INTERNATIONAL COURT OF JUSTICE

CASE CONCERNING PULP MILLS ON THE RIVER URUGUAY

ARGENTINA
V.
URUGUAY

COUNTER-MEMORIAL OF URUGUAY

VOLUME I

---

20 JULY 2007

VOLUME I

TABLE OF CONTENTS

Page

CHAPTER 1. INTRODUCTION ... 1

Section I. Observations on Jurisdiction ... 14

Section II. Summary of Argument ... 16

Section III. Structure of the Counter-Memorial ... 32

PART I

CHAPTER 2. THE LAW APPLICABLE TO THE ALLEGED PROCEDURAL VIOLATIONS OF THE 1975 STATUTE ... 37

Section I. Origins and Scheme of the 1975 Statute ... 43

A. History and Development ... 43

1. The 1961 Boundary Treaty ... 43

2. The 1971 Joint Declaration ... 44

3. The 1973 Treaty on the River Plate ... 46

B. The Object and Purpose of the Statute ... 47

C. The Scheme of the 1975 Statute ... 50

D. Overview of the Environmental Protection Provisions ... 54

E. The Procedural Requirements of the Statute ... 57

Section II. The Procedural Provisions of the Statute ... 60

A. Article 7 ... 60

1. The First Paragraph of Article 7 ... 60

(a) What Is “Significant Harm”? ... 61

(b) Timing ... 62

(i) The Statute ... 64

(ii) The Digest ... 65

(iii) State Practice ... 66

a) Traspapel ... 66

b) M’Bopicua Port ... 69

c) Nueva Palmira Freight Terminal ... 70

(c) To “Carry Out” ... 72

(d) The Application of Article 7 to Industrial Facilities 74

2. The Second Paragraph of Article 7 81

3. The Third Paragraph of Article 7 82

B. Articles 8-11 84

1. Article 8 84

2. Articles 9 and 10 85

3. Article 11 86

C. Prior Consent Is Not Required 90

1. There Is No Veto Right Under General International Law 92

2. The Statute Does Not Require Prior Consent 100

3. The Argentine Government's Memorandum Accompanying the Statute 103

4. The 1976 Joint Presidential Declaration 104

5. Argentina's Practice 106

6. The Case of the Garabí Dam 114

7. Argentina's Conduct Prior to the Submission of Its Application 116

8. State Practice in Latin America 118

D. The Obligation to Consult in Good Faith 121

1. The Purpose of Consultations 121

2. Relevant Timeframes 123

3. Duties During Consultation 125

(a) An Obligation of Conduct, Not Result 127

(b) Status of the Project During Consultations 128

(c) Status of the Work During Dispute Resolution 130

Section III. The Role of CARU 133

Section IV. The Role of the Court 144

Conclusion 146

CHAPTER 3. THE APPLICATION OF THE LAW TO THE FACTS CONCERNING THE ALLEGED PROCEDURAL VIOLATIONS 149

Section I. Uruguay Was Not Required to Notify CARU Before It Issued AAPs to ENCE and Botnia 153

A. Argentina and CARU Were Well Informed About the ENCE Plant Before the 9 October 2003 AAP Was Issued 159

B. Argentina and CARU Were Equally Well Informed About the Botnia Plant Before the 14 February 2005 AAP Was Issued. 163

Section II. Uruguay Was Not Obligated to Await CARU's Authorization for the Plants 169

A. The Parties Agreed to Address the ENCE Plant Outside CARU ... 172

B. The Parties' Agreement to Address ENCE at the Government-to-Government Level Outside CARU Was Extended to Botnia ... 187

C. The Parties Created GTAN as a Means to Address Both Plants at the Government-to-Government Level 191

D. Argentina Seeks to Impose on Uruguay Obligations that Not Only Do Not Exist, But that Argentina Never Accepted for Itself 197

E. Uruguay Complied With Its Obligations Concerning the Botnia Port and the Botnia Water Extraction Permit 197

Section III. Uruguay Gave Argentina Sufficient Information to Assess the Probable Impact of the Plants on Navigation, the Regime of the River and the Quality of Its Water 203

A. Uruguay Gave Argentina Sufficient Information About ENCE 206

B. Uruguay Gave Argentina Sufficient Information About Botnia 211

Section IV. Uruguay Complied with Its Duties During Consultations and Dispute Resolution 227

A. Uruguay Took Only Preparatory Steps During the GTAN Consultative Process 228

B. Uruguay Was Free to Carry Out the Pulp Mill Projects after the Consultations Were Over 233

Conclusions 238

PART II

CHAPTER 4. THE LAW AND THE FACTS PERTAINING TO THE ALLEGED SUBSTANTIVE VIOLATIONS OF THE 1975 STATUTE 243

Section I. Uruguay's Compliance with Its Obligations to Prevent Pollution under Article 41 of the 1975 Statute 249

A. Article 41 Does Not Ban All Discharges to the River 249

B. CARU Regulations Define the Substantive Performance Standards of the 1975 Statute 253

C. Argentina and Uruguay Have, Through CARU, Agreed Upon the Environmental Standards for the Uruguay River 256

D. Uruguay Has Ensured that the Botnia Plant Complies with the Applicable Pollution Prevention Laws and Regulations 262

1. Uruguay Has Required Botnia to Comply with the CARU Water Quality Standards 263

2. The Botnia Plant's State-of-the-Art Anti-Pollution Systems Ensure Compliance with the CARU Water Quality Standards..... 263

3. The IFC's Independent Experts Have Confirmed that the Botnia Plant Will Comply with the CARU Water Quality Standards..... 264

4. Argentina Does Not Allege that Any CARU Standard Will Be Breached..... 265

5. The Botnia Plant Will Not Cause an Exceedance of Uruguay's Phosphorus Standard 266

6. Comprehensive Monitoring Will Ensure Compliance with the CARU Standards..... 270

Section II. Uruguay has Ensured that the Botnia Plant Will Not Alter the Ecological Balance of the River Uruguay in Violation of Article 36 of the 1975 Statute 271

A. CARU Regulations Implement the Parties' Obligations Under Article 36 271

B. Uruguay Has Ensured Compliance with Subject E3 of the CARU Digest..... 272

C. Uruguay Has Ensured Compliance with Subject E4 of the CARU Digest..... 273

D. The IFC's Independent Experts Concluded that the Botnia Plant Will Not Adversely Impact the Ecological Balance of the Uruguay River 275

Section III. Uruguay's Choice of Site for the Botnia Plant Complies with All Applicable Obligations 277

Section IV. The Approach to Environmental Regulation Adopted in the 1975 Statute is Consistent with General International Law 279

A. Equitable and Reasonable Use of the River 280

B. The Alleged Principle of Non-Harmful Use of Territory 282

C. Applicable International Standards Pursuant to the 1975 Statute... 284

D. The Precautionary Principle Neither Calls into Question the Decision to Authorise the Botnia Plant Nor Transfers the Burden of Proof 288

Section V. The International Law of Environmental Impact Assessment 292

A. Environmental Impact Assessment Is a National Procedure, Not an International One 293

B. Environmental Impact Assessment Is a Process Not an Event 295

C. Required Content of a Transboundary Environmental Impact Assessment 298

D. An Environmental Impact Assessment Is Not Required to Assess Remote or Speculative Risks 301

Section VI. The Environmental Review of the Botnia Plant Satisfies the Requirements of the 1975 Statute and International Law 304

A. Uruguay's Law on EIA 304

B. Botnia's Initial Environmental Impact Assessment Submissions to DINAMA 308

C. Uruguay's Response to the Botnia Environmental Impact Assessment Report 314

D. Uruguay's Continuing Environmental Assessment and Control 319

E. Uruguay's Compliance with the 1975 Statute 324

CHAPTER 5. THE CONCLUSIONS OF THE INTERNATIONAL FINANCE CORPORATION AND ITS INDEPENDENT EXPERTS 327

Section I. Deference Due to the International Finance Corporation and Its Independent Technical Experts 329

A. The Weight to Be Accorded the IFC's Findings 332

B. IFC Policy and Performance Standards are Detailed, Extensive, and Cover All Potential Environmental Impacts 334

C. The IFC's Performance Standards 337

1. Performance Standard 1 339

2. Performance Standard 3 343

3. Performance Standard 4 348

4. Performance Standard 6 349

Section II. The Botnia Plant Was Evaluated According to the IFC's Performance Standards Prior to the Decision to Finance the Project 351

Section III. The Evaluation in the Final Cumulative Impact Study 357

A. The Exhaustive Environmental Review in the CIS Demonstrates that the Botnia Plant Will Not Harm the Environment 357

B. The Impacts Analysis in the Final CIS Assumed the Construction of Both the ENCE and Botnia Plants, and Thus Significantly Overstated the Impacts from Operation of the Botnia Plant Alone 359

C. The Botnia Plant Will Comply with the Requirements of IPPC BAT and Will Operate as One of the Best Plants in the World 360

D. The Botnia Plant Will Not Adversely Impact Water Quality or the Ecological Balance of the River, and Any Potential Impacts Are Likely to Be Immeasurable 362

E. The Tree Plantations Will Not Cause Adverse Impacts to the Uruguay River. 378

Section IV. Conclusions with Respect to the International Finance Corporation 382

CHAPTER 6. THE OPINIONS OF THE EXPERTS RETAINED BY THE PARTIES 385

Section I. Argentina Has Failed to Show that the Botnia Plant Will Harm the Environment 387

Section II. Argentina Has Failed to Show that Potential Impacts of the Botnia Plant Have Been Inadequately Assessed 391

A. Argentina Seeks to Impose a Standard on Environmental Impact Assessment that No Project Could Ever Meet 391

B. The Impacts of the Botnia Plant Have Been Thoroughly and Adequately Assessed 397

Section III. Argentina Has Done Nothing to Disturb the Conclusion that the Botnia Plant Will Perform on a World-Class Level. 401

Section IV. Argentina Has Not Met Its Burden of Showing that the Botnia Plant Will Adversely Impact Water Quality or the Ecological Balance of the River 422

Section V. The Conclusions of the IFC's Final Cumulative Impact Statement Are Valid in All Respects 449

CHAPTER 7. ENSURING PROTECTION OF THE URUGUAY RIVER AND THE AQUATIC ENVIRONMENT 451

Section I. Extensive Pre- and Post-Operational Monitoring of the Botnia Plant Will Ensure Rapid Detection and Correction of Any Prohibited Impacts 453

A. Monitoring of the Water Quality and Aquatic Life of the Uruguay River to Date 454

B. Post-Operational Monitoring by DINAMA 461
C. The Follow-Up Committee 467
D. Post-Operational Monitoring by Botnia 468
Section II. Uruguay Has Broad Authority to Require Remedial Measures if Prohibited Impacts Occur 474
Section III. The Question of Remedies for Alleged Violation of the 1975 Statute 478
Submissions 487
List of Annexes

CHAPTER 1.
INTRODUCTION

1.1 Pursuant to Order of the Court dated 13 July 2006 fixing the time limits for the filing of the written pleadings, Uruguay respectfully submits this Counter-Memorial in response to Argentina's Memorial of 15 January 2007. As provided in Article 49(2) of the Rules of Court, Uruguay's Counter-Memorial will answer the factual and legal arguments in the Memorial and, in so doing, identify points of agreement and disagreement between the Parties.

1.2 Uruguay welcomes this opportunity to refute Argentina's case on the merits. In its submissions, Argentina has asked that the Court find that:

> qu'en autorisant unilatéralement la construction des usines de pâte à papier CMB et Orion et les installations annexes de celle-ci sur la rive gauche du fleuve Uruguay en violation des obligations découlant du Statut du 26 février 1975, la République orientale de l'Uruguay a commis les faits internationalement illicites énumérés aux chapitres IV et V du présent mémoire, qui engagent sa responsabilité internationale[1].

Argentina also submits that the Court must order Uruguay, *inter alia*, to:

> rétablir sur le terrain et au plan juridique la situation qui existait avant la perpétration des faits internationalement illicites mentionnés ci-dessus[2].

1.3 As the Court will read in detail in the Chapters to follow, these and the rest of Argentina's submissions are without foundation either in law or in fact. Uruguay has at all times complied with its obligations under the 1975 Statute on the River Uruguay (the "1975 Statute" or "Statute"), and continues to do so. There is thus no cause for the Court to issue an order of any kind against Uruguay.

---

[1] Memorial of Argentina ("AM"), para. 9.1(1) ("by unilaterally authorizing the construction of the CMB and Orion pulp and paper mills and the related facilities on the left bank of the Uruguay River in violation of the obligations arising from the Statute of February 26, 1975, the Eastern Republic of Uruguay has committed the internationally wrongful acts enumerated in Chapters IV and V of this Memorial, for which it bears international responsibility").

[2] AM, para. 9.1(2)(iii) ("on the ground and legally, restore the situation that existed prior to the commission of the internationally wrongful acts described above").

1.4 Argentina's Memorial accuses Uruguay of committing two categories of wrongful acts: procedural and substantive. Neither accusation withstands serious scrutiny. Argentina's procedural case is undone by the simple fact that Argentina received the full measure of performance to which it was entitled under the 1975 Statute. Uruguay's so-called "unilateral" authorizations of the CMB and Orion cellulose plants[3] did not violate the procedural requirements of the Statute. As Uruguay will explain, its compliance with its procedural obligations is amply demonstrated by the text of the Statute, by Argentina's own longstanding interpretation of that text, and by the consistent historical practice of both States throughout the 31-year history of the Statute.

1.5 The Statute imposes the procedural duties of notification, information sharing, and, if necessary, consultation and dispute resolution by this Court whenever one of the Parties authorises a project that may potentially cause harm to the other. But nothing in the 1975 Statute imposes on either Party the obligation to obtain the *approval* of the other before carrying out a planned project, or empowers either State to *veto* the economic development projects of the other. The procedural provisions of the Statute -- which mirror the principles of general international law -- require prior *consultation* between the Parties, not prior *consent*. Where there is a persisting disagreement on whether a particular project may harm the river or the other Party, the Statute provides *not* for a right of rejection by that Party, but for resolution of the dispute by the Court at the instance of either Party. In this case, Uruguay gave timely notice to, shared sufficient information and consulted in good faith with Argentina about both the ENCE and Botnia cellulose plants. It also

[3] For ease of reference, Uruguay will refer to the CMB and Orion plants as the "ENCE" and "Botnia" plants, respectively, after the names of the private corporations building them.

honoured its obligation to submit to the Court's jurisdiction for resolution of this dispute. Procedurally, the 1975 Statute entitles Argentina to no more.

1.6 Uruguay has likewise fully complied with its substantive obligations under the 1975 Statute, which are set forth in general terms in Articles 41 and 36 of the Statute, and with particularity in the environmental regulations promulgated thereunder by the *Comisión Administrativa del Río Uruguay* ("CARU"). It is an unchallenged fact that the cellulose plants about which Argentina now complains will fully comply with CARU's water quality and other environmental regulations. Argentina's Memorial fails to allege even a single CARU standard that either of the two plants will violate, much less to provide any evidence (scientific or otherwise) that the plants will violate these regulations.

1.7 Uruguay's full compliance with its substantive obligations under the Statute is clearly demonstrated by the fact that the International Finance Corporation of the World Bank ("IFC") and its independent panel of experts have concluded that, in terms of their environmental performance, the two plants will be "among the best in the world"[4]. Argentina cannot dispute this fact. The IFC's experts specifically found that "ENCE and Botnia have combined their operating experience and process knowledge with vendor offers to develop mill configurations that would be accepted in Canada, the USA or Europe. The mills will employ state-of-the-art technologies in every respect …"[5]. They also found that the mills will "be IPPC-BAT (2001) or

---

[4] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills (hereinafter "Final CIS"), p. ES.v (September 2006). Uruguay Counter-Memorial (hereinafter "UCM"), Vol. VIII, Annex 173.

[5] *Ibid*.

better"[6]. And thus specifically found that the ENCE and Botnia plants would satisfy all of CARU's water quality standards and regulations for the protection of the Uruguay River and its ecosystem.

1.8 Against this overwhelming case, Argentina can argue only that there are speculative possibilities of eventual harm arising from exceedingly remote contingencies that are impossible to predict. Yet, such a slender reed does not support a claim for breach of the substantive provisions of the 1975 Statute. Like general international law, the Statute recognises the need to balance the equally important priorities of economic development and environmental protection. The very first Article expresses the Statute's ultimate objective of "optimum and rational utilisation" of the Uruguay River. This objective is achieved by guaranteeing to each Party the right to use the river and its waters for economic and commercial activities, subject to the obligation to take appropriate precautions to prevent or minimise harm to the river and its aquatic environment. In this regard, the Statute expressly authorises the use of the river and its waters for *industrial* purposes. The emphasis is on *sustainable development*, that is, on achieving the proper balance between use of the river for economic development activities and environmental protection.

1.9 Since the hearing on Argentina's demand for provisional measures on 8-9 June 2006, ENCE has decided to relocate its planned cellulose plant away from the Uruguay River. Contrary to Argentina's assertions[7], this fact has a material bearing on this case. The environmental review process carried out by Uruguay and later by

---

[6] *Ibid.*, p. ES.vi.

[7] AM, para. 0.5.

the IFC considered both the Botnia and the ENCE facilities, and Chapters 4 through 7 will show that both plants operating together would not cause adverse effects on the river. Nonetheless, Argentina has made much of the fact that two mills had been permitted in Fray Bentos. Now, only the Botnia plant remains. The ENCE plant was a substantial industrial facility, designed to produce 500,000 tons of cellulose annually, which represented approximately half of Botnia's projected production[8]. Its relocation will substantially reduce total effluent flow into the river -- by approximately 40%[9]. Phosphorus will decline by an estimated 41%, AOX by 38%, COD by 35%, BOD by 50%, and total suspended solids by 39%[10]. Because the existing studies document that the two plants operating together would have had no adverse impacts on the river, its water quality, or its ecological balance, there is even more reason to conclude that the Botnia plant, operating alone, will not cause any adverse impacts.

1.10 Unlike many other international disputes over resources or the environment, this is not a case where the alleged improper acts of the Respondent State would have negative effects exclusively or primarily on the Applicant State. The Uruguay River is Uruguay's most precious natural resource, and many Uruguayans depend on its preservation as a functioning ecosystem for their health, welfare, and livelihoods. This is not a natural resource that Uruguay can afford to harm: the 22,000 citizens of Fray Bentos, capital of the Uruguayan Province of Río Negro, drink the water from the river from an inlet 5 km downstream from the

---

[8] Final CIS, *op. cit.*, p. 1.3. UCM, Vol. VIII, Annex 173.

[9] *See* International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex D (hereinafter "Final CIS, Annex D"), pp. D4.7-4.9 (Tables D4.2-1, D4.3-1 & Table D4.3-2) (September 2006). UCM, Vol. VIII, Annex 176.

[10] *See ibid.*

Botnia plant. Uruguay's fishermen fish in the river. Uruguay's Playa Ubici, a beach area 1.5 km from the Botnia discharge, is a recreational resource used for camping, swimming, and other outdoor recreational activities. Las Cañas beach resort area, 12 km downstream from the Botnia plant, attracts visitors from Uruguay, Argentina, and other countries. And, the protected resources Esteros de Farrapos e Islas del Río Uruguay, a Ramsar Convention site located upstream of the Botnia plant, are in Uruguay.

1.11 Uruguay recognises and respects the uses to which the citizens of Argentina may put the river, but Uruguay's reliance on its waters and aquatic life is at least as great. Because the Botnia plant's discharge is in Uruguay, the hypothetical adverse effects of that discharge -- effects that Uruguay denies -- would fall dramatically more in Uruguay than Argentina. Simply put, Uruguay stands to lose far more than Argentina if the Botnia plant damages the river. As a consequence, Uruguay has every incentive to protect the river and has taken every necessary step to ensure that it is, in fact, protected.

1.12 Uruguay's commitment to protect the river is fully engrained in its legal system, beginning with its Constitution[11]. Article 47 of Uruguay's Constitution specifically provides that "[e]nvironmental protection is a matter of general interest"[12]. Water -- including the Uruguay River -- is a "natural resource essential for life" and access to drinking water is a "fundamental human right"[13]. The Constitution requires Uruguay's national policy of water and sanitation to be based on "sustainable management in solidarity with future generations, of water

[11] *See* Constitution of Uruguay, Art. 47 (1967). UCM, Vol. II, Annex 5.

[12] *Ibid.*, Art. 47, para. 1.

[13] *Ibid.*, Art. 47, paras. 2 & 3.

resources"[14]. Persons must "avoid any action which may cause serious depredation, destruction or contamination of the environment[15]", and the Constitution deems to be "void" all authorisations, concessions, and permits that are contrary to the environmental principles enshrined therein[16].

1.13 In Uruguay, these Constitutional protections and objectives are implemented through a sophisticated and comprehensive environmental regulatory regime that ensures that industrial operations such as the Botnia plant do not cause unacceptable impacts to water or other environmental media. The Department of the Environment (Dirección Nacional de Media Ambiente, or "DINAMA"), as part of the Ministry of Housing, Territorial Planning and Environment (Ministerio de Vivienda, Ordenamiento Territorial y Medial Ambiente, or "MVOTMA"), is the agency most responsible for the implementation of this regime. It is undisputed that DINAMA exercises this responsibility with professionalism and vigour, as well as a firm commitment to the principles set forth in the Constitution. The IFC's independent experts analysed Uruguay's environmental protection regime and concluded that "the permit setting process used by DINAMA is practical and rigorous"[17].

1.14 Uruguay achieves its environmental protection objectives in a variety of ways. First, Uruguay mandates water quality standards through Decree 253/79 that sets maximum allowable concentration levels for contaminants in water bodies,

---

[14] *Ibid.*, Art. 47 1(b).

[15] *Ibid.*, Art. 47, para. 1.

[16] *Ibid.*, Art. 47, para. 4.

[17] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex A, p. A6.7 (September 2006). UCM, Vol. VIII, Annex 174.

including the Uruguay River. The IFC's independent experts found Uruguay's water quality standards to be comparable to -- or even stricter than -- the standards of other internationally respected authorities, such as the European Union, the World Health Organization, and the United States Environmental Protection Agency[18]. Decree 253/79 also establishes mandatory effluent discharge parameters for phenolic substances, phosphorus, flow, pH, arsenic, and chemical dissolved oxygen[19]. Any discharge in excess of these limits by an industrial facility such as the Botnia plant is strictly prohibited. MVOTMA is authorised to establish new standards if necessary to protect the quality of the water[20]. In the Uruguay River, Uruguayan law also mandates compliance with the water quality standards adopted by CARU, and the Botnia plant (or any other facility) is required to ensure that its operations do not violate either the Uruguayan or the CARU standards.

1.15 Second, no authorisation to construct or operate significant industrial facilities may be granted unless DINAMA has approved an environmental impact assessment (including a monitoring plan) and determined that there will be no unacceptable impacts on water quality, water resources, or the environment[21]. To implement these provisions, Uruguayan law requires the proponent of a project to undertake an environmental impact assessment, which must be acceptable to DINAMA before an Initial Environmental Authorisation ("AAP" per the Spanish initials) can be issued. Uruguayan law specifically prohibits approval of projects

---

[18] Final CIS, Annex D, *op. cit.*, p. D2.5 (September 2006). UCM, Vol. VIII Annex, 176.

[19] Decree No. 253/79, Regulation of Water Quality (9 May 1979, as amended) (hereinafter "Decree No. 253/79"), Art. 11(2). UCM, Vol. II, Annex 6.

[20] *Ibid.*, Art. 14.

[21] *See* Decree No. 435/994, Environmental Impact Assessment Regulation, Art. 17 para. 3 (21 September 1994). UCM, Vol. II, Annex 9.

that will cause unacceptable environmental impacts[22]. The AAP sets forth the emissions limitations with which a project must comply and other requirements for the protection of the environment. AAPs may also be issued upon the condition that additional information be submitted, certain modifications to the project be made, or upon the adoption of certain mitigation measures and monitoring and contingency plans[23]. DINAMA scrutinised the Botnia plant's application for well over a year before issuing the AAP, which required numerous additional submissions and commitments from Botnia before operations could begin, all of which ensured that the plant will operate as designed and as predicted, and in compliance with all applicable environmental laws and regulations.

1.16 Third, before a project can operate, it must receive an Authorisation to Operate ("AAO" per the Spanish initials)[24]. Issuance of the initial AAO is approved upon confirmation by the project applicant that the project will comply with all applicable requirements, including those in its AAP[25]. And, to ensure that operating procedures continue to be state-of-the-art and provide the highest standard of environmental protection, industrial plants must request and obtain a renewal of their AAO every three years[26]. The renewal process includes revision and updating of the project's environmental management plans and approvals with respect to emissions, including effluent discharges[27]. At each renewal, DINAMA may impose further

---

[22] *Ibid.*

[23] *Ibid.*, Art. 17, para. 4.

[24] Decree No. 349/005, Environmental Impact Assessment Regulation revision, Art. 23 (21 September 2005). UCM, Vol. II, Annex 24.

[25] *Ibid.*

[26] *Ibid.*

[27] *Ibid.*, Art. 24, para. 2.

safeguards, if necessary, and may suspend allegedly dangerous activities while the appropriate investigations are undertaken[28].

1.17 Fourth, independent from a project's environmental review process, DINAMA and MVOTMA are endowed with broad powers to halt unacceptable environmental impacts in the event that a project causes them. These include the power to suspend operations temporarily or permanently if adverse impacts occur, and to require the adoption of more stringent pollution control technology or any other measures deemed necessary to achieve water quality standards or to otherwise prevent a risk to the environment[29]. DINAMA may exercise these powers even if a project is operating in compliance with the requirements of all of its approvals, if unacceptable impacts are nevertheless occurring.

1.18 In short, Uruguay has both every incentive and every needed tool to ensure that the Botnia plant will not harm the environment. Any assertion that the Botnia plant has been authorised in a location where its impacts do not matter to Uruguay, or where Uruguay is powerless to control those impacts, is simply wrong. Uruguay's extraordinary efforts have ensured that the Botnia plant will be among the best in the world.

1.19 Argentina suggests that because it disagrees with some of the conclusions reached by Uruguay, the only course of action is to demolish the plant. There are three simple answers to this. First, Uruguay has scrupulously complied with its obligations under the 1975 Statute and there is thus no legal basis for this unprecedented demand. Second, there is no reasonable scientific or technical

---

[28] *Ibid.*, Art. 24, para. 2.

[29] Decree No. 253/79, *op. cit.*, Art. 17. UCM, Vol. II, Annex 6. Law No. 17,283, General Law for the Protection of the Environment, Art. 14 (28 November 2000). UCM, Vol. II, Annex 11.

support for Argentina's assertions that the Botnia plant will cause unacceptable harm to the river. Third, and in light of the two prior points, to accept Argentina's interpretation of the Statute would divest Uruguay of its sovereign right to economic development consistent with its obligations to protect and preserve the environment. The Botnia plant is central to Uruguay's carefully considered plans to achieve economic development in an environmentally sustainable matter. Uruguay is among the best locations in the world for growing plantation forests to supply cellulose for the world's paper supply. Historically, these trees were exported for processing, which ensured that the bulk of the economic value of Uruguay's natural ability to grow trees sustainably was exported as well. The Botnia plant -- the largest foreign investment in Uruguay's history[30] -- thus represents a crucial step up the ladder of Uruguay's economic development since it will enable the country to advance into value-added processing of its forest products. The IFC's independent experts calculated that operation of the plant will have an annual impact of US $274 million[31]. These experts also predict that the plant will stimulate a major increase in employment, creating 8,155 direct and indirect jobs during the operations phase[32]. The plant will also spawn related projects, including laboratories and university sponsored research[33], all of which will help secure the economic future of Uruguay.

1.20 Yet, notwithstanding these impressive benefits, Uruguay would not have issued *any* authorisations for the Botnia plant had it not been convinced -- by the

[30] Sworn Declaration of Martin Ponce de Leon, Undersecretary of the Ministry of Industry, Energy, and Mining of Uruguay (hereinafter "Ponce Aff."), para. 7 (June 2006). UCM, Vol. X, Annex 227.

[31] Final CIS, *op. cit.*, p. 4.75. UCM, Vol. VIII, Annex 173.

[32] *Ibid.*, p. 4.76.

[33] Ponce Aff., *op. cit.*, para. 10. UCM, Vol. X, Annex 227.

overwhelming technical and scientific evidence -- that the plant would cause no harm to the Uruguay River or its ecosystem. After extensive research and analysis extending over more than three years, Uruguay is convinced that the Botnia project is consistent with its commitment to sustainable development, with its Constitutional obligation to preserve the quality of its water resources, and with its international obligations arising under the 1975 Statute not to harm the Uruguay River or its aquatic environment. As the Court will read in the chapters that follow, the evidence fully supports these conclusions.

Section I.
Observations on Jurisdiction

1.21 Before turning to its Summary of Argument, Uruguay will state its views on the Court's jurisdiction. As Argentina's Memorial correctly notes, the Court's jurisdiction in this case is founded solely upon Article 36(1) of the Statute of the Court and the compromissory clause contained in Article 60 of the 1975 Statute, which provides:

> Any dispute concerning the interpretation or application of the Treaty and the Statute which cannot be settled by direct negotiation may be submitted by either Party to the International Court of Justice[34].

1.22 The Parties are thus in agreement that "les seuls différends couverts *ratione materiae* par la clause compromissoire en question sont ceux relatifs à l'interprétation ou l'application … du statut"[35]. It follows that any dispute that is not

[34] Statute of the River Uruguay (hereinafter "1975 Statute"), Art. 60 (26 February 1975). UCM, Vol. II, Annex 4.

[35] AM, para. 1.4 ("the sole disputes covered *ratione materiae* by the arbitration clause in question are those relating to the interpretation or application … of the Statute."). The only provisions of the 1975 Statute that Argentina alleges have been violated by Uruguay are: procedural obligations arising under Articles 1, 7-12, 27, and 34; obligations concerning use of the river for navigation, under Articles 3-6; obligations concerning use of water from the river

based on interpretation or application of the 1975 Statute is outside the Court's jurisdiction[36]. Although the compromissory clause in Article 60 also gives the Court jurisdiction over disputes concerning the interpretation or application of the 1961 Uruguay-Argentina Treaty Concerning the Boundary Constituted by the River Uruguay (the "1961 Boundary Treaty"), Argentina has not asserted any claims based on that instrument.

1.23 Thus, claims based on other bilateral treaties or multinational conventions, even if ratified by both Argentina and Uruguay, lie beyond the Court's jurisdiction, because they do not concern interpretation or application of the 1975 Statute or the 1961 Boundary Treaty. For the same reason, claims arising under general international law are beyond the Court's jurisdiction in these proceedings. Uruguay accepts that the Court has jurisdiction under Article 60 to address Argentina's claims regarding alleged procedural violations of the 1975 Statute, as well as Argentina's substantive claims insofar as they relate to alleged harm to the Uruguay River or the aquatic environment in violation of the Statute. But the Statute does not cover or provide remedies for all forms of environmental harm. It does not, for example, address the subjects of air pollution, or noise pollution, or what Argentina refers to as "visual" pollution. Since these matters do not concern interpretation or application of the 1975 Statute (or the 1961 Boundary Treaty), they cannot properly be placed before the Court in these proceedings. To the extent Argentina has attempted to do so, therefore, the Court should deny jurisdiction under Article 60.

---

for industrial purposes, under Article 27; obligations concerning soil and forest management, the ecological balance of the river and its zones of influence, and conservation and preservation of biological resources, under Articles 35-37; and obligations concerning prevention of pollution, under Articles 40-43. *Ibid*., para. 1.6.

[36] *Fisheries Jurisdiction (Spain v. Canada)*, *Judgment, ICJ Reports 1998*, p. 456, para. 55.

1.24 While Uruguay is confident that it has fully complied with all of its obligations under international law, whatever their source, it nonetheless wishes to declare that it has not consented to the jurisdiction of the Court over any obligations that are not expressly included within the scope of Article 60 of the 1975 Statute.

Section II.
Summary of Argument

1.25 This Counter-Memorial consists of two Parts and seven Chapters, followed by Uruguay's Submissions. ***Part One***, which consists of ***Chapters 2*** and ***3***, responds to Argentina's claims that Uruguay has violated the procedural requirements of the 1975 Statute, and demonstrates that Uruguay has fully complied with all such requirements. ***Part Two***, which consists of ***Chapters 4*** through ***7***, refutes Argentina's claims that Uruguay has violated the substantive obligations imposed by the Statute, and demonstrates that Uruguay has fulfilled those obligations.

1.26 ***Chapter 2*** of ***Part One*** follows immediately after this Introduction, and provides Uruguay's views on the law applicable to this case. It presents a detailed examination of the text of the 1975 Statute for purposes of identifying the procedural rights and duties it does -- and does not -- create. Where appropriate, Uruguay refers to principles of general international law and the Parties' historical practice under the 1975 Statute to aid in the interpretation of the Statute's text. As the Court will read, Argentina's Memorial radically mischaracterises the 1975 Statute. The Statute is not, as Argentina would have it, a treaty concerned only or primarily with environmental protection. On the contrary, it was crafted to ensure the Parties' respective rights to make use of the Uruguay River in a fair and reasonable manner. As set forth in Article 1, the Statute's ultimate objective is to assure "the rational and

optimal utilisation of the River Uruguay"[37]. The Statute thus covers a broad range of topics, most of which relate to the different uses to which the river might be put: navigation, exploitation of the resources of the riverbed and subsoil, pilotage, port facilities, *etc*. The right to use the river or its waters for industrial purposes is one of the uses that is expressly authorised[38]. To be sure, the protection of the Uruguay River and its aquatic environment is a key part of the Statute, and important obligations are imposed on the Parties in this regard. But the scheme of the Statute is one of balance: an equilibrium between the Parties' rights and needs to use the river for economic and commercial development activities, and the need to protect it from the environmental harm that may be caused by such activities. In other words, the goal of the Statute is best understood as assuring the sustainable development of the river and its environment.

1.27 In order to ensure that each Party's right to make optimum use of the river is not unfairly impaired by the other, the Statute creates a system of notification, information sharing, consultation and, if necessary, dispute resolution when one Party is planning a project of sufficient scope to affect the river and thus potentially harm it or the other State. Chapter 2 demonstrates that the Statute does *not*, however, require the consent of the notified State before a project may be undertaken. The text of the Statute, rules of general international law, and the practice of the Parties uniformly point to this same conclusion. Argentina's Memorial identifies nothing -- because there is nothing -- that can change this result. Indeed, as Uruguay will show, throughout the 31-year history of the Statute,

---

[37] 1975 Statute, *op. cit.,* Art. 1. (UCM, Vol II, Annex 4).

[38] *See ibid.*, Art. 27.

Argentina has consistently interpreted it as imposing an obligation only of notification and consultation, and not one of consent or agreement. Argentina's leading authorities on the Statute and the law of shared natural resources, including (among others) Dr. Julio Barberis, who negotiated the Statute on behalf of Argentina, and Dr. Julio Carasales, who long served as the President of Argentina's delegation to CARU, have always viewed it as requiring notification and consultation, but not consent or agreement. And Argentina's practice for more than three decades has uniformly followed this interpretation. Never, not even once, did Argentina ever seek Uruguay's consent before authorising more than three dozen industrial facilities in Entre Ríos Province, all of which discharge effluents directly or indirectly into the Uruguay River.

1.28 Since there is plainly no requirement of prior consent, Argentina's procedural case depends on its contentions that Uruguay failed to fulfil its obligations with respect to notification and consultation. Yet, Argentina's argument on the alleged failure to give proper notification is based on a misreading of the Statute, to wit, that the State planning a project liable to affect the river must give notification to the other State even *before* it issues a preliminary authorisation for the project. Uruguay will show in Chapter 2 that Argentina's interpretation is refuted by the text of the Statute itself, by the CARU regulations adopted pursuant thereto, and by the Parties' historical practice. All three sources unambiguously confirm that notification can occur (and, as the Court will read, has consistently occurred) *after* projects are first authorised by the initiating State.

1.29 Chapter 2 also deconstructs Argentina's equally fallacious argument that Uruguay's notifications regarding the ENCE and Botnia plants were untimely or

otherwise inappropriate because Uruguay issued them without first awaiting "authorisation" from CARU. In fact, CARU does not "authorise" projects; the Statute does not give it that power. CARU's own regulations, published in the CARU Digest, simply could not be any clearer that the Parties, *and only the Parties*, have the power to authorise projects. Argentina itself has always understood this to be the case. It has never submitted an industrial project, or any other project located exclusively within its own territory, to CARU for approval, and has never awaited (or obtained) authorisation from CARU before carrying out these projects. Nevertheless, it now seeks to hold Uruguay to a standard it itself has never observed.

1.30 Chapter 2 also refutes Argentina's legal argumentation on Uruguay's alleged failure to comply with its consultation obligations under the Statute. Argentina does not deny that Uruguay consulted extensively with it regarding both the ENCE and Botnia plants, and that Uruguay did so in good faith. Rather, Argentina's argument is that while consultations are taking place the Statute creates a "no construction obligation," and that Uruguay violated this ostensible obligation by allowing construction work to continue on the plants. The first problem with Argentina's argument is that there is no language in the Statute that supports it. There is nothing that says work must be suspended while consultations are taking place or, for that matter, at any other time. Uruguay submits that, absent any treaty-based prohibition, the Statute is best construed in a manner consistent with general international law, which permits the initiating State to continue with *preparatory* works in furtherance of the eventual implementation of a project even when consultations between the Parties are taking place. In fact, the only work that

Uruguay allowed during its consultations with Argentina was strictly preparatory in nature.

1.31 Chapter 2 also refutes Argentina's argument that the Statute prohibits work from continuing after the consultations have ended and dispute resolution proceedings have commenced. Again, there is no such obligation in the Statute itself. Moreover, general international law is clear that once consultations have ended, an initiating State is free to resume implementation of a planned project while dispute resolution proceedings are in progress. The alternative, it has been widely recognised, would be to give the objecting State an effective veto right over the project -- a right it possesses neither under the Statute or in general international law -- since blocking a private investment project for the several years that it customarily takes to resolve a dispute is all but certain to kill it.

1.32 In ***Chapter 3*** of ***Part One***, Uruguay applies the law, as explicated in Chapter 2, to the particular facts of this case. Uruguay shows that Argentina has in fact received the full measure of procedural performance to which it is due under the 1975 Statute. As noted above, Argentina complains that notification was due by Uruguay *prior to* the dates when Uruguay issued AAPs to ENCE and Botnia. After demonstrating in Chapter 2 that Argentina's argument is wrong as a matter of law -- because the Statute does not require notification before the issuance of such initial authorisations -- Uruguay demonstrates in Chapter 3 that Argentina's argument fails on the facts as well. Indeed, Argentina badly misunderstands the nature of AAPs under Uruguayan law. The AAPs issued to ENCE and Botnia were only "initial" authorisations, and many additional authorisations, as listed in the AAPs themselves, had to be obtained before either plant could begin construction, much less operation.

Moreover, both CARU and Argentina were well aware of, and engaged seriously with both plants, long before the issuance of their AAPs. Since the Statute prescribes no precise time for the notification of a planned project, the proper interpretation, in light of the text, the purpose of the Statute, the practice of the Parties, and the applicable principles of general international law is that notification is lawful if it is timely. As shown in ***Chapter 3***, Uruguay's notifications were timely in all respects. Both CARU and Argentina were notified before construction began on the plants, and far in advance of the time when any irreversible steps were taken. When notice was provided there was more than ample time to engage in the information sharing and good faith consultations required by the Statute. Argentina's procedural rights were thus fully respected.

1.33 Chapter 3 will also show that Argentina's argument that Uruguay "by-passed" CARU fails on the facts as well as the law. Having shown in Chapter 2 that the Statute does not empower CARU to approve or disapprove particular projects, and that there is consequently no obligation to await CARU's "authorisation" before proceeding with a project, Chapter 3 further exposes the hollowness of Argentina's argument. Contemporaneous documents show that the Parties expressly agreed to address Argentina's stated concerns about the two plants directly, on a Party-to-Party basis at the level of their Foreign Ministers, rather than through CARU. Pursuant to this bilateral understanding, Uruguay furnished Argentina with all the information about the ENCE plant in October and November 2003. Argentina analysed the information and determined (in its own words): "that there would be no

significant impact on the Argentine side…"[39]. And (again in Argentina's words): "It must be pointed out, with complete and absolute emphasis that none of the different technical reports evidence that the activity in question causes an irreversible and unavoidable damage to the environment, at least of a sufficient level that would warrant the suspension of the plant or opposition to its construction, at least with any scientific basis…"[40].

1.34 Based on these findings, the Foreign Ministers of the two States expressly agreed that the plant would be built, subject only to water quality monitoring by CARU during construction and after operations began. Again, in Argentina's own words: "On 2 March 2004, the Foreign Ministers of Argentina reached an understanding with respect to the course of action that would be applied to the issue, that is, to have the Uruguayan government provide the information relating to the construction of the plant, and with respect to the operational phase, to have CARU undertake the monitoring of water quality in conformity with the Statute."[41]

1.35 Chapter 3 demonstrates that the Parties extended this agreement to the Botnia plant as well. This is shown, again, by Argentina's own words, including reports from the highest level of the Argentine government, issued in March 2005 (after the AAP for the Botnia plant was issued): "a Bilateral Agreement was signed through which Argentina's Government put an end to the controversy… Thus,

---

[39] Statement by Argentine Ministry of Foreign Affairs, International Trade and Culture, *included in* Report of the Head of the Argentine Cabinet of Ministers, Alberto Angel Fernandez, to the Argentine Chamber of Deputies (hereinafter "Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies"), Report No. 64, p. 136 (March 2005). UCM, Vol. III, Annex 46.

[40] CARU Minutes No. 01/04, pp. 18-19 (15 May 2004). UCM, Vol. IV, Annex 99.

[41] Statement by Argentine Ministry of Foreign Affairs, International Trade and Culture, *included in* Report of the Head of the Cabinet of Ministers, Alberto Angel Fernandez, to the Argentine Senate, Report No. 65, p. 617 (March 2005). UCM, Vol. III, Annex 47.

inclusive control procedures were carried out on the Uruguay River, which means they will continue after the *plants* begin to operate. Controls on *both plants* will be more extensive than the ones our country has on its own plants on the Paraná River…"[42].

1.36 After public protests caused the Government of Argentina to reconsider its agreement with Uruguay on the two plants, the Parties decided again to deal directly with one another on issues concerning the plants, rather than through CARU. In May 2005, the Presidents of Argentina and Uruguay established the High-Level Technical Group ("GTAN," per the Spanish initials), expressly (again in Argentina's words): "to exchange information and for follow up on the effects that the operation of the cellulose plants that are being constructed in the Eastern Republic of Uruguay will have on the ecosystem of the shared Uruguay River"[43]. Plainly, in light of Argentina's express agreements to address both the ENCE and the Botnia plants directly with Uruguay, at the Foreign Minister level and via the GTAN, rather than through CARU, there can be no merit to Argentina's claim that Uruguay "by-passed" CARU in violation of the 1975 Statute.

1.37 Argentina's argument that Uruguay failed to provide it with adequate information to evaluate the probable impact of the two projects is belied not only by Uruguay's timely production to Argentina of voluminous information -- consisting of everything Uruguay had on the ENCE and Botnia plants -- but also by Argentina's own conduct upon receipt of that information. As indicated, after

---

[42] Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies, *op. cit.,* p. 136 (emphasis added). UCM, Vol. III, Annex 46.

[43] Joint Argentine-Uruguayan Press Release Constituting GTAN No. 176/05 (31 May 2005). UCM, Vol. V, Annex 126.

reviewing the information provided by Uruguay concerning the ENCE plant, Argentina specifically came to the conclusion that the plant was "environmentally viable"[44] and that "none of the different technical reports evidence that the activity in question causes an irreversible and unavoidable damage to the environment …"[45].

1.38 Uruguay provided Argentina with still more information concerning the Botnia plant during the GTAN process. Chapter 3 describes in detail the information Uruguay provided. Uruguay not only gave Argentina everything it had on the Botnia plant, it also supplied Argentina with information that it specifically obtained from third parties at Argentina's request. If the ENCE information was sufficient for Argentina to evaluate that project, the much more extensive information Uruguay provided regarding the Botnia project was sufficient as well.

1.39 In Chapter 3, Uruguay also shows that the facts contradict Argentina's claim that Uruguay violated the Statute by allowing work on the two plants to continue during the consultations that the two Parties conducted under the auspices of the GTAN process between May and December 2005. As indicated, Uruguay first demonstrates in Chapter 2 that the Statute contains no express requirement that work on a planned project cease while consultations are in progress, and that general international law allows preparatory work to continue even in the face of objections from the notified State. Chapter 3 shows that, in fact, only preparatory work was carried out on the ENCE and Botnia plants while consultations were in progress. In the case of the ENCE plant, only ground clearing was performed. And with respect to the Botnia plant, only foundational and ancillary structures were erected; no actual

---

[44] CARU Minutes No. 01/04, *op. cit.,* p. 18. UCM, Vol. IV, Annex 99.

[45] *Ibid.,* pp. 18-19.

construction was performed on the manufacturing facility itself, or on its pollution control or effluent treatment systems. Put simply, no work was performed on any of the elements of the plant that could potentially harm the river or Argentina.

1.40 Chapter 3 further establishes Uruguay's compliance with its obligations after Argentina initiated proceedings in this Court under Article 60. As indicated, there is no obligation in the 1975 Statute or general international law for work to cease during dispute resolution proceedings. Uruguay's only obligation during this period is to accept the jurisdiction of the Court to resolve the dispute, which it has never hesitated to do, and to comply with any orders the Court may issue. By its Order of 13 July 2006, the Court declined Argentina's invitation to impose provisional measures requiring Uruguay to halt construction of the plants. Accordingly, Uruguay remains within its rights under the 1975 Statute in allowing these projects to go forward pending a final resolution by the Court.

1.41 ***Part Two*** of the Counter-Memorial begins with ***Chapter 4*** and continues through ***Chapter 7*** which, taken together, demonstrate that Uruguay has complied with its substantive obligations under the 1975 Statute. Each Chapter on its own provides sufficient justification for why Argentina's claims must be dismissed. Chapter 4 shows that the substantive legal obligations in this case derive from Articles 41 and 36 of the Statute, and in particular from the regulations on water quality and protection of aquatic life adopted by CARU thereunder. Chapter 4 demonstrates that Uruguay has complied fully with these regulations. Significantly, Argentina has failed to allege -- let alone prove -- that the operation of the Botnia plant will violate any of these regulations. Chapter 5 describes the extensive environmental review process conducted by the IFC and the conclusions of its

independent experts that: the Botnia plant employs state-of-the-art anti-pollution technology; conforms to the requirements of the European Commission "Integrated Pollution Prevention and Control Reference Document on Best Available Technologies" ("IPPC BAT"); will be among the top five cellulose plants in the world; will comply with the CARU regulations protecting water quality and aquatic life; and will not cause any harm to the Uruguay River or to Argentina. Chapter 6 presents the responses of the IFC, Uruguay's consultants, independent Argentine authorities, and even the Argentine government to the experts Argentina has retained in this litigation for the purpose of criticising the work performed and the conclusions reached by the IFC and its independent experts; and it shows that the technical objections proffered by Argentina's experts/advocates simply have no merit. Finally, Chapter 7 documents how Uruguay will ensure the continued safe operation of the Botnia plant through comprehensive and vigorous monitoring of the plant's effects on water quality and aquatic life, and through the exercise of its power to order any necessary remedial measures, including modifications to or temporary closure of the plant, in the event violations of any applicable environmental standards are detected. Chapter 7 thus demonstrates why Argentina requires no additional protection from the Court, and why the draconian measure of demolition of the plant that Argentina has requested is completely unjustified, unprecedented, and unnecessary. These Chapters are discussed in more detail below.

1.42 ***Chapter 4*** begins Part Two by setting forth Uruguay's views on the law applicable to the substantive issues in this case, namely the provisions of the 1975 Statute that set forth the Parties' obligations to prevent pollution and to protect the

aquatic environment. As the Court will read, these obligations flow in particular from Articles 41 and 36 of the Statute, pursuant to which the Parties, through their respective delegations to CARU, have adopted binding environmental regulations for the protection of the water quality and the ecological balance of the Uruguay River. As such, the CARU regulations represent the standards against which to measure compliance with the substantive environmental obligations of the Statute. Chapter 4 demonstrates that Uruguay has ensured the plants' compliance with all applicable CARU regulations. Significantly, Argentina has not suggested otherwise. It has not identified a single CARU standard or regulation that would be violated by operation of either the ENCE or the Botnia plant, or by both of them cumulatively. This alone defeats Argentina's substantive case. If the CARU regulations represent the substantive environmental standards with which Uruguay (and the plants) must comply, Argentina's failure even to allege, let alone prove, a violation of those standards is fatal to its entire argument.

1.43 Chapter 4 further demonstrates that phosphorus -- the only substance whose discharge Argentina alleges will result in an exceedance of any standard -- is *not* a subject of the CARU regulations. Rather, the Parties have chosen not to have CARU set limitations on discharges or concentrations of phosphorus in the river. Thus, discharges of phosphorus do not violate the CARU regulations or, consequently, the 1975 Statute. While Uruguay has enacted its own national water quality standard and discharge limit for phosphorus, Argentina has not. Argentina places no limits on phosphorus discharges or concentrations in the river. As a result of this regulatory vacuum in Argentina, Argentine industries and municipalities have freely discharged large quantities of phosphorus into the river, causing the water in

some places to exceed Uruguay's phosphorus standard even before the Botnia plant (or any other Uruguayan facility) begins to operate. The Statute does not allow Argentina, by its irresponsible behaviour, to thus create a servitude or priority for itself with respect to uses of the river that result in unlimited phosphorus discharges, and at the same time deprive Uruguay from undertaking projects that harmlessly release even minute amounts of that substance into the water. In this regard, it is significant that Uruguay has determined, and the IFC's independent technical experts have confirmed, that operation of the Botnia plant will not cause more than *de minimis* additions of phosphorus to the river, which, even under rare and brief periods of low flow, will have no adverse impacts on water quality or any other aspect of the aquatic environment.

1.44 While the Court has jurisdiction under Article 60 of the 1975 Statute to address only questions of interpretation and application of the 1975 Statute (including, of course, the regulations adopted thereunder by CARU), Chapter 4 shows that Uruguay has not only fulfilled those obligations, but it has also fulfilled whatever obligations it may have under other international conventions, including the Convention on Biological Diversity, the Ramsar Convention, and the POPS Convention.

1.45 Chapter 4 further demonstrates that Uruguay has satisfied any international obligations it might have in regard to environmental impact assessment and the precautionary principle (although the latter is, in any event, not relevant in the present circumstances) by adopting a rigorous regulatory regime that requires a series of authorisations and approvals that may only be given after comprehensive assessment and evaluation, including of impacts to Argentina. Contrary to

Argentina's unsupported assertions, the precautionary principle is not relevant here because, as Uruguay's comprehensive environmental impact review has shown, and the IFC's independent experts have substantiated, there is no risk of serious or irreversible harm. Nor does the precautionary principle, even if it were relevant, shift the burden of proof from Argentina to Uruguay, as Argentina alleges. Uruguay notes in this respect that Argentina's attempt to shift the burden to Uruguay must be taken for what it is -- a patent recognition that it cannot satisfy this burden, which it plainly bears as the Applicant State.

1.46 ***Chapter 5*** shows that, although the Botnia plant's compliance with all applicable CARU regulations conclusively establishes that it will not violate any of the substantive provisions of the 1975 Statute, technical and scientific confirmation of the plant's environmental viability is provided in the form of the Final Cumulative Impact Study ("CIS") prepared by the independent experts retained by the International Finance Corporation. The IFC's experts conducted a thorough review of the project and gave it an unqualified endorsement. Based on their findings, the IFC announced that it was "convinced" the plant will both "generate significant economic benefits for Uruguay" and will "cause no environmental harm"[46].

1.47 Chapter 5 describes the nineteen-month process that resulted in this declaration of support. The Chapter discusses the conscientiousness with which the IFC addresses environmental concerns, including its refusal, as a matter of policy, to participate in projects that are environmentally harmful. The IFC's policy is manifested in a series of performance standards with which a proposed project must

---

[46] International Finance Corporation, Press Release, "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay, 2,500 Jobs to be Created, No Environmental Harm" (hereinafter "IFC Press Release"), p. 1 (21 November 2006). UCM, Vol. IX, Annex 206.

comply, including the requirements: to conduct a comprehensive assessment of impacts; to implement sufficient pollution control and abatement; to ensure protection of health, safety, and security; and to maintain conservation of biodiversity and sustainable natural resource management. To determine whether the Botnia (and ENCE) plants would comply with its strict internal guidelines, the IFC conducted a Cumulative Impact Study of the expected impacts of the two plants taken together. The IFC then hired technical consultants to review the CIS. When those experts identified limited deficiencies in the CIS and made recommendations for improvement, the IFC retained still other technical experts to address these concerns in the form of a Final CIS.

1.48 Chapter 5 examines the Final CIS, and describes how it found that no adverse impacts would be caused by the two plants cumulatively, let alone by the Botnia plant alone. The Chapter further demonstrates that the same experts who found fault with the initial CIS were called back to review the Final CIS, and that they gave it their full and unqualified endorsement, finding that the project would have "no impacts on the health of the people in the area, on either side of the Rio Uruguay," and that the Botnia plant would be in the "top five in the world"[47]. The IFC considered this to be "conclusive evidence that the local area, including the Argentine city of Gualeguaychú, will not experience adverse environmental impacts"[48]. Uruguay submits that the conclusions reached by an international organisation experienced and knowledgeable in the field, and by its independent

---

[47] Hatfield Consultants, Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills. p. 2 (14 October 2006). UCM, Vol. VIII, Annex 178.

[48] IFC Press Release, *op. cit.*, p. 1. UCM, Vol. IX, Annex 206.

experts -- the only truly impartial parties to have expressed their views -- are entitled to particular weight in these proceedings.

1.49 ***Chapter 6*** demonstrates that Argentina's attempts to criticise the work and conclusions of the IFC's independent technical experts are misguided and mistaken. In responding to Argentina's attacks on the Final CIS, Uruguay draws on the findings of the Final CIS itself (many of which were ignored or inaccurately described by Argentina), as well as analyses obtained by Uruguay from leading experts in the fields of environmental impact assessment; hydrodynamic modelling, water quality, and sediment transports; cellulose plant technology and ecological impacts; and wastewater treatment. Chapter 6 demonstrates that these experts fully support the conclusions of the IFC's technical consultants in every respect.

1.50 Chapter 6 further shows that independent assessments conducted in Argentina, including by the Argentine National Academy of Engineering, the National Institute of Technology and Industry of the Argentine Republic, and by leading Argentine academics, also confirm that the independent assessment by the IFC's technical experts was correct in all respects, and that the Botnia plant will not cause any adverse impacts to the Uruguay River or its aquatic environment.

1.51 ***Chapter 7*** details the measures that Uruguay has undertaken thus far, as well as the ones it has committed to putting into place, in order to monitor the impacts of the Botnia project once operations begin. It shows that Uruguay's extensive monitoring program will ensure that the project operates as anticipated, and that should, contrary to expectations, adverse impacts begin to develop, they will be immediately detected and corrective measures implemented. The Chapter describes Uruguay's legal authority to require remedial actions, and repeats

Uruguay's commitment to exercise that authority should circumstances require, including ordering the cessation of plant operations.

1.52 Lastly, Chapter 7 shows that even if the Court were to credit Argentina's unfounded concerns, Argentina's proposed remedy of demolishing the plant is unjustified, unprecedented, and completely unnecessary in light of the extensive reviews to which the plant has been subjected, and Uruguay's commitment to extensive monitoring and willingness to require the adoption of any and all remedial measures. Argentina's recently inaugurated national effort to upgrade its own cellulose plants -- to standards that Argentina deems sufficient but which come nowhere close to the technological or performance levels that Argentina asserts the Botnia plant must meet -- demonstrates that the appropriate remedy if one of these plants is deemed insufficient is to improve it, not destroy it. But this, Uruguay submits, is conjecture. The fact is, and the evidence conclusively shows, the Botnia plant will meet all applicable environmental requirements, and Uruguay has fulfilled, and continues to fulfil, all of its obligations under the 1975 Statute.

1.53 For all of the reasons so summarised, each of which will be more fully articulated in the Chapters to follow, Argentina is not entitled to the order from the Court that it has requested, or to any other relief. To the contrary, as set forth in Uruguay's Submissions, all of Argentina's claims should be rejected by the Court.

Section III.
Structure of the Counter-Memorial

1.54 Uruguay's Counter-Memorial consists of 10 volumes. Volume I contains the main text of the Counter-Memorial. Volumes II through X contain supporting materials arranged in the following order: Treaties and Joint Declarations; Government Documents (Uruguay); Government Documents (Argentina);

Diplomatic Notes (Uruguay); Diplomatic Notes (Argentina); CARU Digest; CARU Minutes and Subcommittee Reports; GTAN Documents; Technical Documents; Press Articles; Miscellaneous; and Expert Reports.

1.55 The main text of the Counter-Memorial consists of seven Chapters divided into two parts. Part One begins immediately following this Introduction and addresses Argentina's allegations that Uruguay has not complied with its procedural obligations under the 1975 Statute. Chapters 2 and 3 together form the body of Part One. Part Two addresses Argentina's allegations that Uruguay has not complied with its substantive obligations under the Statute, and is comprised of Chapters 4 through 7. Uruguay's Submissions are included following Chapter 7.

1.56 The Chapter-by-Chapter outline of this Counter-Memorial is as follows:

Chapter 1 Introduction and Summary of Uruguay's Arguments

Chapter 2 The Law Applicable to the Alleged Procedural Violations of the 1975 Statute

Chapter 3 The Application of the Law to the Facts Concerning the Alleged Procedural Violations

Chapter 4 The Law and the Facts Pertaining to the Alleged Substantive Violations of the 1975 Statute

Chapter 5 The Conclusion of the International Finance Corporation and Its Independent Experts

Chapter 6 The Opinions of the Experts Retained by the Parties

Chapter 7 Ensuring Protection of the Uruguay River and the Aquatic Environment

Submissions

PART I

CHAPTER 2.
THE LAW APPLICABLE TO THE ALLEGED PROCEDURAL VIOLATIONS OF THE 1975 STATUTE

2.1 The purpose of this Chapter is to analyze the 1975 Statute, with particular emphasis on the procedural obligations it creates. Uruguay will examine in detail the provisions pertinent to the procedural issues in this case, especially Articles 7 through 12, and draw on principles of general international law where appropriate to aid in the interpretation of that text. It will also describe the Parties' historical practice under the 1975 Statute in order to demonstrate that Uruguay's interpretation of the Statute is confirmed by the Parties' mutual conduct over the past 31 years.

2.2 As Uruguay will show, the 1975 Statute was created for purposes of ensuring the Parties' mutual rights to use the Uruguay River in a fair and reasonable manner for commerce and transportation, for fishing and the extraction of other natural resources, for industrial and agricultural purposes, for recreation, and for municipal purposes, including water supply and sanitation[49]. Although environmental protection was always an important objective of the Statute, it was never its sole purpose, as Argentina's Memorial suggests. Rather, from the time the Parties began negotiating the 1975 Statute, and continuing through its adoption and more than three decades of practice under it, their emphasis has always been on the various uses to which the river might be put, consistent, of course, with their mutual interest in protecting and preserving the aquatic environment. Simply put, the Statute is designed to ensure the *sustainable* use of the Uruguay River.

2.3 In order to protect the Parties' rights to make use of the Uruguay River in a fair and reasonable manner while simultaneously protecting the aquatic environment, the 1975 Statute creates a regime of prior notification, information sharing and, if necessary, consultation whenever one of the Parties plans to

[49] *See* Statute of the River Uruguay (hereinafter "1975 Statute") (26 February 1975). UCM, Vol. II, Annex 4.

undertake a work of sufficient magnitude that it could affect navigation, the regime of the river and/or the quality of its waters. It conspicuously does not, however, give either Party a right to prevent works planned by the other, as Argentina argues. Although the Statute's procedural mechanisms are designed to facilitate agreement between the Parties, they do not state that such agreement is a prerequisite to the implementation of a planned work. Instead, in cases where the Parties are unable to reach agreement despite their good faith efforts, the Statute provides recourse to this Court as the ultimate arbiter of whether or not a planned use is consistent with the central goal of the Statute: the rational and optimal utilization of the river. Uruguay will demonstrate each of these points in the sections that follow.

2.4 In so doing, Uruguay will also expose the fallacy of each of the arguments on which Argentina's procedural case is predicated. That is, that Uruguay violated the 1975 Statute (i) by not notifying CARU *before* it issued initial environmental authorizations to ENCE and Botnia; (ii) by failing to await CARU's "authorization" of the plants; (iii) by not suspending work on the plants during the Parties' consultations; and (iv) by not suspending work while this case is heard by the Court.

2.5 With respect to Argentina's first argument, the truth is that nothing in the 1975 Statute requires notification to CARU *prior* to the initial environmental authorization of a particular project. Indeed, the text of the Statute actually suggests that notice to CARU comes *after* authorization by the initiating State. This reading is confirmed by the CARU Digest and the consistent practice of the Parties, both of which make it clear that notice of a project to CARU is not required until *after* the project has been authorized by the notifying State.

2.6 With respect to Argentina's second argument, that Uruguay was required to await authorization from CARU, the fact is that CARU does not have the authority to approve or reject particular projects. Indeed, CARU has *never* authorized or rejected a particular project in the three decades of its existence. That is not its role. Under the Statute and the Digest, CARU's functions with regard to projects or works undertaken by the Parties are largely technical, regulatory, and facilitative. It expresses opinions and offers technical information and analyses; it establishes water quality standards with which the Parties must comply; it facilitates communication between the Parties; but it does not engage in decision-making with respect to whether particular projects may be implemented or not. The CARU Digest in particular makes it absolutely clear that the Parties (that is, Uruguay and Argentina) -- and *only* the Parties -- have the power to authorize projects. While CARU is given responsibility for conducting a preliminary technical review of a planned project, it does not approve or disapprove the project.

2.7 With respect to Argentina's third argument, that Uruguay was required to refrain from carrying out the projects while consultations were on-going, the fact is that the Statute does not expressly state any such obligation. Even accepting that the provisions of pertinent multilateral conventions explicitly stating the duty Argentina seeks to invoke could be read into the Statute, that duty does not prohibit the initiating State from taking steps in furtherance of a project during consultations. Rather, it is precluded only from "implementing" the project. Preparatory steps are, however, permitted.

2.8 Finally, Argentina's argument that Uruguay was obligated to suspend implementation pending a final judgment on the merits in this case is defeated by the

clear rules of general international law. The Statute itself is silent on this score, but the provisions of the relevant multilateral conventions which (unlike the Statute) expressly state that projects should not be "implemented" during consultations, nonetheless make clear that that duty does not extend into the dispute resolution phase. Even under those conventions, the duty ends when consultations end. Afterwards, the initiating State is free to implement a project even as dispute resolution proceedings are underway. The result can be no different under the Statute.

2.9 For all these reasons, each of which will be more fully articulated below, the pillars of Argentina's procedural argument that Uruguay violated the provisions of Articles 7 through 12 of the 1975 Statute cannot support the weight the Memorial attempts to place on them. As they collapse, so too does the entire edifice of Argentina's procedural case. As demonstrated in the remainder of this Chapter, and in Chapter 3 which immediately follows, in both law and fact Uruguay has at all times complied with its procedural duties under the 1975 Statute.

2.10 Uruguay has not only complied with its procedural obligations under Articles 7-12. As will be more fully detailed in Part II of this Counter-Memorial, Uruguay has also complied with its substantive obligations under the Statute. As demonstrated in Chapters 4 through 7, Uruguay has taken all required steps -- and more -- to ensure that the ENCE and Botnia plants do not harm the Uruguay River or its aquatic environment.

Section I.
Origins and Scheme of the 1975 Statute

A. History and Development

1. The 1961 Boundary Treaty

2.11 The Parties agree that the origins of the 1975 Statute lie in the 1961 Uruguay-Argentina Treaty Concerning the Boundary Constituted by the River Uruguay (the "1961 Boundary Treaty")[50]. Article 7 of the 1961 Boundary Treaty requires the Parties to "agree on the statute on the use of the river," and defines the scope of what would later become the 1975 Statute. It provides that the future statute will contain, among other things, the following:

> a) common and uniform regulation concerning the safety of navigation.
>
> b) a regime of pilotage that respects currently existing practices.
>
> c) regulation of the maintenance of dredging and buoying, in conformity with Article 6.
>
> d) reciprocal facilitation of hydrographic surveys and other studies relating to the River.
>
> e) rules for the conservation of living resources.
>
> f) rules for averting the contamination of the water[51].

2.12 Thus, from the beginning, the statute-to-come was intended to have a broad substantive scope with an emphasis on "the use of the river." Environmental protection was certainly an important concern, but it was also consequent to the Parties' mutual focus on making use of the river.

---

[50] *See* AM, paras. 3.5-3.9. *See* Treaty Concerning the Boundary Constituted by the River Uruguay (hereinafter "1961 Boundary Treaty") (7 April 1961). UCM, Vol. II, Annex 1.

[51] 1961 Boundary Treaty, Art. 7.

2. The 1971 Joint Declaration

2.13 In 1971, four years before final agreement on the text of the 1975 Statute, the Parties issued the Joint Declaration on Water Resources described at paragraph 3.24 of Argentina's Memorial. The 1971 Joint Declaration is of particular interest in understanding the 1975 Statute. It sets out the basic procedural framework governing notification of projects on the river, the central elements of which were later reflected in the procedural provisions of the 1975 Statute. As Argentina itself puts it: "… la Déclaration argentino-uruguayenne de 1971 énonce les principes fondamentaux en matière d'utilisation et de protection d'un cours d'eau"[52].

2.14 The 1971 Joint Declaration states:

> Both Ministries declare their agreement on the following basic principles, applicable to the system for the use of international rivers and their tributaries:
>
> 1. The river waters shall be used in a fair and reasonable manner.
>
> 2. All forms of pollution of international rivers and their tributaries shall be avoided, and all ecological resources shall likewise be preserved in the zones of their respective jurisdictions.
>
> 3. When one State plans to make use of the resource, it shall provide beforehand to the States concerned the work plan and schedule of operations as well as any other data enabling them to determine the effects such work will have on the territory of such States.
>
> 4. The requested party shall indicate within a reasonable period of time any aspects of the plan or schedule that could cause significant damage. In that case, the party shall indicate the technical reasons and calculations on which its concerns are based or shall make suggestions for modifying the proposed plan

[52] AM, para. 3.30. ("the 1971 Argentina-Uruguay Declaration sets out the fundamental principles in terms of the use and protection of a waterway.")

> or schedule when informed thereof in order to avoid such damage.
>
> 5. Any dispute arising for this reason shall be referred to a Joint Technical Committee for a decision. In the event of a disagreement among the technical experts, they shall be required to present a report to their Governments expressing their opinions. The Governments shall attempt to find a solution by diplomatic means or by any other means agreeable to both, with a view to finding a fair and amicable solution[53].

2.15 There are five points about the 1971 Declaration that deserve to be underscored because each reappears in the text of the 1975 Statute. *First*, paragraph 4 provides that if the notified State determines that a planned project could cause it significant harm, it must "indicate the technical reasons and calculations on which its concerns are based". In other words, it must identify the basis of its conclusions with particularity. It cannot rely on speculation or vague allegations of generalized harms, but rather bears a burden of showing that its concerns have a basis in reality.

2.16 *Second*, also under paragraph 4, the notified State is entitled to make "suggestions" for "modifying" the planned project. Both terms are significant. The use of the term "suggestions" implies, of course, that the notified State is not empowered to dictate requirements that must be complied with before work can be undertaken. Similarly, the use of the verb "modify" suggests that while the notified State may seek to influence the manner in which a project is carried out, it is not entitled to negate the initiating State's underlying right to undertake the project.

2.17 *Third*, and related to the previous point, the 1971 Declaration does not state that the consent of the notified State is required before a project can be carried out. Neither does it say anything about the notified State having the right to impede

---

[53] Uruguayan-Argentine Joint Declaration on Water Resources (9 July 1971). UCM, Vol. II, Annex 2.

the execution of the project. In a similar vein, paragraph 5 provides that the Parties "shall attempt to find a solution … agreeable to both". This wording ("…shall attempt…") excludes a requirement that such an agreement be reached before a project can be carried out.

2.18 *Fourth*, paragraph 5 of the 1971 Declaration provides that in the event of a disagreement, the Parties shall first try to settle the issue at a technical level, and will subsequently proceed to direct consultations if they deem it necessary.

2.19 *Fifth*, and finally, the ultimate goal in the case of any disagreement is a "fair solution". Viewed in light of paragraph 1, which states that "the River shall be used in a fair and equitable manner", the necessary conclusion is that a notified State can have no good faith basis for resisting a project if it can be deemed "fair and equitable" under all the circumstances.

3. The 1973 Treaty on the River Plate

2.20 As Argentina's Memorial correctly recounts[54], the Parties deferred completing their negotiation of the Statute for the River Uruguay pending completion of what became the 1973 Treaty on the Río de la Plata and the Corresponding Maritime Boundary (the "1973 Treaty")[55]. The 1973 Treaty is of interest because it presages many of the procedural obligations later included in the 1975 Statute. In particular, Articles 17 through 22 of the 1973 Treaty are virtually identical to what would become Articles 7 through 12 of the 1975 Statute[56]. They are also broadly reflective of the principles of the 1971 Joint Declaration adopted

---

[54] *See* AM, para. 3.12.

[55] *See* Treaty Concerning the Río de la Plata and the Corresponding Maritime Boundary (hereinafter "1973 Treaty") (19 November 1973). UCM, Vol. II, Annex 3.

[56] *Compare* 1975 Statute, arts. 7-12, *with* 1973 Treaty, arts. 17-22.

just two years earlier. There was, however, one key innovation in the 1973 Treaty: the provision in Article 87 for referring disputes between the Parties that cannot be resolved through direct negotiation to the International Court of Justice[57]. This provision, of course, was later mirrored in the 1975 Statute (at Article 60) and forms the basis of the Court's jurisdiction in this case[58].

B. The Object and Purpose of the Statute

2.21 As Argentina again correctly notes[59], the negotiations culminating in the 1975 Statute lasted two years, from 1973 to 1975. On 26 February 1975, the heads of both States signed the agreement in Salto, Uruguay. It subsequently came into force on 18 September 1976 with the exchange of instruments of ratification.

2.22 The central object of the 1975 Statute is set forth in Article 1, which states: "The Parties agree on this Statute … in order to establish the joint machinery necessary for the optimum and rational utilization of the River Uruguay …."[60]. The Statute itself does not define the phrase "optimum and rational utilization". Nonetheless, given the origins of the Statute, logic compels the conclusion that it refers back to the concept of "fair and reasonable" use invoked in paragraph 1 of the 1971 Joint Declaration.

---

[57] 1973 Treaty, *op. cit.*, Art. 87.

[58] There is, however, a difference in the scope of the procedural provisions of the 1973 Treaty and the 1975 Statute. Whereas the 1975 Statute requires notification to the other Party whenever one State is planning a work capable of affecting navigation, the regime of the river and/or the quality of its waters, the analogous provisions of the 1973 Treaty are more limited. They apply only in case where a planned project might affect navigation and/or the regime of the river (in that case, the River Plate).

[59] AM, para. 3.13.

[60] 1975 Statute, *op. cit.*, Art. 1. UCM, Vol. II, Annex 4.

2.23 Argentina agrees that the concepts "optimal and rational utilization" and "fair and reasonable use" are equivalent. In its Memorial, for example, Argentina states: "Le principe de l'utilisation optimale et rationnelle du fleuve Uruguay [in Article 1] est notamment lié au principe de l'utilisation équitable et raisonnable" described in Article 5 of the 1997 Watercourse Convention[61]. The provisions of and the commentary to the 1997 Watercourse Convention can thus shed light on the concept at the heart of the 1975 Statute; that is, the optimum and rational use of the Uruguay River[62].

2.24 The International Law Commission's commentary to its 1994 Draft Articles on the Non-Navigational Uses of International Watercourses (which was later adopted as the 1997 Watercourse Convention) makes clear that, at root, the principle of fair and reasonable use involves an equitable balancing of interests of the States involved. According to the ILC commentary to Article 5 (at para. 2): "[A] watercourse State has both the right to utilize an international watercourse in an equitable and reasonable manner and the obligation not to exceed its right to equitable utilization or, in somewhat different terms, not to deprive other

[61] AM, para. 3.163. ("The principle of optimal and rational use of the Uruguay River [in Article 1] is especially tied to the principle of equitable and reasonable use".)

[62] The 1975 Statute, of course, constitutes the specific source of law governing this case and defining the Court's exercise of jurisdiction. Neither Uruguay nor Argentina have signed the 1997 Watercourse Convention, nor has it entered into force. Consequently, it cannot of its own force create binding obligations relevant to this case. Nevertheless, it is Uruguay's position that reference to principles of general international law can aid in the interpretation of the specific provisions of the 1975 Statute as provided in Article 31(c)(3) of the Vienna Convention on the Law of Treaties. This is especially true of the 1997 Watercourse Convention because it bears manifold similarities to the Statute; because it was adopted by the General Assembly by a vote of 104 in favor to only three against; and because the Court itself has recognised its importance in the *Gabčíkovo* case. *See Case Concerning the Gabčíkovo-Nagymaros Project (Judgment)*, *I.C.J. Reports 1997*, p. 56, para. 85.

watercourse States of their right to equitable utilization"[63]. Accordingly, a State has the right to make use of an international waterway so long as its use does not prevent the other State from exercising its equivalent right to make a fair and reasonable use of the same waterway.

2.25 Again according to the ILC commentary to Article 5:

> There is no doubt that a watercourse State is entitled to make use of the waters of an international watercourse within its territory. This right is an attribute of sovereignty and is enjoyed by every State whose territory is traversed or bordered by an international watercourse. Indeed, the principle of the sovereign equality of States results in every watercourse State having rights to the use of the watercourse that are qualitatively equal to, and correlative with, those of other watercourse States. … [E]ach watercourse State is entitled to use and benefit from the watercourse in an equitable manner[64].

Inevitably, "[t]he scope of a State's rights of equitable utilization depends on the facts and circumstances of each individual case …"[65].

2.26 This rule, which requires an equitable balancing of the interests involved, is an old and distinguished one. In the 1927 *Donauversinkung* case, for example, it was stated: "The interests of the States in question must be weighed in an equitable manner against one another. One must consider not only the absolute injury caused to the neighbouring State, but also the relation of the advantage gained by the one to the injury caused to the other"[66].

---

[63] Draft Articles on the Law of Non-Navigational Uses of International Watercourses and Commentaries Thereto (hereinafter "1994 Draft Articles"), p. 97, comment 2 (1994), appears in *Yearbook of the International Law Commission, 1994*, vol. II, Part Two.

[64] *Ibid.*, p. 98.

[65] *Ibid.*

[66] *Streitsache des Landes Württemberg und des Landes Preussen gegen das Land Baden (Württemberg and Prussia v. Baden)*, *betreffend die Donauversinkung*, German Staatsgerischtshof, 18 June 1927, *Entscheidungen des Reichsgerichts in Zivilsachen* (Berlin), vol. 116, appendix, pp. 18 *et seq*. Although the *Donauversinkung Case* involved two federal

C. The Scheme of the 1975 Statute

2.27 Consistent with the terms of Article 7 of the 1961 Treaty, which required Uruguay and Argentina to agree on a statute on the "use of the River", the scope of the 1975 Statute scope is broad. It is divided into 17 Chapters dealing with a wide range of substantive themes, including: navigation and works (Chapter II), pilotage (Chapter III), port facilities (Chapter IV), safeguarding of human life (Chapter V), salvaging (Chapter VI), use of the waters (Chapter VII), resources of the bed and subsoil (Chapter VIII), conservation of natural resources (Chapter IX), pollution (Chapter X), and research (Chapter XI). It also contains a number of Chapters governing procedural and administrative issues, including: the establishment of an administrative commission (Chapter XIII), procedures for conciliation (Chapter XIV) and the settlement of disputes (Chapter XV).

2.28 As noted above, the focus of the Statute is on the uses to be made of the river. This point is emphasized in the clearest possible way in the provisions of the CARU Digest dealing with the subject of pollution. In setting forth the relevant regulations, the Digest states that the "basic purposes of the provisions of this Subject [that is, dealing with pollution]" include "*to ensure any legitimate use of the water* considering long term needs and particularly human consumption needs"[67]. It should be noted, moreover, both (i) that "legitimate use of the water" is a defined

---

states (Länder) of Germany, the German Constitutional Court applied international law in rendering its decision. The courts of other federal jurisdictions have similarly applied the international principle of "equitable apportionment" or "equitable utilization" between their constituent states. *See, e.g.*, *Kansas v. Colorado*, 206 U.S. 46 (1906) (United States of America); *Soleure v. Argovia* (RO 261, pp. 50-51) (1900) (Switzerland).

[67] Digest of the Commission for the Administration of the River Uruguay (CARU) (hereinafter "CARU Digest"), Subject E3, Title 1, Chap. 2, Sec. I, Art. 1(b) (1984, as amended) (emphasis added). UCM, Vol. IV, Annex 60.

term that means "any use or exploitation of the water that deserves protection"[68], and (ii) that "industrial supply" is specifically included as a "legitimate use" of the water[69]. Argentina's assertion that the Statute reflects "un souci constant: celui d'exclure toute utilisation et exploitation unilatérale du fleuve Uruguay"[70] is thus entirely inconsistent with the actual purposes and text of the 1975 Statute, as well as the provisions of the Digest adopted jointly by the Parties through their respective delegations to CARU.

2.29 Contrary to the extreme position advocated in Argentina's Memorial, what the Statute requires is an equitable balancing of interests. While the Statute guarantees the right of each Party to use the river, including for industrial purposes, this does not mean that Uruguay or Argentina is free to pursue economic development at the expense of the aquatic environment. Rather, the 1975 Statute must be interpreted in accordance with the principle of sustainable development, which requires that the goals of economic development and environmental protection be treated in an integrated fashion[71]. Thus, the 1975 Statute permits each Party to develop its economy in the exercise of its sovereign rights, provided it does not do so at the expense of environmental protection. As shown in Part II of this Counter-Memorial, Uruguay's environmental laws and regulations are as strong as any in Latin America. Indeed, the obligation to protect the environment is enshrined

---

[68] *Ibid.*, Chap. 1, Sec. 2, Art. 1(d).

[69] *Ibid.*, Title 2, Chap. 4, Sec. 1, Art. 1(f).

[70] AM, para. 3.32. ("reflect a consistent concern: the concern for ruling out any unilateral use or operation of the Uruguay River")

[71] This is required by Principle 4 of the Rio Declaration on Environment and Development (3-14 June 1992) and adverted to in several judgments of this Court. *See, e.g., Gabčikovo-Nagymaros Project (Judgment)*, p. 78, para. 140; *Case Concerning Pulp Mills on the River Uruguay (Order on Provisional Measures), I.C.J. Reports 2006*, p. 19, para. 80 (13 July 2006).

in Article 47 of its Constitution[72]. Not only are its laws strong, Uruguay also has an outstanding record of rigorous enforcement. It has been ranked third in the world (and first in Latin America) in its commitment to environmental protection and sustainable development, a fact senior Argentine officials have themselves recognized[73].

2.30 The right of all States to pursue sustainable economic development is enshrined in Principle 2 of the 1992 Rio Declaration (which Argentina does not cite in its Memorial), and in several subsequent treaties[74]. Principle 2 affirms both the sovereign right of States to exploit their own resources "pursuant to their own environmental and developmental policies" and their responsibility "to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or to areas beyond the limits of national jurisdiction." When first adopted in 1992, the totality of this provision was regarded by many States present at the Stockholm Conference, and subsequently by the UN General Assembly, as

---

[72] Constitution of Uruguay, Art. 47 (1967). UCM, Vol. II, Annex 5. Article 47 states, "Environmental protection is a matter of general interest. Persons should avoid any action which may cause serious depredation, destruction or contamination of the environment. The law will regulate this provision and can establish sanctions for infringers thereof."

[73] 2005 Environmental Sustainability Index, World Economic Forum. UCM, Vol. IX, Annex 201. Former Argentine Foreign Minister Rafael Bielsa himself remarked on Uruguay's prominence in the realm of environmental protection, stating that Uruguay is "the sixth leading nation in the world in terms of environmental protection…" Presidency of the Republic of Uruguay Web Site, "Agreements on Mercosur, Environment and Human Rights (9 October 2003), *available at* http://www.presidencia.gub.uy/noticias/archivo/2003/octubre/2003100902.htm (last visited on 29 June 2007). UCM, Vol. II, Annex 14.

[74] United Nations Framework Convention on Climate Change, Preamble (1992) (*entered into force* for Argentina on 9 June 1994); 1992 Convention on Biological Diversity, Art. 3 (1992) (*entered into force* for Argentina on 22 November 1994); Convention to Combat Desertification, Preamble (1994) (*entered into force* for Argentina on 6 April 1997); 2001 Convention on Persistent Organic Pollutants, Preamble (2001) (*ratified* by Argentina on 25 January 2005).

reflecting customary international law[75]. In this form, the Court has held that it is "now part of the corpus of international law relating to the environment"[76].

2.31 The right to pursue economic development – indeed the duty to do so – has also been recognized in international human rights law. Article 1 of the 1966 UN Covenants on Civil and Political Rights and on Economic, Social and Cultural Rights specifically recognizes the right of all peoples to "freely pursue their economic, social and cultural development", and "to freely dispose of their natural wealth and resources" in accordance with international law.

2.32 What is clear is that Principle 2 of the Rio Declaration is neither an absolute prohibition on environmental damage nor a license to exercise absolute freedom in exploiting natural resources. Like Principle 4, it too requires integration or accommodation of development and environmental protection. The Court made the point in the *Gabcikovo* case: "This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development."[77]

2.33 Argentina's arguments about the 1975 Statute entirely fail to address this need to accommodate economic development and environmental protection when utilizing the waters of the Uruguay River. Indeed, Argentina's Memorial studiously cultivates the impression that the 1975 Statute subjugates considerations of economic development to unyielding environmental concerns. However, as

---

[75] L. Sohn, "The Stockholm Declaration on the Human Environment," 14 HARV. INT'L L. J. 423, pp. 491-493 (1973). UNGA Resolution 2996 (XXVII) (1972) asserts that Principles 21 and 22 of the Stockholm Declaration "lay down the basic rules governing this matter". One hundred and twelve states voted for this resolution; none opposed.

[76] *Advisory Opinion on the Legality or Threat of Use of Nuclear Weapons, I.C.J. Reports 1996*, p. 242, para. 29.

[77] *Gabčikovo-Nagymaros Project (Judgment)*, *op. cit.*, p. 78, para. 140.

demonstrated, this view of the interrelationship between economic development and environmental protection is inconsistent with the terms of the Statute itself, and with general international law.

D. Overview of the Environmental Protection Provisions

2.34 The provisions of the Statute relating to environmental protection are set out in Chapter IX (Arts. 35 through 39) relating to the "Conservation, Utilization and Development of Other Natural Resources" and Chapter X (Arts. 40 through 43) relating to "Pollution". Article 41 is of particular relevance in this case. Pursuant to Article 41(a), the Parties undertake to "protect and preserve the aquatic environment and, in particular, to prevent its pollution, by prescribing appropriate rules and measures in accordance with applicable international agreements and in keeping, where relevant, with the guidelines and recommendations of international technical bodies"[78].

2.35 Although Article 41(a) states that the Parties shall "prevent pollution" this does not, of course, require them to refrain from all activities that result in discharges of any kind into the river. To the contrary, as will be discussed in greater detail in Part II, the Parties have specifically agreed on standards setting the threshold for what they jointly consider acceptable impacts. In particular, through CARU, Argentina and Uruguay have together defined and adopted water quality standards which they have determined adequately protect the aquatic environment and ensure their mutual ability to make rational uses of the river.

2.36 These specific standards are set forth in the section of the CARU Digest dealing with the subject of pollution. First established in 1984, the standards are the

---

[78] 1975 Statute, *op. cit.*, Art. 41(a). UCM, Vol. II, Annex 4.

subject of frequent revision and are modified to take account of new scientific developments both in the protection of the environment and the understanding of how various substances exert toxic effects. Thus, under Article 41(a), so long as the Parties are prescribing appropriate rules and measures to ensure compliance with the agreed standards set by CARU, they are discharging their duty to "prevent pollution".

2.37 Viewing the obligation to prevent pollution in this way exposes the error of Argentina's statement that: "Chaque Etat riverain a … l'obligation de prévenir les dommages au cours d'eau. Si cette exigence n'est pas respectée, l'autre Etat riverain pourrait être privé de son droit de parvenir à un résultat optimal et rationnel dans l'utilisation des eaux du fleuve"[79]. In the case of Uruguay and Argentina, the most that could be said is that each State has the obligation to prevent discharges into the river that exceed the agreed water quality standards established under the auspices of CARU in conformity with Article 41(a) of the Statute.

2.38 But even this is an overstatement. The obligation set out in Article 41(a) is a duty of due diligence. The Parties do not undertake to prevent all pollution but rather to "to prevent its [the aquatic environment's] pollution, *by prescribing appropriate rules and measures* …"[80] In other words, it is an obligation of conduct, not an obligation of result. In this respect, the 1975 Statute is entirely consistent with the principles of general international law. As the ILC stated in its commentary to Article 7 of what became the 1997 Watercourse Convention: "The obligation of

[79] AM, para. 3.53. ("Each Waterway State has … the obligation to prevent damage to the waterway. If this requirement is not respected, the other Waterway State may be deprived of its right to benefit from optimum and wise use of the river waters.")

[80] 1975 Statute, *op. cit.*, Art. 41(a) (emphasis added). UCM, Vol. II, Annex 4.

due diligence contained in article 7 sets the threshold for lawful state activity. It is not intended to guarantee that in utilizing an international watercourse significant harm would not occur. It is an obligation of conduct, not an obligation of result."[81]

2.39 The same point is reflected in the commentary to the ILC's 2001 Draft Articles on the Prevention of Transboundary Harm. According to the commentary to Article 3:

> The obligation of the State of origin to take preventive or minimization measures is one of due diligence. It is the conduct of the State of origin that will determine whether the State has complied with its obligations under the present articles. The duty of due diligence involved however is not intended to guarantee that significant harm be totally prevented, if it is not possible to do so. In that eventuality, the State of origin is required, as noted above, to exert its best possible efforts to minimize the risk. In this sense it does not guarantee that the harm would not occur[82].

2.40 Also according to the ILC:

> [D]ue diligence is manifested in reasonable efforts by a State to inform itself of factual and legal components that relate foreseeably to a contemplated procedure and to take appropriate measures in a timely fashion, to address them. … Such measures include, first, formulating policies designed to prevent significant transboundary harm or to minimize the risk thereof and second, implementing those policies. Such policies are expressed in legislation and administrative regulations and implemented through various enforcement mechanisms[83].

2.41 The ILC commentary to Article 5 makes clear how these principles apply when private entities are conducting the potentially polluting activities:

---

[81] 1994 Draft Articles, *op. cit.*, p. 103, comment 4.

[82] Draft Articles on Prevention of Transboundary Harm from Hazardous Activities with commentaries (hereinafter "2001 Draft Articles"), p. 391-392, comment 7, appears in *Yearbook of the International Law Commission, 2001*, vol. II, Part Two.

[83] *Ibid.*, p. 393, comment 10.

> To say that States must take the necessary measures does not mean that they must themselves get involved in operational issues relating to the activities to which article 1 applies. Where these activities are conducted by private persons or enterprises, the obligation of the State is limited to establishing the appropriate regulatory framework and applying it in accordance with these articles[84].

2.42 Of particular note in light of the agreed water quality standards set forth in the CARU Digest are the ILC's comments to Article 3 of the 2001 Draft Articles which state: "Article 3 … imposes an obligation on the State of origin to adopt and implement national legislation incorporating accepted international standards. These standards would constitute a necessary reference point to determine whether measures adopted [to minimize harm] are suitable."[85]

2.43 The logic of this last point is as powerful as it is self-evident. It would be nonsensical for either Argentina or Uruguay to argue that when the other State adopts and enforces national rules requiring compliance with CARU's environmental standards -- standards that both Parties have cooperatively fashioned pursuant to the 1975 Statute -- it might still be said to violate the anti-pollution provisions of the Statute. As Uruguay shows in Part II of this Counter-Memorial, it has faithfully enacted into its own national law the anti-pollution standards adopted by CARU, and has vigorously enforced them and pledged to continue doing so, in particular with respect to the two cellulose plants at issue in this case.

E. THE PROCEDURAL REQUIREMENTS OF THE STATUTE

2.44 In addition to its various substantive articles, the 1975 Statute also contains a series of provisions relating to the procedure for notification, information-

[84] *Ibid.*, p. 399, comment 10.

[85] *Ibid.*, p. 391, comment 4.

sharing and, if necessary, consultation in circumstances where one State is planning to undertake a project which might prejudice navigation on the river, the regime of the river, and/or the quality of its waters. These provisions are set out at Articles 7 through 12 of the Statute and will be examined in detail below.

2.45 At the outset, however, it is important to appreciate the role of these procedural provisions in the scheme of the 1975 Statute as a whole. At the oral hearings on Argentina's request for the indication of provisional measures in June 2006, Counsel for Uruguay observed:

> While the Parties disagree about the nature and extent of the procedural rights and obligations set forth in Articles 7 to 13 of the Statute, they are in agreement, it would appear, on the purpose and objective of these procedures. They are intended to provide some measure of protection for each State against violation of the substantive provisions of the Statute by the other, in this case the substantive provisions against contamination of the river set forth in Articles 40 to 43. ... That is the harm that the procedures set forth in Articles 7 to 13 are designed to protect against[86].

2.46 This agreement is no longer merely apparent; it is explicit. At paragraph 3.31 of its Memorial, Argentina admits that "[d]es obligations de contenu plus procédural comme la notification et la consultation permettent la mise en oeuvre d'obligations à contenu substantiel comme le principe de l'utilisation équitable et raisonnable et le principe de ne pas causer un préjudice sensible"[87]. In a like vein, Argentina elsewhere acknowledges: "Il en va ainsi des deux catégories d'obligations imposées aux Parties par le Statut: les obligations substantielles de prévenir la pollution et les autres dommages au fleuve Uruguay (que l'on peut

---

[86] CR 2006/49, p. 31 (Reichler) (9 June 2006).

[87] AM, para. 3.31 (emphasis added). ("obligations of a more procedural nature like notification and consultation are used to implement obligations of a substantive nature like the principle of fair and reasonable use and the principle of not causing any significant damage.")

considérer comme des obligations de résultat) d'une part; les obligations procédurales de coopération, information et consultation préalables (que s'apparentent à des obligations de comportement[[88]]) d'autre part, *les secondes constituant le moyen pour atteindre les résultats visés par les premières*."[89]

2.47 To say that the procedural mechanisms of the Statute are designed to facilitate the realization of its substantive provisions in no way diminishes the importance of those procedures. It does, however, make clear that their importance is as a tool for achieving the ultimate goal of the Statute: the rational and equitable use of the river. As the ILC stated in connection with the procedural provisions of the 1997 Watercourse Convention (which are very similar to those in the 1975 Statute): "These articles establish a procedural framework designed to assist watercourse States in maintaining an equitable balance between their respective uses of an international watercourse."[90]

2.48 The particular provisions of Articles 7 through 12 of the 1975 Statute track the core elements of the 1971 Joint Declaration[91]. They provide a system of notification, information sharing and, if necessary, consultation between the Parties and dispute resolution by this Court. As Uruguay will demonstrate presently, they distinctly do *not* require the prior consent of the notified State before a planned

---

[88] Uruguay notes that Argentina's reference to the obligation to prevent pollution as an "obligation of result" contradicts the text of Article 41(a) which, as demonstrated above, plainly creates an obligation of conduct.

[89] AM, para. 5.2 (emphasis added). ("Two categories of obligations imposed upon the Parties by the Statute are thus established: on the one hand, substantive obligations to prevent pollution and other damage to the Uruguay River (that can be considered obligations of result); and on the other, procedural obligations of cooperation, information and prior consultation (that can be classified as obligations of conduct), *the latter constituting means of obtaining the results targeted by the former*.")

[90] 1994 Draft Articles, *op. cit.*, p. 111, comment 1.

[91] *See supra* paras. 2.12-2.19.

project can be implemented. Neither do they give the notified State a right to impede the execution of the works, even in circumstances where it has objected to the project in question. What they do is afford the notified State a mechanism for evaluating a planned project, airing its concerns, and having those concerns considered in good faith by the initiating State, including in the context of direct, Party-to-Party consultations if necessary. They also afford the Parties the option of having any unsettled dispute over the potential impact of a planned project on the river resolved by this Court.

Section II.
The Procedural Provisions of the Statute

A. ARTICLE 7

1. The First Paragraph of Article 7

2.49 The obligation to provide notification of a planned work is set forth in Article 7, the first paragraph of which provides:

> If one Party plans to construct new channels, substantially modify or alter existing ones or carry out any other works which are liable to affect navigation, the régime of the river or the quality of its waters, it shall notify the Commission [*i.e.*, CARU], which shall determine on a preliminary basis and within a maximum period of 30 days whether the plan might cause significant harm to the other Party[92].

The triggering event for the obligation to notify CARU is thus when one party "plans" the "implementation" of a "work" that is of sufficient magnitude that it could affect navigation, the regime of the river, and/or the quality of its waters.

2.50 At least two threshold observations about this first paragraph of Article 7 are in order. *First*, by its terms, the duty to notify is triggered only by a limited set

[92] 1975 Statute, *op. cit.*, Art. 7.

of projects. Only those that are liable to affect (i) navigation, (ii) the regime of the river[93], and/or (iii) water quality are included. Works that are not liable to affect any of these three subjects are not included within the scope of the notification obligation, regardless of their nature or scope. *Second*, the initial notice is to be provided to CARU, which then is tasked with determining preliminarily whether the planned project might cause significant harm to the other party. It has a maximum of 30 days following notification by the initiating State to do so.

(a) What Is "Significant Harm"?

2.51 The 1975 Statute itself does not itself define "significant harm." The ILC's commentary to the 2001 Draft Articles -- which uses the identical formulation -- sheds light on the matter, however. According to the ILC: "'[S]ignificant' is something more than 'detectable' but need not be at the level of 'serious' or 'substantial'. The harm must lead to a real detrimental effect on matters such as, for example, human health, industry, property, environment or agriculture in other States."[94] In the same paragraph, the ILC also makes clear that this "would exclude activities where there is a very low probability of causing significant transboundary harm"[95]. In addition, the "significant harm" must stem from transboundary activity that has a measurable physical (as opposed to purely psychological) effect.

---

[93] "Regime" in this context means, "the condition of a river with respect to the rate of its flow as measured by the volume of water passing different cross sections in a given time". Webster's Third New International Dictionary, Unabridged, Massachusetts, Merriam Webster, 2002, p. 1911.

[94] 2001 Draft Articles, *op. cit.*, p. 388, comment 4.

[95] *Ibid.*, p. 386, comment 16.

According to the ILC commentary to Article 1, “these activities should have transboundary *physical* consequences which, in turn, result in significant harm”[96].

(b) Timing

2.52 The wording of Article 7 is imprecise with respect to the question of when exactly CARU must be notified about a given project. The Statute says merely that when one of the Parties “plans” to “carry out” a project, it shall inform CARU, without saying precisely when in the planning process this must occur. General international law is helpful in interpreting this provision, however[97]. Article 12 of the 1997 Watercourse Convention requires “timely” notification[98]. According to the ILC commentary: “The term ‘timely’ is intended to require notification sufficiently early in the planning stages to permit meaningful consultations and negotiations under subsequent articles”[99]. Similarly, the ILC commentary to Article 12 of the 2001 Draft Articles provides that “in a timely manner” “means that when the State becomes aware of such information, it should inform the other States quickly so that there will be enough time for the States concerned to consult on appropriate preventive measures or the States likely to be affected will have sufficient time to take proper actions”[100]. As applied to Article 7 of the 1975 Statute, the ILC’s logic would require the notifying State to give notice of a planned project in sufficient time to allow CARU and the notified State to assess the likely impacts of the project

---

[96] *Ibid.*; *see also ibid*., comment 17 (“the activities covered in these articles must themselves have a physical quality, and the consequences must flow from that quality”).

[97] *See* Vienna Convention on the Law of Treaties, *op. cit.*, Art. 31(c)(3).

[98] Convention on the Law of the Non-navigational Uses of International Watercourses (hereinafter “1997 Watercourse Convention”), Art. 12 (1997).

[99] 1994 Draft Articles, *op. cit.*, p. 111, comment 4.

[100] 2001 Draft Articles, *op. cit.*, p. 421, comment 5.

on navigation, the regime of the river, and/or water quality, and, if necessary, "to consult on appropriate preventive measures" before a potentially harmful project is implemented. As will be shown in Chapter 3, Uruguay's notification in this case, in respect of each of the two cellulose plants at issue, was indisputably timely.

2.53 It must also be pointed out that, as a matter of logic, the Article 7 notification cannot occur at the earliest moments of planning because there will not be sufficient information at that stage to enable CARU to render an opinion about whether or not the project will cause significant harm to the other State. Put another way, how could CARU opine on the risk of harm unless the project is at a sufficiently advanced stage of planning that technical data about the likely impacts have been generated? Accordingly, the first paragraph of Article 7 makes sense only if it is understood to require notification at a time when substantial technical information about the project already exists, but before the project has advanced beyond the point at which inputs from CARU or the notified State on the potential harm would necessarily come too late to be acted upon. As will be seen below, this reading is supported by the terms of the third paragraph of Article 7.

2.54 Argentina argues that Article 7 required notification to CARU about the ENCE and Botnia plants *prior to* Uruguay's issuance of the initial environmental authorizations for both. For example, at paragraph 3.66 of its Memorial, Argentina states: "Cette disposition [Article 7] prévoit l'obligation de saisir et d'informer la CARU *préalablement* à toute action qui vise à l'autorisation et à la construction d'un

projet sur le fleuve Uruguay."[101] Indeed, this argument is one of the main pillars in Argentina's overall procedural case. As Argentina claims to see it:

> En conclusion, en autorisant la construction[102] de l'usine CMB sans saisir la CARU, l'Uruguay a violé l'obligation lui incombant en vertu de l'article 7 du Statut de 1975. Cette violation n'a aucune justification et n'est excusée par aucune circonstance excluant l'illicéité. Elle constitue non seulement, par elle-même, un fait internationalement illicite à l'égard de l'Argentine mais aussi elle prive les articles subséquents de toute possibilité de mise en oeuvre[103].

Argentina's thesis is, however, refuted by the text of the Statute, by the CARU Digest, and by its own past practice. All three sources are clear: under the 1975 Statute, the initial authorizations of projects can be (and in practice have been) issued before notification to CARU.

(i) The Statute

2.55 Article 28 of the Statute (in Chapter VII on "Use of Water") states:

> Every six months the Parties shall submit to the Commission a detailed report of the developments they undertake or authorize in the parts of the river under their respective jurisdictions, so that the Commission may verify whether the developments taken together are likely to cause significant damage[104].

---

[101] AM, para. 3.66. ("This provision [Article 7] stipulates the obligation to contact and inform CARU prior to taking any action to authorize and build a project on the Uruguay River.")

[102] As will be detailed in the next Chapter, Argentina repeatedly mischaracterizes the initial environmental authorizations as authorizations to begin "construction." They were not. The initial environmental authorizations about which Argentina complains were very much *initial* authorizations. They did not authorize construction. Additional authorizations were required before either ENCE or Botnia could begin any sort of construction activity. *See infra, Chap. 3,* paras. [3.09 - 3.12].

[103] AM, para. 4.47. ("In conclusion, by authorizing the construction of the CMB plant without referring the matter to CARU, Uruguay violated the obligation incumbent on it under Article 7 of the 1975 Statute. There is no justification for this violation and it is not excused by any circumstance other than illegality. Not only does it, in itself, constitute an internationally wrongful act against Argentina, it also prevents the subsequent Articles of any possibility of implementation.")

[104] 1975 Statute, *op. cit.*, Art. 28.

This provision is also mirrored in the CARU Digest which provides:

> *In compliance with articles 7 to 12 of the Statute*, biannually the Parties shall submit to CARU a detailed report on works or exploitations of the River's waters undertaken or authorized in order to be considered for the River zoning, as well as for determining whether said works or uses, individually or collectively, affect or may affect the water quality[105].

2.56 It is readily apparent that notifications to CARU of particular uses of the river may occur *after* they have been "authorized" by the initiating State. Indeed, the CARU Digest could scarcely be any clearer that post-authorization notice to CARU is entirely consistent with Article 7. The introductory clause specifically states "[i]n compliance with articles 7 to 12", and then goes on to refer to works or exploitations that *have already been authorized* by the initiating State. By itself, this disproves Argentina's argument about the need to notify CARU before any authorizations are issued.

(ii) The Digest

2.57 This same point is made equally explicit elsewhere in the CARU Digest. Subject E3 of the Digest, to which Uruguay has already referred, covers the topic of pollution. Chapter 1 specifies the competencies of the Parties, on the one hand, and CARU, on the other. Article 1(a) states that each of the Parties has the competence to "*promulgate authorizations*, restrictions or prohibitions related to the different legitimate uses of the water, *informing CARU about said authorizations*, restrictions or prohibitions whenever they are originated by or related to risks for human health"[106]. (As previously stated, "industrial supply" is specifically included among

---

[105] CARU Digest, *op. cit.*, Subject E3, Title 2, Chap. 3, Sec. 1, Art. 2 (emphasis added). UCM, Vol. IV, Annex 60.

[106] *Ibid.*, Chap. 1, Sec. 1, Art. 1(a) (emphasis added).

the "legitimate uses of the water"[107].) Thus, each State retains the unilateral right to promulgate authorizations, subject to the obligation subsequently to inform CARU when appropriate.

(iii) State Practice

2.58 The conclusion that notice to CARU is not, as Argentina tries to argue, required prior to the authorization of a project is demonstrated in the most unmistakable way by the Parties' past practice under the Statute. The evidence shows that the Parties have typically authorized and then notified, not the other way around.

a) Traspapel

2.59 Argentina's Memorial cites the Traspapel cellulose plant that was under consideration in Uruguay in the mid-1990s as an example of State practice that ostensibly supports its interpretation of the 1975 Statute[108]. If anything, however, it shows that Uruguay's interpretation is the correct one, particularly on the issue of the timing of notice to CARU. The probative value of the Traspapel example in this respect is particularly high given that it involved exactly the sort of facility -- a cellulose plant -- at issue in this case.

2.60 At the outset, it is important to note that the Traspapel plant did not come to the attention of CARU as a result of any actions taken by either of the Parties themselves. CARU learned about the plant in July 1995, when the Concejo Deliberante de Concepción del Uruguay, a local legislative body from Concepción del Uruguay, Argentina, wrote a letter to CARU's Subcommittee on Water Quality

---

[107] *See supra* para. 2.28.

[108] *See* AM, paras. 3.101, 3.115-3.118.

to express concern about reports that a cellulose plant might be constructed in the vicinity of Fray Bentos, Uruguay[109]. Upon receiving this letter, CARU sent a note to DINAMA asking for information about the project, including studies done and background materials[110].

2.61 DINAMA responded on 15 August 1995 by sending the Subcommittee a memorandum providing technical details about the plant and detailing its administrative status within Uruguay. This was the first time Uruguay communicated with CARU about the plant, and it was sent *four days after* Traspapel's initial environmental authorization (AAP) had been issued on 11 August 1995[111]. Neither Uruguay nor Argentina considered DINAMA's memorandum a formal notification of the project to CARU sufficient to set in motion the 30-day period in which CARU is to render an opinion on whether the project might cause harm to the other Party.

2.62 CARU explicitly took note of the issuance of the AAP at a subsequent plenary meeting on 15 March 1996. During that meeting, the Chairman of the Argentine delegation, Ambassador Carasales, noted:

> the documentation held by the C.A.R.U. appears to be complete with respect to the process of location, given that it includes the decree authorizing the installation of the mill in Fray Bentos and

[109] Subcommittee on Water Quality and Prevention of Pollution Report No. 148, pp. 893-894 (20 July 1995), *approved in* CARU Minutes No. 6/95 (21 July 1995). UCM, Vol. IV, Annex 79.

[110] CARU Minutes No. 6/95, p. 845 (21 July 1995). UCM, Vol. IV, Annex 78.

[111] Ministry of Housing, Land Use Planning and the Environment Initial Environmental Authorisation for Transpapel (11 August 1995). UCM, Vol. II, Annex 10.

> includes the authorization for the works and the technical and environmental conditions that the company must satisfy[112].

2.63 The statement by the Chairman of Argentina's delegation to CARU is most interesting for what it does *not* say. As of March 1996, CARU had in its possession the AAP preliminarily authorizing the installation of the Traspapel plant which had been issued seven months earlier. As of that date, CARU had not been formally notified about the plant by Uruguay pursuant to Article 7. Yet, there is not the slightest hint of protest from Argentina about these facts. Evidently, Argentina did not then consider it objectionable that Uruguay had issued an initial environmental authorization for the installation of a cellulose plant near the river without prior notification to CARU.

2.64 Argentina's failure to protest Uruguay's issuance of an AAP to Traspapel without prior notification to CARU reflects its understanding that Article 7 of the Statute does not require notification before the issuance of the AAP, and undermines its diametrically opposite argument here that prior notification to CARU of the ENCE and Botnia AAPs was required. Argentina clearly understood then what it chooses to ignore now: that the issuance of an initial environmental authorization is merely the beginning of an extended review process that requires multiple subsequent authorizations before a plant can be constructed, let alone brought into operation. Thus, there is ample time following the issuance of the AAP for notice to be provided, for inputs from CARU and Argentina to be offered and considered, and for meaningful consultations to occur before any potentially harmful activities are commenced.

---

[112] CARU Minutes No. 2/96, p. 202 (15 March 1996). UCM, Vol. III, Annex 80. CARU received the information referenced *not* as a result of any official notification from Uruguay, but rather in response to informal information requests CARU itself sent to DINAMA.

b) M'Bopicua Port

2.65 Traspapel is not an isolated case. In its Memorial, Argentina also invokes the example of the M'Bopicua Port built near Fray Bentos. Argentina claims that "[l]es étapes suivies par la CARU dans le cadre du projet de port M'Bopicuá correspondent à ce qui doit être fait avant la Commission ne prenne une décision."[113] In light of this assessment, the facts of the M'Bopicua Port case merit close attention, particularly those that bear on the question of whether the initiating State may authorize a project before notifying CARU about it.

2.66 Argentina's chronology of CARU's treatment of the M'Bopicua Port is conspicuously bare. It states only: "la CARU a été saisie de ce projet par l'Uruguay"[114]. This intentional vagueness obscures a key point. As CARU itself subsequently noted, the Uruguayan Ministry of Transport and Public Works authorized the development, operation and maintenance of installations, and provision of port services on 7 March 2001[115], and this authorization was communicated to CARU *after the fact*[116].

2.67 The record shows that CARU processed the M'Bopicua authorization as a matter of routine. As Argentina acknowledges, on 12 April 2001, the Subcommittee on Navigation, Works and Erosion decided that it had no reason to find fault with the project as described[117]. The port was later built and went into operation in late

---

[113] AM, para. 3.120. ("[t]he steps followed by CARU in connection with the M'Bopicua Port project correspond to the procedure required before the Commission makes a decision.")

[114] AM, para. 3.119. ("CARU was informed of this project by Uruguay.")

[115] CARU Minutes No. 03/01, p. 249 (16 March 2001). UCM, Vol. IV, Annex 91.

[116] *See ibid.*

[117] AM, para. 3.119.

2003[118]. Again, exactly as in the case of the Traspapel plant, the record contains not even the slightest hint that Argentina considered the notice to CARU, coming as it did only *after* the authorization of the project, untimely or in any way inconsistent with the provisions of the Statute. Thus, in 2001, as in 1996, Argentina did not subscribe to the position it advances before this Court; that is, that authorizations are only permitted after the notification and consultation process set forth in Articles 7 through 12.

c) Nueva Palmira Freight Terminal

2.68 Argentina's true understanding about whether notice to CARU is required before any authorizations are issued is still further demonstrated by the example of the Nueva Palmira freight terminal, about which Uruguay notified CARU in February 2006. As with Traspapel and the M'Bopicua Port, Argentina's Memorial attempts to enlist the Nueva Palmira Terminal to support its procedural case[119]. Yet, once again, Argentina's depiction of relevant events is materially incomplete.

2.69 It is true, as Argentina states, that Uruguay brought the freight terminal to CARU's attention at the 17 February 2006 plenary meeting[120]. It is also true that the Argentine delegation then said that, under Article 7, CARU had 30 days to evaluate whether the project might cause significant harm to Argentina[121]. More telling, however, is what Argentina omits. That is, Uruguay's Ministry of Transport and

---

[118] International Finance Corporation Cumulative Impact Study -- Uruguay Pulp Mills, Annex E, p. E2.7 (September 2006), *available at* http://www.ifc.org/ifcext/lac.nsf/AttachmentsByTitle/Uruguay_CIS_AnnexE_Oct2006/$FILE/Uruguay_CIS_AnnexE_Oct2006.pdf (last visited on 5 July 2007).

[119] *See* AM, paras. 3.121-3.122.

[120] *See* AM, para. 3.121.

[121] AM, para. 3.122.

Public Works issued Resolution No. TO/136 authorizing the freight terminal at Nueva Palmira on 30 January 2006[122] -- nearly three weeks prior to Uruguay's notification to CARU. More telling still was Argentina's reaction. It did not object to the timeliness of Uruguay's notification. It did not claim that Uruguay had failed to follow the procedural requirements of the 1975 Statute. In fact, it did quite the opposite. It accepted Uruguay's notice without comment and stated simply that CARU had 30 days to give its preliminary views[123]. It thus implicitly endorsed the propriety of Uruguay's notice.

2.70 The absence of objection is exquisitely awkward for Argentina. The Nueva Palmira freight terminal was first presented to CARU in February 2006 *even as Argentina was positioning this dispute for submission to this Court*. In December 2005 and January 2006, Argentina and Uruguay were in the process of exchanging diplomatic notes about the ENCE and Botnia plants in which Argentina was threatening to institute proceedings in this Court. In those notes, Argentina took the position that it now advances in its Memorial; that is, that Uruguay's "unilateral" authorizations of the cellulose plants prior to notifying CARU were in violation of the 1975 Statute[124]. Yet, even subsequent to sending those notes, in February 2006, Argentina accepted Uruguay's post-authorization notification of the Nueva Palmira freight terminal without objection -- exactly as it had done in the cases of Traspapel and the M'Bopicua Port. Uruguay submits that Argentina's actions reveal more plainly than any legal argument in the Memorial its true understanding of the requirements of the 1975 Statute.

---

[122] CARU Minutes No. 02/06, p. 302 (17 February 2006). UCM, Vol. IV, Annex 116.

[123] *Ibid.*, p. 303.

[124] *See* AM, Vol. II, Annexes 27-30.

*   *   *

2.71 Argentina's argument about when Article 7 requires notice to CARU about a planned project is demonstrably wrong. There is nothing in the text of the Statute, the provisions of the CARU Digest, or the Parties' practice that requires notice before a project is authorized by the initiating State. In fact, as Uruguay has just shown, all three sources show that notice can be provided after the authorization of a project has already occurred. What Article 7 requires is *timely* notice. That is, notice must be given in sufficient time to allow CARU and the notified State to evaluate the likely effects on the river and, if necessary, to consult on appropriate preventive measures. As Chapter 3 will demonstrate, that happened in this case: Uruguay provided timely notice with respect to both the ENCE and Botnia plants.

(c) To "Carry Out"

2.72 The first paragraph of Article 7 requires notification whenever one party plans to "carry out" a work that might affect navigation, the regime of the River, and/or water quality. Thus, in evaluating the text of Article 7, including how it relates to the issue of timing, it is important to understand what it means to "carry out" a project for purposes of Article 7. The carrying out, or implementation, of a project can only be the initiation of the actions that themselves threaten harm to navigation, the regime of the river and/or the quality of its waters. In the context of this case, that is only the *operation* of the ENCE and Botnia plants, not their mere *construction*. Argentina has made no allegation that the construction of the plant has or will cause damage, merely that the future operation of the plant might do so. Thus, only at the operational phase can the project be said to have been "carried out" within the purview of the Statute.

2.73 The point here is reminiscent of the Court's observations in the *Gabcikovo* case where it stated that:

> [B]etween November 1991 and October 1992, Czechoslovakia confined itself to the execution, on its own territory, of the works which were necessary for the implementation of Variant C, but which could have been abandoned if an agreement had been reached between the parties and did not therefore predetermine the final decision to be taken. For as long as the Danube had not been unilaterally dammed, Variant C had not in fact been applied.
>
> Such a situation is not unusual in international law or, for that matter, in domestic law. A wrongful act or offence is frequently preceded by preparatory actions which are not to be confused with the act or offence itself. It is as well to distinguish between the actual commission of a wrongful act (whether instantaneous or continuous) and the conduct prior to that act which is of a preparatory character and which "does not qualify as a wrongful act"[125].

2.74 To be clear, in making this observation, Uruguay is not suggesting that notice to CARU would be timely at any time up to the moment when the plant becomes operational. To the contrary, Uruguay has already acknowledged that notice is due at a point in time during the planning process that is sufficiently in advance of operation to allow for the procedures of the 1975 Statute to be followed; this is, for a meaningful assessment of the project by CARU and/or the notified State, for the provision of their views, and for good faith consultations between the Parties, if required. The point is simply that so long as notice occurs at a moment during the planning process that it is sufficiently far in advance of operation -- as opposed to mere construction -- so as to permit such consultative procedures, it is timely. As indicated, and as demonstrated in Chapter 3, that is precisely what happened in this case.

---

[125] *Gabčikovo-Nagymaros Project (Judgment)*, *op. cit.*, p. 54, para. 79.

(d) The Application of Article 7 to Industrial Facilities

2.75 There is a final point concerning the scope of the first paragraph of Article 7 that requires attention. That is, it does not apply of its own force to industrial facilities located exclusively within the territory of one of the Parties. By its terms, Article 7 is triggered when one of the Parties plans to implement "works" ("obras") that otherwise meet the criteria stated. The Article is situated in Chapter II of the 1975 Statute, captioned "Navigation and Works," and the only works specifically listed in the text include the construction of new channels or the modification of existing ones; that is, large-scale works that are carried out in the river itself. The term "works" is thus best understood to refer only to a limited set of major public works. Significantly, whenever the 1975 Statute intends to embrace other types of projects within the notice and information sharing obligations it creates, it does so explicitly[126].

2.76 Before proceeding further on this point, Uruguay hastens to make clear that it is *not* arguing that it was not obligated to give notice about either the ENCE or Botnia plants. To the contrary, Uruguay's position is as it advised the Court on 8 June 2006 during the oral hearings on Argentina's request for provisional measures: Uruguay considers that Articles 7-12 of the Statute *do apply* (albeit indirectly, as discussed below) to the plants, and to all other industrial facilities that might affect the quality of the water of the Uruguay River[127]. Uruguay's purpose here is to note

[126] *See, e.g.*, 1975 Statute, *op. cit.*, Arts. 27 (relating to domestic, sanitary, industrial and agricultural uses) & 34 (relating to the exploration and exploitation of the river bed and subsoil). UCM, Vol. II, Annex 4.

[127] *See* CR 2006/49, p. 10, para. 2 (Boyle) (8 June 2006).

the manner in which the Statute works, and to discuss the Parties' historical behaviour under it.

2.77 The fact that Article 7 does not apply of its own force to industrial facilities located exclusively within the territory of one of the Parties is amply supported by the Parties' historical practice under the Statute. In its Memorial, Argentina cites a total of six examples of State practice which it claims shed light on the Parties' *de facto* interpretation of the procedural provisions of Articles 7 *et seq*. They are: (1) the Garabí Dam, (2) the M'Bopicua Port, (3) the Nueva Palmira Freight Terminal, (4) the Santo Tome-Sao Borja Bridge, (5) the Casa Blanca Canal, and (6) the Traspapel cellulose plant. As the Court will note, five of these six examples are major public works to be built on or in the river itself, and thus plainly fall within the explicit language and scope of Article 7. The only prior case identified in the Memorial that did *not* involve public works on the river itself was the Traspapel cellulose plant. And even then, the consideration of the Traspapel plant touched off an extensive debate in CARU as to whether or not Articles 7-12 of the Statute apply to industrial plants located within the territory of one of the Parties. Most significantly, it was Argentina's position that they do not. Ambassador Julio Carasales, then Chairman of Argentina's delegation to CARU, argued that he "understands that those articles are regulating the execution of works, emphasizing the word works, in the river such as channels, dams, etc., that is, works which have a direct relation to and are done fundamentally in the river"[128].

2.78 The CARU minutes of an earlier meeting at which the Traspapel plant was discussed reflect that Argentina's

---

[128] CARU Minutes No. 7/96, p. 1069 (23 August 1996). UCM, Vol. IV, Annex 82.

> Ambassador Carasales confirms for the record that, the pertinent studies by the appropriate national authorities of Uruguay having been completed, and the authorization for placement [of the Traspapel plant] having been granted, *the Administrative Commission of the Uruguay River does not have competence to express an opinion on a facility in the territory of one of the Parties*. Once that plant is operating and in production, if it causes contamination problems, the CARU will have statutory power to intervene in the matter[129].

2.79 The issue of whether or not the procedural mechanisms of the 1975 Statute applied to the Traspapel plant was subsequently addressed at some length, although without conclusion (then or since). It was in response to the suggestion by the Chairman of the Uruguayan delegation, Ambassador Gonzalez Lapeyre, that the procedural mechanisms of the Statute might apply[130], that Ambassador Carasales expressed the Argentine view that Article 7 addresses only "works that have a direct relation to and are done fundamentally in the river." He also went on to state that he

> believes that *to extend* and to apply - he is not saying that this cannot be done but rather that it should be carefully examined - the prior consultation regime to the implementation of industrial facilities within one country or the other would mean as a practical matter that a country would have to ask for permission from the other country to do an industrial facility. It should be considered carefully why and to what extent works in the River Uruguay can be assimilated to industrial projects or any other kind in the territory of either country[131].

2.80 Ambassador Carasales' use of the verb "to extend" in this context is noteworthy. The implication is plain: until that time, CARU had not applied the regime of prior consultation under the 1975 Statute to industrial facilities located in the territory of either Uruguay or Argentina. The historical record confirms this. As

---

[129] CARU Minutes No. 2/96, *op. cit.*, p. 203 (emphasis added). UCM, Vol. IV, Annex 80.

[130] CARU Minutes No. 7/96, *op. cit.*, p. 1065. UCM, Vol. IV, Annex 82.

[131] *Ibid.*, p. 1069 (emphasis added).

discussed in detail at paragraphs [2.140] to [2.150] below, since the adoption of the Statute in 1976, Argentina has authorized the construction and operation of literally dozens of industrial plants that deposit significant quantities of chemical or biological effluents into the Uruguay River or its major tributaries[132]. Not once has it notified CARU or Uruguay of any of these projects, even though they are certainly of a sufficient magnitude to affect the quality of the river. Likewise, Uruguay authorized several industrial plants of its own without notifying either CARU or Argentina during the same time period. Plainly, neither Party considered itself obligated to provide a notification under Article 7 for industrial facilities located in its own territory, as distinguished from major works on the river itself.

2.81 It is worth recalling here that in the Traspapel case -- the only industrial plant mentioned in the Memorial -- Uruguay never formally notified CARU (or Argentina), and Argentina made no objection. As a result, Ambassador Carasales considered that any extension of the Statute to bring industrial plants within the purview of Article 7 should be undertaken only after careful analysis by both Parties. He personally did not want to take a position for or against such an extension, but instead stated that

> in relation to the subject of the *extension* of the principle of prior consultation to industrial or other types of facilities constructed within the territory of each State and not in the river, he wants to reiterate his previous statements so there are no doubts about them. He did not take any position in favour of whether or not this principle should be applied, but only expressed the point of view that the subject should be studied with care because if the criterion were applied strictly, perhaps - and this is something to

[132] *See* Ministry of Industry, Energy and Mines, "Works on the River Uruguay," pp. 29-48 (June 2007). UCM, Vol. X, Annex 224.

> be debated - the principle of prior consultation would be excessively extended[133].

2.82 It does not appear that Argentina and Uruguay ever pursued the issue or came to a conclusion one way or another[134]. The issue of the application (or non-application) of the procedural rules set forth in Articles 7 through 12 of the 1975 Statute to industrial facilities was thus left open and unresolved; a state of affairs that has continued to this day.

2.83 It is only now, for purposes of this case, that Argentina argues for the first time that the procedural duties set out in Articles 7-12 apply to industrial facilities, specifically to the ENCE and Botnia plants. Uruguay cannot help but note the irony in Argentina's sudden change of position, reflected in its consistent conduct since 1976 and the justification offered by Ambassador Carasales, one of its leading experts on the 1975 Statute. After authorizing the construction and operation of dozens of industrial plants of its own near the Uruguay River[135] -- all capable of affecting the quality of the water -- without notifying CARU or Uruguay, Argentina now insists that Uruguay's plants are subject to the procedural requirements of Articles 7-12.

2.84 In fact, it is actually Article 27, which appears in Chapter VII of the Statute governing "Use of Water," that makes Articles 7 *et seq.* applicable to industrial facilities. It states:

> The right of each Party to use the waters of the river, within its jurisdiction, for domestic, sanitary, industrial and agricultural

---

[133] *Ibid.*, pp. 1072-1073.

[134] Despite Uruguay's best efforts, including a review of all of the minutes of subsequent CARU meetings, it has been unable to locate any references to CARU having come to a conclusion on the issue. Uruguay thus concludes that it never did so.

[135] *See* "Works on the River Uruguay," *op. cit.*, pp. 30-41. UCM, Vol. X, Annex 224.

> purposes shall be exercised without prejudice to the application of the procedure laid down in articles 7 to 12 when the use is liable to affect the regime of the river or the quality of its waters[136].

2.85 As just discussed, however, the practice of the Parties until this case appears to have been to read Article 27 out of the Statute. Not only have they authorized numerous industrial uses of the river without notifying CARU, they have also authorized a great number of domestic and sanitation projects -- also without notifying CARU or each other. Annex 224 is a study conducted by Uruguay's Ministry of Industry, Engineering and Mining. It identifies nearly 170 industrial facilities on or near the Uruguay River, and more than 30 domestic and sanitation projects capable of affecting the river, authorized by Argentina[137]. None of those projects was ever notified to CARU or Uruguay, or were the subject of consultation with Uruguay. Annex 224 also identifies industrial facilities and sanitation projects authorized by Uruguay. Although the number of these projects on the Uruguayan side of the river is vastly smaller, it is nevertheless true that they were never notified to Argentina or CARU[138].

2.86 The fact that the Parties have historically disregarded their nominal obligations under Article 27 is still further confirmed by their practice under Article 28, which follows and complements Article 27. As previously mentioned, Article 28

---

[136] 1975 Statute, *op. cit.*, Art. 27. The fact that Article 7 does not apply directly to industrial facilities but only through the operation of Article 27 is confirmed by the familiar principle of interpretation that no provision of a treaty should be interpreted to be mere surplusage. If Article 7 applied of it own force to industrial uses of the river, Article 27 would be rendered entirely redundant and thus unnecessary, a result inconsistent with basic interpretive tenets.

[137] "Works on the River Uruguay," *op. cit.*, pp. 30-48, 57, 12-21. UCM, Vol. X, Annex 224.

[138] *Ibid.*, p. 57. Eighty-five per cent of the identified industries are located on the Argentine bank of the river. Eighty-four per cent of the medium and high contamination potential industries are located on the Argentine bank.

and the analogous provisions of the CARU Digest require the Parties to submit semi-annual reports to CARU detailing the uses (including industrial uses) they have authorized within their jurisdiction so that CARU can determine whether those developments are likely to cause significant harm to the regime of the river or the quality of its waters[139]. However, the Parties' compliance with the reporting requirements of Article 28 has been virtually non-existent, whether in respect of industrial, agricultural, sanitary, or domestic uses of the river. In 1994, for instance, Argentina's Ambassador Carasales prepared a report to CARU in which he observed that neither of the Parties had been submitting the information called for in Article 28, nor had CARU insisted on the matter[140]. As a result, he concluded that CARU "obviously does not exercise its duty of judging the possible damage that the uses of water cause or may cause[141]. In this regard, he also observed that as of that date, the duty to notify and consult had been deemed to relate only to works of great importance, such as dams[142].

2.87 Other than noting that Argentina's current argument is contradicted by the prior practice of the Parties, however, Uruguay takes no issue with it. Uruguay has now made it absolutely clear that it considers that Articles 7-12 of the Statute *do*

---

[139] 1975 Statute, *op. cit.*, Art. 28. UCM, Vol. II, Annex 4.

[140] Subcommittee on Legal and Institutional Affairs Report No. 115, pp. 804-805, Annex A, p. 807 (20 June 1997), *approved in* CARU Minutes No. 6/97 (20 June 1997). UCM, Vol. IV, Annex 85.

[141] *Ibid.*

[142] *Ibid*. Minutes of CARU meetings show that when Uruguayan delegate Captain Juan Miguel Herrera was appointed to the Commission in May 1996, he made a point of asking why CARU had historically not insisted on compliance with the procedures set out in Articles 27 to 29 concerning uses of the River, including industrial uses. CARU Minutes No. 4/98, p. 386 (17 April 1998). UCM, Vol. IV, Annex 87. Argentina's Ambassador Carasales informed him that in the early 1990s CARU had asked the Parties to supply it with the pertinent information but they had both largely failed to respond. As a result, CARU decided to stop insisting on the matter. *Ibid*.

apply (albeit indirectly, by operation of Article 27) to the ENCE and Botnia plants, and to all other industrial, agricultural, sanitary, and domestic facilities that might affect the quality of the river's water. And, as shown in this Counter-Memorial, in particular in Chapter 3, Uruguay complied fully with these procedural obligations insofar as the ENCE and Botnia plants are concerned. Uruguay's point here is simply to make clear that this case represents a complete departure from the consistent course of the Parties' historical dealings.

2. The Second Paragraph of Article 7

2.88 The second paragraph of Article 7 states the applicable procedures in the event CARU either (1) finds preliminarily that a project might cause significant damage to the other Party, or (2) is unable to achieve consensus on the matter. It states:

> If [CARU] finds this to be the case [*i.e.*, that the project might cause significant harm to the other Party] or if a decision cannot be reached in that regard, the Party concerned shall notify the other Party of the plan through the said Commission[143].

2.89 The implication, of course, is that if both delegations to CARU come to the agreed conclusion that a project will *not* cause significant harm to the other Party, the initiating State has discharged its procedural obligations and owes no further performance to the other State. As discussed above, this is exactly what happened in the case of the M'Bopicua Port in 2001.

2.90 In the event that CARU finds there is a threat of significant harm or is unable to achieve consensus on the issue, Article 7 provides that the matter will thereafter be dealt with between the two Governments. From that point on, CARU's

---

[143] 1975 Statute, *op. cit.*, Art. 7, para. 2.

substantive role in connection with the Article 7 to 12 process is essentially over. As articulated by Argentina's Ambassador Carasales:

> [T]he fundamental issue is no longer within CARU's competence. It is an exclusively bilateral issue which must be resolved Government-to-Government, with the only procedural matter being that communications should be sent through the [CARU], but [CARU's] role is that of a postal agent that may not take any substantive action. … The dialogue must be formalized bilaterally from Government to Government and not through the [CARU][144].

3. *The Third Paragraph of Article 7*

2.91 Under the third paragraph of Article 7, the notification from the initiating State to the other Party contemplated in the preceding paragraph

> shall describe the main aspects of the work and, where appropriate, how it is to be carried out and shall include any other technical date [*sic*] that will enable the notified party to assess the probable impact of such works on navigation, the régime of the river or the quality of its waters[145].

2.92 The information-sharing requirement described in this paragraph should be understood in light of its purpose -- "to assess the probable impact of such works on navigation, the régime of the river or the quality of its waters." Thus, so long as the notifying Party has provided information adequate to meet this purpose, it has discharged its obligations under the 1975 Statute. As the Court will read in Chapter 3, Uruguay discharged this obligation. It provided Argentina with more than enough information to assess the probable impacts of the ENCE and Botnia plants.

2.93 General international law suggests that the notifying State is under no obligation to conduct additional investigations or gather additional information at the behest of the notified State. According to Article 12 of the 1997 Watercourse

[144] CARU Minutes No. 5/95, pp. 712-713 (23 June 1995). UCM, Vol. IV, Annex 77.

[145] 1975 Statute, *op. cit.*, Art. 7, para. 3.

Convention, any "notification shall be accompanied by available technical data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of the planned measures"[146]. The commentary makes clear:

> The reference to 'available' technical data and information is intended to indicate that the notifying State is generally not obligated to conduct additional research at the request of a potentially affected State, but must only provide such relevant data and information as has been developed in relation to the planned measures and is readily accessible[147].

Nevertheless, as set forth in Chapter 3, at Argentina's request, Uruguay repeatedly obtained additional data from other sources in order to furnish Argentina with information it requested that Uruguay itself did not possess.

2.94 At least two further observations about the third paragraph of Article 7 are in order. *First*, the use of the term "probable" to describe the impact of the planned work should not be ignored. The explicit purpose of the information sharing is to enable the notified Party to evaluate the *likely* effects of the planned project. In other words, by its very terms, the 1975 Statute is not concerned with remote or speculative impacts that, while capable of being imagined, are unlikely to eventuate in reality.

2.95 *Second*, this paragraph underscores once more the limited scope of the notification and information sharing mechanisms of the 1975 Statute. Just as the first paragraph of Article 7 requires notice only when a project may affect navigation, the regime of the river, and/or water quality, the third paragraph requires only the provision of information relating to these same three subject areas. The

---

[146] 1997 Watercourse Convention, *op. cit.*, Art. 12.

[147] 1994 Draft Articles, *op. cit.*, p. 112, comment 5.

notifying State is thus under no obligation to provide information that has no bearing on these issues.

B. ARTICLES 8-11

1. Article 8

2.96 Article 8 says that the State receiving the notification described in the third paragraph of Article 7 has up to 180 days in which to review the information provided by the notifying State and give its response, if any. Specifically, it states:

> The notified Party shall have a period of 180 days in which to respond in connection with the plan, starting from the date on which its delegation to the Commission receives the notification[148].

The Article also deals with the possibility that the notified party considers the material provided to it incomplete, and states:

> Should the documentation referred to in article 7 be incomplete, the notified Party shall have 30 days in which to so inform, through the Commission, the Party which plans to carry out the work[149].

2.97 It bears reiteration here that it is the notified Party itself which is carrying out the review of the project, not that Party's delegation to CARU. Similarly, any requests for additional information are directed from one Party to the other, albeit through the instrumentality of CARU. During this phase of the process, CARU remains a vehicle for communication between the Parties. To use Ambassador Carasales' words, CARU's role in this part of the process is to serve as a "postal agent"[150].

---

[148] 1975 Statute, *op. cit.*, Art. 8. UCM, Vol. II, Annex 4.

[149] *Ibid.*, Art. 8.

[150] CARU Minutes No. 5/95, *op. cit.*, pp. 712-713. UCM, Vol. IV, Annex 77.

2. Articles 9 and 10

2.98 Articles 9 and 10 together describe the procedural consequences that attach when the notified Party either (a) fails to respond within the 180-day period stipulated in Article 8, or (b) specifically states that it has no objection to the planned project. Article 9 provides:

> If the notified Party raises no objections or does not respond within the period established in article 8, the other Party may carry out or authorize the work planned[151].

Article 10, in turn, states:

> The notified Party shall have the right to inspect the works being carried out in order to determine whether they conform to the plan submitted[152].

2.99 These two Articles, and the role they play within the procedural scheme of the 1975 Statute, are discussed at greater length below. For present purposes, it is sufficient to note that together they make clear that when the notified State has no objections to a project, the notifying State bears no further procedural duties with which it must comply (Art. 9), save for permitting the notified State to inspect the work in question in order to verify that the project as implemented is the same as the project previously presented to it (Art. 10).

3. Article 11

2.100 Article 11 deals with the procedural consequences that attach when the notified State comes to the conclusion that the planned project might cause it significant harm. As such, it deals with the alternative possibility to the one addressed in Articles 9 and 10. In particular, it provides:

---

[151] 1975 Statute, *op. cit.*, Art. 9. UCM, Vol. II, Annex 4.

[152] *Ibid.*, Art. 10.

> Should the notified Party come to the conclusion that the execution of the work or the programme of operations might cause significant harm to navigation, the regime of the river or the quality of its waters, it shall so notify the other Party, through the Commission, within the period of 180 days established in article 8.
>
> Such notification shall specify which aspects of the work or the programme of operations might significantly impair navigation, the regime of the river or the quality of its waters, the technical reasons on which this conclusion is based and the modifications suggested to the plan or programme of operations[153].

2.101 At least five important observations can be made about the text of Article 11. *First*, the right of the notified Party to engage with the initiating Party is dependent on a finding that there might be significant harm. This is evident from the first paragraph of Article 11 which applies in the event that "the notified Party comes to the conclusion" that the project might cause it significant harm. It follows, then, that unless it comes to that conclusion, the notified State is entitled to no further procedural performance from the notifying State.

2.102 *Second*, and flowing as a necessary consequence of the first point, the notified State has a duty to accept detrimental effects that do not rise to the level of "significant harm." Indeed, this conclusion flows not just from the text of Article 11, but from the entire scheme of Articles 7 through 11. As Uruguay has shown, the triggering event requiring notification under Article 7 is the planned implementation of a project that has the potential to cause significant harm to the non-initiating State. CARU's preliminary review under the first paragraph of Article 7 is directed at determining whether or not significant harm might occur. Likewise, under Article 11 the notified State's right to engage with the notifying State is dependent on its

---

[153] *Ibid.*, Art. 11.

own finding that the planned project might cause it significant harm. Individually and collectively, these provisions only make sense if they are understood to impose an obligation on the notified State to accept effects, even harms, that do not rise to the level of "significant".

2.103 This reading of the 1975 Statute also finds support in general international law. In his 1986 Second Report on the Law of the Non-Navigational Uses of International Watercourses, Special Rapporteur Stephen McCaffrey stated:

> [A] State's right to use a watercourse is limited by a duty not to cause harm to other States, but this duty is not absolute; some harm may have to be tolerated (*i.e.* is not wrongful), provided it is caused by conduct falling within the ambit of a use by one State that is 'equitable' *vis-à-vis* the other State(s) concerned[154].

2.104 The same point is reflected even more succinctly in the ILC's 2001 Draft Articles on Transboundary Harm. According to the commentary to Article 2:

> These mutual impacts [of one State on another], so long as they have not reached the level of 'significant', are considered tolerable[155].

2.105 This was a point of some discussion during the UN General Assembly's debate over the ILC's 1994 Draft Articles prior to their adoption as the 1997 Convention. During the Sixth Committee Working Group of the Whole for the Elaboration of a Convention on the Law of the Non-Navigational Uses of International Watercourses in October 1996, a

> bone of contention in the discussion of art. 7 was the adjective "significant". Downstream delegations requested its deletion, which was strongly resisted by upstream delegations. During the debate, it gradually emerged that there was unanimous acceptance of the *de minimis* rule. As a general principle this

[154] Special Rapporteur Stephen McCaffrey, Second Report on the Law of the Non-Navigational Uses of International Watercourses, p. 134, para. 184 (1986).

[155] 2001 Draft Articles, *op. cit.*, p. 388, comment 5.

> derives from national legal systems, and from the principle concept of good neighbourliness. Its implication in the context of art. 7 is that co-riparians have a duty to overlook insignificant damage[156].

2.106 *Third*, by requiring the notified State to "specify which aspects of the work or the programme of operations might significantly impair navigation, the regime of the river or the quality of its waters, the technical reasons on which this conclusion is based", the second paragraph of Article 11 squarely places a burden on the notified party to identify the specific technical reasons for believing that a project has the potential to cause significant harm. In this respect, Article 11 mirrors paragraph 4 of the 1971 Joint Declaration[157]. Speculation about remote possibilities or vague allegations of generalized harms is not enough.

2.107 Once again, this approach is entirely consistent with general international law. According to the ILC commentary to Article 15 of the 1997 Watercourse Convention, for example:

> The explanation [of the notified State's objections] must be 'documented' -- that is to say it must be supported by an indication of the factual or other bases for the finding -- and must set forth the reasons for the notified State's conclusion that implementation of the planned measures would violate articles 5

---

[156] Tanzi, A. "Codifying the minimum standards of the law of international watercourses: remarks on part one and a half". (*Natural Resources Forum*, Vol. 21, No. 2, May 1997, p. 115.) Under general international law, not even significant harm to a co-riparian State is necessarily impermissible. The governing question in all cases is whether a use exceeds a State's right to the equitable and rational utilization of the river. According to the ILC commentary to Article 7 of the 1997 Watercourse Convention (at para. 2):

> [T]he fact that an activity involves significant harm would not of itself necessarily constitute a basis for barring it. In certain circumstances 'equitable and reasonable utilization' of an international watercourse may still involve significant harm to another watercourse state. Generally, in such instances, the principle of equitable and reasonable utilization remains the guiding criterion in balancing the interests at stake.

1994 Draft Articles, *op. cit.*, p. 103, comment 2.

[157] *See supra* paras. 2.14.

> or 7. The word 'would' was used rather than a term such as 'might' in order to indicate that the notified State must conclude that a violation of articles 5 or 7 is more than a mere possibility[158].

2.108 *Fourth*, the limitations as to the substantive scope of the procedural provisions must again be emphasized. Article 11 once more underscores that the only legitimate areas of inquiry for the notified State are navigation, the regime of the river, and the quality of its water. Other subject matters unrelated to navigation, the river regime and water quality -- even those of an environmental character -- afford no basis for objection under Article 11, even if the Statute elsewhere covers those topics for other purposes.

2.109 A *fifth* and final point concerns the use of the terms "modifications" and "suggested" in the final phrase of Article 11. The terms are significant, and hearken back to the use of similar terms in the 1971 Joint Declaration. The use of the verb "suggest" underscores the fact that the notified State has no right *to impose* any particular changes to the planned project, merely that it may make recommendations which by definition need not be incorporated into the final project. In a similar way, the use of the term "modifications" indicates that the notified State has no power to negate the initiating State's right to undertake the project in question. It has only a right to suggest modifications to the project that the initiating State is obligated to consider in good faith.

C. Prior Consent Is Not Required

2.110 Before turning to the Parties' mutual duties to consult in good faith, it is appropriate to address the issue of whether or not anything in the foregoing

---

[158] 1994 Draft Articles, *op. cit.*, p. 115, comment 2.

provisions of the 1975 Statute requires the notifying State to obtain the *prior consent* of the notified State before implementing a planned project. Oddly, especially in light of the evident centrality of the issue, Argentina's Memorial conspicuously refuses to take a clear position. While Argentina seems intent on cultivating the impression that the Statute requires prior consent, it is reluctant to come out and say that directly. Thus, for example, the words "prior consent" and "veto" are not used in connection with the 1975 Statute anywhere in the 370 pages of the Memorial. The phrase "accord préalable" or "prior agreement", on the other hand, appears with some frequency. When it does, however, it is not altogether clear that Argentina is arguing that the Statute actually *requires* prior agreement. Most often, the phrase appears in the context of a statement that the Statute creates a system of notification and consultation "*en vue de parvenir à* un accord préalable"[159]. This hortatory formulation, of course, stops well short of claiming an express requirement for prior agreement.

2.111 Only very rarely do the two words "accord préalable" stand alone and unqualified. Indeed, Uruguay can identify only five such usages in the Memorial[160]. Yet even these, when examined closely, evince a tenderly nurtured ambiguity that makes it unclear whether Argentina really means what it appears to be implying. At paragraph 3.38, for example, the Memorial states: "Le droit de chaque Etat d'utiliser les eaux du fleuve à l'intérieur de sa juridiction nationale est donc soumis aux obligations relatives à l'information, la notification, la consultation et l'accord préalable, c'est-à-dire au mécanisme strict de coopération établi par le Statut de

---

[159] *See, e.g.*, AM, paras. 3.25, 3.28, 3.39, 3.63, 3.81, 3.85, 3.97 (emphasis added). ("*with a view* to achieving prior agreement")

[160] AM, paras. 3.38, 3.51, 3.99, 3.101 & 3.198.

1975."[161] The "mécanisme strict de coopération établi par le Statut de 1975" indisputably requires "disclosure" (Art. 8) and "notification" of a project that might prejudice navigation, the regime of the river and/or the quality of its waters (Art. 7). But there is no reference of any kind, direct or indirect, to a "prior agreement" anywhere in the Statute. What then does Argentina mean when it refers to the "obligation[] relative[] à … l'accord préalable"? Given its general reluctance to take a definitive position on the matter, it is not clear what Argentina is actually arguing. Maybe it really does mean to say that a prior agreement is obligatory. On the other hand, maybe the reference to the "obligation[] relative[] à … l'accord préalable" is merely descriptive. That is, maybe Argentina is saying that the right of each Party to use the river is conditioned on such obligations of prior agreement as might exist in the Statute, which in turns means only that the Statute creates a system of notification and consultation "*en vue de parvenir à* un accord préalable".

2.112 If Argentina appears to be reticent to make an outright claim that the Statute requires "prior agreement", there is good reason. At the oral hearings on Argentina's request for provisional measures in June 2006, Counsel for Uruguay pointed out that in the 30-year history of the Statute prior to this case, Argentina had never -- not once -- taken the position that a Party could not carry out a project without the other's prior agreement. Now, after reviewing Argentina's 370-page Memorial and 2439 pages of annexes, after readings thousands of pages of minutes of CARU meetings and other official CARU documents, and after examining the publications authored by Argentina's experts on the negotiation and history of the

[161] AM, para. 3.38. ("The right of each State to use the waters of the river inside its national jurisdiction is therefore subject to the obligations relating to disclosure, notification and prior agreement; *i.e.*, the strict cooperation mechanism established by the 1975 Statute.")

Statute, Uruguay reaffirms its Counsel's statement in June 2006. In the 30-year history of the Statute prior to the history of this case, Argentina never -- not once -- took the position that the Statute requires the prior agreement or consent of the notified State before the notifying State can carry out a covered project.

2.113 Uruguay and especially the Court should not be put in the position of having to sort out Argentina's current ambivalence. A consequence of Argentina's reluctance to take a clear stand is that Uruguay does not know to which argument it is supposed to be responding. Certainly, if Argentina is contending simply that the 1975 Statute creates a regime of notice, information sharing and consultation, all "en vue de parvenir à" or "with a view to" prior agreement, Uruguay does not and could not disagree. It should perhaps go without saying that prior agreement is always a worthy goal, and Uruguay does indeed view the procedural mechanisms of the Statute as designed to facilitate (without requiring) such an agreement. On the other hand, if Argentina is arguing that the Statute requires the prior agreement of the notified State before the notifying State may implement any projects, Uruguay strongly disagrees for all of the reasons that follow.

1. There Is No Veto Right Under General International Law

2.114 A logical starting place to begin the analysis of whether or not the 1975 Statute requires prior consent is general international law, which the context for interpreting the text of the Statute. It is clear -- and Argentina makes no argument to the contrary -- that general international law does *not* give notified States a veto right.

2.115 As early as 1957, the arbitral tribunal in the *Lake Lanoux case* (Spain v. France) held:

> [I]nternational practice does not so far permit more than the following conclusion: the rule that States may utilize the hydraulic power of international watercourses only on condition of a prior agreement between the interested States cannot be established as a custom, even less as a general principle of law[162].

Later in the same portion of its opinion, the tribunal reiterated the point:

> Customary international law, like the traditional Law of the Pyrenees, does not supply evidence of a kind to orient the interpretation of the Treaty and of the Additional Act of 1866 in the direction of favouring the necessity for prior agreement; even less does it permit us to conclude that there exists a general principle of law or a custom to this effect[163].

2.116 Significantly, the *Lake Lanoux* tribunal found that the obligations to give notice and to consult do not themselves imply an obligation to reach a prior agreement. Its logic was straightforward:

> If the contracting Parties had wished to establish the necessity for a prior agreement, they would not have confined themselves to mentioning in Article 11 only the obligation to give notice. The necessity for prior notice from State A to State B is implicit if A is unable to undertake the work envisaged without the agreement of B; it would, then, not have been necessary to mention the obligation of notice to B, if the necessity for a prior agreement with B had been established[164].

2.117 In light of the foregoing, the tribunal determined that if prior agreement is required, that requirement must be stated expressly. Specifically, it held:

> To admit that jurisdiction in a certain field can no longer be exercised except on the condition of, or by way of, an agreement between two States, is to place an essential restriction on the

---

[162] *Lake Lanoux Arbitration (France v. Spain)* (hereinafter "*Lake Lanoux*"), *International Law Reports*, vol. 24, p. 129, para. 13 (16 November 1957).

[163] *Ibid.*

[164] *Ibid.*, para. 16.

> sovereignty of a State, and such restriction could only be admitted if there were clear and convincing evidence[165].

2.118 Dr. Julio A. Barberis, who negotiated the 1975 Statute on behalf of Argentina and is widely considered among the leading Latin American authorities on shared natural resources, emphasized the same point in his 1979 work *Shared Natural Resources Among States and International Law*. He wrote:

> Some treaties establish the principle that one State, to be able to carry out a work or hydraulic project, must have the consent of the other contracting State. In these cases, each State has a veto right with respect to the works and projects that may be undertaken by its co-contracting party since, for its realization, it must have the latter's agreement. The consent of the co-contracting State is necessary, regardless of whether the hydraulic work project will or will not affect its territory. *The existence of a legal regime of this type must be expressly stipulated in a treaty*[166].

2.119 Argentina's Memorial attempts to minimize the *Lake Lanoux* case and avoids reference to Dr. Barberis altogether. Indeed, Argentina seems so uncomfortable with the *Lake Lanoux* case and the obvious implications it has for this dispute that it mentions the case in only three paragraphs of an otherwise ample Memorial. Paragraph 3.83 contains Argentina's only effort to distinguish *Lake Lanoux* from this case[167]. It argues: "l'Espagne et la France n'étaient pas liées par

---

[165] *Ibid.*, para. 11.

[166] Julio Barberis, Shared Natural Resources Among States and International Law (hereinafter "Shared Natural Resources"), p. 46 (1979) (emphasis added). UCM, Vol. IX, Annex 198.

[167] The only other references to the *Lake Lanoux* case are in paragraph 3.82, where Argentina merely identifies the case as a source of one of the arguments Uruguay made during the June 2006 oral hearings, and paragraph 3.174, where Argentina cites the portion of the decision where the tribunal states: "[l]a souveraineté territoriale joue à la manière d'une présomption. Elle doit fléchir devant doutes les obligations internationales, quelle qu'en soit sa source […]". ("territorial sovereignty acts as a presumption. It must yield before all international obligations, regardless of their source [...].")

un traité au contenu semblable au Statut de 1975."[168] Presumably, Argentina means to suggest that the 1975 Statute contains language expressly requiring prior agreement. As Uruguay will demonstrate below, that is not true.

2.120 Moreover, the fact is that Spain and France were bound by a treaty broadly similar to the 1975 Statute. Specifically, they were bound by the 1866 Treaty of Bayonne and the Additional Act of the same date. Article 11 of the Additional Act required notice whenever "in one of the two States it is proposed to construct works or to grant new concessions which might change the course or the volume of a watercourse" so that "the interests that may be involved on both sides will be safeguarded"[169]. On that basis, the tribunal found that the parties owed each other duties similar to those set forth in the 1975 Statute. It declined, however, to find a requirement for prior agreement, precisely because the Additional Act did not contain an express requirement to that effect. Given the broad similarities between the 1866 Additional Act and the 1975 Statute, the same conclusion is warranted in this case.

2.121 General international law has not changed since the *Lake Lanoux case* was decided. The ILC commentary to Article 1 of the 2001 Draft Articles, for example, states the general principle:

> States likely to be affected are given the right of engagement with the State of origin in designing and, where appropriate, in the implementation of a system of management of risk commonly shared between or among them. *The right thus envisaged in favour of the States likely to be affected however*

---

[168] AM, para. 3.83. ("Spain and France were not bound by a treaty with contents similar to the 1975 Statute.")

[169] Treaty of Bayonne and Additional Act, Art. 11 (1866), *quoted in*, *Lake Lanoux*, *op. cit.*, p. 103.

> *does not give them the right to veto the activity or project itself*[170].

2.122 Similarly, the text of Article 9 of the 2001 Draft Articles also makes clear that prior agreement is not required:

> If the consultations referred to in paragraph 1 fail to produce an agreed solution, the State of origin shall nevertheless take into account the interests of the State likely to be affected in case it decides to authorize the activity to be pursued, without prejudice to the rights of any State likely to be affected[171].

The ILC commentary to Article 9 is particularly instructive:

> [This] article maintains a balance between the two considerations, *one of which is to deny the States likely to be affected a right of veto*. … To take account of this possibility, the article provides that the State of origin is permitted to go ahead with the activity, for the absence of such an alternative would, in effect, create a right of veto for the States likely to be affected[172].

2.123 A leading commentator succinctly summed up the state of the law in her discussion on "water as a natural resource." She wrote: "With one early exception [the Madrid Declaration of 1911], none of the [International Law Association] or Institut [de Droit International] resolutions require prior permission for change to the flow of water, whether as to line of its flow or as to its quantum or content."[173]

2.124 Historically, Argentina has not disagreed. In 1974, for example, the United Nations was working on the draft Charter of Economic Rights and Duties of States, of which Argentina was a sponsor. At a 6 December 1974 session of the

---

[170] 2001 Draft Articles, *op. cit.*, p. 383, comment 6 (emphasis added).

[171] 2001 Draft Articles, *op. cit.*, Art. 9, para. 3.

[172] *Ibid.*, pp. 411-412, comment 10 (emphasis added).

[173] Higgins, R.: Problems and Process, International Law and How We Use It. Oxford, Oxford University Press, 1994, p. 135.

General Assembly, just two and half months before the signing of the 1975 Statute, the representative of Argentina, Mr. Oliveri Lopez declared:

> Article 3 [of the draft Charter] stated a universally recognized principle, namely, that economic co-operation between States should be based on a system of information and prior consultation in order to prevent disputes. *It should not be interpreted as implying that any State had a right of veto*[174].

2.125 During the oral proceedings on Argentina's request for the indication of provisional measures in June 2006, Uruguay cited for the Court the provisions of United Nations General Assembly Resolution 2995, dated 15 December 1972[175]. Paragraph 2 affirms the obligations of States to cooperate and exchange data when planning to implement projects that may cause harm to their neighbours. Paragraph 3, however, makes it clear that

> the technical data referred to in paragraph 2 above will be given and received in the best spirit of co-operation and good-neighborliness, without this being construed as enabling each State to delay or impede the programmes and projects of exploration, exploitation and development of the natural resources of the States in whose territories such programmes or projects are carried out[176].

2.126 In its Memorial, Argentina attempts to downplay the relevance of Resolution 2995, principally by claiming that because it was adopted some two years before the 1975 Statute, it can have no relevance to the interpretation of the latter

---

[174] United Nations, *Official Records of the General Assembly*, *Twenty-ninth Session*, *Second Committee*, agenda item 48, para. 3, document A/C.2/SR.1647 (emphasis added). UCM, Vol. IX, Annex 197.

[175] CR 2006/49, p. 24 (9 June 2006) (Condorelli).

[176] United Nations General Assembly Resolution 2995 (15 December 1972). UCM, Vol. IX, Annex 196.

instrument[177]. In so doing, Argentina ignores the history of the Resolution, a history which only underscores its relevance to the procedural elements of this case.

2.127 In the early 1970s, a dispute developed between Argentina and Brazil over the proposed construction of a dam across the River Paraná between Brazil and Paraguay. Argentina was concerned that the dam would adversely affect it as a downstream State, and took the position that Brazil had a duty under international law to inform it of the technical details of the project and to consult with it in order to take Argentina's interests into account. Brazil initially resisted, but the two States ultimately came to an agreement on 29 September 1972. It was precisely the text of that bilateral agreement between Argentina and Brazil that was later adopted by the General Assembly as Resolution 2995[178]. The core mechanisms laid out in Resolution 2995 (that is, information sharing and consultation without a right to impede another State's projects) thus reflected Argentina's position in the early 1970s.

2.128 The fact that two years passed between the time of the Resolution and the conclusion of the 1975 Statute is immaterial. *First*, as Argentina itself has admitted, negotiations on the Statute had begun as early as 1969[179]. The negotiation of the Statute thus overlapped with Argentina's agreement with Brazil and the adoption of Resolution 2995. *Second*, as already discussed above, the procedural provisions of the 1975 Statute largely echo those contained in the 1973 Treaty on the Rio de la Plata at Articles 17-22. That treaty was completed in November 1973, just 11

[177] AM, para. 5.12.

[178] Stephen McCaffrey, *The Law of International Watercourses*, pp. 265-266 & n. 260 (2001).

[179] AM, para. 3.12.

months after the adoption of Resolution 2995, and must unquestionably be viewed as bearing its imprint.

2.129 Argentina's views concerning Brazil's duties with respect to the River Paraná dam, as reflected in Resolution 2995, did not arise in a vacuum. In 1946, Uruguay and Argentina signed the Agreement Relating to the Utilization of the Rapids of the Uruguay River in the Area of Salto Grande (ratified in 1958). At Article 11, the 1946 Agreement affords Brazil an opportunity to be consulted in connection with the construction of the Salto Grande dam[180]. Brazil had previously sought to assist a right to prior consent, a position expressly rejected by both Argentina and Uruguay in favor of a prior consultation regime. Particularly interesting in this respect are the words of a 23 September 1960 Joint Declaration in which the Governments of Argentina, Brazil and Uruguay agreed on the following:

> The Governments of Argentina and Uruguay recognize the Brazilian Government's right, *in accordance with existing international instruments and the rules of international law*, freely to carry out hydraulic works of any nature in the Brazilian reaches of the Uruguay River and its tributaries; the Brazilian Government will in its turn, *in accordance with international law and practice*, consult with the other riparian States before carrying out any hydraulic works which may alter the present regime of the Uruguay River[181].

Thus, it is clear that Argentina's position on "the rules of international law" was consistent for at least the 30-year period leading up to the adoption of the 1975 Statute. The initiating State could "freely carry out" projects subject only to the duty

---

[180] Agreement between Argentina and Uruguay relating to the utilization of the rapids of the Uruguay River in the area of Salto Grande (30 December 1946), *Yearbook of the International Law Commission*, 1974, vol. II, Part Two, p. 87 (emphasis added).

[181] Joint Declaration of Argentina Brazil and Uruguay (23 September 1960), *Yearbook of the International Law Commission*, 1974, vol. II, Part Two, p. 87-88, n.228 (emphasis added).

to "consult with the other riparian States". Prior consent was not required by "international law and practice".

2. The Statute Does Not Require Prior Consent

2.130 As the *Lake Lanoux* Tribunal held, "clear and convincing evidence" is required to find that a State's right to undertake projects within its own territory is conditioned upon reaching a prior agreement with another State[182]. Argentina has not and cannot identify any such evidence. The Statute itself contains no provision expressly requiring the prior consent of the notified State. The closest Argentina has ever come to identifying a textual basis for its position that the 1975 Statute requires prior agreement was during the oral proceedings on its request for provisional measures in June 2006. At that time, Argentina argued that an *a contrario* reading of Article 9 (which provides that when the notified State has no objections, the notifying State may implement the project) implies that when the notified State does object to a planned project, the initiating State may not implement the project[183]. Article 9 will not bear the weight Argentina attempts to put on it, however.

2.131 *First*, the Court should be cautious about yielding to the temptation of simplistic *a contrario* reasoning. As Uruguay will demonstrate below, when States mean to create a regime of prior consent, they express that requirement directly, exactly as the *Lake Lanoux* case and Dr. Barberis suggest they should. They do not depend, as Argentina would have it, on inferential leaps of logic from ambiguous text. The fact that neither Article 9 nor any other provision of the 1975 Statute

---

[182] *Lake Lanoux*, *op. cit.*, para. 11.

[183] CR 2006/46, p. 31 (8 June 2006) (Sands).

expressly requires prior agreement compels the straightforward conclusion that no such requirement exists.

2.132 *Second*, there is another perfectly logical way to read Article 9 that is consistent with both the text of the Statute and the rejection of a veto right under general international law. It is this: Article 9 (as read together with Article 10) states the procedural consequences when the notified State does not object to the notifying State's project. Article 9 makes clear that the initiating State may proceed with the project without incurring any further procedural obligations (of information sharing, consultation, *etc*.), subject only to the notified State's right to inspect the project (under Article 10) to verify that the project as implemented conforms to the project as described.

2.133 Articles 11 and 12, in turn, state the procedural consequences when the notified State does have objections. In that case, the notified State must state the basis for its objections with particularity, the parties must consult with one another and, if they are unable to come to an agreement, one of them may submit the dispute to the jurisdiction of this Court.

2.134 The procedural consequences under Article 9, which flow from the absence of objections by the notified State, say nothing about the procedural consequences flowing from the contrary situation when the notified State does have objections. Seen in this light, Article 9 means exactly, but only, what it says: in the absence of objections from the notified State, the notifying State may proceed with the project with no additional procedural obligations incumbent upon it.

2.135 Dr. Barberis's 1979 book confirms that the 1975 Statute does not require prior consent. As cited above, Dr. Barberis wrote that "[s]ome treaties establish the

principle that one State, to be able to carry out a work or hydraulic project, must have the consent of the other contracting State"[184]. He cites three examples: an 1816 Treaty between Prussia and Holland, an 1862 treaty between Austria and Bavaria, and a 1956 treaty between Czechoslovakia and Hungary[185]. He conspicuously does *not* cite the 1975 Statute that he had negotiated on Argentina's behalf four years earlier. This is no oversight. Just three pages later, Dr. Barberis references both the 1973 Treaty and the 1975 Statute in connection with his discussion of treaty regimes that create a duty of prior consultation, but not prior consent[186].

2.136 In 1987, Dr. Barberis was one of the principal speakers at a two-day "Technical Legal Symposium" ("Encuentro Técnico-Jurídico") on the meaning and application of the 1975 Statute. The symposium was sponsored by CARU, and chaired by the President of CARU, the aforementioned Dr. Julio Carasales of Argentina. In his presentation, Dr. Barberis again emphasized that the regime established by the Statute was one of consultation, not consent:

> Now, when one State proposes carrying out any work of sufficient size to affect the river, it must first *consult* with its riparian neighbor to permit the latter to determine whether said work will cause it significant harm. Articles 7 to 13 of the Statute establish the procedure to follow for this purpose and provide for the participation of the Commission. Here, I would like to highlight the provision in Article 13 that refers specifically to the topic under consideration. This establishes the *regime of consultation* not only for works that will be carried out in the river, but also with regard to those that will be executed within the jurisdiction of the States "outside the section defined as a river and in the respective areas of influence in both sections." In conformity with these norms, if anyone, for

---

[184] Shared Natural Resources, *op. cit.*, p. 46. UCM, Vol. VII, Annex 198.

[185] *Ibid.*, p. 46, n. 125.

[186] *Ibid.*, p. 49 & n. 133.

> example, has a rice field of a certain size on the bank of the river and proposes to fertilize it with a given chemical product or treat it with certain pesticides, this could affect the quality of the river waters and therefore, it must be the subject of *consultation* with the riparian neighbor. The same procedure must be followed if the execution of a work involves impeding the discharge of an aquifer in the river or if someone proposes establishing a contaminating industry on a tributary of the Uruguay River, such as a tannery or a plant intended to process certain chemical products.
>
> As can be seen, the *regime of consultation* provided for in the Statute has a broad range of application[187].

Thus, there can be no question that Argentina's lead negotiator of the 1975 Statute did not read it to require prior consent, but only prior consultation.

3. The Argentine Government's Memorandum Accompanying the Statute

2.137 Annex 4 to Argentina's Memorial confirms Argentina's contemporaneous understanding of what the Statute does -- and does not -- require[188]. That document is a 7 September 1976 memorandum from the Argentine legislature to the President accompanying bill no. 21.413 concerning ratification of the Statute. In recommending ratification, the memorandum describes the provisions of the Statute in substantial detail. With respect to the procedural provisions of the Statute it states:

> The *principle of prior consultation* applies to cases in which one of the riparian States plans to build new canals, to modify or alter significantly those already in existence or to carry out other works of sufficient magnitude to affect navigation, the regime of the river or the quality of its waters[189].

---

[187] CARU Technical-Legal Symposium, pp. 67-68 (17-18 September 1987) (emphasis added). UCM, Vol. IV, Annex 72.

[188] AM, Vol. II, Annex 4.

[189] Note to the Executive Branch Accompanying Bill 21.413, p. 79 (7 September 1976) (emphasis added). UCM, Vol. II, Annex 40.

It also states:

> Although the parties have the right to use the river's waters within their respective jurisdictions, for domestic, sanitary, industrial and agricultural purposes, *the prior consultation procedure* is established for those uses that are of sufficient magnitude to affect the regime of the river or the quality of its waters. [190]

2.138 Numerous other references to "the principle of prior consultation" or "the procedure of prior consultation" are included throughout the text of the memorandum. The terms "prior agreement," "prior consent" and/or "veto", however, appear nowhere either in form or in substance. The conclusion is unmistakable. At the time the Argentine government submitted the 1975 Statute for ratification, it did not view it as creating a requirement of prior consent.

4. The 1976 Joint Presidential Declaration

2.139 The only document that Argentina has been able to identify that refers to prior agreement is the joint Argentine-Uruguayan Declaration of 18 September 1976[191]. The Declaration was issued only 11 days after Argentina's 7 September 1976 memorandum on ratification of the Statute discussed in the preceding section, which described the procedural regime of the 1975 Statute as one of "prior consultation", not prior agreement. In contrast to the memorandum, the 18 September 1976 declaration, which was issued to commemorate the inauguration of a bridge over the Uruguay River -- a jointly undertaken public works project -- refers to the Statute as adding "dans son ordre juridique bilatéral, le principe d'accord préalable pour tout ouvrage ou activité que l'une quelconque des Parties envisage

[190] *Ibid.*

[191] AM, Vol. II, Annex 34.

réaliser"[192]. Such a solitary and isolated reference to "le principe d'accord préalable" cannot be, and is not, sufficient by itself to establish that such agreement is *required* by the 1975 Statute, or that absent an agreement the Statute permits one Party to veto projects of the other that are entirely within the latter's territory. The Declaration not only stands in stark contrast to the formal memorandum immediately preceding it from the Argentine legislature to the President, but also contradicts Argentina's historical position that international law requires prior consultation but not prior agreement, and the interpretation given to the Statute by Argentina's leading authorities on it, including the principal Argentina negotiators. Given that there is *no other instance* in which either Argentina or Uruguay has taken the position that the Statute requires prior agreement, the Declaration can only be understood as (i) a hortatory expression of preference, rather than obligation, that the Parties respective projects be carried out by mutual agreement[193]; or (ii) a reference to bridges and other joint public works projects, which can only be carried out by agreement of the Parties. The Joint Declaration thus will not do the work Argentina asks of it. *Cf. Lake Lanoux* Award, para. 18 ("one must not seize upon isolated expressions or ambiguous attitudes which do not alter the legal positions taken by States"[194]) As the Court will read in the sections to follow, Argentina's own conduct since the adoption of the Statute disproves the idea that it requires prior consent. Never once in the past 31 years -- prior to this case -- has Argentina even claimed

---

[192] *Ibid.* ("adding in its bilateral legal system the principle of prior agreement for any work or activity the Parties plan to carry out".)

[193] Understood in this manner, the Declaration would be consistent with Argentina's formulation, repeated throughout its Memorial, that the Statute creates a scheme of prior consultation "en vue de parvenir à un accord préalable", without requiring such agreement. *See supra*, paras. [2.110 - 2.112].

[194] *Lake Lanoux*, *op. cit.*, para. 18.

that prior agreement was required under the 1975 Statute; nor has it ever sought Uruguay's agreement before (or for that matter, even after) carrying out its own industrial projects affecting the Uruguay River.

5. Argentina's Practice

2.140 Since the entry into force of the 1975 Statute, Argentine federal, provincial and municipal authorities have authorized the construction and operation of dozens of industrial plants that discharge liquid and solid waste into the Uruguay River or its tributaries. In no case -- not a single one -- has Argentina ever sought Uruguay's prior agreement or consent to the construction or operation of these industrial facilities. In fact, Argentina has never so much as notified Uruguay, let alone consulted with it or sought its prior agreement, before authorizing any of the industrial plants that have been established in its territory since 1975, even though every one of these plants discharges waste directly or indirectly into the Uruguay River. Nor did Argentina ever notify CARU about the plants, before or after they began operating. Although numerous examples could be presented, the following should suffice.

2.141 In 1976, shortly after the Statute took effect and, ironically, the same year as the presidential joint declaration highlighted in Argentina's Memorial, the chemical plant of Fana Química, S.A. began operating in Colón, Argentina, alongside the Uruguay River in Entre Ríos Province[195]. The plant manufactures chemical adhesives, plastics, paint, glue, aerosols, insecticides and silicon sealers, and it discharges liquid effluents into the river. Argentina did not consult with

[195] "Fanaquimica is a Guarantee of quality," *available at* http://www.fanaquimica.com/NuestraEmpresa/Default.aspx (last visited on 6 June 2007). UCM, Vol. IX, Annex 207.

Uruguay prior to the commencement of operation of the plant, much less seek its prior consent or agreement. Nor did Argentina notify CARU of the plant's authorization or commencement of operations. There is no reference to this plant in the CARU Minutes or any other CARU documents until November 1991, nearly fifteen years after it began to operate, when CARU initiated a "Coastal Sampling Program" ("Programa de Muestreo de Costas"), the first stage of which included Fana Química[196]. Then, in 2000, after learning that municipal authorities in Argentina had sanctioned Fana Química for violating local environmental regulations, CARU on its own initiative wrote to the company and complained about the discharge of liquid effluents into the river[197].

2.142 In 1983 and 1984, Argentine authorities approved the establishment of two poultry plants alongside the Uruguay River in Entre Ríos Province at San José (built and operated by Las Camelias, S.A.) and Concepción del Uruguay (built and operated by Granja Tres Arroyos, S.A.)[198]. According to the Environmental Health and Safety Guidelines promulgated by the International Finance Corporation, such poultry operations

> may generate effluents from various sources including runoff from poultry housing, feeding and watering; and from waste management and storage facilities. Both types of effluents have the potential to contaminate surface water and ground water with nutrients, ammonia, sediment, pesticides, pathogens and feed additives, such as heavy metals, hormones and antibiotics. Effluents from poultry operations typically have a high content of organic material and consequently a high biochemical oxygen

---

[196] Subcommittee on Pollution Report No. 108, Annex A, p. 1344 (22 November 1991), *approved in* CARU Minutes No. 10/91 (22 November 1991). UCM, Vol. IV, Annex 76.

[197] Letter SET-8952-AR sent from CARU President, Dr. Rodolfo Zanoniani, to Fana Química S.A. (10 February 2000). UCM, Vol. IV, Annex 90.

[198] "Las Camelias: Historical Evolution," *available at* http://www.lascamelias.com.ar/ (last visited on 29 June 2007). UCM, Vol. IX, Annex 208.

> demand (BOD) and chemical oxygen demand (COD), as well as nutrients and suspended solids[199].

Nevertheless, Argentina neither consulted with Uruguay prior to the operation of the plants, nor sought its consent or agreement. Nor did Argentina notify CARU about the existence of the plants. The first reference to the plants in CARU's minutes was not until 1996 (in the case of Las Camelias), when CARU received a note from the Prefectura Naval de Colón (Argentina) advising it of water tests performed near the Las Camelias facility[200], and 1999 (in the case of Granja Tres Arroyos), when the Subcommittee on Water Quality proposed to evaluate the plant's discharges into the Uruguay River[201].

2.143 In 1994, Argentine authorities approved the establishment of a manufacturing facility for wood projects at Concordia, also in Entre Ríos Province. The company, Masisa Argentina, S.A., acknowledges that effluents from this type of facility include suspended solids, organic load (DBO5) and high chemical oxygen demand (COD)[202]. Nevertheless, Argentina did not notify Uruguay or CARU about the authorization of the plant, or its commencement of operations; nor did it engage in any consultations with Uruguay, or seek Uruguay's consent or agreement with respect to the plant. CARU's Minutes include no references to the plant until 1999,

---

[199] International Finance Corporation, "Environmental, Health and Safety Guidelines for Poultry Production," *available at* http://www.ifc.org/ifcext/enviro.nsf/ AttachmentsByTitle/gui_EHSGuidelines2007_PoultryProd/$FILE/Final+-+Poultry+Production.pdf (last visited on 4 July 2007).

[200] CARU Minutes No. 8/96, pp. 1233-1234 (27 September 1996). UCM, Vol. IV, Annex 83.

[201] Report on Meeting with Concordia Development Association, Annex E to Subcommittee on Water Quality and Prevention of Pollution Report No. 192 (21 July 1999), *approved in* CARU Minutes 11/99 (23 July 1999). UCM, Vol. IV, Annex 88.

[202] "Water: Consumption and Effluents," *available at* http://stage.masisa.com/ Content.aspx?idioma=2&lang+2&site=&content=96&menu=175 (last visited on 5 July 2007). UCM, Vol. X, Annex 226.

five years after operations began, when the Commission on its own initiative, undertook to address contamination issues directly with Masisa Argentina, S.A[203]..

2.144 After 1975, when an "industrial park" was established in Entre Ríos Province near the Gualeguaychú River[204], which flows directly into the Uruguay River and is its principal tributary from the Argentine side, Argentine authorities licensed the construction and operation of some 25 industrial facilities at that park[205]. Many of these plants discharge liquid and solid wastes that enter the Uruguay River just upstream from Argentina's Ñandubaysal beach resort, and across from Fray Bentos on the Uruguayan side. Among these is the food and beverage processing plant belonging to RPB, S.A., which commenced operations in 1983[206]. According to the IFC's Environmental Health and Safety Guidelines,

> effluent streams from food and beverage processing may have a high biochemical and chemical oxygen demand (BOD and COD) resulting from organic wastes entering into the wastewater stream, and from the use of chemicals and detergents in various processes, including cleaning. In addition, effluent may contain pathogenic bacteria, pesticide residues, suspended and dissolved solids such as fibers and soil particles, nutrients and microbes, and variable pH[207].

---

[203] Report on Meeting with Concordia Development Association, *op. cit.*, pp. 1095-1097. UCM, Vol. III, Annex 88.

[204] "Gualeguaychú Industrial Park," *available at* http://www.pigchu.com.ar/ubicacion_parque.htm (last visited on 27 June 2007). UCM, Vol. IX, Annex 209.

[205] "Works on the River Uruguay," *op. cit.*, p. 40. UCM, Vol. X, Annex 224.

[206] "Baggio-RPB: The Company," *available at* http://www.baggio.com.ar/english/thecompany.html (last visited on 29 June 2007). UCM, Vol. IX, Annex 211.

[207] International Finance Corporation, Environmental, Health and Safety Guidelines for Food and Beverage Processing," *available at* http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_FoodandBeverage/$FILE/Final+-+Food+and+Beverage+Processing.pdf. (last visited on 4 July 2007).

It is not surprising, therefore, that a report published in the newspaper *Diario El Argentino* on 25 October 2006, quoted local residents as complaining that:

> Since the RPB company began to dig ditches on the land the company owns that is adjacent to the district, it discharges raw effluents, and that gives rise to bad odors in the air and pollutes the groundwater[208].

It also states:

> Since we've had this problem, we can no longer take water from our wells and we have to resort to using mineral water, with all the costs that involves[209].

2.145 Argentina never notified Uruguay or CARU about the RPB, S.A. plant. Nor did it consult with Uruguay or attempt to obtain its consent. There are no references to the plant in the CARU Minutes or in any other CARU documents. The same can be said for the industrial dyeing facility built by Rontaltex, S.A., which is also located in the Gualeguaychú Industrial Park and began operating in 1989[210]. According to the IFC's Environmental Health and Safety Guidelines,

> wastewater from dyeing may contain color pigments, halogens (especially in vat, disperse and reactive dyes), metals (e.g., copper, chromium, zinc, cobalt and nickel), amines (produced by azo dyes under reducing conditions) in spent dyes, and other chemicals used as auxiliaries in dye formulation (e.g., dispersing and antifoaming agents) and in the dyeing process (e.g., alkalis, salts and reducing/oxidizing agents). Dyeing process effluents are characterized by relatively high BOD and COD values, the latter commonly above 5,000 mg/Salt concentration (e.g., from reactive dye use) may range between 2,000 and 3,000 ppm[211].

---

[208] Diario El Argentino, "Residents of the Don Pedro District Complain" (25 October 2006). UCM, Vol. IX, Annex 188.

[209] *Ibid.*

[210] "Nuestra PYMES/Textile/Rontaltex," *available at* http://pymesriouruguay.com.ar/pymes/index2.php?option=com_content&do_pdf=1&id=77 (last visited on 6 June 2007). UCM, Vol. IX, Annex 210.

[211] International Finance Corporation, "Environmental, Health and Safety Guidelines for Textiles Manufacturing," *available at* http://www.ifc.org/ifcext/enviro.nsf/

2.146 Likewise, Argentina never notified Uruguay or CARU (or consulted with the former) about the battery manufacturing plant established by Unión BAT, S.A. at the Gualeguaychú Industrial Park in 1978. The IFC's Environmental Health and Safety Guidelines state that effluents from such a facility include:

> fluids resulting from metal cutting, grinding and forming [that] typically become contaminated due to extended use and reuse…Spent fluids may contain high amounts of metals (e.g., iron, aluminum and copper) acids and alkalis, (e.g., hydrochloric, sulphuric and nitric acids), and organics (e.g., ethylene glycol, acetic aldehyde and formaldehyde, straight oils, soluble oils, semi-synthetic fluids, and solvent wastes). Effluents usually contain significant pollutants, and can be differentiated into separate streams, including wastewaters potentially impacted by oils and solvents; surface treatment finishing wastewaters; and metal containing wastewaters…[212].

2.147 These are but a few examples of the many industrial facilities that have been authorized by Argentine authorities, and that have entered into operation, following the adoption of the 1975 Statute. Many others could be cited. Rather than burden the Court with a case-by-case examination of all the times Argentina has authorized industrial facilities along the Uruguay River, Uruguay respectfully refers the Court instead to Annex 224 of this Counter-Memorial. This is the study, cited previously, by the Uruguayan Ministry of Industry, Energy and Mining that details, *inter alia*, the dozens of industrial facilities installed along the Argentine side of the Uruguay River. As the Court can read, Argentina has authorized an impressive array of industrial facilities along the river or its major tributaries in the period since 1975. The Gualeguaychú Industrial Park alone hosts more than 25 industrial facilities, all

---

AttachmentsByTitle/gui_EHSGuidelines2007_TextilesMfg/$FILE/Final+-+Textiles+Manufacturing.pdf (last visited on 4 July 2007).

[212] International Finance Corporation, "Environmental, Health and Safety Guidelines for Metal, Plastic and Rubber Products Manufacturing," *available at* http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_MetalPlasticRubber/$FILE/Final+-+Metal%2C+Plastic%2C+and+Rubber+Products+Mnfg.pdf (last visited on 4 July 1007).

established since 1976 when the Park opened. Liquid effluents from these plants flow directly into the Arroyo del Cura, a stream that leads to the Gualeguaychú River, which in turn flows into the Uruguay River[213].

2.148 Even these are but a fraction of the total number of industrial plants authorized by Argentina near the river. The Industrial Park at Concepción del Uruguay, near the Argentine bank of the river, hosts at least eight industrial facilities, all established since the Park opened in the 1980's. All of them discharge liquid and solid wastes into the Uruguay River, either directly or indirectly, and all of them appear to be capable of affecting water quality. Yet in no case -- not a single one -- has Argentina ever notified Uruguay or CARU about the authorizations issued for these plants, or about their commencement of operations. In no case has Argentina ever consulted with Uruguay about the establishment of an industrial plant or facility in Argentine territory; and in no case has Argentina ever sought to obtain Uruguay's consent[214].

2.149 It is thus surprising that Argentina criticizes a November 2003 statement of Uruguay's then Foreign Minister, Didier Opertti, "que des projets industriels ont été menés à bien du côté argentin sans qu'il y ait eu de réaction ou de protestation

---

[213] "Works on the River Uruguay," *op. cit.*, p. 40. UCM, Vol. X, Annex 224. Concordia alone has some 100 industrial facilities. *Ibid.*, pp. 34-38.

[214] Argentina cannot argue that these projects did not require notification because they were incapable of affecting water quality. The threshold for notification under Article 7 is low, requiring only that the project be "capable of affecting" ("puede afectar") water quality. 1975 Statute, *op. cit.*, Art. 7. UCM, Vol. II, Annex 4. As is demonstrated in text, Argentina's plants plainly met this threshold. Moreover, the determination of whether or not a project is capable of affecting water quality is not one that Argentina can make unilaterally. As its Counsel stated during the June 2006 oral proceedings on its request for provisional measures: "The outstanding issue is whether or not these effects, amongst others, are acceptable or not. Uruguay says they are acceptable, but we say the 1975 Statute does not allow it to impose that view on Argentina." CR 2006/48, p. 16, para. 10 (9 June 2006) (Sands).

uruguayennes."[215] According to Argentina: "M. Opertti ne s'est pas montré plus explicite bien qu'il eût laissé entendre que dans des cas semblables l'Argentine n'avit pas saisi la CARU. *Rien n'est plus éloigné de la réalité*."[216] As the proceeding demonstration reveals, however, the truth is that it is Argentina's claim that is a long way from the truth. Argentina repeatedly -- indeed frequently -- authorized industrial projects without referring the matter to CARU and without protest from Uruguay, exactly as Minister Opertti had said.

2.150 Based on Argentina's consistent practice since the 1975 Statute was adopted, a period that has now extended for more than 32 years, the following conclusions can be drawn:

- Argentina has *never* considered itself obligated to obtain Uruguay's *prior consent or agreement* in order to carry out a planned project, even one that could affect the Uruguay River or the quality of its water. This is not surprising. It has always been the unanimous view of Argentina's (and Uruguay's) leading experts on the 1975 Statute that it does *not* require the State initiating a project affecting the river or the quality of its water to obtain the other State's *consent or agreement* before carrying out the project.
- Argentina has *never* considered itself obligated *even to notify* Uruguay or CARU, *or to consult* with Uruguay, regarding a planned industrial facility located exclusively within Argentine territory, even if the facility could affect the river or the quality of its water. In this regard, Argentina's behaviour has followed the interpretation of the 1975 Statute advanced by Dr. Julio Carasales, former Argentine President of CARU. As described above, Dr. Carasales held the view that the Statute applied only to works on the river itself -- like dams and canals -- and doubted that it could apply to an industrial facility located in the territory of only one of the Parties. This was contrary to the view of Dr. Julio Barberis, Argentina's lead negotiator of the Statute, who took the position that the "regime of consultation" ("régimen de consulta") established by the Statute applied to

[215] AM, para. 4.20. ("that industrial projects had been carried out by the Argentines with no reaction or protest from Uruguay.")

[216] *Ibid*. (emphasis added). ("Mr. Opertti did not give explicit details, although he implied that in similar cases, Argentina had not referred the matters to CARU. *Nothing could be further from the truth*.")

> industrial facilities. By its conduct, Argentina has demonstrated its adherence to Dr. Carasales' interpretation of the Statute rather than to that of Dr. Barberis[217].

6. The Case of the Garabí Dam

2.151 The fact that Argentina does not view the 1975 Statute as incorporating a prior consent regime is further confirmed by its behaviour in one of the State practice examples cited in its Memorial -- the Garabí Dam. In the early 1980s, the Governments of Argentina and Brazil began researching the possibility of constructing a dam in the upper reaches of the Uruguay River[218]. The project came before CARU in October 1981. In December of that year, the two delegations to the Commission came to the joint conclusion that "carrying out the work in question, as planned for the Upper Uruguay River may produce significant damage to navigation, the regime of the river and water quality."[219]

2.152 Notwithstanding CARU's opinion, however, Argentina continued to move forward with its plans for the dam. For example (as reflected in the CARU minutes), in 1983, it came to the attention of the Uruguayan delegation that Argentina was pressing ahead with the project[220]. Upon learning this, Uruguay's Ambassador Gonzalez Lapeyre stated his view that in light of CARU's prior finding -- jointly agreed by both delegations -- the dam should not be built, at least as then planned[221]. At the time, the Argentine delegation took no position on Ambassador Lapeyre's

---

[217] Uruguay, as described above, agrees with Dr. Barberis: that industrial plants *are* covered by Articles 7-12 (by virtue of Article 27).

[218] CARU Minutes No. 8/81, pp. 447-448 (13 November 1981). UCM, Vol. IV, Annex 67.

[219] CARU Minutes No. 9/81, p. 514 (18 December 1981). UCM, Vol. IV, Annex 68.

[220] CARU Minutes No. 6/83, p. 399 (29 July 1983). UCM, Vol. IV, Annex 69.

[221] *Ibid.*, p. 397.

statement. Argentina's subsequent conduct shows that it did not agree, however. The CARU minutes show that in August 1985, the Presidents of Argentina and Brazil announced their intent to go forward with the project[222]. Argentina's delegation to CARU told its Uruguayan counterpart that Uruguay would be informed and consulted later, when there was something "concrete and decided"[223].

2.153 In 1988, the Parties' respective Foreign Ministries engaged in a round of discussions about the planned project[224]. As a result of these State-to-State discussions, it was agreed that documents concerning Garabí would be sent to Uruguay, through CARU, so that it could determine whether the project would cause significant harm. It is clear from the CARU minutes, however, that Argentina never viewed its plan to build the Garabí Dam as in any way conditional on Uruguay's consent. The head of the Argentine delegation, Ambassador Carasales, acknowledged the existence of the agreement just mentioned, an agreement which he said contained "a commitment on the part of the Argentine Republic, as it could not be otherwise, *to consult* with the Eastern Republic of Uruguay about the [Garabí Dam] *that will be built* jointly with Brazil …."[225]

2.154 On 13 July 1990 the Government of Uruguay informed CARU that it had concluded that the project might cause significant harm to navigation, the regime of the river, and the quality of its waters[226]. According to the CARU minutes from that day:

---

[222] CARU Minutes No. 7/85, p. 670 (13 December 1985). UCM, Vol. IV, Annex 70.

[223] *Ibid.*, p. 678.

[224] CARU Minutes No. 2/89, p. 218 (17 March 1989). UCM, Vol. IV, Annex 74.

[225] *Ibid*.

[226] CARU Minutes No. 8/90, pp. 801-802 (13 July 1990). UCM, Vol. IV, Annex 75.

> The note from the Uruguayan Delegation dated 13 July 1990, whereby the Government of the Eastern Republic of Uruguay expresses its position on the Garabí hydroelectric project in the Upper Uruguay River area, was received. The note contains technical reports attached, which state that the planned works may cause significant harm to navigation, the regime of the river, and the quality of its waters[227].

2.155 Notwithstanding Uruguay's conclusion that the project might cause significant harm (and CARU's prior opinion to the same effect), Argentina continued to move forward with its plans for the dam -- albeit slowly. In 1996, the Presidents of Argentina and Brazil met and discussed their desire to reinitiate the project[228]. In April 1997, the two Presidents met again and specifically declared their intent to carry out the project[229]. The CARU minutes do not make clear what transpired thereafter, although very recent reports suggest that Argentina and Brazil have recently revitalized their plan. At any rate, the important point is that even in the face of express determinations by both CARU and Uruguay that the Garabí Dam would cause significant harm, Argentina forged (and is continuing to forge) ahead with its plans to implement the project with Brazil. Its behaviour is plainly incompatible with the view that the 1975 Statute required Uruguay's prior consent to the project.

7. Argentina's Conduct Prior to the Submission of Its Application

2.156 The fact that the 1975 Statute creates only a regime of prior consultation, not prior consent, is still further confirmed by Argentina's conduct leading up to the filing of its Application to this Court. In all of its communications with Uruguay,

---

[227] *Ibid.*

[228] Subcommittee on Navigation, Works and Erosion Report No. 185, pp. 408-409 (18 April 1996), *approved in* CARU Minutes No. 3/96 (19 April 1996). UCM, Vol. IV, Annex 81.

[229] CARU Minutes No. 9/97, p. 1387 (12 September 1997). UCM, Vol. IV, Annex 86.

Argentina never once claimed that the Statute creates anything other than a regime of prior consultation. It never once claimed that it requires prior consent. This fact further reveals Argentina's true understanding of the 1975 Statute's requirements.

2.157 Argentina's own Memorial cites a telling example. According to Argentina, at a 2005 CARU meeting, the head of the Argentine delegation complained that "le *mécanisme de consultation* prévu par le Statut (article 7 et suivants) n'avait été respecté…"[230] It then quotes at great length the comments of the Chairman of the Argentine delegation. Conspicuously, the head of the Argentine delegation referred to the mechanism of "consultation préalable" or "prior consultation" three different times in his comments. At no point, however, did he contend that there was or is a requirement for prior consent. Similarly, on 12 January 2006, Argentina sent Uruguay a diplomatic note laying the foundation for its Application. In that note, it referred repeatedly to the "prior information and consultation mechanism set forth in Articles 7 to 12 of the Statute", without anywhere suggesting that the Statute contained a requirement for prior agreement[231].

2.158 These official communications, coming even as Argentina was positioning this dispute for submission to the Court, must be seen for what they are -- clear admissions that Argentina does not consider the Statute to require prior consent. As the *Lake Lanoux* tribunal noted fifty years ago, "the obligation to give notice does not include the obligation, which is much more extensive, to obtain the agreement of

---

[230] *See* AM, para. 2.60 (emphasis added). ("the *consultative mechanism* provided by the Statute (Articles 7 *et seq*.) had not been respected….")

[231] Diplomatic Note sent from Argentine Minister of Foreign Affairs, International Trade and Culture to Uruguayan Ambassador in Argentina, D. Francisco Bustillo (12 January 2006). UCM, Vol. III, Annex 59.

the State that has been notified"[232]. If Argentina truly considered that the 1975 Statute required prior agreement, it surely would have said so in its communications with Uruguay leading up to this lawsuit. The fact that it confined itself instead to invoking the mechanisms of "prior consultation" is compelling evidence of Argentina's true understanding of what the Statute does -- and does not -- require.

8. State Practice in Latin America

2.159 In its Memorial, Argentina includes a curious review of State practice in Latin America that it claims supports the view that prior consent is a general requirement in regional practice. In truth, however, the only thing that Argentina's review proves is that when prior consent is required by an international agreement, that requirement is *expressly* stated in the agreement. Argentina cites four instruments.

2.160 The first is the 1933 Uruguay-Brazil Boundary Treaty, Article XX of which specifically requires prior agreement. It states:

> When there is possibility that the installation of plant for the utilization of the water may cause an appreciable and permanent alteration in the rate of flow of a watercourse running along or intersecting the frontier, the contracting State desirous of such utilization *shall not carry out the work necessary therefore until it has come to an agreement with the other State*[233].

2.161 The second instrument Argentina cites is the Montevideo Declaration, also dating to 1933. Section 2 of the Declaration also specifically requires consent:

> [N]o State may, *without the consent of the other riparian State*, introduce into watercourses of an international character, for the industrial or agricultural exploitation of their waters, any

[232] *Lake Lanoux*, *op. cit.*, para. 16.

[233] Convention Regarding the Determination of the Legal Status of the Frontier Between Brazil and Uruguay (20 December 1933) (emphasis added).

> alteration which may prove injurious to the margin of the other interested State[234].

In its discussion of the Montevideo Declaration, the Memorial cites Gonzalez Lapeyre's and Flangini's book *El Estatuto del Rio Uruguay*[235]. The phrasing of Argentina's reference seems designed to create the erroneous impression that when the authors wrote "[c]ette règle, applicable au fleuve Uruguay en raison de son caractère de frontalier… [requis] le consentement de l'autre Etat" they were referring to the 1975 Statute[236]. They distinctly were not. The reference to "[c]ette règle" relates solely to the 1933 Montevideo Declaration between Uruguay and Brazil. Their book nowhere suggests that the 1975 Statute requires prior consent.

2.162 Argentina's third example is the 1971 Asunción Resolution. Like the previous two examples, it too explicitly requires prior agreement. Section 1 provides:

> In contiguous international rivers, which are under dual sovereignty, *there must be a prior bilateral agreement* between the riparian States before any use is made of the waters[237].

2.163 The fourth and last document Argentina cites is the 1957 Inter-American Bar Association Resolution, paragraph 3 of which also specifically requires agreement:

---

[234] Declaration of Montevideo concerning the industrial and agricultural use of international rivers (24 December 1933), *Yearbook of the International Law Commission*, 1974, vol. II, Part Two, p. 212 (emphasis added).

[235] AM, para. 3.87.

[236] *See ibid.* ("[t]his rule, which is applicable to the River Uruguay, owing to its nature as a boundary between the two States … [requires] the consent of the other State")

[237] Declaration of Asunción on the use of international rivers, Resolution No. 25 (1971), *Yearbook of the International Law Commission*, 1974, vol. II, Part Two, p. 324 (emphasis added).

> States having under their jurisdiction part of a system of international waters are under a duty to refrain from making changes in the existing régime that might affect adversely the advantageous use by one or more other States have a part of the system under their jurisdiction, *except in accordance with (i) an agreement with the State or States affected* or (ii) a decision of an international court or arbitral commission[238].

2.164 From this partial review of Latin American practice, Argentina's Memorial attempts to draw the conclusion that: "La règle de l'approbation préalable des projets sur un cours d'eau international a donc été plébiscitée en Amérique Latine. Le Statut du fleuve Uruguay s'inscrit dans cette mouvance."[239] Logic would seem to compel exactly the opposite conclusion. In each of these instruments, the requirement for prior consent or agreement was expressly stated, exactly as the *Lake Lanoux* tribunal and Dr. Barberis said it should be. The 1975 Statute, on the other hand, contains no such statement. The absence of an express prior consent requirement can only compel the conclusion that it was specifically and intentionally left out in order to make clear that prior consent/agreement is not required.

2.165 Thus, there is nothing in the text of the 1975 Statute, the practice of the Parties or general international law that can be read to graft onto the Statute a requirement that the initiating State obtain the prior agreement of the notified State before implementing a covered project in its own territory. The duty the Statute creates is the obligation *to consult* with the notified State in good faith in an effort to

---

[238] Inter-American Bar Association Resolution, *Proceedings of the Tenth Conference*, (14 to 21 November 1957), *Yearbook of the International Law Commission*, 1974, vol. II, Part Two, p. 208 (emphasis added).

[239] AM, para. 3.91. ("The rule of prior approval of projects on an international waterway was therefore put to a vote in Latin America. The Uruguay River Statute is subject to this movement.")

reconcile the interests of the two States. Uruguay will now turn to the scope and content of that obligation.

D. THE OBLIGATION TO CONSULT IN GOOD FAITH

2.166 Although the 1975 Statute does not expressly state a requirement to engage in consultations as such, it is Articles 11 and 12 that, taken together, impose a duty on both Parties to engage in direct consultations. As already discussed, Article 11 provides that in the event the notified State concludes that a planned project will cause significant harm to navigation, the regime of the river, or the quality of its waters, it must inform the initiating State of the reasons for its conclusions, as well as any suggested modifications to the project. Article 12 then provides:

> Should the Parties fail to reach agreement within 180 days following the notification referred to in article 11, the procedure indicated in chapter XV [relating to dispute settlement by the ICJ] shall be followed[240].

It is thus clear that following the notification from the notified State to the initiating State referred to in Article 11, the Parties must attempt to reach agreement within 180 days by means of direct consultations.

1. The Purpose of Consultations

2.167 In analyzing the pertinent articles of the 1975 Statute, it is worth considering the object and purpose of the consultation mechanism within the scheme of the Statute as a whole. In this respect, Uruguay is content to adopt the words of the Memorial, where Argentina states:

> L'obligation d'information et consultation préalables est caractérisée par sa finalité: il s'agit de permettre à l'autre partie

[240] 1975 Statute, *op. cit.*, Art. 12. UCM, Vol. II, Annex 4.

> intéresée 'd'évaluer l'effet probable que l'ouvrage aura sur la navigation, sur le régime du fleuve ou sur la qualité de ses eaux'[241].

2.168 Inasmuch as these are Argentina's own words, Uruguay will pause on them to make two points. *First*, Argentina recognizes, as it must, that the focus of the inquiry during the consultation phase is on "l'effet probable" of the planned work. Argentina thus acknowledges that remote or speculative harms are irrelevant to the consultative process envisioned by Articles 11 and 12. *Second*, Argentina also recognizes the limited scope of the consultations. They are concerned only with impacts on navigation, the regime of the river, and/or water quality. Other issues, even other environmental considerations, are outside the ambit of the consultation mechanism under the 1975 Statute.

2.169 The understanding of the limited scope of the consultation process Argentina evinces in paragraph 4.76 (and elsewhere[242]) of its Memorial refutes less considered statements in other parts of the Memorial. At paragraph 5.09, for example, Argentina (mis)states: "aucune décision relative [aux projets] ne pouvait, ni n'aurait dû être prise par l'Uruguay avant que *toutes* les conséquences environmentales n'en aient été étudiées et prises en considération."[243] To similar effect is paragraph 3.52 which argues: "une utilisation optimale est celle qui prend

---

[241] AM, para. 4.76. ("The prior information and consultation obligation is characterized by its ultimate objective: it enables the other interested Party to 'assess the probable impact of such works on navigation, the regime of the river or the water quality'.")

[242] *See, e.g.*, AM, para. 3.84 ("le Statut de 1975 encadre le mécanisme de décision relatif à tout ouvrageou toute utilisation que peut causer un préjudice sensible à la navigation, au régime du fleuve ou à la qualité de ses eaux") ("The 1975 Statute does indeed lay out the framework for the decision-making mechanism relating to any project or use that can cause substantial damage to navigation, the regime of the river or the water quality.")

[243] AM, para. 5.9 (emphasis added). ("No decision about the [plants] could or should have been made by Uruguay until *all* environmental consequences had been studied and taken into consideration.")

en compte *toutes* les oppositions éventuelles d'un Etat riverain lorsque des mesures sont projetées."[244]

2.170 Such expansive claims are plainly inconsistent with Argentina's own admissions and, more importantly, with the text of the Statute itself. In four separate places between Articles 7 and 11 (twice each in Articles 7 and 11), the Statute reiterates that the topical scope of the notification, information sharing and consultation provisions is limited to (1) navigation, (2) the regime of the river, and (3) water quality. Consequently, Argentina's entitlement to be consulted and to have input must likewise be limited to the same three subjects. And even then, it is entitled to be heard only with respect to objections arising from its assessment of "l'effet probable", not "toutes" impacts, as Argentina would have it.

2. Relevant Timeframes

2.171 Article 12 requires direct consultations for up to 180 days, after which time either Party may submit a dispute to the Court for resolution. This 180-day period, of course, states the maximum period a Party must wait before submitting an Application to the Court. It is also possible that the Parties will reach an impasse in their consultations prior to the expiration of the 180-day period, in which case it would be unreasonable and inconsistent with the sound administration of justice to require the Parties to wait the full six months before initiating the case. As was stated in *Barcelona Traction, Light and Power Company, Limited,* a Party need not

[244] *Ibid.*, para. 3.52 (emphasis added). ("Optimal use is a use that takes into account *any and all* possible objections by a Waterway State when measures are planned.")

undertake "a clearly futile and pointless activity, or a repetition of what has been done in vain"[245].

2.172 The 180-day consultation period in Article 12 also comes at the end of a series of other time periods provided for in Articles 7 and 8; *viz*, CARU's 30-day summary review period (Article 7) and the 180-day review period given to the notified State to examine the information presented to it about the project. (Article 8.) Insofar as the purpose of these earlier steps is to obviate the need for direct consultations by giving first CARU and then the notified Party the opportunity to decide that a given project poses no threat to navigation, the regime of the river, or the quality of its waters, there is no reason in principle that the Parties might not jointly decide to bypass these prior steps and proceed directly to bilateral consultations. If it is clear that the two Parties have a difference of opinion about a given project, there should be no impediment to their seeking to resolve the matter through direct consultations at any mutually agreed moment. As will be detailed in Chapter 3, this is exactly what Uruguay and Argentina did with respect to both the ENCE and Botnia plants. As soon as it became clear that they viewed matters differently (as did their respective delegations to CARU, causing a stalemate in that body), they agreed to seek out mutually acceptable solutions through Party-to-Party consultations. The consultation process in which they engaged, and the voluminous information provided to Argentina by Uruguay during this process, are described in Chapter 3.

2.173 Not surprisingly, this common-sense approach is reflected in general international law. Article 9 of the 2001 Draft Articles provides: "The States

[245] *Barcelona Traction, Light and Power Company, Limited, Second Phase (Judgment)*, *I.C.J. Reports 1970*, p. 145 (Tanaka, separate opinion).

concerned shall enter into consultations, at the request of any of them, with a view to achieving acceptable solutions regarding measures to be adopted in order to prevent significant transboundary harm"[246]. With respect to the issue of timing, paragraph 7 of the ILC commentary states:

> Article 9 may be invoked *whenever* there is a question about the need to take preventive measures. Such questions obviously may arise as a result of Article 8, because a notification to other States has been made by the State of origin that an activity it intends to undertake may pose a risk of causing significant transboundary harm, or in the course of the exchange of information under Article 12 or in the context of Article 11 in the absence of notification[247].

The point is thus that whenever it becomes clear that a difference may be most efficiently resolved by direct consultations between the Parties (as happened in this case), such consultations are appropriate and entirely consistent with the procedural scheme of the Statute if the Parties jointly agree to follow such a route.

3. Duties During Consultation

2.174 The obligations of each Party during the course of consultations conducted pursuant to Articles 11 and 12 are not subject to doubt. Each side must participate in the process in good faith with an open mind and a willingness to take account of the other side's views. The obligation to consult genuinely and in good faith was recognized in the *Lake Lanoux* award, in which it was held:

> Consultations and negotiations between two States must be genuine, must comply with the rules of good faith and must not be mere formalities. The rules of reason and good faith are applicable to procedural rights and duties relative to the sharing of the use of internal rivers[248].

---

[246] 2001 Draft Articles, *op. cit.*, Art. 9, para. 1.

[247] *Ibid.*, p. 411, comment 7 (emphasis added).

[248] *Lake Lanoux*, *op. cit.*, p. 119.

Although it is unnecessary to identify all the attributes of good faith consultation, the *Lake Lanoux* tribunal did refer to some forms of behaviour that were impermissible, including "an unjustified breaking off of the discussions, abnormal delay, disregard of the agreed procedures, [and] systematic refusals to take into consideration adverse proposals or interests …"[249]. These rules, of course, apply equally to both sides at the negotiating table. The notified State has an equal duty to take into account the initiating State's interests and, as observed above, even to accept harms that do not rise to the level of "significant." Were it otherwise, the notified State could turn the consultation process into a mechanism that "paralyses the exercise of the territorial jurisdiction of another."[250]

2.175 The Court has recognized the same general principles on more than one occasion. In the *North Sea Continental Shelf Cases*, for example, the Court held:

> [T]he parties are under an obligation to enter into negotiations with a view to arriving at an agreement, and not merely to go through a formal process of negotiation as a sort of precondition for the automatic application of a certain method of delimitation in the absence of agreement; they are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it[251].

Similarly in the *Fisheries Jurisdiction Case*, the Court stated: "the task [of the parties] will be to conduct their negotiations on the basis that each must in good faith pay reasonable regard to the legal rights of the other."[252] The principle is, of course, simply a particular application of the duty of good faith that inheres in all

---

[249] *Ibid.*, p. 128, para. 11.

[250] *Ibid.*

[251] *North Sea Continental Shelf Cases (Judgment)*, *I.C.J. Reports 1969*, p. 47, para. 85.

[252] *Fisheries Jurisdiction (U.K./Iceland) (Judgment)*, *I.C.J. Reports 1974*, p. 33, para. 78.

international obligations, whether treaty-based or otherwise. As the Court stated in the *Nuclear Tests Cases*: "One of the basic principles governing the creation and performance of legal obligations, *whatever* their source, is the principle of good faith."[253]

2.176 As will be shown in Chapter 3, Uruguay fully discharged this obligation. Indeed, Argentina nowhere argues that it did not. Uruguay's good faith is thus admitted.

(a) An Obligation of Conduct, Not Result

2.177 As discussed above, the Statute does not require prior agreement in order for one State to undertake projects on its side of the river. The obligation to consult does not imply an obligation to achieve a particular outcome. In other words, it is an obligation of conduct, not an obligation of result. Were it otherwise, the consultation mechanism the Statute creates would effectively be converted into a means for an objecting State to prevent or indefinitely forestall the implementation of a project.

2.178 As with so many of the other elements of the 1975 Statute, this understanding of the text is entirely consistent with general international law. In the *Railway Traffic Case*, the PCIJ clearly stated that "an obligation to negotiate does not imply an obligation to reach an agreement."[254] The decision of the tribunal in the *Lake Lanoux* case is to the same effect:

> [I]nternational practice prefers to resort to less extreme solutions [than requiring prior agreement] by confining itself to obliging

---

[253] *Nuclear Tests Cases (New Zealand/France) (Judgment)*, *I.C.J. 1974*, p. 268, para. 46 (emphasis added).

[254] *Railway Traffic Between Lithuania and Poland (Railway Sector Landwarów Kaisiadorys) (Advisory Opinion)*, *P.C.I.J.*, *Series A/B*, *No. 42*, p. 116 (1931).

> the States to seek, by preliminary negotiations, terms for an agreement, without subordinating the exercise of their competences to the conclusion of such an agreement. Thus, one speaks, although often inaccurately, of the "obligation of negotiating an agreement"[255].

(b) Status of the Project During Consultations

2.179 As previously discussed, Argentina's argument that the 1975 Statute requires prior agreement is notably half-hearted, and entirely without merit. Argentina is more direct, however, in arguing that in the face of objections from the notified State, the initiating State may not authorize a project at least until such time as consultations have been exhausted or, if the notified State institutes dispute resolution proceedings under Article 12 and Chapter XV, even until after a decision on the merits has been reached by the Court. At paragraph 4.89(a)(iv), for example, Argentina argues that the Statute creates "l'obligation de parvenir à un accord avec l'autre partie ou d'attendre le règlement du différend selon la procédure prévue au chapitre II du Statut [*i.e.*, Articles 7-12] de 1975, avant d'autoriser la construction" of any projects[256]. This narrower argument fares no better, however, and should similarly be rejected.

2.180 The starting point of the analysis is, of course, the text of the 1975 Statute. Conspicuously, the Statute itself does not expressly state what the duties of the initiating State are during the consultation period. It neither says that the State in question may proceed with the project nor says that it may not. In contrast, both the 1997 Watercourse Convention and the 2001 Draft Articles on the Prevention of

---

[255] *Lake Lanoux*, *op. cit.*, p. 128, para. 11.

[256] AM, para. 4.89(a)(iv). ("obligation to reach an agreement with the other party or to await the settlement of the dispute according to the procedure established in Chapter II of the Statute [*i.e.*, Articles 7-12], before authorizing" any projects.)

Transboundary Harm expressly state that in the event of consultations over a planned project, the initiating State shall refrain from "implementing" the project during the pendency of consultations, provided the other party so asks[257]. Even accepting that the 1975 Statute implicitly incorporates the same duty, that obligation only prohibits the initiating State from "implementing" the project while consultations are ongoing. As a leading commentator on consultation in international law has stated:

> [A] prior consultation obligation does not inherently imply a duty to desist until a solution is finally reached. It simply implies that nothing more than preparatory work will be undertaken until the consulted state has had an ample opportunity to present its views and until those views have been considered in good faith[258].

2.181 As discussed above, the "implementation" of the project at the heart of this case is the operation of the plants, not simply their construction. Construction *per se* poses no threat to navigation, the regime of the river or the quality of its waters[259]. Accordingly, steps that are preparatory to the actual *construction* of the plants, but not their ultimate operation, are plainly permissible even as consultations continue.

2.182 This result is consistent with the purposes of the consultation mechanism. According to the ILC commentary to Article 12 of the 1997 Watercourse Convention, for example, the object of timely notification is "to permit meaningful consultations and negotiations under subsequent articles"[260]. Thus, so long as the

---

[257] 1997 Watercourse Convention, *op. cit.*, Art. 17, para. 3; 2001 Draft Articles, *op. cit.*, Art. 11, para. 3.

[258] Kirgis, F.: Prior Consultation in International Law: A Study in State Practice, Charlottesville, University Press of Virginia, 1983, p. 75.

[259] *See Gabčikovo-Nagymaros Project (Judgment)*, *op. cit.*, p. 54, para. 79.

[260] 1994 Draft Articles, *op. cit.*, p. 111, comment 4.

initiating State takes no irreparable steps during consultations that might foreclose the good faith consideration of the notified State's interests, it has fulfilled its obligations, exactly as Kirgis suggests. As the next Chapter will demonstrate, Uruguay in fact authorized no more than preparatory work (such as ground clearing) for construction of the ENCE and Botnia plants while consultations were taking place. It thus indisputably complied with its obligations under the Statute.

(c) Status of the Work During Dispute Resolution

2.183 Regardless of whether or not the initiating State may implement the project while consultations are on-going, once the consultation period is over or the consultations have reached an impasse, the project most certainly can go forward, even if all avenues of dispute resolution have not been exhausted. Argentina's argument to the contrary is mistaken. Once again, the Statute is entirely silent on the matter. General international law is clear, however, that any obligation to refrain from implementing a project endures only for a reasonable period during the consultations as such. It does *not* continue after the consultation phase or extend into any subsequent dispute resolution procedure.

2.184 Both the 1997 Watercourse Convention and the 2001 Draft Articles contain provisions for post-consultation dispute resolution. Although neither provides for the reference of disputes to this Court, the difference is immaterial for present purposes. Article 33 of the 1997 Watercourse Convention and Article 19 of the 2001 Draft Articles both provide for the creation of impartial fact-finding commissions or, if agreed by the States concerned, mediation or conciliation[261]. Both instruments make clear that the duty to refrain from implementing a project

[261] 1997 Watercourse Convention, *op. cit.*, Art. 33; 2001 Draft Articles, *op. cit.*, Art. 19.

ends when consultations end, regardless of the status of any subsequent dispute resolution proceedings. The ILC commentary to Article 9 of the 2001 Draft Articles, for instance, specifically states that when consultation fails "the State of origin is permitted to go ahead with the activity, for the absence of such an alternative would, in effect, create a right of veto for the States likely to be affected."[262] Similarly, the ILC commentary to the 1997 Watercourse Convention states: "After this period [of consultation] has expired, the notifying State may proceed with the implementation of its plans..."[263]. Accordingly, whatever obligations are imposed on the initiating State during consultations, there can be no question that implementation of the project is permissible during a subsequent dispute resolution phase.

2.185 Uruguay notes that this understanding of the 1975 Statute does not mean that the notified State is without remedy during the dispute resolution process. As Argentina demonstrated by its actions in May 2006, the notified State can, if it believes the situation warrants, always seek interim measures of protection from this Court at any time after the filing of its Application. Provided that it can meet the requirements for provisional measures -- an urgent need to protect its rights in dispute from irreparable harm -- the notified State has an effective mechanism for protecting its interests pending the outcome of the dispute.

2.186 The practical consequences flowing from a finding that the initiation of judicial proceedings by itself requires the suspension of a project also demonstrate why it is wrong. If Argentina were right, a notified State could impede the initiating

---

[262] 2001 Draft Articles, *op. cit.*, p. 412, comment 10.

[263] 1994 Draft Articles, *op. cit.*, p. 116, comment, para. 4.

State's projects not just for the six month consultation period, but potentially for years as the dispute wends its way to final judgment. Given that the 1975 Statute specifically recognizes the "right of each Party to use the waters of the river"[264] that result would be plainly inconsistent with the central objective of the Statute. Such a prolonged suspension would quite probably kill any and all private projects, as investors would be unlikely to wait out a multi-year judicial proceeding when they might find a more readily available location for their investment. Reading the Statute as Argentina suggests would thus effectively subjugate each State's right to economic development to the whims of the other, and would be plainly incompatible with "the rational and optimal *utilization* of the Uruguay River."[265] Even so, as indicated above, the notified State can already bring about the suspension of the project during dispute resolution proceedings if it can demonstrate to the Court an urgent need to protect its rights in dispute from irreparable harm. Thus, the practical consequence of adopting Argentina's interpretation of the Statute as requiring a suspension of the work whenever dispute resolution proceedings are initiated would be automatically to suspend and potentially kill a project though the need to do so is not urgent, and there is no imminent danger of irreparable harm to the notified State.

* * *

2.187 Argentina and Uruguay are in agreement about the purposes of consultations under the Statute: to enable the notified State to assess the probable impact of planned projects on navigation, the regime of the river, and the quality of

---

[264] 1975 Statute, *op. cit.*, Art. 27. UCM, Vol. II, Annex 4.

[265] *Ibid.*, Art. 1 (emphasis added).

its waters[266]. And although the Memorial nowhere expressly says as much, Uruguay presumes that the Parties are also in agreement that all consultations must be conducted in good faith. Where they disagree, however, is in whether the obligation to consult entails an obligation to achieve a certain result, and in whether the initiating State may move forward with a project during consultations and any subsequent dispute resolution proceedings. For the reasons articulated above, a careful analysis of the Statute proves that the duty to consult is an obligation of conduct, not result, and that the initiating State may at very least undertake preparatory work even as consultations are on-going, and may implement the project during dispute resolution proceedings in this Court (unless the Court determines that the indication of provisional measures is justified). In the next Chapter, Uruguay will demonstrate that it fulfilled all of its obligations during the consultation and dispute resolution processes.

Section III.
The Role of CARU

2.188 A central theme of Argentina's Memorial is Uruguay's ostensible failure to abide by its procedural obligations in and to CARU by issuing preliminary environmental authorizations (AAPs) to ENCE and Botnia prior to referring the matter to the Commission. In making its argument, Argentina systematically cultivates the impression that "[l]e mandat de la CARU est large et ses compétences sont étendues."[267] Similarly, it suggests that CARU had the power to "détermine s'il

---

[266] *See supra* para. 2.167.

[267] AM, para. 3.58. ("[t]he mandate of CARU is broad and its authority extensive.")

pouvait construire ou délivrer l'autorisation des ouvrages concernés."[268] Like references are sprinkled liberally throughout the Memorial. Uruguay submits, however, that such assertions should be treated with the greatest of caution. Under the 1975 Statute, CARU, though it exercises critical functions in fulfilment of the statutory scheme, simply does not have the particular powers Argentina seeks to give it.

2.189 Article 56 of the 1975 Statute states the functions of CARU. Uruguay will not burden the Court by setting those functions out in exhaustive detail here but will merely refer the Court to the Statute itself[269]. For present purposes, it is enough to observe that nowhere in Article 56 is CARU given the authority to approve or reject works planned by either of the Parties in the exercise of their sovereign powers. The functions the Statute confers on CARU are essentially of five kinds: (i) regulatory; (ii) fixing limits on fish catches; (iii) facilitating coordination between the Parties; (iv) exchange of information; and (v) participation in consultations between the Parties.

2.190 With respect to its regulatory functions, it is instructive to note that although CARU is given the power to draw up rules governing the "prevention of pollution", the way in which it has done so only underscores that (a) CARU's role is secondary to that of the Parties themselves, and (b) largely consists of providing technical advice and conducting monitoring activities. As previously mentioned, the portions of the CARU Digest dealing with the subject of pollution expressly state the competencies of each of the Parties, on the one hand, and CARU, on the other. The

---

[268] AM, para. 4.13. (to "determine whether Uruguay could build or grant the authorization to build the works in question.")

[269] 1975 Statute, *op. cit.*, Art. 56. UCM, Vol. II, Annex 4.

competencies of each Party include, among others: to promulgate authorizations for the various legitimate uses of the waters; to create and operate the appropriate systems for collection, treatment and disposal of effluents and solid waste derived from industrial activity; to control the compliance with effluent standards; to control compliance with the conditions established for discharges and dumpings; and to approve, as proposed by CARU, the zoning of the River and its corresponding legitimate uses[270].

2.191 In contrast, the competencies of CARU include: to establish water quality standards; to promote and coordinate *the Parties'* monitoring of compliance with the water quality standards; to promote *the Parties'* implementation of strict control measures as regards contaminants; to promote the construction by *the Parties* of water treatment systems; to encourage the dissemination of information to the public; and to issue periodic reports on water quality levels[271]. It is thus clear that CARU's role, although very important, is not what Argentina now pretends it to be. It does not approve or reject projects as Argentina repeatedly suggests. It issues water quality standards, and then promotes their observance. Each Party retains the right to approve its own projects, subject only to the obligation to notify CARU and the other Party in a timely fashion.

2.192 Indeed, the Digest could scarcely be any clearer in this respect. The very first competency of the Parties listed is the power to issue authorizations for the various legitimate uses of the River (which include industrial uses). This portion of the Digest was first adopted in 1988. According to a CARU report dated 9 April

---

[270] CARU Digest, *op. cit.*, Subject E3, Title 2, Chap. 1, Sec. 1, Art. 1. UCM, Vol. IV, Annex 60.

[271] *Ibid.*, Art. 2.

1987 explaining each of the provisions later adopted in the Digest, the subparagraph concerning the Parties' power to issue authorizations: "[r]efers to the competence of the Parties to grant authorizations in *a broad sense, including every type of permit, license, or administrative act of similar content,* related to the various legitimate uses of the waters."[272] There is simply no basis to dispute that the power to authorize or deny authorization to particular projects resides solely in the hands of the Parties, not CARU.

2.193 In the context of the procedural mechanisms created by Articles 7 through 12 of the 1975 Statute, CARU plays a role consistent with its technical function. That is, it performs what is essentially a technical screening function to determine whether or not a given project needs to be brought to the attention of the non-initiating State. In particular, under the first paragraph of Article 7, it receives the initial notification of a project from the initiating State. It then conducts a summary review to determine whether or not the project might cause significant harm to the other Party. If it comes to the conclusion that it will not, it does not authorize the project, it simply reports its findings to the Parties.

2.194 When CARU comes to the opposite conclusion (*i.e.*, that there might be significant harm), it does not disapprove the project. The 1975 Statute does not give CARU the authority to stop a project. What CARU does is report its findings to the Parties. The only thing that happens then is that, under the second paragraph of Article 7, the State planning the project must inform the other State about the project, thereby starting the direct, Party-to-Party mechanisms of information-

[272] Annex A to Subcommittee on Pollution and Investigation Report No. 57, p. 383 (9 April 1987), *approved in* CARU Minutes No. 3/87 (10 April 1987) (emphasis added). UCM, Vol. IV, Annex 71.

sharing and, potentially, consultation[273]. During this process, CARU serves as a vehicle for facilitating communication between the Parties. But in no case does CARU have any decision-making authority over the project, much less any kind of executive power to prevent it from being undertaken. As Uruguay's Ambassador Gonzalez Lapeyre stated during the Parties' discussions about the Traspapel plant in 1996, he

> Believes that this is extremely important. It is not a matter of the organization [CARU] issuing an opinion that it cannot be done or that it may cause significant damage to navigation, the regime of the river or the quality of its waters. It is about that, starting from this moment [when the CARU decides there might be significant harm], it is essential to initiate a round of negotiations to seek a solution, to elucidate the doubts that may exist and to resolve the observations from the technical perspective. [274]

2.195 CARU's lack of decision-making authority on proposed projects is further demonstrated by a document entitled "Standard Procedure to be Followed by CARU With Respect To Communication From One Party Regarding the Installation of a Project that May Affect The Quality of the Water"[275]. This document was first prepared by CARU's Subcommittee on Water Quality and then approved in plenary session in April 1997. This document makes clear that in CARU's own estimation,

---

[273] 1975 Statute, *op. cit.*, Art. 7, para. 2. UCM, Vol. II, Annex 4.

[274] Ambassador Gonzalez Lapeyre's opinion in 1996 differs from the one cited by Argentina (at para. 3.104) and expressed 13 years earlier in connection with the Garabí Dam. Then, he claimed that when both delegations to CARU agree that a project might cause significant harm, that finding should have a suspensive effect on the project. CARU Minutes No. 7/96, *op. cit.*, p. 1079. UCM, Vol. IV, Annex 82. His 1996 statement may reflect his revised understanding of the matter. In any event, in the present case there was no finding by CARU that either the ENCE plant or the Botnia plant might cause significant harm. In both cases, the two delegations to CARU, each of which exercises one vote, were divided, and no findings -- which can only be issued by consensus -- were possible.

[275] Annex B to Subcommittee on Water Quality and Prevention of Pollution Report No. 167, p. 463 (18 April 1997), *approved in* CARU Minutes No. 4/97 (18 April 1997). UCM, Vol. IV, Annex 84.

its role under Articles 7-12 is strictly limited to a preliminary technical review. No power to approve or disapprove projects is claimed, exactly as the Statute suggests.

2.196 CARU's screening function is stated in steps (a) and (b) of the 1997 document. They provide that CARU shall first:

> a. - Verify whether the submission for the works or river water use presented by the Party falls within the guidelines of Articles 7 to 12 of the Statute of the River Uruguay.
>
> b. - Review the documentation presented by the Party on the characteristics of the undertaking. Special attention should be paid to the data on the qualitative-quantitative composition of future discharge, production processes employed, [and] proposed effluent treatment system (if necessary). [276]

2.197 Steps (f) and (g) of the standard procedure describe the consequences when either (i) the two delegations agree that the project will not affect water quality, or (ii) they are unable to come to agreement. They state:

> f. - In case both CARU delegations agree that the water quality will not be affected or on the use presented by the Party…a strict Water Quality Monitoring Plan should be designed to verify compliance with the quality standards outside the Mixing Zone.
>
> g. - When there is no agreement between both delegations at CARU with regard to the viability of the work or use presented by the Party, the plan will be submitted to the other Party in compliance with the provisions of Articles 7/12 of the Statute[277].

2.198 The import of these provisions is unmistakable: CARU does not exist to approve projects. When the two delegations agree that a project will not harm the river, CARU does not issue an authorization or anything of the kind. Consistent with its more technical function generally, it designs a water monitoring plan to ensure compliance with its water quality standards after the project is implemented.

---

[276] *Ibid*.

[277] *Ibid.*, pp. 463-464.

And when the two delegations disagree about the impact of a project, the effect is not to put a stop to it. Rather, it is merely to set in motion a round of direct, Party-to-Party communications, exactly as the 1975 Statute says.

2.199 To be sure, CARU plays an important role in achieving the objectives of the 1975 Statute. First and foremost, it serves as a regulatory body, promulgating regulations as agreed to by both Parties for the conservation and preservation of natural resources, and the prevention of contamination. Second, CARU sets limits on fish catches. Third, it monitors compliance with its regulations and coordinates the measures taken by the Parties to carry out their obligations to protect the aquatic environment. Fourth, it shares information with the Parties relative to their obligations under the Statute and the Digest. And fifth, CARU participates in the "consultation regime" (to use Dr. Barberis' words) of Articles 7-12 of the Statute in the ways described above, that is, by summarily determining if a planned project might cause significant harm to the other State, and thereafter serving as a vehicle of communication and source of technical information for the two States.

2.200 The powers of CARU under the 1975 Statute -- and the limits of those powers -- were described in detail by Dr. Barberis, perhaps Argentina's leading expert on the Statute, at the CARU-sponsored "Technical Legal Symposium" in 1987. Dr. Barberis, it will be recalled, was Argentina's lead negotiator in the talks with Uruguay that culminated in the 1975 Statute. Uruguay apologizes for the following lengthy quotation from his presentation at the symposium, but it prefers to present Dr. Barberis' remarks on CARU's role under the Statute in their entirety, rather than to appear to be extracting only certain excerpts.

With respect to the conservation of living resources and the environment in the Statute of the River Uruguay, the breadth of competence granted to the Commission has drawn my attention.

Article 7 of the Uruguay River Boundary Treaty (7 April 1961) provides that the River Statute will contain provisions regarding the conservation of living resources (Par. e) and prevention of contamination of the waters (Par. f).

The Statute of the River Uruguay (26 February 1975) addresses the matter in some detail.

In the first place, the Statute grants the Commission the authority to regulate matters related to the conservation and preservation of living resources (Art. 56, Paragraph a, 2) and the prevention of contamination (Article 56, Paragraph a, 4). This is, therefore, a regulatory power.

Then, according to Art. 56, Paragraph (c), of the Statute, the Commission can set maximum fishing limits by species and adjust them periodically.

Another authority that the Commission possesses, in accordance with Art. 36 of the Statute, is that of coordinating measures that the two countries take "to avoid any change in the ecological balance and to control pests and other harmful factors in the river and its areas of influence". It should be emphasized here that these preventive measures to be coordinated by the Commission refer not only to the river but also to its "areas of influence".

At the same time, Article 39 of the Statute provides that the parties, through the Commission, will exchange information on fishing and the catch per species.

Finally, one power of the Commission that is interesting to analyze is its participation in the regime of consultation. To examine this matter, it is convenient first to mention Article 35 of the Statute, which provides as follows: "The Parties undertake to adopt the necessary measures such that the management of the soil and woodlands and the use of groundwater and the waters of the tributaries of the river do not cause changes which may significantly harm the régime of the river or the quality of its waters." This article reflects the obligation that every State has, under general international law, not to cause significant harm beyond its territory. The merit of this provision lies in specifying that it is possible to cause a significant deterioration to the river

waters through bad management of other natural resources, such as the soil, the forests, and the aquifers. Now, when one State proposes carrying out any work of sufficient size to affect the river, it must first consult with its riparian neighbor to permit the latter to determine whether said work will cause it significant harm. Articles 7 to 13 of the Statute establish the procedure to follow for this purpose and provide for the participation of the Commission. Here, I would like to highlight the provision in Article 13 that refers specifically to the topic under consideration. This establishes the regime of consultation not only for works that will be carried out in the river, but also with regard to those that will be executed within the jurisdiction of the States "outside the section defined as a river and in the respective areas of influence in both sections." In conformity with these norms, if anyone, for example, has a rice field of a certain size on the bank of the river and proposes to fertilize it with a given chemical product or treat it with certain pesticides, this could affect the quality of the river waters and therefore, it must be the subject of consultation with the riparian neighbor. The same procedure must be followed if the execution of a work involves impeding the discharge of an aquifer in the river or if someone proposes establishing a contaminating industry on a tributary of the Uruguay River, such as a tannery or a plant intended to process certain chemical products.

As can be seen, the regime of consultation provided for in the Statute has a broad range of application.

Therefore, according to what I have said, we can state that the powers of the Commission with regard to the conservation of natural resources and the environment fall into five distinct categories: 1) regulation, 2) establishing fishing limits, 3) coordination of measures, 4) exchange of information, and 5) participation in the consultation regime. If we compare these authorities with those granted by river statutes to other Commissions, we can see that the competency of the Administrative Commission of the Uruguay River is broad and, in general, greater than that of other analogous entities. [278]

2.201 Uruguay agrees with this statement by Dr. Barberis. Uruguay agrees that CARU is empowered by Article 56 of the Statute "to promulgate regulations" pertaining to the prevention of contamination and the preservation of living

[278] CARU Technical-Legal Symposium, *op. cit.*, pp. 67-68. UCM, Vol. IV, Annex 72.

resources, and "to fix" fishing limits; and that it is authorized by Article 36 "to coordinate" the activities of the Parties intended to preserve the ecological balance of the river and its zones of influence. With particular regard to CARU's powers under Articles 7-13 of the 1975 Statute, Uruguay also agrees with Dr. Barberis that these are limited to exchange of information and participation in consultation. Nowhere does the Statute -- or Dr. Barberis -- attribute to CARU the power to *approve or disapprove* projects covered by Articles 7-13. Although CARU plays a vital role in the protection of the Uruguay River and the aquatic environment, and in the conservation of resources and the protection of aquatic life, it simply does not have the particular power Argentina attempts to ascribe to it in the Memorial: to approve or disapprove the projects covered by Article 7-13. Nor has Argentina ever -- on any occasion prior to the initiation of this lawsuit -- attributed such power to CARU.

2.202 Interestingly, this appears to be the first time that Argentina has taken such an expansive view of CARU's role and power. As previously discussed, Argentina never even notified, let along obtained approval from, CARU prior to authorizing the construction and operation of dozens of industrial plants located on its side of the river. Even with regard to public works projects on the river itself. Argentina's own actions belie the position it now adopts in the Memorial. In the Garabí Dam case, CARU formed the opinion that the project might significantly harm the River. Yet, as shown by its subsequent behaviour, Argentina did not view that finding as in any way dispositive. Indeed, as cited above, Argentina's Ambassador Carasales, then the President of Argentina's delegation to CARU, informed Uruguay's delegation that the Commission would be consulted later, when there was something "concrete

and decided." This statement is, of course, incompatible with the notion that it was CARU's role to do the deciding.

2.203 CARU's organizational nature and structure belie Argentina's attempt to depict it as an independent, decision-making authority. CARU is an inter-governmental organ, not an autonomous international or supranational entity. It has no executive staff; its full-time personnel exercise only technical and administrative functions. Its "executive" consists of the two delegations appointed by the Parties. Its President is actually the head of one of the delegations; the presidency alternates between the heads of the two delegations. All decisions regarding the adoption of regulations, the setting of limits on fish catches, *etc*., are made by consensus with each delegation casting one vote. Significantly, the delegations are appointed by their respective Foreign Ministries, normally from the Foreign Ministry's ranks, and they report directly to their Foreign Ministers. Thus, it is very much the Parties themselves, and especially their Foreign Ministers, that control CARU, rather than the other way around.

2.204 Ambassador Carasales succinctly summed up the matter in 1988. At that time, some members of the Subcommittee on Water Quality were proposing that CARU explore the possibility of undertaking pilot irrigation projects on both sides of the River. After listening to them, Ambassador Carasales:

> stated that in general the arguments set forth on the matter have not convinced him, because it seems that they stem from the belief that CARU has powers to establish what the States can or cannot extract [from the river] and to do this, they must turn to the Commission. This is not what is stipulated in the Statute of the River Uruguay. [279]

[279] CARU Minutes No. 6/88, p. 2295 (22 July 1988). UCM, Vol. IV, Annex 73.

For support, Ambassador Carasales cited Articles 27 and 28 of the Statute[280].

2.205 Although Ambassador Carasales' comments related specifically to the subject of irrigation, the general principle applies with full force to other uses of the river, including industrial uses. Article 27 does not draw a distinction among the various uses; they are treated the same. Thus, CARU has no more "authority" to "determine" what the Parties may do with the river for industrial purposes than for agricultural purposes. Likewise, the Parties need not "address themselves" to the Commission for permission when they use the river for industry any more than when they use it for agriculture. CARU simply does not have the authority Argentina now tries to say it does. Accordingly, Uruguay cannot have violated the Statute by authorizing the ENCE and Botnia plants without waiting for CARU's approval.

Section IV.
The Role of the Court

2.206 As stated, Article 12 provides that "[s]hould the Parties fail to reach agreement within 180 days"[281] they may have recourse to this Court under Article 60, which provides in turn that "[a]ny dispute concerning the interpretation or application of the Treaty and the Statute which cannot be settled by direct negotiations may be submitted by either Party to the International Court of Justice."[282]

2.207 In evaluating the role of the Court, it is important to bear in mind the nature of the dispute that brought the Parties before it in the first place. Articles 7 through 12 establish a regime of notification, information-sharing and consultation

---

[280] *Ibid.*

[281] 1975 Statute, *op. cit.*, Art. 12. UCM, Vol. II, Annex 4.

[282] *Ibid.*, Art. 60.

all relating to the effects of a planned project on three subjects: (i) navigation; (ii) the regime of the river; and (iii) the quality of its waters. The articles create a mechanism for the Parties to share their views about the potential effects of the planned project on these three subjects and to attempt to come to an agreement either (a) that there will be no significant harm, or (b) on appropriate mechanisms for averting or minimizing such harm. As Uruguay has shown, the premise of these articles is that the notified State must accept harms that do not rise to the level of "significant". The dispute before the Court thus centres on the following question: is the notified State threatened with significant harm to its interests in navigation, the regime of the river or the quality of its waters? Argentina appears to agree that this question defines the scope of the Court's jurisdiction. At paragraph 4.80 of the Memorial, for example, it states: "Si un différend s'élève entre les parties à cet égard [*i.e.*, about whether or not there will be significant harm] et qu'il ne peut être réglé, il appartient à la Cour de le régler (article 12)."[283]

2.208 If the answer to this question is "no", -- i.e., that there is no likelihood that the project will cause significant harm to the notified State's interests in navigation, the regime of the river, and/or water quality -- then there is no need to, and the Court is without power to, impose requirements of any kind on the planned project. Logically, the situation would revert back to the circumstance contemplated by Article 9; that is, it is just the same as if the notified State had come to the conclusion that the project will not cause significant harm. In that case, as the Statute makes clear, the initiating State is free to implement the project with no further obligations incumbent upon it, except those imposed by Article 10. In

[283] AM, para. 4.80. ("If a dispute arises in this regard [*i.e.*, about whether or not there will be significant harm] and it cannot be settled, it is up to the Court to settle it (Article 12).")

Argentina's own words: "Le recours à la CIJ participe à la réalisation de l'objectif de prévention des atteintes à l'environnement du fleuve Uruguay."[284] It follows, then, that if there is no threat to the river, there is nothing for the Court to prevent.

2.209 It is only if the Court concludes that the project will cause significant harm to the notified State -- that is, to its interests in navigation, to the regime of the river, and/or to water quality -- that it would be empowered to impose obligations on the initiating State to prevent or minimize such harm. Unless and until the Court reaches such a conclusion, and in the absence of indication of provisional measures, the initiating State is free to continue to carry out the project, as described above.

2.210 In Part II of this Counter-Memorial, Uruguay demonstrates that, based on all of the scientific evidence, there is no likelihood that operation of the Botnia plant will significantly harm the river or Argentina, and specifically that operation of the plant will cause no harm to navigation, the regime of the river, or the quality of its water. Accordingly, there is no harm to prevent, and no basis for any remedial action to be ordered by the Court.

Conclusion

2.211 Chapter 3, which immediately follows, examines the facts bearing on Uruguay's compliance with the legal obligations described in this Chapter. Chapter 3 makes it plain that Uruguay has fully complied with all of its procedural obligations under the Statute, particularly its obligations under Articles 7-12. Together, Chapter 2 on the applicable law and Chapter 3 on the application of the

---

[284] AM, para. 3.96. ("The right of recourse to the ICJ partly fulfils the objective of preventing threats to the Uruguay River environment.")

law to the facts, demonstrate why Argentina's arguments that Uruguay has violated its procedural obligations under Articles 7-12 should be rejected in their entirety.

CHAPTER 3.
THE APPLICATION OF THE LAW TO THE FACTS CONCERNING THE ALLEGED PROCEDURAL VIOLATIONS

3.1 This Chapter will present the facts showing that Uruguay complied at all times with its procedural obligations under the 1975 Statute. The discussion of the facts in this Chapter will draw on the legal analysis of the Statute set forth in Chapter 2, in order to put the facts in their proper legal context. In the process of stating the facts, Uruguay will also respond to Chapters 2 and 4 of Argentina's Memorial, which lay out Argentina's view of the facts and Uruguay's ostensible violations of the 1975 Statute, respectively. In so doing, Uruguay will show that (i) Argentina's depiction of the facts is materially inaccurate in virtually every respect, and (ii) the conclusions of law it attempts to draw from the facts are similarly off the mark.

3.2 Although Argentina's Memorial is not always a model of clarity, it appears to argue that Uruguay violated its procedural obligations in four basic respects: (i) by failing to notify CARU about the ENCE and Botnia plants before issuing initial environmental authorizations; (ii) by failing to await authorization from CARU before itself authorizing the plants; (iii) by not providing either CARU or Argentina sufficient information to evaluate the probable impact of the projects on navigation, the regime of the River, or the quality of its water; and (iv) by moving ahead with the plants both during consultations between the Parties and during the pendency of this case.

3.3 Chapter 2 of this Counter-Memorial has already demonstrated the fallacy of at least three of Argentina's four arguments as a matter of law. As shown therein, the 1975 Statute does not require notice to CARU before the initiating State may authorize a project in its sovereign territory. In fact, the text of the Statute and the consistent practice of the Parties show that notification can occur (and has occurred) *after* authorizations have already been issued. Similarly, Uruguay showed that

CARU does not have the power to approve or reject particular projects. The Parties -- and only the Parties -- have that power. The Statute therefore does not require the initiating State to await approval from CARU before authorizing a project; and, in practice, neither Argentina nor Uruguay have ever awaited -- or sought -- CARU's authorization before undertaking a project. Finally, it is not true that the Statute prevents an initiating State from taking steps in furtherance of a project during the pendency of consultations or during proceedings before this Court. The Statute allows a Party to undertake preparatory work during the consultation period; and once consultations are over, the Statute permits the initiating State to implement a project, even if dispute resolution proceedings are underway.

3.4 Three of Argentina's four procedural arguments are thus disproved even without reference to the facts of this case. As Uruguay will demonstrate further in this Chapter, once the true facts are revealed, the conclusion that Uruguay fully complied with its procedural duties under the Statute is inescapable. With respect to the only one of Argentina's arguments that does not fail as a matter of law -- that is, that Uruguay did not provide adequate information to either CARU or Argentina -- the truth is to the contrary. In point of fact, Argentina received more than enough information to enable it to evaluate the probable impact of the plants on navigation, the regime of the river, and the quality of its water, as Article 7 of the 1975 Statute requires. As shown within, Argentina's own conduct proves the point. Consequently, not a single one of Argentina's procedural claims withstands analysis. Each and every one of its submissions in this respect is unfounded, either as a matter of law, as a matter of fact, or both.

3.5 For ease of reading, this Chapter will respond to each of Argentina's four arguments in sequence.

Section I.
Uruguay Was Not Required to Notify CARU Before It Issued AAPs to ENCE and Botnia

3.6 Argentina contends that Uruguay violated Article 7 of the 1975 Statute by granting initial environmental authorizations to ENCE (9 October 2003) and Botnia (14 February 2005) without prior notice to CARU. The Memorial argues, for example: "Cette disposition [Article 7] prévoit l'obligation de saisir et d'informer la CARU *préalablement* à toute action qui vise à l'autorisation et à la construction d'un projet sur le fleuve Uruguay."[285] Elsewhere, it states: "En conclusion, en autorisant la construction de l'usine CMB sans saisir la CARU, l'Uruguay a violé l'obligation lui incombant en vertu de l'article 7 du Statut de 1975."[286]

3.7 Argentina's argument cannot stand in the face of the law analyzed at length in Chapter 2[287]. Uruguay showed there that the 1975 Statute does not require notice to CARU before a State may authorize a project within its own territory. Both the text of the Statute and the provisions of the CARU Digest make clear that notice to CARU may occur *after* a project has been authorized. The CARU Digest, for example, states that each of the Parties has the competence to "promulgate authorizations, restrictions or prohibitions related to the different legitimate uses of the water, informing CARU about said authorizations, restrictions or prohibitions

[285] AM, para. 3.66 (emphasis in text). "This provision [Article 7] stipulates the obligation to contact and inform CARU *prior to* taking any action to authorize or build a project on the Uruguay River."

[286] AM, para. 4.47; *see also, inter alia*, AM, para. 4.89. ("In conclusion, by authorizing the construction of the CMB [ENCE] plant without referring the matter to CARU Uruguay violated the obligation incumbent on its under Article 7 of the 1975 Statute.")

[287] *See* Chap. 2, paras. 2.52-2.71

whenever they are originated by or related to risks for human health."[288] On its face, this provision plainly anticipates that the Parties will *first* promulgate authorizations and *then* notify CARU in relevant cases.

3.8 The fact that notice to CARU is not required prior to the authorization of a project is confirmed in the most unmistakable way by the Parties' consistent and mutual conduct prior to this case. Contrary to Argentina's argument (which appears to have been invented for purposes of this case), the Parties have in the past typically notified CARU only *after* authorizing particular projects. Thus, for example, in 2001 Uruguay authorized the M'Bopicua Port and informed CARU only after the fact[289]. Argentina did not protest and CARU proceeded to review the project in the ordinary course[290]. Similarly, in 2006, Uruguay first authorized the Nueva Palmira Freight Terminal and then notified CARU about the project. Again, Argentina did not protest, and again CARU proceeded to take cognizance of the issue as a matter of routine[291]. Particularly in light of the fact that both projects were cited in Argentina's Memorial as probative instances of State practice, the two cases stand as dispositive evidence of Uruguay's reading of the Statute. Accordingly, notice was not due to CARU before Uruguay issued initial environmental authorizations to ENCE and Botnia.

---

[288] Digest of the Commission for the Administration of the River Uruguay (CARU) (hereinafter "CARU Digest"), Subject E3, Title 2, Chap. 1, Sec. 1, Art. 1(a) (1984, as amended) (emphasis added). UCM, Vol. IV, Annex 60.

[289] *See* Chap. 2, para. 2.65-2.67; *see also,* CARU Minutes No. 03/01, p. 249 (16 March 2001). UCM, Vol. IV, Annex 91.

[290] *See* AM, para. 3.199.

[291] CARU Minutes No. 02/06, p. 302 (17 February 2006). UCM, Vol. IV, Annex 116.

3.9 It is important to note also that in making its arguments about the putative requirement to notify CARU before any authorizations are issued, Argentina repeatedly mischaracterizes the authorizations Uruguay issued to ENCE and Botnia in October 2003 and February 2005, respectively. Argentina states again and again that the authorizations permitted the construction of the plants[292]. They did no such thing. They were very much *preliminary* authorizations, the purpose of which will be described in the paragraphs that follow. Argentina's mischaracterizations demonstrate either a fundamental ignorance of Uruguayan law or a wilful disregard for the facts.

3.10 The ENCE and Botnia authorizations about which Argentina now complains were "initial environmental authorizations" ("autorizaciones ambientales previas" or "AAPs"). As their name implies, they were preliminary only. Under Uruguayan law, an AAP reflects the initial determination of Uruguay's Ministry of Housing, Territorial Development and Environment ("MVOTMA") that, based on the review conducted to date, a project is environmentally viable[293]. Administratively, an AAP serves two principal functions. First, it establishes certain substantive requirements with which a project must comply. In the case of Botnia, for example, the AAP mandated that the plant had to comply with IPPC BAT requirements, and with the water quality standards established by CARU and DINAMA[294].

---

[292] *See, e.g.*, AM, paras. 0.14, 2.2, 2.3, 4.89 (b)(c).

[293] Decree No. 435/994, Environmental Impact Assessment Regulation (hereinafter "Decree No. 435/994"), Art. 17, para. 3 (21 September 1994). UCM, Vol. II, Annex 9.

[294] MVOTMA Initial Environmental Authorization for the Botnia Plant (hereinafter "Botnia AAP"), Subsec. (aa) (14 February 2005). UCM, Vol. II, Annex 21.

3.11 Second, an AAP also identifies the further environmental reviews to which a project is subject, and the further authorizations that will be required. In the case of the ENCE and Botnia AAPs, they established a multi-phased review process under which the companies were required to submit for DINAMA's approval separate environmental management plans ("EMPs") for all significant pre- and post- operational phases in the life cycle of the plants, such as earth movements[295], the construction of the foundations and other associated elements of the plants[296], and the construction of the wastewater treatment plants[297]. Indeed, even the final construction permit would not authorize the actual operation of the plants. Before operation could begin, still another EMP, including an implementation plan for mitigation measures and a solid waste management plan, must be submitted and must receive DINAMA's approval[298].

3.12 The Director of DINAMA neatly summarized the point in her 1 June 2006 affidavit, which Uruguay submitted to the Court at the time of Argentina's request for provisional measures:

> The AAPs authorize Botnia and ENCE merely to request approval to begin construction only; an AAP does not authorize either plant to begin operations, nor do they even authorize construction itself. The AAP requires the submission of an Environmental Management Plan ("Plan de Gestion Ambiental"

---

[295] DINAMA Environmental Management Plan Approval for the Botnia Plant (for the removal of vegetation and earth movement) (hereinafter "Botnia PGA (for the removal of vegetation and earth movement)") (12 April 2005). UCM, Vol. II, Annex 22.

[296] DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the concrete foundation and the emissions stack) (hereinafter "Botnia PGA (for the construction of the concrete foundation and the emissions stack)") (22 August 2005). UCM, Vol. II, Annex 23.

[297] DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the wastewater treatment plant) (hereinafter "Botnia PGA (for the construction of the wastewater treatment plant)") (10 May 2006). UCM, Vol. II, Annex 28.

[298] Botnia AAP, *op. cit.,* Art. 2(h). UCM, Vol. II, Annex 21.

> or "PGA") for construction, an Environmental Management Plan for operation, a Mitigation Plan, and a Monitoring and Follow-up Plan (including monitoring of effluent quality and affect on living creatures).[299]

3.13 As discussed in detail in Chapter 2, Article 7 is imprecise as to when exactly in the planning process of a project notice to CARU is required[300]. Certainly, it is not due prior to an initial authorization. General international law suggests that so long as notice is "timely," Article 7 is satisfied. "Timely" in this sense means simply that notice occurs in sufficient time to allow CARU and the notified State to assess the likely impacts of the project on navigation, the regime of the river, and/or water quality, and, if necessary, to consult on appropriate preventive measures before a potentially harmful project is carried out[301]. Here, there is no serious argument that the ability of CARU or Argentina to review the projects and have their concerns considered and addressed was impaired in any way when the AAPs to ENCE and Botnia were issued in October 2003 and February 2005, respectively. No final decision of any kind had been made with respect to either plant. Both still required several additional authorizations before even construction could begin, much less operation. There was still more than enough time for CARU to review the project and for Argentina's concerns to be addressed before the projects were carried out. Indeed, as the Court will read, this is exactly what happened. Thus, in no sense was Argentina presented with a *fait accompli* merely by issuance of the AAPs as the Memorial repeatedly and erroneously suggests.

---

[299] Sworn Declaration of Alicia Torres, Director of Department of the Environment (hereinafter "Torres Aff."), p. 6, para. 3. (June 2006). UCM, Vol. II, Annex 30.

[300] *See* Chap. 2, para. 2.52.

[301] *See* Chap. 2, para. 2.52; *see also,* Draft Articles on Prevention of Transboundary Harm from Hazardous Activities with commentaries (hereinafter "2001 Draft Articles"), p. 421, comment 5 (2001), appears in *Yearbook of the International Law Commission, 2001*, vol. II, Part Two.

3.14 Argentina's argument that Uruguay's issuances of the ENCE and Botnia AAPs were somehow untimely also rings hollow in light of the fact that Argentina and CARU were well aware of Uruguay's plans far in advance of the dates when the AAPs were issued. As it must, Argentina's Memorial admits this. At paragraph 2.5, for example, Argentina acknowledges that CARU was aware of the potential ENCE plant at least as early as 17 October 2002, a full year before issuance of the AAP[302]. Similarly, at paragraph 2.47, Argentina admits that CARU was aware of the Botnia plant at least as of 29 April 2004, some ten months before the AAP was issued[303]. As will be detailed immediately below, CARU and Argentina were actually aware of both plants long before the dates acknowledged in the Memorial.

3.15 The fact that CARU and Argentina knew about both plants prior to the issuance of the AAPs is important for at least three inter-related reasons. *First*, Argentina cannot credibly claim either surprise or prejudice. *Second*, the CARU Digest specifically permits the Commission itself to request notification from a Party pursuant to Article 7 whenever it believes a project might affect the water quality of the River. In particular, the Digest provides that

> whenever CARU may have determined by preliminary procedures that the works or exploitation of the River waters imply an impact on the water quality, it shall address the corresponding Party in order to undertake the appropriate measures [*i.e.*, notify CARU].[304]

CARU never requested that Uruguay formally notify it about either plant, and certainly made no such request before either AAP was issued. Nor did Argentina's

---

[302] AM, para. 2.5.

[303] AM, para. 2.47.

[304] CARU Digest, *op. cit.,* Subject E3, Title 2, Chap. 3, Sec. 1, Art. 3. UCM, Vol. IV, Annex 60.

representatives to CARU ever propose that the Commission request notification by Uruguay prior to the issuance of the initial authorizations. These facts confirm that all Parties understood that the time was not ripe for an Article 7 notification before the AAPs were issued. *Third*, notwithstanding the fact that Argentina and its delegation in CARU were well aware of the imminent issuance of the AAPs, they never once indicated that they expected to be formally notified under Article 7 before Uruguay issued the AAPs.

A. ARGENTINA AND CARU WERE WELL INFORMED ABOUT THE ENCE PLANT BEFORE THE 9 OCTOBER 2003 AAP WAS ISSUED

3.16 Argentina's Memorial suggests that CARU first became aware of the ENCE plant in October 2002[305]. The truth is, however, that the Commission became aware of the issue much earlier than that. On 14 December 2001, for example, CARU received a letter from a local non-governmental organization in Argentina expressing concern about reports that a cellulose plant would be built in the vicinity of Fray Bentos[306]. In response to that letter, CARU's Legal Subcommittee requested an opinion from its legal advisor analyzing the Commission's powers in the area of pollution control[307]. The opinion is very telling in light of Argentina's arguments before the Court. In essence, it merely quotes the provisions of the CARU Digest Uruguay previously analyzed in Chapter 2[308]. That is, the opinion states that the Parties have the power to "issue authorizations, limitations or prohibitions relating

[305] AM, para. 2.5.

[306] CARU Minutes No. 14/01, p. 2185 (14 December 2001). UCM, Volume IV, Annex 92.

[307] Annex F to Subcommittee on Legal and Institutional Affairs Report No. 165 (11 December 2001), pp. 2225-2228*, approved in* CARU Minutes No. 14/01 (14 December 2001). UCM, Vol. IV, Annex 93.

[308] *See* Chap. 2, para. 2.191.

to the various legitimate uses of the waters, *informing CARU about such authorizations, limitations or prohibitions, when they cause or are linked to risks to human health."*[309] Thus, at this early stage, it was plainly CARU's understanding that it would be notified of the ENCE plant *after* an appropriate authorization had been issued by Uruguay.

3.17 The planned project took more concrete form before CARU on 8 July 2002, when representatives of ENCE visited CARU's offices in Paysandú, Uruguay to provide information about the company's plans to build a cellulose plant near Fray Bentos[310]. Although the CARU records do not elaborate on the content of the meeting, it is at a minimum clear that no later than July 2002, more than 15 months before Uruguay issued ENCE's AAP, CARU knew with specificity not only the nature and location of the project being planned, but also the company that would build it.

3.18 By October 2002, just three months later (and a full year before the AAP was issued), CARU already had a summary of the environmental impact assessment which ENCE had submitted to the Uruguayan government as part of its application for an AAP, as well another study entitled "Estudio Hidrodinámico del Río Uruguay."

---

[309] By contrast, *CARU's* powers are described in the Memorandum as: to establish water quality standards; to promote and coordinate *the Parties'* monitoring of compliance with the water quality standards; to promote *the Parties'* implementation of strict control measures as regards contaminants; to promote the construction by *the Parties* of water treatment systems; to encourage the dissemination of information to the public; and to issue periodic reports on water quality levels. Annex F to Subcommittee on Legal and Institutional Affairs Report No. 165, *op. cit.,* pp. 2225-2228. UCM, Vol. IV, Annex 93.

[310] Letter sent from Vice President of Celulosas M'Bopicuá, Rosario Pou Ferrari, to CARU Uruguayan Delegation President, Architect Walter Belvisi (24 August 2004). UCM, Vol. IV, Annex 106.

3.19 Uruguay will not burden the Court with a point-by-point exegesis of all the facts bearing on CARU's awareness of and involvement with the ENCE plant prior to the issuance of the AAP in October 2003. It is content to quote the words of Argentina's Ambassador García Moritán. During the 17 October 2003 meeting at which he was otherwise decrying Uruguay's "failure" to notify CARU about the ENCE plant before issuing the AAP, he nonetheless conceded that:

> The environmental studies relating to the establishment of the plant have been part of our discussions at all our plenary meetings for more than a year. We have also had meetings with experts to understand the environmental scope of the issue and they have helped us on several occasions to include the technical details that must be considered in writing the letters we have sent to the Department of the Environment. These meetings with the experts have brought up various issues that must be kept in mind when dealing with a cellulose plant. Among other things, it was agreed that new monitoring stations would have to be installed to check the water quality in those areas. We have discovered that all the historic records describe a water quality of 100%. The CARU monitoring stations will continue to provide information. I also believe that CARU has had extensive correspondence with that agency we esteem so highly, the Department of the Environment.[311]

3.20 From all the prior communications to which Ambassador García Moritán referred, it was well known to CARU, and in particular to Argentina's delegation to CARU, that the issuance of the AAP was imminent. As part of its effort to keep the Commission informed, for example, DINAMA sent CARU a copy of its 14 July 2003 resolution "convening a Public Hearing on the request for an Initial Environmental Authorization presented by Celulosas de M'BOPICUYÁ [*sic*] S.A."[312] A member of CARU's Technical Secretariat and its legal advisor attended the hearing on 21 July 2003, and prepared a report describing the event in positive

[311] CARU Minutes No. 11/03, pp. 2181-2182 (17 October 2003). UCM, Vol. IV, Annex 97.

[312] CARU Minutes No. 08/03, p. 1400 (15 August 2003). UCM, Vol. IV, Annex 94.

terms[313]. Also, in August 2003, the advisors to the Subcommittee on Water Quality, which was continuing to work on a plan for monitoring the water around the ENCE plant, noted that in order to make further progress on the plan "it is necessary to await the Department of the Environment's decision about the impact study that was presented."[314] And in September 2003, anticipating the issuance of the AAP, Argentine delegate to CARU, Dr. Armando Darío Garín, asked whether DINAMA already "had issued an opinion on the project" or not[315]. DINAMA's representative on the Commission stated that it had not but would do so in the next several days[316].

3.21 Not once during the course of any of these exchanges did any member of CARU, whether Argentine or Uruguayan, suggest that the forthcoming AAP had to be deferred pending formal Article 7 notification to CARU. When this is considered in light of the consistent prior practice of the Parties described in Chapter 2, pursuant to which the Parties routinely authorized *then* notified -- not the other way around -- there is simply no basis to conclude that Uruguay's putative "failure" to notify CARU at this stage violated the 1975 Statute.

3.22 Argentina's Memorial contains a curious allegation that on the same day that ENCE's AAP was issued, 9 October 2003, "le Président de l'Uruguay Jorge

---

[313] Annex B to Subcommittee on Water Quality and Prevention of Pollution Report No. 239 [*sic*] (12 August 2003), pp. 1455-1456, *approved in* CARU Minutes No. 08/03 (15 August 2003). UCM, Vol. IV, Annex 95.

[314] Subcommittee on Water Quality and Prevention of Pollution Report No. 239 [*sic*], p. 1441 (12 August 2003), *approved in* CARU Minutes No. 08/03, 15 August 2003. UCM, Vol. IV, Annex 95.

[315] Subcommittee on Water Quality and Prevention of Pollution Report No. 239, pp. 1701-1702 (9 September 2003), *approved in* CARU Minutes No. 09/03 (12 September 2003). UCM, Vol. IV, Annex 96.

[316] *Ibid.* Technically, under Uruguayan law, an AAP is issued by MVOTMA, not DINAMA. However, MVOTMA bases its decision on the recommendation of DINAMA. Decree No. 435/994, *op. cit.* Chap. IV. UCM, Vol. II, Annex 9.

Batlle avait promis à son homologue argentin Néstor Kirchner, dans une réunion tenue à Colonia (Uruguay), qu'aucune autorisation ne serait déliverée avant de répondre aux soucis environnementaux de l'Argentine."[317] The Court need not concern itself with this allegation, however, because Argentina offers no evidence to support it. The Court will see that the pertinent statement in the Memorial lacks citation. In fact, contemporaneous accounts of the Presidents' meeting make no mention of the putative promise Argentina identifies[318]. The reason, of course, is simple: no such promise was ever made.

B. ARGENTINA AND CARU WERE EQUALLY WELL INFORMED ABOUT THE BOTNIA PLANT BEFORE THE 14 FEBRUARY 2005 AAP WAS ISSUED.

3.23 Both CARU and Argentina were at least equally well informed about the Botnia plant before February 2005 when MVOTMA issued its AAP. CARU itself first became aware of the Botnia plant no later than 15 April 2004, nearly ten full months before Uruguay granted the company its AAP[319]. In fact, internal Uruguayan documents show that Argentine officials were aware of the Botnia project long before that. According to a 4 November 2003 memorandum from Minister Counsellor Daniel Castillo of the Uruguayan Embassy in Buenos Aires to Ambassador Alberto Volonté Berro, representatives of Botnia, together with Finland's Ambassador in Argentina, had already met with Argentine government

---

[317] AM, para. 2.17 ("Jorge Battle, President of Uruguay, promised his Argentinean counterpart, Nestor Kirchner, at a meeting held in Colonia (Uruguay), that no permit would be issued before the environmental concerns of Argentina were addressed.")

[318] *See* La Nación (Argentina), "Kirchner, Satisfied with His Meeting with Jorge Batlle" (9 October 2003). UCM, Vol. IX, Annex 182.

[319] *See* CARU Inter-Plenary Session, Report No. 09/2004, pp. 146-148 (15-16 April 2004), *approved in* CARU Minutes No. 02/04 (21 May 2004). UCM, Vol. IV, Annex 100.

officials to discuss Botnia's potential investment in Uruguay. According to that memorandum,

> the visit by the representatives of said group to Argentina, was solely for informational purposes, of a preventative nature, (concerned about the problem between Argentina and Uruguay when the news appeared regarding a project similar to that of the Spanish group M-Bopicuá), with the aim of dispelling any doubts which the Argentine authorities could raise about the purpose, scope and especially environmental protection guarantees in relation to the impact on the Uruguay River and its area of influence. The Ambassador of Finland stated that the results of the meetings with the Argentine authorities were positive on their part, and without encountering any obstructionist attitudes, but rather, on the contrary, they were flexible and helpful, appearing to be simply interested in becoming acquainted with the evaluation of the environmental impact of the project.[320]

3.24 The timing of Botnia's meeting with Argentine government officials coincided with the public announcement of the company's plans. On 24 October 2003, Botnia issued a press release announcing the creation of a local corporate entity, Botnia, S.A., to begin studying the possibility of constructing a cellulose plant with a production capacity of around one million tons/year in the vicinity of Fray Bentos[321].

3.25 On 15 April 2004, the Parties' delegations to CARU met unofficially in Buenos Aires and decided to seek a meeting with Botnia representatives to learn directly about the company's plans[322]. As Argentina's Memorial acknowledges, the

---

[320] Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro (4 November 2003). UCM, Vol. II, Annex 16.

[321] Botnia Press Release, "Botnia Investigates Prospects for Starting Pulp Production in Uruguay" (24 October 2003). UCM, Vol. IX, Annex 199.

[322] *See* CARU Inter-Plenary Session, Report No. 09/2004, *op. cit.,* pp. 146-148. UCM, Vol. IV, Annex 100. The delegations met "unofficially" because the formal work of CARU was suspended at the time for reasons that will be addressed in the next section of this Chapter.

meeting between Botnia and CARU took place on 29 and 30 April 2004[323]. CARU minutes do not detail the contents of the meetings, but simply characterize it as "informative"[324].

3.26 CARU quickly incorporated the Botnia plant into its activities. As Uruguay will detail in the next section of this Chapter, in October 2003, the Foreign Ministers of Uruguay and Argentina came to an understanding about the approach to be taken with the ENCE plant. An agreement was formalized in March 2004[325]. As part of their agreement, the Foreign Ministers agreed that CARU would be given responsibility for implementing a water quality monitoring program in the vicinity of the ENCE plant to guarantee compliance with the CARU water quality standards[326]. CARU began working on the plan, which became known as "the Plan for Monitoring the Environmental Quality of the Uruguay River Proposed for the Areas of the Pulp Mills" ("PROCEL") in July 2004, less than three months after its meeting with Botnia representatives[327]. From the very first draft, the plan anticipated not only the future ENCE plant, but also the Botnia plant. This can be seen most obviously in its title, which refers to "pulp mills". Equally, the first line of the first draft dated July 2004 states: "Taking into account the future installation of

---

[323] AM, para. 2.47. Argentina incorrectly states that the meeting took place in Montevideo. In actuality it occurred in Fray Bentos. CARU Inter-Plenary Session, Report No. 10/2004, p. 151 (29-30 April 2004), *approved in* CARU Minutes No. 02/04 (21 May 2004). UCM, Vol. IV, Annex 101.

[324] *Ibid.*

[325] *See infra*. 2, paras. 3.45-3.60

[326] *See ibid.*

[327] "Procedimiento de Vigilancia de la Calidad Ambiental del Río Uruguay en áreas de Plantas Celulósicas," in English: "Draft Plan for Monitoring the Environmental Quality of the Uruguay River for the Areas of the Pulp Mills," Subcommittee on Water Quality and Prevention of Pollution Report No. 243, p. 851 (13 July 2004), *approved in* CARU Minutes No. 04/04 (16 July 2004). UCM, Vol. IV, Annex 102.

cellulose and paper *plants* … the plan described below was developed, focusing on areas which the *facilities* may possibly impact.*”*[328]

3.27 The same month, on 7 July 2004, Botnia's Vice President invited CARU to send a delegation to Finland to learn more about the company and its cellulose plant technology[329]. CARU accepted the invitation and sent a delegation in early August 2004[330]. The delegation was comprised not only of representatives of the Commission, but also members of the local governments on both sides of the river, including Argentina's Entre Rios province[331]. The delegation delivered an audio-visual presentation about the trip to the full CARU on 25 October 2004[332]. They also prepared a detailed, technical report of their visit, which they presented to the full Commission on 7-11 February 2005[333].

3.28 CARU's Subcommittee on Water Quality continued to work on developing the PROCEL plan throughout the remainder of 2004. Like the first draft quoted above, all subsequent drafts continued to contemplate "the future installation of cellulose and paper plants"[334] that is, both the ENCE and Botnia plants. On 12

---

[328] Draft Plan for Monitoring the Environmental Quality of the Uruguay River in the Areas of the Pulp Mills (hereinafter "Draft PROCEL"), Annex C to Subcommittee on Water Quality and Prevention of Pollution Report No. 243, p. 863 (13 July 2004), *approved in* CARU Minutes No. 04/04 (16 July 2004) (emphasis added). UCM, Vol. IV, Annex 102.

[329] CARU Minutes No. 05/04, pp. 997-998 (13 August 2004). UCM, Vol. IV, Annex 103.

[330] CARU Inter-Plenary Session, Report No. 16/2004, p. 1304 (30 July 2004), *approved in* CARU Minutes No. 05/04 (13 August 2004). UCM, Vol. IV, Annex 105.

[331] *Ibid.*

[332] CARU Inter-Plenary Session, Report No. 26/2004, p. 1901 (25-26 October 2004), *approved in* CARU Minutes No. 08/04 (12 November 2004). UCM, Vol. IV, Annex 110.

[333] Subcommittee on the Environment and Sustainable Water Use Report No. 03, pp. 306-309, Annex B, pp. 313-327 (7-11 February 2005), *approved in* CARU Minutes No. 02/05 (11 February 2005). UCM, Vol. IV, Annex 112.

[334] Draft Plan for Monitoring the Environmental Quality of the River Uruguay in the Areas of the Pulp Mills (hereinafter "Draft PROCEL"), Annex A to Subcommittee on Water Quality and

November, CARU's plenary session approved the final version of the PROCEL and sent DINAMA a copy "for the final approval of the Environmental Quality Monitoring Plan Proposed for the Uruguay River in the Areas of the Pulp Mills."[335] DINAMA subsequently advised CARU that it had no objections to the monitoring plan and approved it[336].

3.29 Also in November 2004, CARU sent DINAMA a letter seeking an update on the administrative status of the Botnia plant in Uruguay[337]. DINAMA replied by fax in December "forwarding the text of the public file for the Kraft cellulose plant project, application for initial environmental authorization [AAP] filed by Botnia S.A."[338] In the same CARU minutes in which receipt of DINAMA's fax is noted, Argentina's Ambassador García Moritán went on record to make clear his pleasure at how well CARU had fulfilled its mandate with respect to the two cellulose plants; that is both the ENCE and Botnia plants. He

> indicated that [the past year] was a success if one examines the work done relative to the issue of the environment

---

Prevention of Pollution Report No. 244, p. 1136(11 August 2004), *approved in* CARU Minutes No. 05/04 (13 August 2004). UCM, Vol. IV. Annex 104. Draft Plan for Monitoring the Environmental Quality of the Uruguay River in the Areas of the Pulp Mills (hereinafter "Draft PROCEL"), Annex A to Subcommittee on Water Quality and Prevention of Pollution Report No. 246, p. 1717 (12 October 2004), *approved in* CARU Minutes No. 07/04 (15 October 2004). UCM, Vol. III, Annex IV. Draft Plan for Monitoring the Environmental Quality of the Uruguay River in the Areas of the Pulp Mills (hereinafter "Draft PROCEL"), Annex A to the Subcommittee on Water Quality and Prevention of Pollution Report No. 247, p. 1959 (8 November 2004), *approved in* CARU Minutes No. 08/04 (12 November 2004). UCM, Vol. IV, Annex 109.

[335] Subcommittee on Water Quality and Prevention of Pollution Report No. 247, p. 1951 (8-12 November 2004), *approved in* CARU Minutes No. 08/04 (12 November 2004). UCM, Vol. IV, Annex 109.; CARU Minutes No. 08/04 (12 November 2004), pp. 1859-1860. UCM, Vol. IV Annex 108.

[336] Subcommittee on Water Quality and Prevention of Pollution Report No. 247, *op. cit.*, p. 1951.

[337] *Ibid.,* p. 1955.

[338] CARU Minutes No. 09/04, p. 2148 (10 December 2004). UCM, Vol. IV, Annex 111.

> fundamentally, and perhaps everyone's wish is that the Uruguay River Environmental Protection Plan had had greater momentum; but it is also fair to recognize that the work was very focused on adopting control and monitoring procedures with respect to the *cellulose plants*, as reflected in the respective reports. In that respect, the responsibilities of the CARU have been particularly significant, within the scope of work requested by the Foreign Ministers of our countries; and now, perhaps all of the work studied and analyzed can be concluded by requesting funding for the start-up of a specific monitoring station. And as this issue has evolved, among others also placed before the CARU, *congratulations are in order for the manner in which this matter was treated*, and in all of these activities, the presence and dedication of the President, in seeking to find the most propitious environment and a harmonious and adequate manner in which to carry out this year's important tasks, have not been minor.[339]

3.30 It is thus clear that CARU was fully engaged with the Botnia plant long before Uruguay issued its AAP in February 2005. Especially given the provisional nature of an AAP under Uruguayan environmental law, Argentina's attempt to attach dispositive significance to the issuance of the AAP, and to treat it as the watershed event in the procedural scheme of the 1975 Statute, simply makes no sense. CARU and Argentina were well informed about the plant before the AAP was issued. At the time it was issued in February 2005, Argentina's rights were just as secure as they were before. There was still plenty of time for CARU and Argentina to be consulted prior to the construction, much less the operation, of the plant, and for Uruguay to take into account any concerns they might raise about the project's effects on navigation, the regime of the river, and/or the quality of its water. In fact, as will be demonstrated below, that is exactly what happened here.

* * *

---

[339] *Ibid.,* pp. 2153-2153 bis (emphasis added).

3.31 In light of the foregoing, it is clear both as a matter of fact and as a matter of law that Uruguay did not violate the 1975 Statute by not formally notifying CARU in advance of granting AAPs to ENCE and Botnia. As a matter of law, the 1975 Statute does not require notice to CARU before a Party may authorize a given project. And as a matter of fact, both CARU and Argentina were well informed about and engaged with the ENCE and Botnia plants long before the AAPs were issued. The day after Uruguay granted the AAPs, Argentina's rights were no more threatened than they had been beforehand. Particularly given that so many additional permits were required before either company could begin construction, much less operation, more than adequate time remained for CARU to be notified and Argentina consulted, and for their views to be taken into account by Uruguay. This element of Argentina's case thus has no merit.

Section II.
Uruguay Was Not Obligated to Await CARU's Authorization for the Plants

3.32 In addition to arguing that Uruguay violated the 1975 Statute because it did not notify CARU before issuing AAPs to ENCE and Botnia, Argentina's Memorial also contends that Uruguay was obligated to await CARU's authorization before proceeding with the projects. At paragraph 4.13, for example, the Memorial contends that it was up to CARU to "détermine s'il pouvait construire ou délivrer l'autorisation de construire des ouvrages concernés."[340] In a like way, Argentina elsewhere argues that "à aucun moment… [la CARU] n'a approuvé la construction de l'ouvrage…"[341].

---

[340] AM, para. 4.13. ("determine whether Uruguay could build or grant the authorization to build the works in question.")

[341] AM, para. 2.39. ("at no time … was the construction of the facility approved" by CARU); *see also* AM, para. 2.40 (stating that "la procédure n'est en aucun cas arrivée au stade de la

3.33 Once again, this argument collapses even before the facts are examined. As Uruguay showed in Chapter 2, CARU does not have the institutional competence to authorize or reject particular projects[342]. Under the Statute, and as reflected in the CARU Digest, the Parties are the only ones empowered to authorize projects[343]. Indeed, the CARU report describing the purpose of the relevant portions of the Digest makes it absolutely clear that it is the Parties that have the competence "to grant authorizations in the broad sense*, including any type of permit, license or administrative act with similar content,* related to the various legitimate uses of the water."[344] (Uruguay has also already shown that industrial uses are specifically included among the "legitimate uses" of the river.[345]) The competencies of CARU, in contrast, are narrower, and are limited to more technical and administrative functions. They include, for example, establishing water quality standards; promoting and coordinating the Parties' monitoring of compliance with the water quality standards; promoting the Parties' implementation of control measures as regards contaminants; promoting the construction by the Parties of water treatment systems; facilitating the exchange of information between the Parties; encouraging

---

décision par la CARU") ("the procedure had in no way reached the phase of decision-making by CARU.").

[342] *See* Chap. 2, paras. 2.188-2.205.

[343] CARU Digest, *op. cit.,* Subject E3, Title 2, Chap. 1, Sec. 1, Art. 1(a). UCM, Vol. IV, Annex 60.

[344] Annex A to Subcommittee on Pollution and Investigation Report No. 57, p. 383 (9 April 1987), *approved in* CARU Minutes No. 3/87 (10 April 1987) (emphasis added). UCM, Vol. IV, Annex 71.

[345] CARU Digest, *op. cit.,* Subject E3, Title 2, Chap. 4, Sec. 1, Art. 1. UCM, Vol. IV, Annex 60.

the dissemination of information to the public; and issuing periodic reports on water quality levels[346].

3.34 The scope of CARU's competences is confirmed by a 1997 CARU document entitled "Standard Procedure to be followed by CARU with respect to a Communication from one Party regarding the Installation of a Project that May Affect the Quality of the Waters."[347] The document makes clear that in CARU's own view, its role in the consultation process set out in Articles 7-12 of the Statute is strictly limited to a preliminary technical review. No power to approve or disapprove projects is claimed, exactly as the Statute suggests. Thus, for example, steps (f) and (g) of the standard procedure describe the consequences when either (i) the two delegations agree that the project will not affect water quality, or (ii) they are unable to come to agreement. When the two delegations agree that a project will not harm the river, CARU does not issue an authorization or anything of the sort. Consistent with its more technical functions generally, it simply designs a water monitoring plan to ensure compliance with the applicable water quality standards[348]. And when the two delegations disagree about the impact of a project, the effect is not to put a stop to it. Rather, it is solely to set in motion a round of direct, Party-to-Party communications, exactly as the 1975 Statute says[349]. The conclusion is thus unmistakable that as a matter of law, CARU does not have the power Argentina now seeks to confer on it.

---

[346] *Ibid.,* Subject E3, Title 2, Chap. 1, Sec. 1, Art. 2. UCM, Vol. IV, Annex 60.

[347] Annex B to Subcommittee on Water Quality and Prevention of Pollution Report No. 162, p. 463 (18 April 1997), *approved in* CARU Minutes No. 4/97 (18 April 1997). UCM, Vol. IV, Annex 84.

[348] *Ibid.,* pp. 463-464.

[349] *Ibid.*

3.35 Quite apart from this fundamental legal impediment, the position Argentina adopts in its Memorial is also refuted by the facts. In the paragraphs that follow, Uruguay will demonstrate that in the cases of both ENCE and Botnia, the Parties expressly agreed to address the issue of both plants outside the context of CARU. Indeed, in direct, Party-to-Party talks, Argentina specifically agreed that both plants would be built (although it now attempts to retract that agreement). Thus, even if CARU had the powers Argentina seeks to confer on it in the abstract (which it does not), the fact of the matter is that the Parties agreed to handle both plants at a higher, Government-to-Government level.

A. THE PARTIES AGREED TO ADDRESS THE ENCE PLANT OUTSIDE CARU

3.36 Uruguay demonstrated in Section I of this Chapter that Argentina was well aware of the ENCE plant long before the AAP was issued on 9 October 2003. In fact, the issue had even been engaged at the Foreign Ministry level before that date. Thus, for example, in advance of a protest planned by Argentine citizens on the main bridge linking the two countries, Uruguay's Foreign Ministry sent a diplomatic note to the Argentine Embassy in Montevideo on 3 October 2003 expressing its concern and noting that "the issue [of the ENCE Plant] is already known by and under consideration of both Foreign Ministries."[350]

3.37 The topic was addressed at some length by the Foreign Ministers of the two States on 9 October 2003, on the occasion of a meeting between the Presidents of Uruguay and Argentina in Anchorena, Uruguay, the same day that Uruguay issued ENCE's AAP. The two Foreign Ministers discussed the most appropriate

---

[350] Diplomatic Note DGAP3 603/2003, sent from the Minister of Foreign Affairs of Uruguay to the Embassy of Argentina in Montevideo (3 October 2003). UCM, Vol. III, Annex 54.

manner to address the issue. At a press conference after the meeting, Argentina's Foreign Minister Rafael Bielsa made clear that his country

> does not oppose the construction of the plant, on the contrary it appears to us to be very good for generating jobs, but we hope that all of the guarantees and laws in force in both countries governing protection of the environment are complied with.[351]

3.38 He also stated:

> We talked about the M'Bopicuá plant. The idea is that when the company issues its environmental assessment plan, that report can be made known. From the point of view of Argentina, if the report is satisfactory regarding the environmental issues, something that Uruguay is also pursuing in its capacity as the sixth leading nation in the world in terms of environmental protection, then we shall be in agreement.
>
> * * *
>
> There is no such thing; the position of the two nations is absolutely in harmony [*sic*]. We, on the contrary, Argentina, wants to see that this plant is actually installed, that these jobs can actually be created, that the investment can actually go forward and that this does not involve any deterioration for the environment.[352]

Tellingly, Argentina's Memorial neither acknowledges the 9 October meeting of the Foreign Ministers nor mentions Minister Bielsa's public remarks made immediately afterwards.

3.39 As their subsequent conduct demonstrated, the effect of the Foreign Ministers' understanding in early October was to take the issue of the ENCE plant outside the formal process designated in Articles 7 through 12 of the 1975 Statute

---

[351] Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro (28 October 2003). UCM, Vol. II, Annex 15.

[352] Presidency of the Republic of Uruguay, "Agreements on Mercosur, Environment and Human Rights" (9 October 2003), *available at* http://www.presidencia.gub.uy/noticias/archivo/2003/octubre/2003100902.htm. (last visited on 29 June 2007). UCM, Vol. II, Annex 14.

and deal with it in a more direct, bi-lateral fashion by the Foreign Ministers themselves. Argentina would be given an opportunity to assure itself that the plant was environmentally viable, but Uruguay's fundamental right to undertake the project was never in question. As circumstances would have it, it was impossible to submit the project to CARU at that stage in any event. As Argentina itself has admitted, following the 17 October 2003 CARU meeting in which Argentina's Ambassador García Moritán (erroneously) accused Uruguay of failing to abide by its duties under the Statute, CARU was effectively prevented from working for half a year. In Argentina's own words: "En conséquence de cette situation qui empêche la CARU d'exercer les compétences que sont les siennes, la CARU suspend son fonctionnement durant plus de six mois."[353] Uruguay is confident that the irony of Argentina's position will not be lost on the Court. By its own admission, Argentina caused CARU to suspend its activities for six months, yet it now accuses Uruguay of failing to respect the CARU process during this period.

3.40 Pursuant to the understanding reached by the Foreign Ministers in early October 2003, the Uruguayan Foreign Ministry dispatched a diplomatic note to Argentina on 27 October in which it included the 22 July 2002 environmental impact assessment ("EIA") ENCE had submitted in connection with its application for an AAP (which CARU had had since at least October 2002), DINAMA's 2 October 2003 technical report on the EIA and the 9 October 2003 AAP itself[354]. Argentina's

---

[353] AM, para. 2.25. ("As a consequence of this situation, which prevented CARU from exercising its functions, CARU suspended its operations for more than six months.")

[354] Diplomatic Note 05/2003, sent from Ministry of Foreign Affairs of Uruguay to the Embassy of Argentina in Uruguay (27 October 2003). UCM, Vol. III, Annex 55.

Memorial admits that it received all three documents at this time[355]. As Argentina further admits, Uruguay also sent Argentina a copy of MVOTMA's entire file on the ENCE project -- a total of 1,683 pages -- on 7 November 2003[356].

3.41 Argentina's Memorial cites a statement of Uruguay's Foreign Minister, Didier Opertti, made during this time to the Foreign Relations Committee of the Uruguayan Senate[357]. In his 26 November 2003 remarks, Minister Opertti articulated his view that the ENCE plant did not fall within the competencies of CARU. In the circumstances, Argentina would appear to have no grounds to object. Uruguay's position on the application of Articles 7-12 of the 1975 Statute is clear. As Uruguay stated on the record at the oral hearings on Argentina's provisional measures request, the ENCE plant (and the Botnia plant) *do* fall within the notification and information-sharing obligations of the 1975 Statute[358]. This is not in dispute in these proceedings. Nonetheless, two important observations about Minister Opertti's comments are in order. *First*, they are entirely consistent with Argentina's historical approach to the issue of industrial facilities built within the territory of either of the Parties. As demonstrated in Chapter 2, Argentina has never informed or consulted with Uruguay about any of the dozens of industrial facilities it has built on or near the Uruguay River since 1976. Indeed, it was the express view of Dr. Julio Carasales, the former Chairman of Argentina's delegation to CARU and leading Argentine Authority on the 1975 Statute, that "the Administrative Commission of

---

[355] AM, para. 2.23.

[356] AM, para. 2.25; *see also* Diplomatic Note DGAP/711/2003, sent from Ministry of Foreign Affairs of Uruguay to the Embassy of Argentina in Uruguay (7 November 2003). UCM, Vol. III, Annex 56.

[357] AM, para. 2.26.

[358] *See* CR 2006/49, p. 10, para. 2 (Boyle) (8 June 2006).

the Uruguay River does not have competence to express an opinion on an [industrial] undertaking in the territory of one of the Parties."[359] *Second*, Minister Opertti's comments came at a time when the Parties had already come to a direct understanding about the manner in which the project would be handled. As stated, Argentina would be given a chance to satisfy itself that the plant was environmentally viable, but Uruguay's sovereign right to carry out the project was not in doubt.

3.42 In any event, Argentina proceeded to analyze the documents Uruguay gave it in October and November 2003. In February 2004, Argentina's technical advisors to CARU prepared a report addressing the potential environmental impact of the plant. Conspicuously, Argentina not only fails to include a copy of the report among the hundreds of pages of annexes is does submit to the Court, but also fails even to mention the report's existence. Fortunately, however, Argentina acknowledged both the existence of the report and its contents beyond the confines of its Memorial. In a statement contained in the 2004 year-end report to Argentina's Chamber of Deputies prepared by the Chief of Staff to Argentina's Cabinet of Ministers, the Argentine Foreign Ministry succinctly described the report and its findings as follows:

> In February 2004, the report from CARU's advisors established that there would be no significant environmental impact on the Argentine side; it was estimated that said impact would be, mainly, the bad odors that usually come from pulp mills and that might reach the Argentine shore of the Uruguay River.[360]

---

[359] CARU Minutes No. 2/96, p. 203 (15 March 1996). UCM, Vol. IV, Annex 80.

[360] Statement by Argentine Ministry of Foreign Affairs, International Trade and Culture, *included in* Report of the Head of the Argentine Cabinet of Ministers, Alberto Angel Fernandez, to the Argentine Chamber of Deputies (hereinafter "Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies"), Report No. 64, p. 136 (March 2005). UCM, Vol. III, Annex 46.

3.43 The same report also observes that "Controls on both plants will be more extensive than the ones our country has on its own plants on the Paraná River, which were nevertheless accepted by Uruguay …"[361].

3.44 On the basis of the February 2004 report of Argentina's technical advisors, Argentine delegate to CARU, Dr. Darío Garín, stated categorically:

> It must be pointed out, with complete and absolute emphasis, that none of the different technical reports evidence that the activity in question causes an irreversible and unavoidable damage to the environment, at least of a sufficient level that would warrant the suspension of the plant or opposition to its construction, at least with any scientific basis…[362]

Dr. Garín's comments were seconded by another Argentine delegate to CARU, Dr. Hectór Rodriguez, who stated that he would "not spend any more time on" the technical issues and "adopts as his own" Dr. Garín's comments[363].

3.45 In light of the February 2004 report of Argentina's technical advisors, and with CARU still "paralysée" (to use Argentina's word[364]), the Foreign Ministers of both countries met again on 2 March 2004 to continue their Party-to-Party talks about the ENCE plant. During that meeting, they specifically agreed on the way forward, an agreement that included the fact that the plant could and would be built. According to the text of a 3 March 2004 press conference about the agreement given by Uruguayan Foreign Minister Didier Opertti:

> Well, a working methodology was put in place to address the concerns that have arisen on this issue … The first phase of the project was recently completed, which represents the first favorable test of the project. The second phase consists of the

[361] *Ibid.*

[362] CARU Minutes No. 01/04, pp. 18-19 (15 May 2004). UCM, Vol. IV, Annex 99.

[363] *Ibid.,* p. 23.

[364] AM, para. 2.29. ("paralyzed")

> construction of the plant, which will take no less than four years. During that period, what will we have to provide to Argentina? Information, knowledge of whether the construction of the plant is complying with environmental guidelines and the environmental rules that apply in those cases. The third phase is the operational phase, namely, when the plant starts to operate, which will take place in a period of four to five years. At that time, it will be necessary to report on the monitoring of the water, that is, the control of the waters to determine whether the river is taking in effluents, whether in liquid, gaseous or solid form, that are capable of causing some type of harm to the quality of the water. That is the methodology we have identified for the different stages, and we are going to document it appropriately in CARU itself in the next weeks.[365]

3.46 Contemporaneous Argentine accounts evidence the same facts. According to a 3 March 2004 story in Argentina's leading daily, *La Nación*, Argentine Deputy Secretary for Latin American Affairs, Ambassador Eduardo Sguiglia, stated that the Foreign Ministers "agreed to make the plant's installation process 'transparent'."[366] He is quoted further as stating: "It was agreed that in the next four years of construction, there will be exhaustive monitoring to ensure compliance with the environmental guidelines established for the installation of the plant, which will include permanent monitoring."[367] Later in the same story, Foreign Minister Bielsa himself is quoted as saying: "This system that we have agreed upon with Foreign

---

[365] Presidency of the Republic of Uruguay Web Site, "M'Bopicuá: Working Methodology Established" (3 March 2004), *available at* http://www.presidencia.gub.uy/noticias/archivo/2004/marzo/2004030301.htm. (last visited on 4 July 2007). UCM, Vol. II, Annex 17. Uruguay has searched for, but has been unable to find any contemporaneous record of the statements of Argentine Foreign Minister Bielsa. However, as detailed in text, the subsequent history confirms Minister Opertti's understanding of events.

[366] La Nación (Argentina), "Uruguay Promises to Inform the Government about the Paper Mill" (3 March 2004). UCM, Vol. IX, Annex 183.

[367] *Ibid.*

Minister Opertti, I believe, protects the legitimate expectation of the residents that these projects do not threaten their daily life."[368]

3.47 Argentina's official statements after the fact also reflect an identical understanding of events. According to a statement of the Argentine Ministry of Foreign Affairs contained in the 2004 year-end report to the Argentine Senate, prepared by the Chief of Staff to the Cabinet of Ministers:

> On 2 March 2004, the Foreign Ministers of Argentina and Uruguay reached an understanding on the course of action to give to this subject. This is, for the Government of Uruguay to facilitate information relative to the construction of the plant, and in regard to the operational phase, instruct the CARU to proceed to carry out a monitoring of the water quality of the River Uruguay in conformity with the provisions of the Statute for the River Uruguay, especially its Chapter X, Articles 40 to 43. This decision coincides with the request of the Governor of Entre Rios Province who asked that "the Commission for the Administration of the River Uruguay adopt procedures to establish mechanisms of control and monitoring, both for the construction stage and particularly for the period of operation, to the effect of relying on this binational organization and the Statute for the River Uruguay for a program capable of maintaining a strict control over the entire process." The understanding of the Foreign Ministers, the note from the Governor of Entre Rios and the report of the technical experts coincide in that the CARU should concentrate its activity on the subject of mechanisms of control.[369]

3.48 The Argentine Foreign Ministry's statement in the 2004 year-end report to the Chamber of Deputies is to the same effect:

> In June [sic] of that same year, a Bilateral Agreement was signed through which Argentina's Government put an end to the controversy.

---

[368] *Ibid.*

[369] Statement by Argentine Ministry of Foreign Affairs, International Trade and Culture, *included in* Report of the Head of the Cabinet of Ministers, Alberto Angel Fernandez, to the Argentine Senate (hereinafter "Statement by Argentine Ministry of Foreign Affairs to the Argentine Senate"), Report No. 65, p. 617 (March 2005). UCM, Vol. III, Annex 47.

> Said agreement respects, on the one hand, the Uruguayan national character of the project, and on the other hand, the regulations in force, that regulate the waters of the Uruguay River through the CARU.
>
> Likewise, it implies a work methodology for the three phases of the construction of the project: the project, the construction and the operation.
>
> Thus, inclusive control procedures were carried out on the Uruguay River, which means they will continue after the plants are in operation.[370]

3.49 Lest there be any remaining doubt on the matter, the 2004 Annual State of the Nation Report prepared by the Office of the President, the Honourable Nestor Kirchner, reflects the same position. It states:

> That same month, both countries signed a bilateral agreement which put an end to the controversy over the pulp mill installation in Fray Bentos.
>
> This agreement respects, on the one hand, the Uruguayan and national character of the work, which was never under discussion, and on the other hand, the regulation in force that regulates the Uruguay River waters through the CARU (Administrative Commission of the Uruguay River).
>
> It also provides for a working procedure for the three phases of construction of the work: project, construction and operation.[371]

3.50 Argentina's Memorial now tries to recast this "bilateral agreement which put an end to the controversy over the pulp mill installation in Fray Bentos" by claiming that the only thing the Foreign Ministers agreed to do in March was submit the project to CARU so that the Commission could exercise its "decision-making"

---

[370] Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies, *op. cit.,* p. 136. UCM, Vol. III, Annex 46.

[371] Annual Report on the State of the Nation for 2004, Ministry of Foreign Affairs, International Trade and Culture, p. 105 (March 2005). UCM, Vol. III, Annex 48.

authority and determine whether or not the plant could be built[372]. Argentina's effort to explain away the Foreign Ministers' agreement fails for at least three reasons. *First*, Argentina's argument is predicated on the erroneous proposition that CARU has a "decision-making" role in connection with projects covered by Articles 7 through 13 of the Statute. Yet, as shown in Chapter 2 and reiterated in Section I of this Chapter, CARU does not have any such role. Nor, prior to this case, has Argentina ever suggested that it did. Argentina's re-interpretation of the March 2004 agreement of the Foreign Ministers is thus facially untenable.

3.51 To be sure, the Foreign Ministers did agree that CARU would have an important role with respect to the plant. They gave the Commission the task of monitoring water quality both during the construction of the plant and during its operation to assure that the applicable water quality standards would be met. Thus, in its statement included in the 2004 year-end report to the Argentina Senate, the Argentine Foreign Ministry emphasized that the "understanding of the Foreign Ministers, the note from the Governor of Entre Rios and the report of the technical experts coincide in that the *CARU should concentrate its activity on the subject of mechanisms of control*."[373] Neither in the Argentina Foreign Ministry 's report nor anywhere else is there any suggestion that CARU will play anything other than a technical role, which is precisely the role it has always played during the 32 years since the Statute was adopted.

3.52 *Second*, Argentina's contention that the agreement did not settle anything, and did not involve an acknowledgement that the plant would be built, is directly

---

[372] *See* AM, para. 2.40.

[373] Statement by Argentine Ministry of Foreign Affairs to the Argentine Senate, *op. cit.,* p. 617 (emphasis added). UCM, Vol. III, Annex 47.

contradicted by the same official statements cited above. Both the Office of the President and the Ministry of Foreign Affairs are on public record as stating that Argentina and Uruguay had signed an agreement that "put an end" to the controversy[374]. In those same statements, the President of Argentina and the Minister of Foreign Affairs made repeated reference to the construction and the operation of the plant in a way that left no room for doubt that Argentina had agreed the plant would be built. Thus, in its statement in the 2004 year-end report to the Argentina Senate, the Ministry of Foreign Affairs noted that the Foreign Minister's agreement

> coincides with the request of the Governor of Entre Rios Province who asked that "the Commission for the Administration of the River Uruguay adopt procedures to establish mechanisms of control and monitoring, *both for the construction stage and particularly for the period of operation*, to the effect of relying on this binational organization and the Statute for the River Uruguay for a program capable of maintaining a strict control over the entire process."[375]

3.53 To the same effect is the Foreign Ministry's statement included in the year-end report to the Argentine Chamber of Deputies which states that "inclusive control procedures were carried out on the Uruguay River, *which means they will continue after the plants are in operation*."[376]

3.54 *Third*, Argentina's revised argument about the nature of the Foreign Ministers' agreement in March 2003 is still further belied by the Parties' consistent, mutual conduct after the fact. At the end of March 2003, Foreign Minister Bielsa

---

[374] Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies, *op. cit.,* p. 136. UCM, Vol. III, Annex 46.

[375] Statement by Argentine Ministry of Foreign Affairs to the Argentine Senate, *op. cit.,* p. 617 (emphasis added). UCM, Vol. III, Annex 47.

[376] Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies, *op. cit.,* p. 136. UCM, Vol. III, Annex 46.

visited Montevideo to meet with his Uruguayan counterpart, Foreign Minister Opertti. During a dinner of about ten officials of both countries, the topic of the ENCE plant was raised. According to a contemporaneous memorandum recording the content of the conversation:

> both parties agreed on the identification of the essential points that are beyond debate: on the one hand, the legitimate claim of the Uruguayan government that what is involved is a decision, to authorize the investment, that is an exercise of the internal sovereignty of the country, and therefore, should not be the object of any consultations; and, on the other hand, the understandable Argentine desire to know the environmental impact of the proposed plant on the water quality of the Uruguay River. In this regard, an agreement on the role of the CARU was confirmed, as being the most suitable vehicle for channeling the pertinent information for organizing the system of monitoring and following the environmental management plans, both in the pre-feasibility phase (now completed) and in the construction phase (which will last approximately 4 years), as well as after the start-up of plant's operation.[377]

3.55 Pursuant to the 2 March agreement of the Foreign Ministers, the Parties designated two Ambassadorial level officials from their respective Foreign Ministries to memorialize their agreement for subsequent inclusion in the minutes of the next meeting of CARU. Ambassadors Eduardo Sguiglia of Argentina and Pablo Sader of Uruguay proceeded to exchange a number of drafts. The final version is dated 28 April 2004 and is of great interest. At paragraph VIII, for example, it states:

> On 2 March 2004, the Foreign Ministers of Argentina and Uruguay reached an understanding with respect to the course of action that this matter will take, that is, to have the Uruguayan government provide the information relating to the construction of the plant, and with respect to the operational phase, to have

[377] Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro, para. 5 (1 April 2004). UCM, Vol. II, Annex 18.

> the CARU undertake the monitoring of water quality in conformity with its Statute.[378]

3.56 The Court will note that the text of the agreement makes absolutely clear that the construction and future operation of the plant were expected and accepted facts. There is nothing even the least bit conditional about them. Moreover, Uruguay observes that there is nothing to indicate that the Parties had in mind any decision-making role for CARU, as Argentina's Memorial tries to argue[379]. The first stage of the agreed process, that is, Argentina's preliminary review of the project to content itself that the project was environmentally viable, had already been completed, exactly as Foreign Minister Opertti of Uruguay reported in his 3 March 2004 press conference[380], and as confirmed during the Parties subsequent dinner meeting at the end of that month[381]. Indeed, the 28 April draft contains additional confirmation of that fact. In it, Argentina "underscored that the elemental chlorine-free (ECF) technology that will be applied by Celulosa de M'Bopicuá S.A., is environmentally viable."[382] Thus, as the 28 April draft shows, both Parties understood that only two steps remained: construction and operation.

3.57 The agreement of the Foreign Ministers was subsequently restated formally in the minutes of a plenary CARU meeting on 15 May 2004, the first official CARU meeting since October 2003. The minutes of the meeting echo

---

[378] Proposed Special Minutes, Final Version, para. VIII (28 April 2004). UCM, Vol. IX, Annex 200.

[379] See AM, paras. 2.30, 2.40.

[380] Presidency of the Republic of Uruguay Web Site, "M'Bopicuá: Working Methodology Established," *op. cit.* UCM, Vol. II, Annex 17.

[381] Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro, para. 5 (1 April 2004). UCM, Vol. II, Annex 18.

[382] Proposed Special Minutes, Final Version, *op. cit.,* paras. VIII, IX. UCM, Vol. IX, Annex 200.

verbatim the final draft prepared by Ambassadors Sader and Sguiglia two weeks earlier. They state:

> On 2 March 2004, the Foreign Ministers of Argentina and Uruguay reached an understanding with respect to the course of action that this matter will take, that is, to have the Uruguayan government provide the information relating to the construction of the plant, and with respect to the operational phase, to have the CARU undertake the monitoring of water quality in conformity with its Statute.[383]

3.58 Uruguay hesitates to repeat itself. However, in light of Argentina's argument that the Foreign Ministers' agreement was merely to refer the matter to CARU so that the Commission could exercise its "decision-making" authority over the project, it is important to emphasize the Parties' contemporaneous understanding of CARU's role. At this stage, as the agreed minutes of the 15 May 2004 meeting plainly reflect, only two stages remained: construction and operation. The Court will see, and Uruguay warrants, that there is no reference to any sort of decision to be made by CARU. Indeed, the Argentine delegation explicitly recognized the limited nature of the Commission's role at that stage of the process. Argentine delegate Darío Garín, for example, stated that "an important limiting factor in our position is the agreement executed by the Foreign Ministers on 2 March 2004."[384] As already quoted above, he then went on to state:

> It must be pointed out, with complete and absolute emphasis, that none of the different technical reports evidence that the activity in question causes an irreversible and unavoidable damage to the environment, at least of a sufficient level that would warrant the suspension of the plant or opposition to its construction, at least with any scientific basis…[385].

---

[383] CARU Minutes No. 01/04, *op. cit.,* p. 33. UCM, Vol. IV, Annex 99.

[384] *Ibid.,* p. 18.

[385] *Ibid.,* pp. 18-19.

3.59 Uruguay invites the Court to examine closely the quotations from the CARU minutes of 15 May 2004 included in Argentina's Memorial at paragraphs 2.32 through 2.34. The Court will see that they very plainly contradict Argentina's argument that the Foreign Ministers agreed that CARU would decide whether or not the project would go forward. In each case, the quotations prove that the only two remaining steps were construction and operation. In paragraph 2.32, for example, Argentina cites the summary of the Foreign Ministers' agreement that Uruguay has quoted above at paragraph 3.57. The other quotations show merely that CARU was given a technical role, consistent with its institutional competence, in reviewing information relating to the environmental impacts of the plant and in monitoring water quality. There is nothing, however, to suggest that the fact that the plants would be built was anything other than a given.

3.60 CARU's subsequent behaviour further underscores both the Parties' and the Commission's understanding of its role and the status of the plant. As discussed above, beginning in June 2004, and continuing through the remainder of the year, CARU devoted significant time and energy to developing a water quality monitoring program in the vicinity of the future plants. The first line in each and every draft of the PROCEL contains identical wording: "Taking into account the future installation of cellulose plants …"[386]. As the words plainly show, there was never any doubt, or anything conditional, about "the future installation of cellulose plants."

---

[386] Draft PROCEL, Annex C to Subcommittee on Water Quality and Prevention of Pollution Report No. 243, *op. cit.,* p. 863. UCM, Vol. IV, Annex 102. Draft PROCEL, Annex A to Subcommittee on Water Quality and Prevention of Pollution Report No. 244, *op. cit.,* p. 1136. UCM, Vol. IV, Annex 104. Draft PROCEL, Annex A to Subcommittee on Water Quality and Prevention of Pollution Report No. 246, *op. cit.,* p. 1717. UCM, Vol. IV, Annex 107. Draft PROCEL, Annex A to Subcommittee on Water Quality and Prevention of Pollution Report No. 247, *op. cit.,* p. 1959. UCM, Vol. IV, Annex 109.

It was a matter that had been agreed at the Foreign Ministry level on 2 March 2004. Under the bed-rock principle of *pacta sunt servanda*, Argentina cannot be allowed to walk away from that legally binding agreement now. Still less can it be allowed to complain that Uruguay failed in its duties toward CARU, when Argentina expressly agreed with Uruguay that the ENCE plant would be addressed directly by the two States at the level of their Foreign Ministers, rather than through the Commission.

B. THE PARTIES' AGREEMENT TO ADDRESS ENCE AT THE GOVERNMENT-TO-GOVERNMENT LEVEL OUTSIDE CARU WAS EXTENDED TO BOTNIA

3.61 Argentina also argues that Uruguay violated its duties under the 1975 Statute by circumventing CARU and not awaiting the Commission's authorization before issuing Botnia's AAP in February 2005[387]. As in the case of ENCE, this argument collapses for the simple reason Uruguay has now made clear more than once: CARU does not have the authority Argentina's Memorial seeks to give it. CARU does not have, and never has had, the authority to approve or disapprove projects. The argument also fails for two additional reasons. *First*, the Parties' agreement that the ENCE plant could be built was later extended to include the Botnia plant as well. *Second*, by Argentina's own admission, soon after Uruguay issued the Botnia AAP, the Parties agreed in writing to bypass CARU altogether and proceed to direct consultations under Articles 11 and 12 of the 1975 Statute. Thus, *by agreement* the issue was removed from CARU's ambit altogether. Each of these points is addressed below.

3.62 As discussed above, Argentina was aware of the Botnia project beginning in or around November 2003, and by April 2004 (10 months before the AAP was

---

[387] *See* AM, paras. 2.54, 4.48.

issued) CARU had taken cognizance of the project[388]. In other words, even as the Parties were finalizing the text of their agreement on the ENCE plant to be recorded in the CARU minutes, both Argentina and CARU were well informed about the Botnia project. Thus, the CARU Subcommittee on Water Quality, which was charged with carrying out the Foreign Ministers' 2 March 2004 agreement by designing the PROCEL water quality monitoring program, included the Botnia plant as well as the ENCE plant in the PROCEL program from the very beginning. There was never any conditionality expressed about either plant. In all cases, "the future installation of cellulose plants" was a given on which Uruguay was entitled to, and did, rely. When the PROCEL was completed by CARU's technical advisors in November 2004[389], it was then approved by both delegations to the Commission in plenary session on the 12th of that month[390]. After that, CARU asked for and received DINAMA's approval of the plan[391]. Consequently, Uruguay's delegation to CARU, DINAMA, and Uruguay itself understood that Argentina had agreed that both plants could and would be built.

3.63 The scope of Argentina's agreement is reconfirmed in one of the 2004 year-end reports cited by Uruguay above. The report to the Argentine Chamber of Deputies from the Chief of Staff of the Argentine Cabinet of Ministers contains a telling question (from a legislator) and answer (by the Foreign Ministry). It reads:

---

[388] *See supra*. paras. 3.23-3.25.

[389] Subcommittee on Water Quality and Prevention of Pollution Report No. 247, *op. cit.,* p. 1951. UCM, Vol. IV, Annex 109.

[390] *Ibid.* CARU Minutes 08/04, *op. cit.,* pp. 1859-1860. UCM, Vol. IV, Annex 108.

[391] Subcommittee on Water Quality and Prevention of Pollution Report No. 247, *op. cit.,* p. 1951. UCM, Vol. IV, Annex 109.

INSTALLATION OF CELLULOSE *PLANTS* ON THE URUGUAY RIVER

Argentina's Position

220. Taking into account the decision of the Uruguayan Government to authorize the installation of *cellulose plants* on the Uruguay River and considering that it goes against the Statute of the Uruguay River and also against the MERCOSUR constituent agreements, what is the reason why our Government does not value these supranational legal provisions?

RESPONSE: MINISTRY OF FOREIGN AFFAIRS, INTERNATIONAL TRADE AND CULTURE

Pursuant to the Statute of the Administrative Commission of the River Uruguay - CARU- both parties assume the obligation of informing the other party of any project or facility that they plan to carry out and that could have an impact on both banks of the river.

Based on this, the official Argentine claim, in relation to the installation of *cellulose plants* by Uruguay, in the area near Fray Bentos, was aimed at obtaining Uruguay's compliance with this obligation.

…

In June [*sic*] of that same year, a Bilateral Agreement was signed through which Argentina's Government put an end to the controversy.

Said agreement respects, on the one hand, the Uruguayan national character of the project, and on the other hand, the regulations in force, that regulate the waters of the Uruguay River through the CARU.

Likewise, it implies a work methodology for the three phases of the construction of the project: the project, the construction and the operation.

Thus, inclusive control procedures were carried out on the Uruguay River, which means they will continue *after the plants begin to operate*.

> *Controls on both plants* will be more extensive than the ones our country has on its own plants on the Paraná River, despite which they were accepted by Uruguay (the technologies the Province of Entre Ríos raises questions about to Uruguay are the same ones used by our country).[392]

3.64 What makes this report particularly interesting is the extent to which it defines Argentina's understanding of the scope of the controversy, Argentina's position on that controversy, and the agreement putting an end to it. The heading above the question and answer make clear that the issue encompasses the "installation of the cellulose plants;" that is, it is a plural reference to both plants. The question likewise addresses itself to the installation of the "plants," again plural. The scope of the "the official Argentine claim", and thus the controversy, similarly encompasses "the installation of the cellulose plants". Therefore, when the report states that the Government of Argentina "put an end to the controversy," it can only mean with respect to both plants. This reading is confirmed in subsequent paragraphs of the statement which make reference to the time "after the plants begin to operate" and the fact that "controls on both plants *will be* (*i.e.*, future tense, unconditional ("serán")) more extensive than the ones our country has." There can thus be no doubt that Argentina understood that the controversy covered "the two plants," and that the controversy as to both the ENCE and Botnia plants, not just the ENCE plant, was "put to an end."

3.65 Before leaving this report, one other point bears mention. The report relates to events during the year 2004. It was, however, delivered in March 2005; that is, the month *after* Uruguay issued Botnia's AAP in February 2005. Thus,

---

[392] Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies, *op. cit.,* p. 136 (emphases added). UCM, Vol. III, Annex 46.

Uruguay's allegedly "unilateral" authorization of the Botnia plant elicited no contemporaneous objection by Argentina, or complaint that Uruguay had violated the agreement previously reached by the two States. To the contrary, in March 2005 Argentina submitted reports to its Senate and Chamber of Deputies confirming that there was an agreement on the installation of "the two plants."

C. THE PARTIES CREATED GTAN AS A MEANS TO ADDRESS BOTH PLANTS AT THE GOVERNMENT-TO-GOVERNMENT LEVEL

3.66 Independent of their agreement, made outside CARU, that the ENCE and Botnia plants would be built, the Parties reached a subsequent agreement in May 2005 to commit the issue of both plants to a bi-lateral, high level technical group outside the ambit of CARU. As Argentina put it at the time: "The lack of agreement within the River Uruguay Administration Commission (CARU) … led the Government of both countries to deal with the question directly and to establish a High Level Technical Group (GTAN) in May 2005."[393]

3.67 Although Argentina describes the catalyst for the creation of the GTAN as Uruguay's granting of an AAP to Botnia in February 2005, that claim is dubious in light of the twin facts that (i) Argentina and CARU had long known about the imminent issuance of Botnia's AAP, as described in Section 1 of this Chapter; and (ii) Argentina had already agreed that both the ENCE and Botnia plants would be built, as described above. The true catalyst appears instead to have been a marked change in the domestic political situation in Argentina. By April 2005, popular opposition to the cellulose plants, centred in the city of Gualeguaychú, reached a critical level. On 30 April 2005, approximately 40,000 Argentine citizens marched

[393] Diplomatic Note sent from Argentine Minister of Foreign Affairs, International Trade and Culture to Uruguayan Ambassador in Argentina, Francisco Bustillo (12 January 2006). UCM, Vol. III, Annex 59.

on the General San Martín Bridge connecting Gualeguaychú and Fray Bentos[394]. Energized by the vocal support of local municipal and provincial authorities, the citizens organized themselves into the "Environmental Assembly of Gualeguaychú", which launched a series of unremitting protests against the construction of the two plants, and against the Argentine government for not opposing them[395]. Thus, while as late as March 2005 Argentina had expressly and officially recognized its agreement on the construction and operation of the ENCE and Botnia plants -- subject to the monitoring of water quality by CARU -- mounting domestic political pressure caused it to reverse its position on the plants by the end of April.

3.68 To fend off this pressure, the Argentine government backtracked on its prior acceptance of the plants. It called for new technical studies to assess the probable impacts of the plants, even though its own experts had previously concluded -- based on the environmental impact assessments that had been furnished by Uruguay the previous year -- that the plants were environmentally viable. Argentina's reversal of course on the viability of the plants had a predictable impact in CARU. With the two delegations -- which had previously united in support of the plants -- now divided, CARU became deadlocked.

3.69 While CARU remained deadlocked, the two States came to an explicit understanding on how to move the process forward on 5 May 2005, on the occasion of Uruguayan President Tabaré Vázquez's first visit to Argentina since taking office on 1 March 2005. As Argentina's Memorial states:

---

[394] El Clarín (Argentina), "Mass Protest in Entre Rios Against Installation of Pulp Mills" (1 May 2005). UCM, Vol. IX, Annex 184.

[395] *See* http://es.wikipedia.org/wiki/Asamblea_Ciudadana_Ambiental_de_Gualeguaych%C3%BA. (last visited on 8 July 2007).

> Lors de sa première visite en Argentine, le nouveau président uruguayen Tabaré Vázquez et son homologue argentin Néstor Kirchner décident le 5 mai 2005 de créer un groupe de travail de haut niveau (GTAN), en vue du règlement du différend, sur la base d'une étude d'impact sur l'environnement des deux projets d'usines de pâte à papier, CMB et Orion.[396]

3.70 The Presidents' early May agreement was concretized by their Foreign Ministers at the end of the month. As Argentina again writes: "Le 31 mai 2005, les Ministres des affaires étrangères procèdent à la création effective du GTAN."[397] According to a press release issued by the Argentine Foreign Ministry that same day:

> In conformity with what was agreed to by the Presidents of Argentina and Uruguay, the Foreign Ministries of both of our countries constitute, under their supervision, a Group of Technical Experts for complementary studies and analyses, exchange of information and follow up on the effects that the operation of the cellulose plants that are being constructed in the Eastern Republic of Uruguay will have on the ecosystem of the shared Uruguay River.[398]

3.71 Since Argentina had previously agreed that the plant would be built, Uruguay was under no obligation to participate in additional consultations under the Statute. Likewise, it had no obligation to halt construction of the plants. Nonetheless, Uruguay recognised that political opposition within Argentina was causing a problem for President Kirchner because of his government's prior agreement concerning the plants. It thus saw the GTAN as a way to provide additional information and reassurance that the plants were environmentally viable.

---

[396] AM, para. 2.58. ("During his first visit to Argentina, the new Uruguayan president, Tabaré Vázquez and his Argentinean counterpart, Néstor Kirchner, decided on May 5, 2005, to create a high-level working group (GTAN) with a view to settling the dispute based on an environmental impact study of the two paper pulp mills, i.e., CMB and Orion.")

[397] AM, para. 2.61. ("On May 31, 2005, the Ministers of Foreign Affairs moved ahead with the creation of GTAN.")

[398] Joint Argentine-Uruguayan Press Release Constituting GTAN No. 176/05 (31 May 2005). UCM, Vol. V, Annex 126.

In no sense, however, did the creation of the GTAN detract from the prior agreement that the plants would be built. The enduring quality of that agreement is reflected, for example, in the language of the Argentine press release issued following the Foreign Ministers' 31 May 2005 meeting. In particular, it states that, "[i]n conformity with what was agreed to by the Presidents," the GTAN will examine and analyse the environmental effects that "the operation of the cellulose plants *that are being constructed* in the Eastern Republic of Uruguay *will have*."[399] The use of the unconditional future tense, "will have" ("tendrán"), and the present progressive, "are being constructed" ("se están construyendo"), make clear that, even as of the end of May 2005, Argentina recognized Uruguay's underlying right to build the projects and that their construction would continue. Subsequently, as the increasingly vehement protests of the citizens of Gualeguaychú turned into a national political issue, and with the approach of national elections in October 2005, Argentina hardened its position.

3.72 Uruguay will discuss the conduct of the GTAN meetings, which consisted of 12 plenary sessions between August and December 2005, in the next section of this Chapter. For present purposes, the important point is that Argentina admits that the "lack of agreement" in CARU "led the Governments of both countries to deal with the question directly and to establish a High Level Technical Group (GTAN)."[400] It also admits that the GTAN process fulfilled the Parties' duty to

---

[399] *Ibid*. (emphasis added).

[400] Diplomatic Note sent from Argentine Minister of Foreign Affairs, International Trade and Culture to Uruguayan Ambassador in Argentina, Francisco Bustillo (12 January 2006). UCM, Vol. III, Annex 59.

engage in good faith consultations under Article 12 of the 1975 Statute. The Memorial states, for example:

> Le 14 décembre 2005, l'Argentine transmet à l'Uruguay une note dans laquelle elle rappelle formellement l'existence d'un différend relatif au Statut de 1975, que l'article 12 de celui-ci est applicable, que par conséquent la procédure du chapitre XV du Statut est ouverte aux Parties et que le délai de 180 jours prévu par ce traité pour que celles-ci parviennent à un règlement par des négociations directes court depuis le 3 août 2005, date de la première réunion du GTAN.[401]

3.73 Thus, by Argentina's own admissions, the Parties agreed to proceed directly to the Party-to-Party consultations envisioned by Article 12 of the Statute and not to await a preliminary determination from CARU. Uruguay showed in Chapter 2 that there is no legal impediment to the Parties doing this[402]. Once a difference of opinion crystallised, the Parties were free to try to resolve the matter through direct consultation at any mutually agreed moment. To argue to the contrary, Argentina would have to contend that a mutual agreement to bypass certain treaty-based procedures in favour of other treaty-based procedures itself violates the treaty. Such a result would plainly be nonsensical, especially where, as here, the purpose of the procedures by-passed (preliminary review by CARU, *etc*.) is to obviate the need for the procedures to which the Parties specifically agreed (direct consultations).

---

[401] AM, para. 2.72 (citing 14 December 2005 Diplomatic Note). ("On December 14, 2005, Argentina sent Uruguay a memo in which it officially reiterated the existence of a dispute with respect to the 1975 Statute, and indicated that Article 12 was applicable and that consequently, the procedure set out in chapter XV of the Statute was open to the parties, and that the 180-day period provided in this treaty to help the parties reach a settlement by direct negotiations had started on August 3, 2005, the date of the first GTAN meeting.")

[402] *See* Chap. 2, para. 2.172.

3.74 This same point can be made from a slightly different perspective. The entire thrust of Argentina's procedural argument is its claim that Uruguay disrupted the proper functioning of the procedures set forth in Articles 7 through 12 of the 1975 Statute by failing to notify CARU, *etc*. Yet, Argentina admits (as it must) that the Parties were able to bring themselves back within the Statute's procedural framework by agreeing to the GTAN process and thus fulfilling their duty to consult under Article 12. Accordingly, even assuming arguendo that Uruguay failed to abide by the procedures laid out in Articles 7 through 11 -- which it did not -- that nominal failure was later remedied by the Parties' mutual agreement to consult under Article 12.[403] It is no answer to say that the GTAN consultations were somehow untimely. As Uruguay will show in Section IV of this Chapter, the consultations occurred at a sufficiently early stage in project development that there was more than "enough time for the States concerned to consult on appropriate preventive measures."[404]

[403] At paragraph 4.73 of its Memorial, Argentina cites Professor Felipe Paolillo as having expressed this view, that is, that Uruguay's direct and timely consultations with Argentina through the GTAN process fulfilled the mandate of Article 12 of the 1975 Statute, and therefore "cured" any earlier defects in Uruguay's compliance with the Statute's notice obligations. Argentina mischievously goes on to insinuate -- falsely -- that Professor Paolillo's view was adopted by Uruguay when, at the conclusion of the conference at which he spoke (along with several other distinguished counsel who, unlike Professor Paolillo, spoke on behalf of the Government of Uruguay and disagreed with him), Foreign Minister Reinaldo Gargano said that the participants "had, in 40 minutes, precisely summarised Uruguay's position." (AM, para. 4.74.). It is obvious from the context that Foreign Minister Gargano was referring to the expression of views by counsel for the government, not by Professor Paolillo or others who participated in the open and wide-ranging discussion. Uruguay's position then, as at all times before or since, has been the same: it fully complied with all of its procedural obligations under the 1975 Statute, including its notice obligations. While Uruguay agrees that, theoretically, its consultations with Argentina via the GTAN process were sufficient to "cure" any prior defect in its performance under Articles 7-12, in fact there were no defects and nothing to "cure."

[404] 2001 Draft Articles, *op. cit.*, p. 421, comment 5.

D. ARGENTINA SEEKS TO IMPOSE ON URUGUAY OBLIGATIONS THAT NOT ONLY DO NOT EXIST, BUT THAT ARGENTINA NEVER ACCEPTED FOR ITSELF

3.75 As shown, the 1975 Statute imposes no obligation on a Party to await "authorization" from CARU before it may itself authorize or implement a project that may affect navigation, the regime of the river, and/or the quality of its water; CARU simply does not "authorize" such projects, or reject them.

3.76 It is perplexing that Argentina would suggest otherwise, given its own consistent practice during the entire time the 1975 Statute has been in effect. As discussed in Chapter 2[405], Argentina has authorized and implemented literally dozens industrial projects on its side of the river, as well as a host of water and sewage treatment projects and flood control installations (that affect the regime of the river as well as water quality), with ever awaiting CARU's "authorization" before carrying out its plans. Indeed, Argentina not only failed to await CARU's "authorization" before proceeding with these projects but in almost every case it failed even to *notify* CARU about the projects. Nor did it notify Uruguay, or attempt to consult with Uruguay in advance of these activities.

E. URUGUAY COMPLIED WITH ITS OBLIGATIONS CONCERNING THE BOTNIA PORT AND THE BOTNIA WATER EXTRACTION PERMIT

3.77 In addition to its primary complaints about the ENCE and Botnia cellulose plants, Argentina also argues in passing that Uruguay failed to give CARU an opportunity to approve both the Botnia port and the Botnia water extraction permits issued on 5 July 2005 and on 12 September 2006, respectively. With respect to the Botnia port, Argentina claims that Uruguay improperly authorized "le 5 juillet 2005, la société Botnia à utiliser le lit du fleuve et à construire un port a l'usage exclusif de

[405] *See* Chap. 2, paras. 2.140-2.150

l'usine Orion sans saisir la CARU."[406] And with respect to the Botnia water extraction permit, Argentina contends that pursuant to "sa politique systématique d'autorisation unilatérale, L'Uruguay a, le 12 septembre 2006, autorisé Botnia à prélever et utiliser les eaux du fleuve Uruguay à des fins industrielles, à savoir la production de pâte à papier."[407] Uruguay will briefly respond to and quickly disprove each of these allegations, in turn.

3.78 In the case of the Botnia port, the facts show that it was Argentina, not Uruguay, that prevented CARU from exercising its statutory role. At the first meeting of the GTAN on 3 August 2005, the Parties' delegations agreed to refer the port project back to CARU for preliminary review[408]. Acting pursuant to this understanding, Uruguay promptly notified CARU about the project on 15 August 2005[409]. The notice included a copy of Uruguay's 5 July 2005 resolution authorizing Botnia to make use of the riverbed for purposes of constructing a port[410]. Argentina's delegation to CARU subsequently requested additional information which Uruguay promptly provided on 13 October 2005[411]. However, notwithstanding Uruguay's timely submission of this information, Argentina made

---

[406] AM, para. 4.55. ("Botnia, on 5 July 2005, to use the bed of the river and build a port for the exclusive use of the Orion plant without referring the matter to CARU.")

[407] AM, para. 4.61. ("its systematic policy of unilateral authorization, Uruguay, on 12 September 2006, authorized Botnia to extract and use the waters of the Uruguay River for industrial purposes; *i.e.*, the production of paper pulp.")

[408] First Meeting of the Uruguayan-Argentine Technical Group (GTAN) (3 August 2005). UCM, Vol. V, Annex 127.

[409] Diplomatic Note 168/05 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (15 August 2005). UCM, Vol. IV, Annex 105A.

[410] *Ibid.*

[411] Diplomatic Note OCARU No. 032/2005 sent from the President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (13 October 2005). UCM, Vol. IV, Annex 113.

clear that it had no intention of allowing CARU to examine the information Uruguay had given it[412]. Argentina's position was communicated at the CARU meeting of 14 October 2005, and again in a 10 November 2005 Note to the Chairman of the Uruguayan Delegation to CARU. Argentina's ostensible basis for blocking the Commission's review of the project was the fact that Uruguay had refused to suspend work on the port until the evaluation and consultation process had been exhausted[413]. As Uruguay discussed in Chapter 2, and as is reiterated further in Section IV below, Uruguay had no legal obligation to suspend any and all work on the port. Nonetheless, Argentina seized on this excuse to impede CARU's consideration of the project. The real reason for Argentina's actions is clear. In light of mounting domestic opposition to the plants, and the decision of the government in Buenos Aires to curry favour with the protestors, by October 2005 Argentina had no intention of doing anything that might be perceived as facilitating either cellulose plant project.

3.79 Argentina's true motive for preventing CARU from doing its work is made plain by the fact that there is no real dispute about the environmental viability of the port. Nowhere either in its Application or in the 370 pages of its Memorial does Argentina argue that the port will cause any harm, let alone significant harm to navigation, the regime of the river or the quality of its water. Given that Argentina has had all the pertinent technical data in its possession since at least October 2005, it can be presumed that if Argentina had a substantive basis to oppose the project, it would have said so. Its silence is itself a powerful admission. In this connection, it

---

[412] *See* CARU Minutes No. 09/05, *op. cit.,* pp. 1859-1863. UCM, Vol. IV, Annex 114.

[413] *Ibid.*

is worth mentioning that the Botnia port is significantly smaller in size than the M'Bopicua Port about which Uruguay notified CARU in 2001[414]. In that case, as Argentina admits, both delegations to CARU quickly agreed that the port posed no threat to navigation, the regime of the river or the quality of its water[415]. Indeed, the issue occupied very little of the Commission's time or attention. There is no record in the CARU minutes of any debate, much less disagreement, on this matter. The fact that even now Argentina has been unable to identify any technical basis on which to oppose the much smaller Botnia port shows that its objections, and its refusal to let CARU do its work, were based solely on its more general desire to frustrate Uruguay's overall plans for the cellulose plant projects.

3.80 Argentina's protest about the Botnia port authorization appears even more inauthentic when its own historic practices with respect to port authorizations are taken into account: Argentina has repeatedly authorized port construction and rehabilitation on its side of the Uruguay River without even bothering to notify Uruguay or CARU, let alone to consult with Uruguay over these projects. Examples include: creation of a new port at Federación (1979) with a 180-meter esplanade and seven piers; structural repair of the port at Concordia (2004); authorization of a new port at Puerto Yuquerí (2004); and construction of a new pier 152 meters in length and 10.9 meters in width and the reconstruction of two existing piers at Concepción del Uruguay (2000-2004)[416]. The port construction and rehabilitation project at Concepción del Uruguay was part of a major Port Modernization Project financed by

---

[414] CARU Minutes No. 03/01, *op. cit.,* p. 249. UCM, Vol. III, Annex 91.

[415] *See* AM, para. 3.119.

[416] Ministry of Industry, Energy and Mining, "Works on the River Uruguay," pp. 59-66 (June 2007). UCM, Vol. X, Annex 224.

the Inter American Development Bank[417]. Argentina neither notified nor consulted with Uruguay or CARU in any of these cases.

3.81 The putative issue Argentina raises with respect to the 12 September 2006 Botnia water extraction permit can be disposed of even more readily. Argentina had timely notice of the water extraction issues and was consulted in good faith about them as part of the GTAN process. Argentina thus received all the procedural performance to which it was due under the Statute.

3.82 The water extraction permit related to an integral element of the overall Botnia project that was expressly included within the scope of work from the outset. It was understood at the very earliest stages that the Botnia plant would "prélever et utiliser les eaux du fleuve Uruguay."[418] Thus, for example, the Botnia EIA indicated how much water the company expected to extract from the river when it began operating, and the 14 February 2005 AAP likewise contains terms relating to the issue of water extraction. The consequence, of course, is that both CARU and Argentina had notice of the water extraction issues from the moment they became aware of the plants themselves. Moreover (and as further evidence of the previous point), water extraction issues were specifically encompassed by and addressed during the GTAN consultation process. Argentina was therefore fully informed about the water extraction issues, and had an opportunity to voice its concerns and have them considered in good faith by Uruguay. The Statute requires no more.

---

[417] Inter American Development Bank, Uruguay M'Bopicua Port Environmental and Social Impact Report (ESIR) (September 2002), *available at* http://www.iadb.org/pri/projDocs/UR0142_R_E.pdf (last visited on 7 July 2007).

[418] *See* AM, para. 4.61. ("extract and use the waters of the River Uruguay.")

3.83 Beyond this, Uruguay notes that the predicate of Argentina's argument -- that an entirely separate notice to CARU was due for the water extraction permit -- finds no support in the text of the 1975 Statute. To accept Argentina's point would mean that the Statute requires notice not just for "works" within the scope of Article 7, but also for each and every incremental step taken in furtherance of those works. In a case like this, for example, Argentina's logic would suggest that one notice was due at the time of the AAP, another notice was due at the time of approval to begin ground clearing is was given, still another notice was due when the permit to lay the foundation was granted, *etc*. Argentina neither has identified nor could identify anything in the Statute supporting that result. Indeed, the absurdity (not to say administrative impossibility) of the approach speaks for itself.

3.84 In any event, even though it was not under an obligation to do so, Uruguay did, in an abundance of caution, formally notify Argentina and CARU about the issuance of the water extraction permit to Botnia in timely fashion. As indicated, the permit was issued on 12 September 2006. Uruguay formally notified CARU on 17 October 2006[419]. This was at least twelve months before the plant was scheduled to commence operations and begin extracting water, that is, in plenty of time to consult with Argentina and CARU and take account of any well-founded objections.

* * *

3.85 For all of these reasons, there is no genuine argument either in fact or law that Uruguay violated the 1975 Statute by failing to await CARU's authorization of the ENCE and Botnia plants (or the Botnia port or water extraction permit). As a

[419] Subcommittee on the Environment and Sustainable Water Use Report No. 16, p. 2468 (17 to 20 October 2006), *approved in* CARU Minutes No. 07/06 (20 October 2006). UCM, Vol. IV, Annex 123.

matter of law, it is clear that CARU does not have the authority to approve or reject projects. The Parties, and only the Parties, are the ones that have that power. CARU's authority, in contrast, is centred on technical, administrative, and regulatory matters. Uruguay thus never had a legal obligation to await CARU's authorization of either the ENCE or Botnia projects. Moreover, Uruguay and Argentina specifically agreed to address the issue of the plants in direct, Party-to-Party talks, first in 2003/04 when the Parties' Foreign Ministers agreed that the plants would be built, and then again in May 2005 when the Presidents of both countries agreed to establish the GTAN for the purpose of carrying out direct consultations on the two plants. If CARU was "by-passed" in this process, it was only with the specific agreement of both Parties. As a result, no legitimate claim that Uruguay violated the Statute in this respect can be made.

Section III.
Uruguay Gave Argentina Sufficient Information to Assess the Probable Impact of the Plants on Navigation, the Regime of the River and the Quality of Its Water

3.86 A third element in Argentina's procedural case is its argument that Uruguay failed to provide it with adequate information concerning the ENCE and Botnia plants. At paragraph 2.23 of its Memorial, for example, Argentina claims that the information Uruguay gave it in 2003 concerning the ENCE plant "est… loin de constituer l'information requise conformément au Statut de 1975."[420] And at paragraph 4.72, Argentina contends that the information Uruguay gave it about Botnia in the GTAN process "s'est avérée manifestement incomplète."[421]

---

[420] AM, para. 2.23. ("failed to meet the standard of information required under the 1975 Statute.")

[421] AM, para. 4.72. ("proved to be grossly incomplete.")

3.87 In evaluating these claims, it is necessary to bear in mind what the Statute does -- and does not -- require. The third paragraph of Article 7 requires the initiating State to provide the notified State with information describing "the main aspects of the work and, where appropriate, how it is to be carried out" and to "include any other technical data that will enable the notified party to assess the probable impact of such works on navigation, the regime of the river or the quality of its waters."[422] As Uruguay showed in Chapter 2, this information-sharing requirement is best understood in light of its purpose -- "to assess the probable impact of such works on navigation, the regime of the river, or the quality of its waters."[423] Argentina's Memorial admits the point when it states the purpose of the information-sharing and consultation provisions of the 1975 Statute: "il s'agit de permettre à l'autre partie intéressée 'd'évaluer l'effet probable que l'ouvrage aura sur la navigation, sur le régime du fleuve ou sur la qualité de ses eaux."[424] As a result, the Parties would appear to be in agreement that so long as the notifying Party provides enough information to meet this purpose, it has discharged its duties under the 1975 Statute. It bears repeating that general international law suggests that "the notifying State is generally not required to conduct additional research at the request of a potentially affected State, but must only provide such relevant data and

---

[422] Statute of the River Uruguay (hereinafter "1975 Statute"), Art. 7 (26 February 1975). UCM, Vol. II, Annex 4.

[423] *See* Chap. 2, para. 2.92.

[424] AM, para. 4.76.

information as has been developed in relation to the planned measures and is readily accessible."[425] As demonstrated below, Uruguay met these duties and more.

3.88 It is important to observe in the first instance that Argentina does not accuse Uruguay of withholding any information in its possession. To the contrary, Argentina admits that it received a mass of documents concerning both the ENCE and Botnia plants. It admits, for example, that:

- On 23 October 2003, Uruguay gave it the 9 October 2003 MVOTMA resolution granting ENCE's AAP, DINAMA's 2 October 2003 technical report on ENCE's environmental impact assessment, and ENCE's 22 July 2002 EIA[426];

- On 7 November 2003, Uruguay gave it the entire 1,683-page MVOTMA file on ENCE[427];

- On 3 August 2005, at the start of the GTAN process, Uruguay gave it documents detailing Uruguayan environmental legislation, as well as the AAPs for both Botnia and ENCE[428];

- Throughout the GTAN process, "les parties ont échangé de la documentation et soulevé diverses questions relatives à l'impact transfrontalier des usines"[429]; and

- In the course of the GTAN meetings, Uruguay gave it no less than 36 documents, including DINAMA's entire 4,000-plus-page file on Botnia.[430]

[425] Draft Articles on the Law of Non-Navigational Uses of International Watercourses and Commentaries Thereto (hereinafter "1994 Draft Articles"), p. 112, comment 5 (1994); *see also* Chap. 2, para. 2.93.

[426] AM, para. 2.23.

[427] AM, para. 2.25.

[428] AM, para. 2.65.

[429] AM, para. 2.66.

[430] First Report of the Uruguayan Delegation to the GTAN, Annex B (31 January 2006). UCM, Vol. V, Annex 154.

3.89 As this list itself suggests, and as more fully described below, the information Uruguay supplied was more than enough to enable Argentina to evaluate the probable impacts of the plants on navigation, the regime of the river, and the quality of its waters. Uruguay will address the sufficiency of information provided about ENCE first, and then describe the information exchanged relating to Botnia.

A. URUGUAY GAVE ARGENTINA SUFFICIENT INFORMATION ABOUT ENCE

3.90 As noted above, Argentina admits that on 23 October 2003 Uruguay gave it ENCE's EIA, DINAMA's technical report on the EIA, and MVOTMA's Resolution granting the AAP[431]. It also admits Uruguay gave it DINAMA's entire 1683-page file on ENCE just a week and a half later on 7 November 2003[432]. Although Argentina is forced to concede these facts, it tries to suggest that the information it received was nonetheless insufficient by complaining that Uruguay did not forward any additional information after 7 November 2003[433]. Argentina's self-serving complaint conveniently overlooks two key points, however. *First*, it never actually asked Uruguay for more information after 7 November 2003. And *second*, it does not identify any additional documents that Uruguay possessed but failed to turn over.

3.91 An examination of the materials Uruguay provided shows that it was much more than adequate to allow Argentina to assess the probable impact of the ENCE plant. As discussed in more detail below, the documents Uruguay gave Argentina

---

[431] AM, para. 2.23.

[432] AM, para. 2.25.

[433] AM, para. 2.25.

describe the receptor environment and the main aspects of the project, including the technology to be employed, and they specify maximum emission limits for liquids, solids, gases, and particulate matter.

3.92 The ENCE EIA is dated 22 July 2002 and is 260 pages long. It describes the project and the surrounding environment, and it contains details about potential environmental impacts, as required by Uruguayan law[434]. With respect to the receptor environment, it makes reference to location, flora, fauna, hydrology, geomorphology, meteorology, and the human environment[435]. It describes the kind of technology to be employed, and the amounts of pulp to be produced yearly, eucalyptus to be utilized and water to be extracted[436]. With regard to the production process, it discusses wood reception, washing and delignification, bleaching, drying, and packing[437]. Concerning the recovery process, it describes concentration, the recovery boiler, and causticizing. Regarding the auxiliary process, it discusses water treatment, sludge treatment, collecting and processing concentrated and dilute gases, chlorine dioxide production, the deposit of solid waste, and energy generation[438].

3.93 The 2 October 2003 DINAMA technical report is a 29-page document that analyzes the environmental impact of the ENCE pulp mill and recommends that MVOTMA grant the AAP. In it, DINAMA presents its findings on the EIA and proposed mitigation measures, including impacts on the physical environment, sound pollution, particulate matter emissions, biota, archaeological heritage and

---

[434] Decree 435/994, *op. cit.,* Art. 4. UCM, Vol. II, Annex 9.

[435] ENCE Environmental Impact Assessment, Table of Contents (July 2002). UCM, Vol. VI, Annex 156.

[436] *Ibid.*

[437] *Ibid.*

[438] *Ibid.*

landscape, during implementation and the operational and withdrawal phases[439]. It recommends maximum emissions standards, including for sulphur dioxide, nitrogen oxides, reduced sulphur compounds, chlorine dioxide, and many others. In addition, it makes repeated reference to BAT and USEPA standards.

3.94 The 9 October 2003 MVOTMA resolution grants the AAP, and in addition to listing a number of conditions ENCE must satisfy, it sets maximum liquid, gas, and solid emissions limits. For example, it states that

> [t]here must be compliance with effluent standards set forth in decree 253/79 and amendments (including: oils and fats, phenols, sulphurs, mercury, lead, cadmium and chromium), as well as ensuring maintenance of the parameters for water quality corresponding to Category 1 of the same decree.[440]

Decree 253/79, to which the AAP refers, sets water quality standards and liquid effluent limits[441]. In addition, it specifies "maximum air emissions limits"[442], and indicates what technologies should be used to reduce particulate matter, such as scrubbers[443]. The AAP establishes that the company "[m]ust comply with the relevant DINAMA standards on Management of Industrial Solid Residuals."[444] It also specifies that "[t]he non compliance with any of the conditions set forth in the

[439] DINAMA Environmental Impact Assessment Report for the ENCE Plant (hereinafter "DINAMA EIA Report, ENCE") (2 October 2003). UCM, Vol. II, Annex 12.

[440] MVOTMA Initial Environmental Authorization of the ENCE Plant (hereinafter "ENCE AAP"), para. q (9 October 2003). UCM, Vol. II, Annex 13.

[441] Decree 253/79, Regulation of Water Quality (9 May 1979, as amended). UCM, Vol. II, Annex 6.

[442] ENCE AAP, *op. cit.,* para. r. UCM, Vol. II, Annex 13.

[443] *Ibid.*, para. t.

[444] *Ibid.,* para. u.

previous paragraph, will cause the automatic revocation of this resolution, making possible, the imposition of … sanctions …"[445].

3.95 With these documents, as well as the remaining documents in the ENCE file, Argentina was informed about the maximum emissions standards and the fact that the AAP would be revoked automatically if ENCE failed to comply with these requirements. Consequently, Argentina knew with certainty the amount of pollutants that might enter the environment at both the construction and operation phases. Combined with the information on the receptor environment and the technology to be employed, Argentina had more than enough data to evaluate the probable impacts on water quality, the regime of the river, and navigation.

3.96 In fact, Argentina's actions after receiving the ENCE material prove that it was sufficient to meet this purpose and thus satisfy the requirements of the Statute. As discussed in Section II above, Argentina gave the ENCE materials to its technical advisors to CARU and asked them to review the file and evaluate the project. They did so without a hint anywhere in the record that their analysis was hampered by inadequate information. Thus, in February 2004 they issued their report, which the Argentine Foreign Ministry itself acknowledged "established that there would be no significant environmental impact on the Argentine side."[446] Plainly, the advisors could not have "established" anything about the plants, let alone that "there would be no significant environmental impact on the Argentine side" if they had not been furnished with adequate information.

---

[445] *Ibid.,* para. 3.

[446] Statement by Argentine Ministry of Foreign Affairs to the Chamber of Deputies, *op. cit.,* p. 136. UCM, Vol. III, Annex 46.

3.97 The fact that Argentina was given sufficient information to assess the impacts of the ENCE plant is confirmed by numerous other Argentine sources as well. In the final version of the draft memorializing the Foreign Ministers' 2 March 2004 agreement on the ENCE plant exchanged between Ambassadors Sguiglia and Sader, for example, Argentina expressly acknowledged that, in light of the CARU advisors' report, the project was "environmentally viable."[447] This same conclusion was also reaffirmed by Argentina's delegates to CARU during the 15 May 2004 plenary session. According to Argentine Delegate Dr. Darío Garín:

> It must be pointed out, with complete and absolute emphasis that none of the different technical reports evidence that the activity in question causes an irreversible and unavoidable damage to the environment, at least of a sufficient level that would warrant the suspension of the plant or opposition to its construction, at least with any scientific basis…[448]

Still another example is the 2004 year-end report to the Argentine Senate prepared by the Chief of Staff to the Cabinet of Ministers in which the Argentine Ministry of Health and Environment stated that "[t]aking into account the technology of which we have been informed, it is not believed that there will be any effects on our territory, given the distances, the river's diluting capacity and the technologies involved."[449] Of course, none of these assessments would have been possible if Argentina had not received information sufficient to support them.

3.98 Based on a review of the documents themselves as well as Argentina's contemporaneous actions and admissions, it is clear that Argentina had more than

---

[447] *See supra*, para. 3.56.

[448] CARU Minutes No. 01/04, *op. cit.,* p. 18. UCM, Vol. IV, Annex 99.

[449] Statement by Argentine Ministry of Foreign Affairs to the Argentine Senate, *op. cit.,* p. 531. UCM, Vol. III, Annex 47.

adequate information on which to assess the probable impact of the ENCE plant on navigation, the regime of the river and water quality. Article 7 of the 1975 Statute requires no more. Argentina's claim in this respect is therefore unsupportable.

B. Uruguay Gave Argentina Sufficient Information About Botnia

3.99 Notwithstanding the fact that Argentina had already pronounced the ENCE plant "environmentally viable" in February 2004, it received still more information from Uruguay about ENCE during the GTAN process in the second half of 2005. Uruguay also provided Argentina with a vast amount of information about the Botnia plant during that consultation process. Indeed, Uruguay gave Argentina far more information about Botnia in 2005 than it had about ENCE in 2004. Given that Argentina -- at least by its actions -- has admitted that the information concerning ENCE was sufficient, the only possible conclusion is that the information on Botnia in 2005 was more than sufficient.

3.100 A close examination of the documents Uruguay gave Argentina during the GTAN process proves the point. Uruguay produced to Argentina the following 36 new documents[450] during the GTAN process:

- On 3 August 2005 (at the first meeting of GTAN): Uruguay's Regulation on Environmental Impact Assessments, approved by Decree 435/994[451]. This describes the requirements for EIAs and requests for AAPs under Uruguayan law.

- On 3 August 2005: DINAMA's 11 February 2005 technical report on Botnia[452]. This 35-page document describes the proposed project for the "construction, start-up and operations of a pulp mill and a port

[450] Uruguay also reproduced the ENCE EIA, the DINAMA technical report and the MVOTMA AAP that had previously been given Argentina in October and November 2003.

[451] Decree 435/994, *op. cit.* UCM, Vol. II, Annex 9.

[452] DINAMA Environmental Impact Assessment Report for the Botnia Plant (hereinafter "DINAMA EIA Report, Botnia") (11 February 2005). UCM, Vol. II, Annex 20.

terminal, in a private free-trade zone situated on the outskirts of the city of Fray Bentos, on the Uruguay River."[453] It describes the proposed pulp mill and port, the receptor environment, the environmental impacts identified in the EIA, the proposed mitigation, compensation and monitoring measures in the EIA, DINAMA's comments on the EIA, the public hearing held on the EIA, and DINAMA's conclusions and recommendations. In its comments on the EIA, DINAMA considers liquid emissions, air emissions, noise, soil emissions, physical presence of the project, impacts on biota, archaeological heritage, social context and public perception, landscape and recreation, risks and accidents, among other things.

- On 3 August 2005: MVOTMA's 14 February 2005 Resolution granting Botnia's AAP[454]. This document sets out a number of conditions with which Botnia must comply: "The authorization . . . is granted subject to strict compliance with the commitments that arise from the company's presentation."[455] The AAP establishes maximum air and liquid emissions standards: "The effluents to be discharged into the Uruguay River shall comply with the standards for direct discharges into a water body (Article 11.2 of Decree 253/79 and its amendments)."[456] It provides maximum concentrations for AOX, nitrogen, and nitrates, and it sets out the water quality standards that apply: **"**The water quality standards applicable to the facility shall be the lowest of those provided in Decree 253/79 and its amendments (including the values determined by OSE –State Waterworks Agency- under Section 8 therein) and in the Digest issued by the Administrative Commission of the Uruguay River (Comisión Administradora del Rio Uruguay)."[457] It also states that the project must comply with "the best available technologies as established in the document: "European Commission Integrated Pollution Prevention and Control (IPCC) Reference Document on Best Available Technologies in the Pulp and Paper Industry, issued in December 2001."[458] The AAP specifies that "non-compliance with any of the conditions set forth in the previous numbered paragraph will cause … the automatic revocation of this resolution …"[459].

---

[453] *Ibid.*, p. 3.

[454] BOTNIA AAP, *op. cit.* UCM, Vol. II, Annex 21.

[455] *Ibid.,* para. 2.

[456] *Ibid.,* para. y.

[457] *Ibid.,* para. aa.

[458] *Ibid.*

[459] *Ibid*., para. 3.

- On 19 August 2005 (at the second meeting of GTAN): A CD containing Botnia's EIA.[460] The EIA contains a detailed description of the project, the receptor environment and possible impacts to it. It also describes measures to improve environmental efficiency and prevent risks, as well as providing information on monitoring, management and company policy. The description of the project contains information concerning the selection of the technology to be utilized, the Kraft process, the production process, the wood to be utilized, the preparation of the wood, the preparation of chemical bleaches, the use of chemical substances, the drying and transportation of the wood, evaporation and boilers, energy usage, causification and the lime kiln, and water use. The principal impact factors described include liquid effluents, atmospheric emissions, management of solid waste, noise and physical presence. With respect to the liquid effluents, the EIA describes the types of effluents, their treatment, characteristics of the treatment, management of rainwater, sanitary effluents, manipulation of sludge, prevention of spills, the final effluents, and reduction in liquid effluents in different parts of the production process. In its review of the receptor environment, it examines possible impacts to the Uruguay River, the physical characteristics of the river, water quality, water uses, municipal and industrial effluents, industry and irrigation, navigation and fishing, physical impacts, biological impacts, and impacts on minor waterways.

- On 31 August 2005 (at the third GTAN meeting): A response to a request for information from Argentina submitted at the first GTAN meeting on 3 August 2005[461]. In this document, Uruguay observes that much of the information Argentina requested "is found in abundant and validated form the documents delivered."[462] With respect to three of Argentina's requests seeking "broader contextual information", Uruguay notes that "the request for additional information has already been forwarded to both companies. It is believed that this is an opportune time to improve upon this information, to supplement the existing information, and the response is pending"[463]; thus showing its willingness to obtain information not in its possession.

---

[460] GTAN/DU/6/19-08-05, CD containing the EIA of Botnia Company, *cited in* First Report of the Uruguayan Delegation to the GTAN, *op. cit.* Annex B. UCM, Vol. V, Annex 154.

[461] GTAN/DU/7/31-08-05, Response to Request for Information on Both Pulp Mills from Argentina, submitted to GTAN on 3 August 2005 (31 August 2005). UCM, Vol. V, Annex 128.

[462] *Ibid.*

[463] *Ibid.*

- On 31 August 2005: Reflections on an Argentine document entitled "Technical Considerations regarding CMB," responding to specific Argentine comments regarding the ENCE plant[464]. Concerning Argentina's questions about the effluent tube, for example, Uruguay noted that "the company … has been requested to provide additional information regarding construction details for the discharge tubes. It should be emphasized that Plan 001GO100 (page 1166 of the … EIA) shows the location of the discharge tubes and the coordinates are given, and Plan No. 1 (point 5.34 of the EIA …) shows the bathymetry."[465]

- On 14 September 2005 (at the fourth meeting of GTAN): Supplementary information responding to a request for information about ENCE Argentina made at the first GTAN meeting on 3 August 2005[466] . This document contains charts and statistics on yield, kappa numbers, brightness, and inflows and outflows for digestion, washing, and bleaching, pulp drying, evaporators, and the effluent treatment plant. In addition, it contains the list of chemicals to be consumed in the ENCE plant.

- On 14 September 2005: Supplementary response to a request for information concerning the ENCE plant made by Argentina on 19 August 2005[467]. This document contains a chart of contaminants at the exit of the diffusers, as well as other technical diagrams.

- On 14 September 2005: Supplementary response to request for information concerning Botnia made by Argentina at the first GTAN meeting on 3 August 2005[468]. This document contains information that Uruguay solicited from Botnia at Argentina's request, including technical information on mass balance, consumption and mass balance of chemical products of bleaching, and evolution of the pulp.

---

[464] GTAN/DU/8/31-05-05, Reflections on Document GTAN/DA4/19-05-05 (31 August 2005). UCM, Vol. V, Annex 129.

[465] *Ibid.*

[466] GTAN/DU/9/14-09-05, Supplementary Information Responding to a Request for Information on the Pulp Mils, submitted in the Meeting of the High-Level Technical Group on 3 August 2005, corresponding to points 2.1, 2.2 and 2.3 regarding ENCE (14 September 2005). UCM, Vol. V, Annex 130.

[467] GTAN/DU/10/14-09-05, Supplementary Response to Document DA/4/19-08-05, corresponding to points 9 and 26 (14 September 2005). UCM, Vol. V, Annex 131.

[468] GTAN/DU/11/14-09-05, Supplementary Information Responding to a Request for Information on the Pulp Mils, submitted en the Meeting of the High-Level Technical Group on 3 August 2005, corresponding to points 2.1, 2.2 and 2.3, regarding Botnia (14 September 2005). UCM, Vol. V, Annex 132.

- On 14 September 2005: A CD containing Botnia's effluent dispersion model[469].

- On 14 September 2005: A report entitled "Climate Change, Climate Variability, Climate Trends, Variability between Decades" by Professor José Luis Genta of the Institute of Mechanics and Fluids and Environmental Engineering, School of Engineering, Universidad de la República[470]. This document discusses trends in precipitation and climate change.

- On 14 September 2005: An extract of the report "Analysis of Climate Statistics and Development and Evaluation of Climactic and Hydrological Scenarios in the Principle Hydrographic Watersheds of Uruguay and Its Coastal Zone (Río Uruguay, Río Negro, Laguna Merín, Río de la Plata and Atlantic Ocean)" prepared by the Climate Change Unit at MVOTMA[471]. This document analyzes climate statistics and rainfall trends. It notes: "In the last two decades, an increase in rains has been observed …"[472]. It includes tables predicting changes in precipitation through 2050.

- On 14 September 2005: Uruguay's comments on a document Argentina submitted to the GTAN on 31 August 2005 regarding Uruguay's environmental laws, Botnia's EIA and the Botnia AAP[473]. Uruguay's response includes an agreement to add monitoring stations on the Argentine side of the river and to improve the landscape if Argentina so requests: "We do not believe that there are any disadvantages in having the Monitoring Plan include sampling points from the Argentine side, especially if there is consent (and a request)

---

[469] GTAN/DU/12/14-09-05, CD containing effluent dispersion model of the Botnia company, *cited in* First Report of the Uruguayan Delegation to the GTAN, *op. cit.,* Annex B. UCM, Vol. V, Annex 154.

[470] GTAN/DU/13/14-09-05, Climate Change, Climate Variability, Climate Trends, Variability between Decades, prepared by Professor José Luis Genta of the Institute of Mechanics and Fluids and Environmental Engineering, School of Engineering, Universidad de la República, (14 September 2005). UCM, Vol. V, Annex 133.

[471] GTAN/DU/14/14-09-05, Extract of Analysis of Climate Statistics and Development and Evaluation of Climate and Hydrological Scenarios in the Main Hydrographic Basins of Uruguay and the Coastline Thereof (Uruguay River, Negro River, Merin Lagoon, River Plate, the Atlantic Ocean) prepared by the Climate Change Unit, DINAMA (14 September 2005). UCM, Vol. V, Annex 134.

[472] *Ibid.*, p. 3.

[473] GTAN/DU/15/14-09-05, Comments on Document GTAN/DA/5/31-08-05, prepared by DINAMA (undated). UCM, Vol. V, Annex 135.

from that State that this be done. Something similar can be said about the environmental conditioning."[474]

- On 30 September 2005 (at the fifth meeting of GTAN): A CD containing DINAMA's entire file on Botnia[475]. The CD contains over 4,000 pages of documentation, including information about DINAMA's classification of the project, environmental impact studies, information requested of Botnia by Uruguay, Botnia's responses to such requests, DINAMA's reports, information about the request for the AAP, and all other documentation exchanged between Botnia and Uruguay. The CD contains all the information in Uruguay's possession concerning Botnia as of that date.

- On 30 September 2005: A powerpoint presentation on the production process of the pulp mills by DINAMA Engineer Cyro Croce[476]. This powerpoint covers the Kraft process, preparation of the wood, digestion, washing and delignification, purification and drying. In addition, it provides information on the recovery cycle, services and auxiliary processes, Best Available Technologies ("BAT") and BREF liquid, gas and solid emissions.

- On 30 September 2005: A powerpoint presentation on the technology of cellulose production in by Chemical Engineer Alberto Hernández of the Institute of Chemical Engineering of the Universidad de la República[477].

- On 4 November 2005: An additional report prepared by Botnia concerning plume and sedimentation studies[478]. This technical document addresses questions raised by Argentina on the plume and sedimentation studies during the 20 October 2005 meeting of GTAN.

- On 4 November 2005: Technical considerations relative to documents concerning Botnia provided by Argentina on 31 August

[474] *Ibid.*

[475] GTAN/DU/16/30-09-05, CD containing DINAMA's entire file on Botnia, *cited in* First Report of the Uruguayan Delegation to the GTAN, *op. cit.,* Annex B. UCM, Vol. V, Annex 154.

[476] GTAN/DU/17/30-09-05, Pulp Mills Production Process, prepared by Chemical Engineer Cyro Croce, DINAMA (30 September 2005). UCM, Vol. V, Annex 136.

[477] GTAN/DU/18/30-09-05, Influence of Paper Pulp Technology on Case Study Generation, prepared by Chemical Engineer Alberto Hernández, MSc. Institute of Chemical Engineering, Universidad de la República (30 September 2005). UCM, Vol. V, Annex 137.

[478] GTAN/DU/19/04-11-05, Botnia EIA additional report in connection with Document GTAN/DA/14/20-10-05 (4 November 2005). UCM, Vol. V, Annex 138.

2005 and 14 September 2005[479]. This document provides specific responses to Argentina's questions. It discusses chlorate emissions and toxicity levels for algae, pointing out that "[i]n the worst case scenario considered and at the most compromised point … the discharge under the fully operational system implies an input of 6.8 µg/L."[480] It also makes explicit reference to CARU standards: "In reference to the preservation of the current conditions of the river at the point of discharge, the considerations established by CARU for the mixing zone were taken into account (see CARU – "Digest regarding the uses of the Uruguay River" Topic E3, Title 1: General Dispositions, Article 1, Subsection k. Also Topic E3, Title 2, Chapter 4, Article 4 and Topic E3, Title 2, Chapter 5, Section 1, Articles 4 and 5)."[481] In addition: "The criterion for the selection of the discharge point for the plant's effluents is that the residual environmental impacts are not significant. To this effect, the point finally adopted does not coincide with the one originally proposed by the project sponsor ..."[482].

- On 7 November 2005 (at the sixth meeting of GTAN): Technical considerations relative to documents concerning ENCE provided by Argentina on 31 August 2005[483]. The document responds to specific points raised by Argentina concerning AOX emissions, dispersion equations and modelling, the value of DBO5, and atmospheric emissions.

- On 7 November 2005: An analysis of gaseous emissions from the Botnia and ENCE plants by Chemical Engineer Cyro Croce, and Hydr. & Environm. Ambassador Engineer Eugenio Lorenzo[484]. This document provides data concerning the load and concentration of gaseous emissions, internal mitigation systems, characteristics of the chimneys, descriptions of the receptor medium with respect to

---

[479] GTAN/DU/20/04-11-05, Technical Considerations with Regard to Documents GTAN/DA/7/31-08-05 and GTAN/DA/9/14-09-05 on Botnia (4 November 2005). UCM, Vol. V, Annex 139.

[480] *Ibid.*, p. 1.

[481] *Ibid.*, p. 1-2.

[482] *Ibid.*, p. 2.

[483] GTAN/DU/21/07-11-05, Technical Considerations with Regard to Documents GTAN/DA/4/19-08-05 and GTAN/DA/8/31-08-05 on ENCE (7 November 2005). UCM, Vol. V, Annex 140.

[484] GTAN/DU/22/07-11-05, Analysis of the Gas Emissions Derived from the BOTNIA and M'BOPICUÁ Pulp Mills, prepared by Chemical Engineer Cyro Croce, Hydr. & Environm. Engineer Eugenio Lorenzo, DINAMA (7 November 2005). UCM, Vol. V, Annex 141.

climate and air quality, and dispersion studies and modelling. It also details maximum emissions standards.

- On 7 November 2005: An analysis of solid wastes from the Botnia and ENCE plants by Chemical Engineer Cyro Croce, and Ambassador Engineer Eugenio Lorenzo[485]. This document describes solid wastes, their origin, destination, classification, amount, strategic profile, treatment, characterization of ground water, and the pertinent conditions set forth in the AAPs for both ENCE and Botnia.

- On 7 November 2005: An analysis of liquid emissions from the Botnia and CMB plants prepared by Chemical Engineer Cyro Croce, and Ambassador Engineer Eugenio Lorenzo[486]. This document provides charts and statistics about liquid emissions, including a comparison of the loads for Botnia and ENCE with BAT - REF standards, as well a comparison of concentrations for Botnia and ENCE with Decree Law 253/79, the Uruguayan law on water quality. In addition, the analysis discusses mitigation measures, including internal systems, effluent treatment, and the characteristics of the discharge tubes. Further, it discusses the receptor medium, including hydrological classifications, flow rates, physical-chemical classifications, and hydrodynamic classifications and current measurements, hydrodynamic behaviour, and mathematical modelling. The presentation also addresses dispersion studies, providing information concerning mathematical equations, methodologies, control points, simulations modelled, and results. It provides specific results for studies examining Botnia alone, and Botnia and ENCE collectively. In addition, it includes a "worst case scenario," explicitly examining the impact on the Argentine coast at Isla Sauzal and at Gualeguaychú, based on increments in concentration of a number of substances, with comparisons to CARU Use 1 standards[487]. It concludes with a recitation of the conditions of the authorizations for both ENCE and Botnia[488].

- On 21 November 2005: An additional report on the Botnia EIA in response to Argentina's request for additional information on 20

---

[485] GTAN/DU/23/07-11-05, Analysis of the Solid Waste Derived from the BOTNIA and M'BOPICUÁ Pulp Mills, prepared by Chemical Engineer Cyro Croce, Hydr. & Environm. Engineer Eugenio Lorenzo, DINAMA (7 November 2005). UCM, Vol. V, Annex 142.

[486] GTAN/DU/24/07-11-05, Analysis of the Fluid Emissions Derived from the BOTNIA and M'BOPICUÁ Pulp Mills, prepared by Chemical Engineer Cyro Croce, Hydr. & Environm. Engineer Eugenio Lorenzo, DINAMA (7 November 2005). UCM, Vol. V, Annex 143.

[487] *Ibid.*, p. 15

[488] *Ibid.*, p. 16.

October 2005[489]. This document responds to Argentina's request that Uruguay do a study of the impact on plume and sediments of a south-eastern windstorm in the Río de la Plata that stops the currents in the Uruguay River. It states, "[i]f indeed no explicit simulation of a very intensive *Sudestada* (rain-filled southeast rotating wind) was carried out, in the simulations already done for dry periods (between January 1999 and January 2000), situations were produced that could be interpreted as *Sudestadas* of moderate intensity.[490]" Uruguay then provides graphs of the winds registered in Montevideo in January 1999 and January 2000.

- On 21 November 2005: A response to a request for information included in the 9 November 2005 Note 2015/05 from the Argentine Foreign Ministry[491]. This ten-page, single-spaced document responds to each question asked in Argentina's letter, noting that: "It should be pointed out that most of the information requested has already been provided to..."[492]. Uruguay points to the specific documents in which it responded to each of Argentina's questions. For example, "The questions contained in Annex II of the summary minutes of the first meeting of the High Level Group [GTAN], presented on 3 August 2005, were answered in the following documents: Points 2.1, 2.2 and 2.3 were answered in documents GTAN/DU/9/14-09-05 … and GTAN/DU/11/14-09-05 … with the exception of the comment regarding the omission of an "integrated" flow chart for [ENCE], which is found on page 1015 of the corresponding file, validated at the third meeting held on 31 August 2005. It is understood that the remaining points were answered in document GTAN/DU/7/31-08-05 and expanded upon in the information subsequently submitted. If the Argentine delegation requires more information about the issues raised in these points, we request that it be more specific in its request."[493] Similarly, "As regards questions 2 and 4 of Note No. 2015/05 of the Ministry of Foreign Affairs … referring to documents GTAN/DA/4/19-08-05 and GTAN/DA/8/30-08-05 regarding the [ENCE] project, we reiterate the responses in GTAN/DU/8/31-08-05, GTAN/DU/10/14-09-05 and GTAN/DU/21/07-11-05. These questions, the answers to which are still pending, were duly

---

[489] GTAN/DU/25/21-11-05, Botnia EIA 2nd Additional Report in Connection with Document GTAN/DA/14/20-10-05 (21 November 2005). UCM, Vol. V, Annex 144.

[490] *Ibid.*

[491] GTAN/DU/26/21-11-05, Reply to Request for Information Submitted by the Argentine Delegation at the High-Level Technical Group sent in Note No. 2015/05 from the Ministry of Foreign Affairs, International Trade and Culture (21 November 2005). UCM, Vol. V, Annex 145.

[492] *Ibid.*, p. 1.

[493] *Ibid.*, p. 2.

forwarded to the project sponsor, and a corresponding response has not yet been received. Likewise, we reiterate that this information will be submitted as soon as it is available."[494] With respect to supplementary information Argentina requested regarding the Botnia production process, Uruguay responded that **"**by virtue of the fact that the information available to the Argentine delegation is the same that is available to the Uruguayan delegation, the request for the required information necessarily had to be forwarded to the company. No corresponding response has been received to date. This information will be sent to the Argentine delegation as soon as it is available."[495]

- On 25 November 2005: A presentation prepared by DINAMA concerning the monitoring of emissions and environmental quality for ENCE and Botnia[496]. The document begins by citing the provisions of the AAPs of both Botnia and ENCE requiring the submission and approval of environmental monitoring plans. It then reviews relevant Uruguayan laws and CARU standards for effluent monitoring, as well as the PROCEL program. The document also examines gas emissions, biota, invertebrate benthic communities, and fish monitoring requirements, by pointing to relevant provisions in the AAPs and Uruguayan law. The presentation also refers to the requirement in the AAPs that both Botnia and ENCE participate in follow-up commissions. For example, Botnia must "participate in a Follow-Up Committee for the project and make the relevant information available for the purpose of following up on the project's environmental performance …"[497]. The presentation concludes with references to provisions in both AAPs allowing for their revocation if the companies fail to comply with the conditions stated. For example, for Botnia: "The non-compliance with the provisions set forth" will result in "the revocation of this authorization …"[498].

- On 25 November 2005: A presentation on the procedure for environmental impact assessments[499]. This document describes the process for evaluating environmental impacts and for granting environmental authorizations in Uruguay.

---

[494] *Ibid.*, p. 2.

[495] *Ibid.*, p. 10.

[496] GTAN/DU/27/25-11-05, Emissions and Environmental Quality Monitoring in Connection with the M'Bopicuá and Botnia Pulp Mills, prepared by DINAMA (25 November 2005). UCM, Vol. V, Annex 146.

[497] *Ibid.*, p. 25, *citing* Botnia AAP, para. x.

[498] *Ibid.*, p. 27, *citing* Botnia AAP, para. 3.

[499] GTAN/DU/28/25-11-05, Environmental Impact Assessment Procedure, prepared by DINAMA (25 November 2005). UCM, Vol. V, Annex 147.

- On 25 November 2005: A document entitled "Technical Proposal for Regulation on Integrated Management of solid industrial, agroindustrial and service wastes."[500] This 27-page technical document discusses norms concerning the handling and treatment of solid wastes under Uruguayan law.

- On 9 December 2005: A supplementary report on Botnia's production process responding to a request from Argentina on 21 October 2005[501]. This 37-page document provides still more technical data on the Botnia plant. It includes additional information on the use of chemical products, the principal stages of the process, emissions treatment, the principal equipment employed, the water treatment plant, and numerous flow diagrams.

- On 9 December 2005: An outline presentation on the evaluation of the anthropic medium prepared by MVOTMA[502]. This presentation looks at the impact of pulp mills on human communities, specifically examining populations, health, soil use, sites of cultural and historical interest, and security. It includes a citation to Botnia's AAP: "The implementation plan of mitigation and compensation measures, in addition to considering those measures already submitted in the Environmental Impact Assessment Summary, shall define those concrete measures for the impacts on the environment from noise, disturbing odour, and effects on tourism, fishing, and leisure activities in the area surrounding Fray Bentos."[503]

- On 16 December 2005: Results of atmospheric dispersion modelling for the area of Ñandubayzal, Argentina[504]. This document notes that "[a] review was undertaken of the assessment of air quality in the area of Ñandubayzal as a result of specific points being emphasized by the Argentine delegation during the sixth meeting of the group."[505]

---

[500] GTAN/DU/29/25-11-05, GESTA's Technical Proposal, 25 November 2005, *cited in* First Report of the Uruguayan Delegation to the GTAN, *op. cit.*, Annex B. UCM, Vol. V, Annex 154.

[501] GTAN/DU/30/09-12-05, Additional Report Providing Information on Botnia's Production Process, in Connection with Document GTAN/DA/15/21-10-2005 (9 December 2005). UCM, Vol. V, Annex 148.

[502] GTAN/DU/31/16-12-05, Social and Economic Impact, prepared by DINAMA (16 December 2005). UCM, Vol. V, Annex 149.

[503] *Ibid.*, p. 4.

[504] GTAN/DU/32/16-12-05, Clarification of Items Raised during the 6th GTAN Meeting, prepared by DINAMA (16 December 2005). UCM, Vol. V, Annex 150.

[505] *Ibid.*, p. 1.

The document provides mean annual and maximum hourly values, as well as extreme values and hourly concentration information.

- On 21 December 2005: Additional information on the ENCE project in response to requests from Argentina on 19 August 2005 and 14 September 2005[506]. This seven-page document contains technical information responding directly to questions raised by Argentina regarding flow, mixing zones, AOX concentrations, dilution calculations, degradation coefficients, data concerning calibration of an EIA model, and the longitude of the effluent tube and diffuser. It includes also a map of the ENCE port terminal and the effluent tube.

- On 18 January 2006: An analysis of the effect of discharges of the future Botnia and ENCE plants at various points of interest[507]. The document states that "In accordance with the agreement made with the technical experts from the Argentine Delegation during the videoconference of 4 January of the present year, the Uruguayan Delegation has carried out the recalculation of the increases in the concentration of BOD [Biochemical Oxygen Demand] in water (microg/L) due to the discharges of the future Botnia and [ENCE] plants, at various points of interest, in a scenario that does not consider the load factor".[508] The results are included.

- On 18 January 2006: Two technical proposals by GESTA (Technical Group on Environmental Standardization) regarding air quality standards and mobile source emissions, provided to Argentina[509].

* *

3.101 As is illustrated by this list and description of documents, Uruguay responded to each and every request for information Argentina made in GTAN, and responded with all the information at its disposal. When it did not have the

[506] GTAN/DU/33/21-12-05, Additional Report on the Celulosas de M'Bopicuá Project, in Connection with Documents GTAN/DA/4/19-08-05 and GTAN/DA/8/14-09-05 (21 December 2005). UCM, Vol. V, Annex 151.

[507] GTAN/DU/34/18-01-06, Effect of the Discharges of the Future Botnia and M'Bopicuá Pulp Mills on Various Items of Interest, in a Scenario where the Load Factor is not Considered, prepared by DINAMA (18 January 2006). UCM, Vol. V, Annex 152.

[508] *Ibid.*, p. 1.

[509] GTAN/DU/35/18-01-06, GESTA's Technical Proposal on Air with reference to Air Quality Standards, 18 January 2006, and GTAN/DU/35/18-01-06, GESTA's Technical Proposal on Air with reference to Mobile Source Emissions, 18 January 2006, *cited in* First Report of the Uruguayan Delegation to the GTAN, *op. cit.,* Annex B. UCM, Vol. V, Annex 154.

information (because it was not necessary for environmental evaluations previously undertaken by Uruguay), Uruguay either generated the information necessary to respond to the request, or sought the information from ENCE or Botnia, notwithstanding the fact that it had no obligation to do so under the 1975 Statute.

3.102 All this was much more than enough for Argentina to assess the probable effects of the Botnia plant (and the ENCE plant as well) on water quality, navigation, and the regime of the river. This conclusion is confirmed by the expert report of Dr. Pieter Booth of Bellevue, an expert in ecological risk assessment. Dr. Booth states:

> Based on a review of the EIA, and supplemental information submitted to DINAMA, we conclude that the information presented is sufficient for an independent assessment of potential ecological impacts in the Uruguay River from effluent discharges from the Botnia Orion plant… This determination is based on assessment of standard practice in environmental impact and ecological risk assessment.[510]

3.103 Argentina attempts to prop up its argument on the putative insufficiency of the information it received by citing to the 27 March 2006 Hatfield report to the International Finance Corporation which, it claims, "a reconnu que l'information relative aux usines CMB et Orion était insuffisante."[511] Argentina's reliance on the Hatfield report is, however, entirely misplaced. The IFC did not hire the Hatfield consultants to review the information Uruguay had given Argentina, whether before or during the GTAN process. Rather, the consultants were hired to review the

---

[510] Sufficiency of EIA and GTAN Information for Determination of Environmental Impacts-Botnia, S.A., Fray Bentos Uruguay, Mr. Pieter Booth (Exponent, Inc.) (June 2007). UCM, Vol. X, Annex 217. The report only addresses Botnia. ENCE is no longer building a pulp mill in the vicinity of Fray Bentos. At any rate, Argentina's conduct shows the information provided by Uruguay, concerning ENCE was sufficient.

[511] AM, para. 4.78. ("recognized that the information related to the CMB and Orion plants was insufficient.")

sufficiency of the IFC's own comprehensive impact study ("CIS"). Thus, the opinions Hatfield may have expressed about the adequacy of the CIS for purposes of satisfying the IFC's internal processes and requirements say nothing about the very different question of whether or not Uruguay had provided Argentina with sufficient information to satisfy the particular requirements of the 1975 Statute (that is, to assess the probable impacts on navigation, the river regime and water quality). The Director of DINAMA addressed exactly this point in her 1 June 2006 affidavit, submitted at the time of Argentina's provisional measures request. She stated:

> DINAMA believes that many of the questions and issues raised by the Hatfield report about IFC's draft Cumulative Impact Study were previously answered through DINAMA's EIA process, the AAPs and accompanying documents, or the information that was presented to GTAN. Many of the doubts and concerns raised in the Hatfield report arise from the lack of information contained in the CIS, and not from a deficiency of the total amount of information available.[512]

As a result, the statement from the Hatfield Report that Argentina cites is very much out of context, has no bearing on the issues presented in this case, and therefore does nothing to bolster the Memorial's argument that the information Uruguay gave Argentina was insufficient to satisfy Uruguay's obligations, under the 1975 Statute.

3.104 The facts recited above make two conclusions perfectly obvious. First, Uruguay gave Argentina an enormous volume of information on every aspect of the ENCE and Botnia plants; it was more than sufficient to satisfy the information sharing requirement contained in the 1975 Statute. Second, no amount of information would have appeased Argentina. In fact, by October 2005, if not earlier, Argentina was incapable of being satisfied, as the above recitation amply

[512] Torres Aff., *op. cit.,* p. 12, para. E. UCM, Vol. II, Annex 30.

demonstrates. Argentina appears instead to have been intent on overwhelming Uruguay with requests for more and more information, much of which had nothing to do with the topics actually within the scope of the 1975 Statute. Rather than coming to the table with an open mind and with a view to accommodating the legitimate interests of Uruguay, Argentina's behaviour reflects a determination to frustrate the success of the GTAN process.

3.105 Argentina's determination not to reach agreement with Uruguay in the GTAN process is evidenced most dramatically by its abrupt termination of the work of the water quality sub-group even as that group was finalizing the text of its report on the effects of plant emissions on water quality[513]. The sub-group was meeting during a previously scheduled session in Buenos Aires. As the sub-group was finalizing its report, however, Argentina's Ambassador García Moritán came into the room and announced perfunctorily that the session was over and the sub-group's work terminated[514]. The consequence, of course, was that the report was never finalized. It is interesting to note, however, that the last draft, containing points of agreement between the two delegations, is attached to the final report of the Uruguayan delegation to GTAN and shows just how much productive work the group was able to do based on the volumes of data exchanged[515]. Plainly, such a detailed and sophisticated analysis would have been impossible if, as Argentina claims, the group lacked the information necessary to do its work.

---

[513] *See* AM, Vol. IV, Annex 2, Ex. C; *see also* First Report of the Uruguayan Delegation to the GTAN, *op. cit.,* Annex C. UCM, Vol. V, Annex 154.

[514] Report concerning Meeting of Water Subgroup of GTAN (27 January 2006). UCM, Vol. V, Annex 153.

[515] *See* AM, Vol. IV, Annex 2, Ex. C; s*ee also* First Report of the Uruguayan Delegation to the GTAN, *op. cit.,* Annex C. UCM, Vol. V, Annex 154.

3.106 Before concluding on this point, it bears mention that Argentina's assertion that it was not given sufficient information to assess the impact of the plants is flatly contradicted by other elements of its own argument. In particular, Argentina has from the beginning of this case argued with great passion that the plants will cause significant harm to the water quality of the Uruguay River. In its Application, for example, Argentina asserted that the information available to it "établit manifestement que la mise en service des usines de pâte a papier CMB et Orion causera un préjudice sensible à la qualité des eaux du fleuve Uruguay et un préjudice sensible transfrontalier à l'Argentine."[516] But Argentina cannot simultaneously argue both (i) that it lacked sufficient information to assess the plants' effects and (ii) that they will "manifestly" cause significant harm. As Uruguay will show in subsequent chapters of this Counter-Memorial, Argentina's allegation that the plants will cause significant harm is manifestly erroneous. The important point here, however, is that the allegation itself disproves the argument that Argentina feels it did not receive adequate information to make that determination.

* * *

3.107 As discussed above, the Parties agree that the purpose of the information-sharing mechanism in the 1975 Statute is to enable a notified State to determine the probable effects of a project on the three subjects covered by the Statute; namely, navigation, the regime of the river, and the quality of its water. It could scarcely be otherwise. The third paragraph of Article 7 unmistakably provides exactly that. Where the Parties disagree is over the question of whether Uruguay gave Argentina

[516] Argentina's Application Instituting Proceedings, para. 22 (4 May 2006); s*ee also* Argentina's Request for the Indication of Provisional Measures, paras. 6, 9 (4 May 2006).

information sufficient to satisfy this purpose. Yet, Argentina's own behaviour shows that it did. In the case of ENCE, Argentina reviewed the information Uruguay provided it in October and November 2003 and expressly determined the project was "environmentally viable." Such a determination would not have been possible had Argentina not received adequate information. And in the case of Botnia, Argentina was given still more ample information in the course of the GTAN process. Given that Argentina had previously found the ENCE information adequate, it cannot now be heard to claim that the still more exhaustive information it received on Botnia was somehow less adequate. Indeed, as Uruguay's detailed examination of the materials exchanged in the GTAN process shows, there can be no serious doubt about the sufficiency of the information Argentina received. Accordingly, Argentina's complaints on this score fare no better than the other elements of its procedural case; put simply, they have absolutely no validity.

Section IV.
Uruguay Complied with Its Duties
During Consultations and Dispute Resolution

3.108 The fourth and final element of Argentina's procedural argument is that Uruguay violated the 1975 Statute because it did not suspend all work on the projects while the GTAN consultations were in progress, and because it has not refrained from implementing the Botnia plant during the pendency of this case. Thus, for example, Argentina contends that Uruguay breached its putative "obligation de parvenir à un accord avec l'autre partie ou d'attendre le règlement du différend selon la procédure prévue au chapitre II du Statut de 1975, avant

d'autoriser la construction de l'usine CMB."[517] (The procedure "established in Chapter 2" refers to Articles 7 through 12, which, of course, include the duty to consult and provide for the referral of disputes to this Court.) An identical allegation is also made with respect to the Botnia plant[518].

3.109 Like so many of its other allegations, these charges fail in the face of the law described in Chapter 2 of this Counter-Memorial. Uruguay showed there that the Statute does not obligate an initiating State to put a complete stop to a project while consultations are underway; to the contrary, preparatory work may continue even as consultations are taking place. Uruguay also showed that the Statute does not require the Parties to refrain from implementing projects once consultations have ended and dispute resolution proceedings have begun. These two points are addressed in turn below.

A. Uruguay Took Only Preparatory Steps During the GTAN Consultative Process

3.110 The 1975 Statute does not specifically address the question of the initiating State's duties in cases when Article 12 consultations are necessitated. It neither states that a project is permitted to continue nor states that it must be stopped. In contrast, the pertinent multilateral conventions expressly state that in the event of consultations, the notifying State is obligated to refrain from "implementing" the work for a reasonable period during those consultations[519]. Even accepting that this express obligation can be implied into a silent Statute, it does not mean that Uruguay

[517] AM, para. 4.89(a)(iv). ("obligation to reach an agreement with the other party or to await the settlement of the dispute according to the procedure established in Chapter 2 of the 1975 Statute before authorizing the construction of the [ENCE] plant.")

[518] AM, para. 4.89(b)(iv).

[519] *See* Chap. 2, para. 2.180.

was obligated to put a hold on any and all activities in furtherance of the ENCE and Botnia projects while consultations continued. Instead, as discussed in Chapter 2, the obligation

> does not inherently imply a duty to desist until a solution is finally reached. It simply implies that nothing more than preparatory work will be undertaken until the consulted state has had an ample opportunity to present its views and until those views have been considered in good faith.[520]

3.111 Insofar as Argentina makes no argument that the construction of the plants *per se* poses any threat to the water quality of the Uruguay River, preparatory steps in furtherance of the final construction of the plants are, under any view of the law, entirely permissible while consultations are on-going. Such preparatory steps do not foreclose the good faith consideration of the notified State's interests within the consultation process. In the paragraphs to follow, Uruguay will demonstrate that that is exactly what happened here; no more than preparatory steps were taken during the GTAN consultation process.

3.112 For purposes of analyzing this issue, it is important to bear in mind the timing of the GTAN process. The Presidents of Argentina and Uruguay agreed to establish the GTAN on 5 May 2005[521]. Their Foreign Ministers formally established the GTAN at their meeting on 31 May 2005, and announced that it was "to produce an initial report within 180 days"[522], precisely the same period provided for consultation under Article 12 of the 1975 Statute[523]. Thus, under the schedule

---

[520] Kirgis, F.: Prior Consultation in International Law: A Study in State Practice, Charlottesville, University Press of Virginia, 1983, p. 75.

[521] *See* AM para. 2.58.

[522] Joint Argentine-Uruguayan Press Release Constituting GTAN, *op. cit.* UCM, Vol. V, Annex 126.

[523] 1975 Statute, *op. cit.*, Art. 12. UCM, Vol. II, Annex 4.

adopted by the Foreign Ministers, GTAN's initial report was due by the end of November 2005.

3.113 As it turned out, the first substantive meeting of the GTAN did not occur until 3 August. The group then met a total of 12 times over the next several months, with the last official meeting occurring on 30 January 2006. Although the meetings continued into January, Argentina's Memorial admits that by the end of 2005 the GTAN process had reached an impasse. It states:

> *Fin 2005*, compte tenu des positions contradictoires des parties au sujet de l'étendue de l'information requise, de la question de l'emplacement des usines et de la technologie à utiliser par celles-ci, ainsi que du fait que les travaux se poursuivaient et que l'Uruguay continuait à donner des autorisations de construction d'ouvrages sans suivre la procédure du Statut de 1975, il est devenu évident que les travaux du GTAN *s'acheminaient vers une impasse*.[524]

3.114 In light of this obvious impasse, Argentina began laying the procedural groundwork for its application to the Court. Thus, on 14 December 2005, it sent Uruguay a diplomatic note warning that it was preparing to initiate proceedings in the Court[525]. In that note, Argentina claimed that the 180-day consultation period under Article 12 of the Statute began to run on 3 August, when GTAN first met, and thus would expire on 3 February 2005. Argentina's position in this respect was reiterated twice more before even the last GTAN meeting by means of diplomatic

---

[524] AM, para. 2.71. ("*At the end of 2005*, in light of the contradictory positions of the parties with respect to the scope of the information requested, the issue of the site where the mills would be located and the technology to be used by the mills, and given the fact that the work had continued and that Uruguay was still issuing construction permits for the facilities without following the procedure set out in the 1975 Statute, *it became evident that the work of GTAN was on the way to an impasse.*")

[525] Diplomatic Note 149/2005 sent from Argentine Minister of Foreign Affairs, International Trade and Culture to Uruguay Ambassador in Argentina D. Francisco Bustillo (14 December 2005). UCM, Vol. III, Annex 57.

notes dated 26 December 2005 and 12 January 2006[526]. Argentina's behaviour throughout this period, and its declaration of an impasse, appear to have been driven by the dictates of internal politics; in particular, the behaviour of protestors on the ground in Gualeguaychú. Beginning on 8 December 2005, coinciding with the start of the South American summer and tourist season, protestors from the "Environmental Assembly of Gualeguaychú" began blockading the bridges linking Uruguay and Argentina to pressure the Argentine government to use all means at its disposal, including a suit in this Court, to stop Uruguay from carrying out the ENCE and Botnia Projects[527]. Their protests continued without let-up until 20 March 2006[528], long after the GTAN had formally come to an end[529].

3.115 It is against this backdrop of events that the steps Uruguay took in furtherance of the ENCE and Botnia plants must be evaluated. ENCE is the simpler case. Beyond the October 2003 AAP, the only other approval ENCE ever received was the authorization to begin land movement, issued on 28 November 2005[530]. Although the permit was issued during the GTAN process, there can be no dispute

---

[526] Diplomatic Note 154/05 sent from Argentine Minister of Foreign Affairs, International Trade and Culture to Uruguay Ambassador in Argentina D. Francisco Bustillo (26 December 2005). UCM, Vol. III, Annex 58. Diplomatic Note sent from Argentine Minister of Foreign Affairs, International Trade and Culture to Uruguayan Ambassador in Argentina, Francisco Bustillo (12 January 2006). UCM, Vol. III, Annex 59.

[527] Award of the "Ad Hoc" Arbitral Tribunal of Mercosur (6 September 2006). UCM, Vol. IX, Annex 205.

[528] The blockades subsequently resumed and continued for still another month between 5 April to 2 May 2006. *Ibid.*

[529] First Report of the Uruguayan Delegation to GTAN, *op. cit.,* Annex A. UCM, Vol. V, Annex 154.

[530] DINAMA Environmental Management Plan Approval for the ENCE Plant (for the removal of vegetation and earth movement) (28 November 2005). UCM, Vol. II, Annex 25.

that land clearing represents only preparatory work and thus was consistent with Uruguay's duties under any view of the law.

3.116 More facts are present in the case of Botnia, but the legal conclusion is the same. On 12 April 2005, Botnia was authorized to begin ground clearing and land movement[531], and on 22 August 2005 it was authorized to begin construction of a chimney, a concrete plant (necessary for subsequent construction) and the foundation of the plant itself[532]. As in the case of ENCE, none of these steps is anything more than preparatory to the later construction of the pulp processing facility. None threatened to foreclose meaningful consultations about the elements of the plant that could cause environmental impacts, such as the bleaching technology to be employed, the facilities for or methods of waste water treatment, the nature and location of discharges into the river, *etc*. In short, nothing Uruguay did during the consultation period prejudiced Argentina's rights under the Statute to be consulted, or to have its views considered by Uruguay in good faith.

3.117 It was only on 18 January 2006, when it authorized the actual construction of the bleached cellulose plant, that Uruguay could be said to have done anything other than license purely preparatory steps. Yet, the 18 January 2006 authorization could not have violated Uruguay's obligations under the Statute because it came *after* the consultation period had run its course and reached an impasse. It occurred (i) after the initial 180-day period set by the Foreign Ministers had expired; (ii) more than a month after Argentina had declared the consultations to be "on the way to an impasse"; and (iii) only a few days before the final GTAN meeting on 30 January

---

[531] Botnia PGA (for the construction of the concrete foundation and the emissions stack), *op. cit.,* para. 1. UCM, Vol. II, Annex 23.

[532] *Ibid.*

2006, when the Parties formally agreed to end the consultation process. Moreover, there is no evidence that any construction work on the plant itself was actually performed prior to 30 January.

3.118 Even were one to accept Argentina's characterization of events and calculate the running of the 180-day Article 12 consultation period from 3 August when GTAN first met, the fact is that by the end of 2005, GTAN had reached an impasse -- by Argentina's own admission. Indeed, the impasse had been effectively reached when Argentina dispatched its 14 December 2005 diplomatic note preparing both itself and Uruguay for the institution of proceedings before the Court. Consequently, by waiting until consultations had reached an impasse before authorizing the actual construction of the Botnia plant, Uruguay plainly discharged any duty it may have had to undertake no more than preparatory work while consultations continued.

* * *

3.119 For the reasons discussed in the preceding paragraphs, Argentina's argument that Uruguay violated it obligations under the 1975 Statute by refusing to freeze the Botnia and ENCE projects during the GTAN consultative process fails in both law and fact. Uruguay's behaviour was entirely consistent with its duties under the Statute.

B. Uruguay Was Free to Carry Out the Pulp Mill Projects after the Consultations Were Over

3.120 In a related vein, Argentina argues that Uruguay has violated the procedural provisions of the 1975 Statute because it has not waited until this Court renders final judgment to implement the plants. At paragraph 4.80 of its Memorial, for example, Argentina claims that

> [s]i un différend s'élève entre les parties à cet égard [*i.e.*, about whether a project will cause significant harm] et qu'il ne peut être réglé, il appartient à la Cour de le régler (article 12). Comme il a été expliqué au chapitre III du Mémoire, tant qu'une décision favorable à la construction ou à l'autorisation de construire n'est pas intervenue, la partie intéresée ne peut pas procéder de la sorte de manière unilaterale.[533]

3.121 Uruguay's answer to this aspect of Argentina's argument is based on the law. The facts themselves are not in dispute. Uruguay readily acknowledges that after its consultations with Argentina in GTAN reached an impasse in December 2005, it authorized the construction of the Botnia plant. Since that time, construction has proceeded, and Uruguay anticipates that the plant will enter into operation in the fourth quarter of 2007. As detailed at length in Chapter 2[534], Argentina's argument that the 1975 Statute prohibits Uruguay from carrying out the project until such time as the Court enters final judgment in this case is inconsistent with the text of the Statute, general international law, and the sound administration of justice. It has no merit whatsoever.

3.122 Under general international law, the status of a work during the dispute resolution phase is different than during the consultation phase. Whereas the initiating State is prohibited from implementing a project (other than preparatory work) during consultations, it is permitted to do so during dispute resolution proceedings. As Uruguay showed in Chapter 2, the 1997 Watercourse Convention and the 2001 Draft Articles both provide for post-consultation dispute resolution in

---

[533] AM, para. 4.80. ("[i]f a dispute arises between the parties in this regard [*i.e.*, about whether a project will cause significant harm] and it cannot be settled, it is up to the Court to settle it (Article 12). As explained in Chapter 2 of the Memorial, as long as a decision favorable to the construction or construction authorization has not been issued, the interested party cannot proceed in a unilateral manner.")

[534] *See* Chap 2, para. 2.183-2.186.

the form of impartial fact-finding commissions or, if the States concerned agree, mediation or conciliation[535]. Yet, both instruments also make clear that the duty not to implement a project ends when consultations end, whatever the status of any dispute resolution proceedings. The ILC commentary to the 1997 Watercourse Convention, for example, states: "After this period [of consultation] has expired, the notifying State may proceed with the implementation of its plans …"[536].

3.123 The reason both the 1997 Watercourse Convention and 2001 Draft Articles permit the initiating State to implement a project after consultations have run their course is clear. As the ILC explained in its commentary to Article 9 of the 2001 Draft Articles: "the State of origin is permitted to go ahead with the activity, for the absence of such an alternative would, in effect, create a right of veto for the States likely to be affected."[537] A right of veto is, of course, inconsistent with general international law. It is also inconsistent with the 1975 Statute.

3.124 Uruguay described in great detail in Chapter 2 the numerous grounds that support its conclusion that the 1975 Statute does not give the notified State a veto right. In particular, Uruguay demonstrated that the text of the 1975 Statute, the practice of the Parties, the practice of the States in the region, and the rules of general international law all point to the same unavoidable conclusion: the Statute does not require the prior consent of the notified State, or otherwise give that State

---

[535] Convention on the Law of the Non-Navigational Uses of International Watercourses (hereinafter "1997 Watercourse Convention"), Art. 33 (1997); 2001 Draft Articles, *op. cit.*, Art. 19.

[536] 1994 Draft Articles, *op. cit.,* p. 116, comment 4; *see also* 2001 Draft Articles, *op. cit.,* p. 412, Art. 9, para. 3. ("To take account of this possibility, the article provides that the State of origin is permitted to go ahead with the activity, for the absence of such an alternative would, in effect, create a right of veto for the States likely to be affected.")

[537] 2001 Draft Articles, *op. cit.,* p. 412, Art. 9, para. 3.

veto power over the initiating State's project. Uruguay will not burden the Court by recapitulating its argument in full here but merely refers the Court back to Section II (E) of Chapter 2 where it sets forth its analysis in full.

3.125 Were the rule otherwise, the notified State could impede the initiating State's projects not just for the 180-day consultation period under Article 12, but potentially for years while the case navigates its way through each of the stages attendant to litigation in this Court: at least one round (and usually two rounds) of written pleadings, oral proceedings on the merits and final judgment. Such an extended hiatus would kill most investment projects. If Uruguay and Argentina truly intended to restrict their respective sovereign rights to develop their economies in accordance with their individual national priorities, they would have expressed that intent clearly and convincingly. That they did not do so should be dispositive of the issue. As the arbitral tribunal stated in the *Lake Lanoux Case*:

> To admit that jurisdiction in a certain field can no longer be exercised except on the condition of, or by way of, an agreement between two States, is to place an essential restriction on the sovereignty of a State, and such restriction could only be admitted if there were clear and convincing evidence.[538]

3.126 As it did in Chapter 2, Uruguay hastens to add that this reading of the 1975 Statute, and a finding that an initiating State may implement a project even as proceedings are underway in this Court, in no way leaves the notified State without remedy in those instances where it is authentically threatened with significant harm. Under Article 73(1) of the Rules of Court the notified State has the right to request an order of the Court indicting provisional measures at any stage of the proceedings.

---

[538] *Lake Lanoux Arbitration (France v. Spain), International Law Reports*, vol. 24, p. 127, para. 11 (16 November 1957).

Argentina's conduct in this case proves Uruguay's point. Simultaneous with its Application, Argentina filed a request for provisional measures seeking, *inter alia*, an order from the court halting construction of the ENCE and Botnia plants. In ruling on the provisional measures request, the Court specifically considered Argentina's argument that the Statute imposed a "no construction" obligation during these proceedings. It nonetheless declined to order that construction be halted:

> Whereas in this connection, the Court has taken note of the interpretation of the 1975 Statute advanced by Argentina to the effect that it provides for a "no construction" obligation, that is to say that it stipulates that a project may only proceed if agreed to by both parties or that, lacking such agreement, it shall not proceed until the Court has ruled on the dispute; whereas, however, the Court does not have to consider that issue for current purposes, since it is not at present convinced that, if it should later be shown that such is the correct interpretation of the 1975 Statute, any consequent violations of the Statute that Uruguay might be found to have committed would not be capable of being remedied at the merits stage of the proceedings[539][.]

3.127 For all of these reasons, Argentina's contention that the Statute obligates Uruguay to refrain from implementing the plant during the course of these proceedings must fail. The Statute creates no such express obligation, and there is no basis on which it can be implied. Argentina's rights, even if impaired by Uruguay's implementation of these projects during these proceedings (which Uruguay vigorously denies) can be fully restored by means of the Court's final order. There is no legal basis for halting the projects at this time. Argentina's argument should therefore be rejected.

---

[539] *Case Concerning Pulp Mills on the River Uruguay (Order on Provisional Measures), I.C.J. Reports 2006,* p. 18, para. 71 (13 July 2006).

Conclusions

3.128 Uruguay has now come to the end of Part I of this Counter-Memorial relating to the procedural aspects of Argentina's claim. In Chapter 2, Uruguay analyzed the provisions of the 1975 Statute for purposes of setting out the law applicable to this element of the dispute. In so doing, Uruguay refuted the core legal arguments on which Argentina's procedural case is predicated. In particular, Uruguay showed that

> (i) the 1975 Statute creates a regime of prior notice, information-sharing and consultation, but not prior consent. Nothing in the text of the Statute, the provisions of the CARU Digest or the historical practice of the Parties supports Argentina's argument to the contrary. The Statute does not give either State a veto right over the projects of the other;
>
> (ii) Article 7 of the Statute does not require notice to CARU before the initiating State authorizes a project. Indeed, the text of the Statute, the provisions of the Digest and the State practice uniformly show that notice can (and has) come after authorization;
>
> (iii) CARU does not have the institutional competence to authorize or reject particular projects. Only the Parties -- that is, Uruguay and Argentina -- have that power. CARU's role in the scheme of the Statute, although crucial, consists of technical, regulatory, and administrative functions; and
>
> (iv) the Statute does not require the initiating State to desist from any and all work in connection with a project either during the consultation phase under Articles 11 and 12, or during proceedings in this Court. With respect to the consultation period, the initiating State is, at very least, permitted to continue with preparatory works during the consultations so long as it does not take any steps that might prejudice the ability of the Parties to engage in good faith consultations. And with respect to the dispute resolution phase, there is nothing either in the Statute or in international law that prohibits the implementation of a project while court proceedings are on-going.

3.129 In this Chapter 3, Uruguay applied the facts to the law analyzed in Chapter 2, and showed that it complied at all times with its procedural obligations under the Statute. With respect to each of Argentina's arguments, Uruguay demonstrated that

> (i) Argentina's contention that Uruguay did not to give timely notice of the ENCE and Botnia plants to CARU fails both as a matter of law and also as a matter of fact. In the first instance, Argentina badly mischaracterizes the nature of an AAP under Uruguayan law. AAPs are *initial* authorizations in the truest sense. Many additional authorizations were required before a plant may begin construction, much less operation. Moreover, CARU and Argentina were well aware of and engaged with both plants long before the issuance of their AAPs. Argentina's attempt to attach dispositive significance to the date of the AAP thus makes no sense. The ability of both CARU and Argentina to review and be consulted about the projects was in no way diminished by the mere issuance of initial environmental authorizations, and their notification about the projects, including the AAPs issued by Uruguay, was timely;
>
> (ii) Argentina's argument that Uruguay was obligated to await CARU's authorization of the projects likewise fails first in law, but also in fact. In fact, the Parties expressly agreed to treat the issue of the ENCE plant outside the context of CARU, which had become paralyzed in any event. Indeed, in March 2004, the Parties expressly agreed that the plant would be built, subject only to water quality monitoring by CARU. This agreement was later extended to the Botnia plant as well. Still further, the Parties once again agreed to take the issue of both plants outside the ambit of CARU in May 2005 when they constituted the GTAN consultation process;
>
> (iii) Argentina's argument that Uruguay failed to provide it with adequate information to evaluate the probable impact of the projects on navigation, the regime of the river and water quality is belied by its own conduct. Argentina reviewed the information concerning the ENCE plant and specifically came to the conclusion that the plant was "environmentally viable." Uruguay provided Argentina with still fuller information concerning the Botnia plant during the GTAN process. If the ENCE information was adequate to meet the purposes of Article 7, the Botnia information was more than adequate;
>
> (iv) And finally, Argentina's argument that Uruguay failed to respect its obligations during the consultation and dispute resolution phases similarly fails. During the GTAN consultation

> phase, Uruguay did no more than authorize preparatory work, something it is plainly permitted to do. And during the dispute resolution phase, although Uruguay has indeed moved to implement the Botnia plant, the law is clear that it is permitted to do so.

3.130 For all the reasons thus articulated, Argentina's procedural submissions can and should be rejected.

3.131 With this, Part I of the Counter-Memorial is now complete. Uruguay thus turns to Part II, which addresses the environmental claims that make up Argentina's substantive case.

PART II

CHAPTER 4.
THE LAW AND THE FACTS PERTAINING TO THE ALLEGED SUBSTANTIVE VIOLATIONS OF THE 1975 STATUTE

4.1 The purpose of this Chapter is to analyse the provisions of the 1975 Statute that impose substantive environmental protection obligations, including the obligations to prevent pollution, safeguard water quality, and protect the aquatic ecosystem. The Chapter sets out Uruguay's view of the law applicable to the protection of the Uruguay River and its aquatic environment, and demonstrates Uruguay's full compliance therewith. Together with Chapters 5 through 7, this Chapter exposes the flaws in Argentina's legal argument and the complete lack of factual underpinning for it.

4.2 Argentina bases its legal arguments on (a) Articles 35-37 and 40-41 of the 1975 Statute, (b) various treaties or recommendations which are alleged to be applicable under the terms of Article 41 of the 1975 Statute, including the 2001 Stockholm Convention on Persistent Organic Pollutants ("POPS Convention"), the WHO water quality standards, the 1992 Convention on Biological Diversity, and the 1971 Convention on Wetlands of International Importance (the "Ramsar Convention"), and (c) principles of international law, including the precautionary principle, and the principles of harm prevention and equitable and reasonable use of an international watercourse.

4.3 All of Argentina's legal arguments are founded on a single factual premise, whether they are based on the 1975 Statute itself, international conventions, or principles of general international law. That premise -- the sole basis on which all of Argentina's legal argumentation depends -- is that discharges from the Botnia plant to the Uruguay River will constitute pollution so harmful to the river that they are prohibited by the 1975 Statute[540]. If -- as Uruguay will demonstrate --

[540] AM, paras. 5.20-5.53, 5.78-5.83.

Argentina's premise is wrong about pollution, that is, if discharges from the plant do not cause significant harm to the river, Argentina's entire legal case disintegrates. Simply put, if the plant does not "pollute" within the meaning of the 1975 Statute, then there is no substance to Argentina's arguments on the use of best available techniques ("BAT") in the Botnia plant[541], the siting of the plant[542], the adequacy of the environmental impact assessments[543], the protection of biodiversity or wetlands, the POPS Convention, or the equitable and reasonable use of the river. If there is no prohibited pollution, then there is nothing more to prevent and nothing left to assess. If there is no prohibited pollution, Uruguay quite simply has no case to answer and the Court must dismiss Argentina's claims outright.

4.4 As shown in this Chapter, and in Chapters 5 through 7 which follow, there is no prohibited pollution. Argentina has failed to meet its burden of proving that discharge from the Botnia plant will cause significant harm to navigation, the regime of the river, and/or its water quality. Argentina does not even allege that the plant will affect navigation or the regime of the river. And it falls well short of demonstrating the likelihood of any significant harm to water quality. In fact, the technical and scientific evidence shows that there is no likelihood of harm to water quality, a fact confirmed by the International Finance Corporation -- an impartial international organisation -- and the independent experts it retained to evaluate the Botnia plant.

4.5 The source of Uruguay's substantive environmental obligations is, of course, the 1975 Statute. In particular, Argentina has alleged that Uruguay has

[541] AM, paras. 5.78-5.77.

[542] AM, paras. 5.65-5.73.

[543] AM, para. 5.63.

violated Article 36 (ecological balance of the river) and Article 41 (prevention of pollution)[544]. Both Parties accept that the starting point for interpreting their environmental obligations is found in these Articles and in their relationship to other Articles of the 1975 Statute.

4.6 Two other sources of law elucidate the substantive content of Articles 36 and 41. First, the Parties, through CARU, and pursuant to an express delegation of authority provided in the 1975 Statute, have enacted a complex regulatory regime that elaborates the substantive obligations with respect to protection of the environment. The CARU Digest sets forth detailed and specific standards governing a host of matters relating to the Uruguay River, including two categories of regulation that are decisive in the present dispute: standards governing water quality and regulations governing the ecological balance of the river. Sections I and II of this Chapter discuss these CARU regulations, and show that Uruguay has complied with all of them.

4.7 Second, both Parties are in agreement that the Court's interpretation of the 1975 Statute should be guided by general international law[545]. As explained in Section III, Uruguay's interpretation of its obligations under the 1975 Statute concerning the regulation of pollution and the ecological balance of the river is entirely consistent with general international law, including the right of a State to make equitable and reasonable use of a shared river, and its obligation to exercise due diligence in the regulation and control of environmental risks. The Convention

---

[544] Argentina also makes passing reference to Articles 3-6, 27, 35, 37, and 42-43.

[545] This is not to say that all international law is relevant to the present dispute. Rather, international law is relevant only insofar as it gives assistance in interpreting and applying the various Articles of the 1975 Statute. The Court lacks jurisdiction over international obligations that are independent from the 1975 Statute.

on Biological Diversity, the Ramsar Convention, and the POPS Convention do not directly apply to this case, in which the jurisdiction of the Court is based solely on Article 60 of the 1975 Statute, but if they did apply they would not assist Argentina in the present dispute; Uruguay's actions are in full compliance with the provisions of these international instruments. Moreover, the precautionary principle, on which Argentina also purports to rely, is applicable only where there is a risk of serious or irreversible harm, which is manifestly not the case here; Argentina has failed to demonstrate the existence of such a risk, or the factual predicates thereto. Nor does the precautionary principle transfer the burden of proof from Argentina to Uruguay as Argentina erroneously suggests.

4.8 Third, Section IV shows that Argentina has misapprehended the international law of environmental impact assessment. Argentina (i) erroneously conceives of EIA as an international procedure that requires the approval of any affected State, whereas it is, in fact, a national one; (ii) wrongly views EIA as a single event instead of an ongoing process; and (iii) mistakenly claims that all risks must be assessed, regardless of how remote or speculative they are. Section V demonstrates that Uruguay has fully satisfied the existing EIA standards under international law through its regulatory program that requires a series of authorisations and approvals, which can only be granted after comprehensive assessment and evaluation, including specific evaluation of the impacts to Argentina.

Section I.
Uruguay's Compliance with Its Obligations to Prevent Pollution under Article 41 of the 1975 Statute

A. ARTICLE 41 DOES NOT BAN ALL DISCHARGES TO THE RIVER

4.9 Argentina's principal claim is that Uruguay has violated Article 41 of the 1975 Statute, which provides that the Parties undertake, "[w]ithout prejudice to the functions assigned to the Commission in this respect", to "protect and preserve the aquatic environment and, in particular, to prevent pollution, by prescribing appropriate rules and measures in accordance with applicable international agreements and in keeping, where relevant, with the guidelines and recommendations of international technical bodies"[546]. This Section discusses the law applicable to Argentina's claim and demonstrates Uruguay's full compliance with all its legal obligations[547]. As shown below, the Botnia plant will cause no "pollution" within the meaning of the 1975 Statute.

[546] Statute of the River Uruguay (hereinafter "1975 Statute"), Art. 41(a) (26 February 1975). UCM, Vol. II, Annex 4. Argentina does not have a separately cognisable claim under Article 27 because that article serves only to clarify that the provisions of Articles 7 *et seq.* are applicable to industrial facilities.

[547] Argentina's allegations regarding violations of Articles 3 through 6 with respect to navigational issues can be disposed of summarily. Argentina alleges that the increase in river traffic as a result of the shipment of wood, chemicals, and pulp to and from the Botnia plant violates those provisions. AM, paras. 7.202-7.204. Nothing in Articles 3 through 6 expressly prohibits an increase in river barge traffic ancillary to a project, much less addresses the subject. In any event, the Final CIS found that the operations of both the ENCE and the Botnia plants combined would add 1.8 barge trips per day to the already existing average of 5.3, but that this amount was not significant and would be offset by the reduction of traffic for the current export of wood chips. International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills (hereinafter "Final CIS"), p. 4.93 (September 2006). UCM, Vol. VIII, Annex 173. Even that change, of course, is less with the relocation of the ENCE plant. It is also unclear the extent to which Argentina is alleging that an increase in vehicles within Uruguay constitutes a violation of the 1975 Statute. AM, paras. 7.202-204. Clearly, however, impacts to vehicular traffic within the sovereign territory of Uruguay are outside the scope of the 1975 Statute, and in any event, it is unclear how car and truck traffic could interfere with the function of the river.

4.10 The 1975 Statute is not a pure preservationist agreement. Although Uruguay has always protected and will always protect the important ecological values of the river, the 1975 Statute does not prohibit all discharges to the river or require that the river be kept in an untouched state. Article 27 of the 1975 Statute specifically affirms the right of each Party "to use the waters of the river, within its jurisdiction, for domestic, sanitary, industrial and agricultural purposes", each of which (except the first) could result in the discharge of potentially harmful substances into the river. Accordingly, references in Article 41 to the Parties' undertaking to "protect and preserve the aquatic environment" must be understood in that context, and cannot be interpreted in a fashion that eviscerates a Party's rights under Article 27[548].

4.11 This interpretation is consistent with the entire schema of the 1975 Statute, which, as discussed in Chapter 2, is predicated on the principle, set forth in Article 1, of "optimum and rational utilization of the River Uruguay", a concept that is analogous with the 1997 Watercourse Convention's concept of "fair and reasonable use". As explained in the International Law Commission's commentary to its 1994 Draft Articles on the Non-Navigational uses of International Watercourses (later

---

[548] In its Order of 13 July 2006, the Court recognised:

> the need to ensure environmental protection of shared natural resources while allowing for sustainable economic development; whereas it is in particular necessary to bear in mind the reliance of the Parties on the quality of the water of the Uruguay River for their livelihood and economic development; whereas from this point of view account must be taken of the need to safeguard the continued conservation of the river environment and the rights of economic development of the riparian States.

Case Concerning Pulp Mills on the River Uruguay (Order on Provisional Measures), I.C.J. Reports 2006, p. 19, para. 80 (13 July 2006). The Court's order shows the need to balance uses of the river permitted under Article 27 and environmental protection. That is why the Parties have agreed upon water quality standards within the framework of CARU, as will be discussed herein.

adopted as the 1997 Watercourse Convention), this gives a State both the right to utilise an international watercourse in an equitable and reasonable manner and the obligation not to exceed its right to equitable utilisation. Accordingly, the 1975 Statute requires an equitable balancing of interests, which necessitates consideration of both the objectives of economic development and environmental protection. One is not privileged over the other. Rather, they are to be treated in an integrated fashion.

4.12 The 1975 Statute's definition of "pollution" as the introduction of "substances" into the Uruguay River that have "harmful effects" conforms to generally accepted norms found in many environmental agreements, including Article 1(4) of the 1982 UN Convention on the Law of the Sea[549] and Article 21(1) of the 1997 UN Convention on the Non-navigational Uses of International Watercourses[550]. Discharges constitute pollution only after they reach a certain level of seriousness, either in volume or in the context of their location. For example, Principle 6 of the 1972 Stockholm Declaration on the Human Environment refers to the discharge of toxic substances "in such quantities or concentrations as to exceed the capacity of the environment to render them harmless"[551]. By defining pollution

[549] United Nations Convention on the Law of the Sea (hereinafter "1982 Convention"), Art. 1(4) (1982) (pollution exists where there is "harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities").

[550] Convention on the Law of the Non-navigational Uses of International Watercourses (hereinafter "1997 Watercourse Convention"), Arts. 21(1)-(2) (1997) (defining pollution as "any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct", including "significant harm" to "human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse").

[551] Declaration of the United Nations Conference on the Human Environment, UN Doc A/CONF/48/14/REV.1 (1972).

as "substances" that have "harmful" effects, the 1975 Statute therefore does not impose a categorical prohibition on discharges into the river.

4.13 The Parties' intention not to ban all discharges is confirmed by their subsequent practice. Argentina, in particular, has taken full advantage of its qualified right to allow discharges into the Uruguay River. The IFC's independent experts noted that while in general "the quality of the water in the Uruguay River is considered good", there is localised deterioration on the Argentine side of the river, due primarily to runoff from areas of intense agricultural use and discharges from urban centres and industries with inadequate effluent treatment, notably at Concordia, and Concepción del Uruguay (Argentina)[552]. As discussed in Chapter 2, Argentina has authorised more than 50 industrial facilities on its side of the river since the 1975 Statute came into effect, including more than 25 at the Gualeguaychú Industrial Park, which release effluents into the Gualeguaychú River, the principal tributary of the Uruguay River[553]. Indeed, much of the present pollution in the vicinity of the Botnia plant comes from Argentina, and Argentina itself acknowledges that pollution emanating from sources discharging into the Gualeguaychú River causes high concentrations of phosphorus and organic matter on the Argentine side of the Uruguay River[554]. Thus, the Botnia plant will hardly be the first to make discharges to the Uruguay River.

---

[552] Final CIS, *op. cit.*, p. ES.xi. UCM, Vol. VIII, Annex 173.

[553] *See infra*, Chap. 2, paras. 2.140-2.150.

[554] AM, para. 6.32.

B. CARU REGULATIONS DEFINE THE SUBSTANTIVE PERFORMANCE STANDARDS OF THE 1975 STATUTE

4.14 The 1975 Statute created CARU[555]. Among its other functions (described in Chapter 2[556]), CARU serves as a forum in which Argentina and Uruguay establish mutually agreeable, comprehensive, and enforceable environmental norms and regulations that both Parties deem adequate to protect the Uruguay River. The Parties achieved this objective by mandating that CARU have an equal number of representatives from Argentina and Uruguay and that each delegation have only one vote. As a result, the rulemaking authority of CARU can be exercised only by achieving the consensus of both the Argentine and Uruguayan delegations[557]. Any rule or standard promulgated by CARU therefore has the express endorsement of both State Parties.

4.15 The 1975 Statute expressly gives CARU the competence to promulgate a comprehensive regulatory regime for the Uruguay River. In that regard, Article 56 requires that CARU "shall perform" certain enumerated "functions"[558]. Included among these functions is the requirement that CARU draft binding "rules governing", among other things, the "conservation and preservation of living resources" and the "prevention of pollution"[559]. CARU has no discretion in this

---

[555] 1975 Statute, *op. cit.*, Art. 50 ("The Commission shall be made a legal entity in order to perform its functions."). UCM, Vol. II, Annex 4.

[556] *See infra*, Chap. 2, paras. 2.140-2.150.

[557] 1975 Statute, *op. cit.*, Arts. 49-50, 55.

[558] *Ibid.*, Art. 56 ("The Commission shall perform the following functions…").

[559] *Ibid.*, Art. 56(a)(2) & (4).

matter; Article 56's use of the word "shall" obligates CARU to enact such regulations[560].

4.16 Complementing CARU are the respective State Parties to the 1975 Statute, which may enact binding environmental regulations on those matters that CARU decides not to regulate. Under Article 41, the Parties "undertake", among other things, to "protect and preserve the aquatic environment and, in particular, to prevent its pollution, by prescribing appropriate rules and measures"[561]. However, the assignment of this responsibility to the States is subject to an important limitation that Argentina conspicuously ignores -- Argentina and Uruguay's authority to prescribe such rules and measures is expressly made "without prejudice to the functions assigned to the Commission in this respect"[562]. This has important implications for determining the substantive obligations imposed by the 1975 Statute[563].

4.17 First, by making the Parties' undertaking to adopt environmental rules and measures "without prejudice" to the functions assigned to CARU, the 1975 Statute requires that, in circumstances where an environmental standard promulgated by CARU conflicts with one adopted by a State, the CARU standard controls. Thus,

---

[560] Other areas that CARU is obligated to regulate include safety of navigation on the river and use of the main channel; pilotage; and the installation of pipelines and cables under the river or in the air. *See ibid.*, Arts. 56(a)(1), (a)(3), & (a)(5).

[561] *Ibid.*, Art. 41 & 41(a).

[562] *Ibid.*, Art. 41.

[563] Argentina has a confused view of the relationship between CARU and the State Parties with regard to their respective regulatory authority under Articles 41 and 56. Argentina appears mistakenly to believe that CARU regulations set forth in the Digest are promulgated pursuant to Article 41 of the 1975 Statute. AM, para. 3.133. In fact, as explained above, it is Article 56 that bestows upon CARU plenary competence to construct a comprehensive regulatory regime for the Uruguay River.

neither domestic legislation nor the permitting of a facility may supersede a CARU standard.

4.18 Second, it means that a decision by CARU not to exercise its authority to the fullest extent authorised by Article 56 necessarily means that Argentina and Uruguay may regulate these areas as they see fit. This is what has occurred with regard to certain water quality standards, which are regulated under Uruguayan law by Article 5 of Decree 253 of 1979[564].

4.19 Finally, CARU may adopt certain baseline standards, but leave it up to the respective States to determine how to ensure compliance with those standards. This is what CARU has done with respect to water quality. Although CARU has the competence under Article 56 to impose discharge limits, it has chosen not to do so. Instead, CARU has enacted water quality standards -- that is, maximum allowable concentration levels of particular substances that may be present in the river at any given time -- and left it to Argentina and Uruguay to decide how to ensure that these water quality standards are not exceeded. Thus, Uruguayan law establishes maximum effluent discharge limits in Article 11 of Decree 253 of 1979[565]; any discharge in excess of those limits is prohibited, and the Minister of the Environment is authorised to establish new standards if necessary to protect the quality of the water under Article 14 of the same decree. Uruguay's discharge limits are calculated to ensure that the applicable CARU water quality standards are not exceeded.

---

[564] Decree No. 253/79, Regulation of Water Quality (hereinafter "Decree No. 253/79"), Art. 5 (9 May 1979, as amended). UCM, Vol. II, Annex 6.

[565] *Ibid.*, Art. 11.

C. ARGENTINA AND URUGUAY HAVE, THROUGH CARU, AGREED UPON THE ENVIRONMENTAL STANDARDS FOR THE URUGUAY RIVER

4.20 Argentina and Uruguay are in agreement that CARU has fulfilled its mandate to enact rules and regulations for the environmental protection of the Uruguay River. In the years following the signing of the 1975 Statute, the Parties, operating through CARU, created a carefully drawn regime regulating the prevention of pollution in accordance with Article 41. The applicable rules are found in the CARU Digest, at Subject E3. Argentina does not dispute that CARU has enacted such a regime or that it is binding upon the Parties. To the contrary, Argentina expressly concedes that "La CARU a édicté des standards relatifs à la qualité des eaux" and that "[c]es standards sont compilés dans les sections E3 . . . du Digest"[566]. Moreover, Argentina admits that "[l]'object et le but de Digeste" is "de protéger et de préserver le milieu aquatique et son équilibre écologique" and "d'assurer toute utilisation légitime des eaux en tennant compte de nécessités à long terme et particulièrment celles relatives à la consommation humaine"[567].

4.21 Nor does Argentina dispute that CARU standards establish the substantive obligations concerning pollution imposed by the 1975 Statute. Argentina admits that the environmental rules contained in these sections of the Digest are "l'expression directe de la volonté des parties et de leur interprétatīon des dispositions du Statut de 1975"[568]. As Argentina stated in a 1990 diplomatic note, CARU standards set forth in Subject E3 "déterminent les principes normatifs essentiels pour prévenir la

566 AM, para. 3.147. ("CARU has issued standards for … water quality") ("[t]hose standards are compiled in sections E3 . . . of the Digest.").

567 AM, para. 3.150. ("[t]he object and purpose of the Digest"), ("to protect and preserve the aquatic environment and its ecological equilibrium").

568 AM, para. 3.147. ("the direct expression of the desire of the two parties and their interpretation of the provisions of the 1975 Statute").

contamination des eaux du fleuve et définir les standards de qualité de ces eaux."[569] The Parties are thus in agreement that a determination of whether a Party has satisfied its substantive obligations under the 1975 Statute with respect to pollution is made by measuring the Party's action against the applicable CARU regulations, namely Subject E3 (prevention of pollution).

4.22 The State practice of the Parties further confirms that CARU is endowed with the competence to promulgate authoritative environmental standards that embody the substantive obligations imposed by the 1975 Statute. In the early years of CARU, the question arose as to whether CARU had independent authority to issue binding norms and regulations, or whether these required the approval of the Parties' respective Foreign Ministers. In 1981, it was definitively resolved that CARU regulations do not require such approval. As stated by Uruguay's Ambassador González Lapeyre:

> It is fitting to make the distinction between resolutions that are binding on the Parties and resolutions that do not have that character. The resolutions that are indicated within the provisions of the Treaty are directly binding on the State Parties. The others that are adopted by interpretation, analogy, extension or advice do not have a binding character, and they would have to be ratified by an exchange of corresponding diplomatic notes between both Governments. But in this case, in which there exists an express provision that leaves this issue to the Commission, the resolution that is adopted on the issue binds both Governments[570].

Given these long-standing views of CARU and the regulations codified in the Digest, it is indisputable that the Digest is the dispositive standard by which alleged substantive violations must be judged.

---

[569] AM, para. 3.148. ("determine the essential normative principles for preventing the pollution of the river's water and define the quality standards of those waters").

[570] CARU Minutes No. 5/81, pp. 225-230 (21 August 1981). UCM, Vol. IV, Annex 66.

4.23 The Digest constitutes the codification of the binding norms that CARU has established with respect to the governance of the Uruguay River pursuant to the 1975 Statute. It was recognized early in CARU's history that "the Digest is the Law of the River, applicable in full both for the authorities and for the users, and it will also be a source of reference and application for the respective courts whenever they might act on issues under their jurisdiction referring to the river"[571]. Argentina agrees that this continues to be the case[572].

4.24 Subject E3 of the Digest, entitled "Pollution", sets forth the environmental norms and regulations governing the Uruguay River. The stated purposes of Subject E3 demonstrate that a Party's compliance with the environmental norms and standards established therein is intended to be dispositive of whether it has satisfied its substantive obligations. Specifically, the purposes of Subject E3 include the following:

- To protect and preserve the aquatic medium and its ecological equilibrium;
- To ensure any legitimate use of the water considering long term needs and particularly human consumption needs; and
- To prevent any new form of pollution and to procure its reduction when the values of the standards adopted for the different legitimate uses of the waters of the river are exceeded.

The language used to describe the purposes of Subject E3 parallels that which describes the obligations of CARU set forth in Article 56(a) of the Statute, and those of the Parties in Article 41. This reflects the understanding of the Parties that they

---

[571] CARU Minutes No. 2/81, pp. 47-55, Annex, pp. 62-64 (11 March 1981). UCM, Vol. IV, Annex 65.

[572] AM, paras. 3.147-3.152.

were creating enforceable, binding norms to which they would refer in determining their compliance with the substantive obligations of Article 41.

4.25 CARU regulates the water quality of the Uruguay River and the presence of pollution therein primarily through the development of water quality standards, while leaving to the Parties the responsibility to determine the discharge limitations of any given source[573]. The Digest defines water quality standards as "the numeric concentration levels or specific recommendations for water quality parameters, which are set forth as a permanent reference both for allowing the legitimate uses of the water and adopting measures aimed at preventing pollution"[574]. The Digest enumerates four different classes of water use and then specifies the acceptable levels of various contaminants that may not be exceeded for each use.

4.26 Although Article 56(a)(4)'s grant of regulatory authority to CARU to prevent pollution includes the authority to set discharge limitations for all potential sources of pollution, CARU has decided not to set its own discharge limits. Rather, it has generally left the determination of discharge limitations to the Parties. Specifically, the Digest provides that:

> Each Party will dictate the standards to which effluents that could enter the river from activities carried out in its jurisdiction must conform. In said regulations, the Parties will take into account the water quality standards incorporated into Chapter 4 of the present Title[575].

---

[573] The Digest does set forth discharge limitations for a limited number of substances, Digest of the Administrative Commission of the Uruguay River (CARU), Subject E3 (hereinafter "CARU Digest Subject E3"), Title 2, Chap. 5, Art. 7 (1984, as amended), UCM, Vol. IV, Annex 60, but the discharges of the Botnia plant will not contain, and Argentina does not allege that they will contain, any of those substances.

[574] *Ibid.*, Title 1, Chap. 1, Sec. 2, Art. 1(f).

[575] *Ibid.*, Title 2, Chap. 5, Art. 1.

4.27 By choosing not to exercise CARU's authority to set discharge limits, but to allow each of themselves to do so, the Parties have established a system that allows each State a high degree of flexibility in regulating projects within its borders. Discharges from each of the States' jurisdictions are permitted regardless of the concentration of their effluent, so long as the activity does not itself cause an exceedance of CARU water quality standards. In other words, each State is permitted to structure its industrial, agricultural, or municipal development according to the environmental protection regime of its choosing, so long as it does not cause an exceedance of a CARU water quality standard.

4.28 CARU water quality standards are the product of mutual agreement between Argentina and Uruguay. Achieving consensus is the cornerstone of the decision-making process of CARU. Article 50 specifically provides that CARU will be composed of an equal number of delegates from each Party, and Article 55 provides that, with respect to the adoption of decisions by CARU, each delegation of the Parties shall have one vote. This process ensures that, for CARU to make a decision, agreement between the Argentina delegation and the Uruguay delegation must be achieved. Therefore, Argentina cannot assert that the water quality standards of the CARU regulatory framework are inadequately protective when they are the result of its express consent and it had an equal role in developing them.

4.29 Moreover, CARU has an affirmative duty periodically to assure that its regulatory framework and norms are sufficiently protective of the environment. Article 2 of Title 2, Chapter 1, Subject E3 specifically provides that CARU has the responsibility of undertaking the revision of the water quality standards and the conditions for discharges every three years, and of modifying them if necessary. In

fact, CARU approved changes to the water quality standards for Use 4 (crude or raw waters destined for public supply) and Use 2 (waters used for recreation with direct human contact) as recently as 14 September 2004[576].

4.30 CARU has done its job well. Its water quality standards are comparable to those promulgated by other internationally respected environmental regulators. The IFC's independent experts compared CARU water quality standards favourably with those of the European Union, Australia, and the World Health Organization, among others[577]. These experts concluded that "[a]lthough there are differences, the surface water quality standards of . . . CARU are comparable and therefore considered as protective of the environment as those of other agencies"[578]. There is thus no basis to suggest that CARU water quality standards are out of line with international norms, and Argentina does not so suggest.

4.31 In sum, CARU, after careful consideration and by agreement of the Parties, has devised strict and binding water quality standards that are protective of the Uruguay River. As explained in the following Section, the Botnia plant will fully comply with these standards and all other applicable CARU regulations.

---

[576] These changes were inserted into the Digest as an official matter on 5 May 2006. The modification of the water quality standards for Use 2 waters is particularly notable because much of Argentina's claim centres on the concern that a deterioration of water quality will affect tourism. Had Argentina felt that the water quality standards were inadequately protective, it was free to propose amending them to its satisfaction.

[577] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex D (hereinafter "Final CIS, Annex D"), pp. D2.5, D2.9-D2.10 (September 2006). UCM, Vol. VIII, Annex 176.

[578] *Ibid.*, p. D2.5.

D. Uruguay Has Ensured that the Botnia Plant Complies with the Applicable Pollution Prevention Laws and Regulations

4.32 As explained above, Argentina and Uruguay have agreed upon water quality standards that implement the substantive pollution prevention requirements of Article 41, which are set forth in Subject E3 of the CARU Digest. This Section demonstrates that the Botnia plant will not cause an exceedance of any water quality standard found in Subject E3. First, Botnia is required by Uruguay's environmental laws to comply with CARU water quality standards. Second, the Initial Environmental Authorisation that Uruguay gave to Botnia expressly requires the Botnia plant to comply with all CARU water quality standards. Third, the plant uses state-of-the-art pollution control systems that render negligible any environmental impacts. Fourth, scientific modelling conducted by the IFC's independent technical experts confirmed that the Botnia plant will not cause any exceedances of CARU standards. Fifth, Argentina has not alleged, much less shown, that the Botnia plant will cause exceedances of CARU standards. Sixth, even if, contrary to the scientific evidence and the conclusions of the IFC's independent experts, an exceedance of CARU water quality standards occurs, the comprehensive post-operation monitoring that Uruguay has required will detect any such impacts, and Uruguay will ensure that Botnia adopts any necessary remedial measures, up to and including a shutdown of the facility.

1. Uruguay Has Required Botnia to Comply with the CARU Water Quality Standards

4.33 The Botnia plant is required to operate in compliance with CARU water quality standards. Specifically, Uruguay has made compliance with CARU water quality standards an explicit condition of the Botnia AAP. In that regard, Botnia's AAP expressly provides that "the water quality standards applicable for the project shall be the lesser [*i.e*., the more stringent] of those established in Decree 253/79 and its amendments (including the values determined by OSE - the State Waterworks Agency - in applying Article 8) and in the regulations issued by the [CARU]"[579]. That the Botnia plant "must independently comply with the water quality standards by CARU" has been confirmed by the Director of DINAMA in her affidavit submitted to the Court in June 2006 in connection with Argentina's request for provisional measures[580].

2. The Botnia Plant's State-of-the-Art Anti-Pollution Systems Ensure Compliance with the CARU Water Quality Standards

4.34 To ensure compliance with CARU water quality standards, Uruguay has required the Botnia plant to use state-of-the-art anti-pollution technology[581]. Because of this advanced technology, the plant's effluent discharge levels will be among the lowest in the world. As the IFC's independent experts found, the Botnia plant will perform among the top 5% of pulp mills in North America and Europe[582],

---

[579] MVOTMA Initial Environmental Authorisation for the Botnia Plant (hereinafter "Botnia AAP"), Art. 2(aa) (14 February 2005). UCM, Vol. II, Annex 21.

[580] Sworn Declaration of Alicia Torres, Director of Department of the Environment (hereinafter "Torres Aff."), sec. VII, para. B(7) (June 2006). UCM, Vol. II, Annex 30.

[581] Botnia AAP, *op. cit.*, Art. 2(bb) (requiring the Botnia plant to comply with IPPC BAT). UCM, Vol. II, Annex 21.

[582] Final CIS, *op. cit.*, p. 2.21. UCM, Vol. VIII, Annex 173.

and all BAT removal efficiencies (*i.e.*, the plant's ability to remove contaminants from its discharge) will be met or exceeded[583]. In that regard, the Botnia plant employs an Elemental Chlorine Free light ("ECF-light") bleaching process, which, as discussed in Chapters 5 and 6, is extremely protective of the environment and virtually eliminates the discharge of dioxins and furans. In compliance with the IPPC BAT, the wastewater treatment plant employs both a primary treatment system and an advanced secondary treatment system involving activated sludge treatment[584]. Other features of the plant's state-of-the-art anti-pollution technology are discussed in Chapters 5 and 6.

3. The IFC's Independent Experts Have Confirmed that the Botnia Plant Will Comply with the CARU Water Quality Standards

4.35 Later sections of this Chapter show that DINAMA required and obtained definitive proof that the Botnia plant will not cause exceedances of CARU water quality standards. However, the Court need not rely on Uruguay alone for proof of compliance with those standards. The comprehensive analysis conducted by the IFC's independent technical experts also confirms that the Botnia plant will not cause exceedances of CARU water quality standards. As described in detail in Chapter 5, the IFC's independent experts conducted sophisticated scientific modelling to forecast the plant's impact on water quality. They concluded that the plant's operations will have no appreciable impact on the quality of the water in the Uruguay River[585]. According to the IFC's experts: "CARU has developed water

---

[583] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex A (hereinafter "Final CIS, Annex A"), p. A8.10 (September 2006). UCM, Vol. VIII, Annex 174.

[584] Final CIS, *op. cit.*, p. 2.22. UCM, Vol. VIII, Annex 173.

[585] The only exception was the possibility of exceedances in the small area immediately adjacent to the point of discharge. Subject E3 the Digest defines the area immediately

quality standards that the mills must comply with. These standards are approved by the Governments of Argentina and Uruguay and are considered by these Governments as acceptable and adequately protective of the aquatic environment of the Río Uruguay"[586]. The experts concluded that the Botnia plant will not violate any of the water quality standards, and so stated in categorical terms: "The mill operations will comply with the water quality standards provided by CARU"[587].

4. Argentina Does Not Allege that Any CARU Standard Will Be Breached

4.36 Argentina's Memorial is striking for a conspicuous omission -- it does not allege that operation of the Botnia plant will cause any CARU water quality standard to be exceeded. Its inability to make that allegation is all the more notable because Argentina clearly hoped to be able to assert that claim. In fact, an entire section of the Memorial is entitled "L'Uruguay N'A Pas Pris Toutes Les Mesures Propres à Empècher La Pollution en N'Appliquant Pas Les Standards de La CARU"[588]. Yet, nowhere does Argentina actually allege that Uruguay has permitted a discharge in violation of any particular standard adopted by CARU[589]. In this regard, Uruguay

---

surrounding a discharge point as a "mixing zone", where compliance with CARU water quality standards is not required. The Court, however, need not be concerned with this geographically-limited exceedance, since Argentina and Uruguay have expressly agreed that such exceedances are permitted. In that regard, Uruguay has complied with all requests for the mixing zone, including giving notice to CARU. CARU Digest Subject E3, *op. cit.*, Title 2, Chap. 5, Sec. 1, Arts. 4, 5. UCM, Vol. IV, Annex 60. *See generally* Diplomatic Note CARU-ROU No. 032/07 sent from President of the CARU Uruguayan Delegation to the Argentine President of CARU Notifying CARU of Mixing Zone for the Botnia Mill (25 May 2007). UCM, Vol. IV, Annex 125.

[586] Final CIS, *op. cit.*, p. 4.56. UCM, Vol. VIII, Annex 173.

[587] *Ibid.*

[588] AM, Chap. 5, Sec. III(b). ("Uruguay Did Not Take All Necessary Measures to Prevent Pollution by Failing to Abide by the CARU Standards").

[589] Argentina has not challenged the conclusion that the plant will not cause any exceedances of these standards. Although the technical consultants retained by Argentina expended tremendous efforts analysing the potential impacts of the Botnia plant, none asserted, much less

invites the Court to review paragraph 5.78 of Argentina's Memorial. It will find no mention of any particular water quality standard established by CARU that the Botnia plant will violate. It will find no mention of any particular substance that will be discharged by the Botnia plant in exceedance of CARU standards.

5. The Botnia Plant Will Not Cause an Exceedance of Uruguay's Phosphorus Standard

4.37 Unable to allege that the Botnia plant will cause an exceedance of CARU water quality standards, Argentina tries to save its case on pollution by alleging that the Botnia plant will cause an exceedance of a *Uruguayan* standard, namely Uruguay's standard for phosphorus. Argentina's claim regarding phosphorus is baseless.

4.38 As an initial matter, Argentina fails to inform the Court that CARU did not set a water quality standard for phosphorus. Similarly, CARU could have, but did not, create a mandatory discharge limit for phosphorus. Of course, there is nothing improper about CARU's decisions in that regard. Under the 1975 Statute, it is CARU's prerogative to delegate such matters to the State Parties individually. In this regard, it is worth noting that CARU had the opportunity to set a phosphorus standard and/or a discharge limit as recently as 2006, but Argentina did not propose such regulations[590]. Had Argentina felt that a CARU water quality standard or a discharge limit for phosphorus was needed to protect the Uruguay River, Argentina was free to propose one. It is notable, therefore, that Argentina chose not to do so.

---

demonstrated, that the Botnia plant will cause an exceedance of any CARU water quality standard.

[590] *See generally* Digest of the Administrative Commission of the Uruguay River (CARU), Subject E3 (June 2006 proposed revisions). UCM, Vol. IV, Annex 62.

4.39 Consistent with its delegation of authority from CARU, Uruguay, as an environmentally responsible State, promulgated both a phosphorus water quality standard and a phosphorus discharge limit. Uruguay's water quality standard is particularly rigorous (0.025 mg/L for drinking water), and in fact is more demanding than even the European Union's phosphorus standard[591]. Decree 253/79 also sets forth a strict phosphorus discharge standard of 5 mg/L, with which the Botnia plant must comply.

4.40 Argentina, in contrast, has not enacted a water quality standard for phosphorus. Neither has Argentina created a phosphorus discharge limit. Thus, Argentine industrial facilities and municipalities are unrestrained by regulation from dumping large quantities of phosphorus into the river. The result is not surprising: areas on the Argentine side of the river exhibit high amounts of phosphorus[592]. Uruguay thus finds itself in the remarkable position of being accused of contributing to the violation of its own water quality standard for phosphorus by a State that has decided that a phosphorus standard is unnecessary, and that imposes no restrictions whatsoever on phosphorus discharges from its territory.

4.41 Leaving aside the contradictory, double-standard that Argentina advocates, Uruguay has taken action to ensure that the Botnia plant will not pollute the Uruguay River with phosphorus. The Botnia plant is required both under general Uruguayan law and as a strict condition of its AAP to comply with a 5 mg/L discharge limit.

---

[591] Final CIS, Annex D, *op. cit.*, p. D2.5. UCM, Vol. VIII, Annex 176.

[592] *Ibid.*, p. D6.15. *See also ibid.*, D6.30 (Table D6.4-1) (showing baseline phosphorus levels at point on the Argentine side of the river to be 0.200 mg/L under extreme low flow conditions), and pp., D6.30-D6.31 (Tables D6.4-2a, D6.4-2b) (showing base line phosphorus levels at Ñandubaysal to be 0.100 mg/L during extreme low flow and flow reversal with low flow conditions). *See also* D3.20 (Table D3.2-2) (showing baseline concentration of phosphorus at the discharge of the Gualeguaychú River to be 0.102 in 2005).

And, as set forth in Chapter 7, Uruguay mandates a strict regime of monitoring that will rapidly detect any exceedance of this standard, and will require immediate remedial action to bring the plant into compliance with the standard. Accordingly, there is no basis to the claim that the Botnia plant will cause Uruguay's water quality standard for phosphorus to be exceeded.

4.42 Although it is true that, after Botnia commences operation, the river will display a phosphorus concentration that exceeds the Uruguayan standard, that is because the river already exceeds the standard, due to phosphorus being discharged into the river indiscriminately by Argentina. Argentina itself acknowledges that the elevated level of phosphorus at the beach area at Ñandubaysal is most likely caused by its proximity to the mouth of the Gualeguaychú River, which carries effluents from the Gualeguaychú Industrial Park and sewage from the City of Gualeguaychú, among other sources of phosphorus, into the Uruguay River a short distance upstream from Ñandubaysal[593].

4.43 The Botnia plant will not cause a harmful increase in phosphorus in the river. In that regard, independent modelling by the IFC's technical experts demonstrated that under almost all conditions, operation of the Botnia plant and the ENCE plant (combined) would not cause any measurable increase in the phosphorus level. It is only under the rare occurrence of low or reverse flow of the river that the level of phosphorus would measurably increase at all, and even then only temporarily, in isolated locations, and by a miniscule amount. For instance, the IFC's technical experts found that at Yaguareté Bay on the Uruguay side of the river, the existing phosphorus concentration is 0.220 mg/L. If *both* the Botnia and ENCE

---

[593] AM, para. 6.32.

plants were operating, it would remain at 0.220 mg/L. If *both* plants were operating *and* there was low flow, the phosphorus concentration would increase by only the insignificant amount of 0.001 mg/L, to 0.221 mg/L. Similarly, at Fray Bentos (also on the Uruguay side), under average flow conditions, operation of both plants (combined) would have no impact on the level of phosphorus; it would remain at 0.140 mg/L. Under low flow conditions, it would increase by only 0.002 mg/L, to 0.0142 mg/L (assuming the operation of *both* plants). Likewise, at Esteros de Farrapos/Islas del Río Uruguay (again, on the Uruguay side), the current level of phosphorus is 0.140 mg/L, and would remain at 0.140 mg/L under normal flow conditions even if both the ENCE and Botnia plants were operating. Under low flow and reversal conditions, and with *both* plants operating, it would rise by only 0.001 mg/L, to 0.141 mg/L. Finally, at Ñandubaysal (on the Argentine side), the current phosphorus level is 0.100 mg/L. Under normal conditions and if both the ENCE and Botnia plants were operating, it would rise by only 0.001 mg/L, to 0.101 mg/L, and would remain at that level even under low flow and reverse flow conditions[594].

4.44 As these results show, under normal conditions there will be no elevation of the level of phosphorus in the river. It is only during the temporary and infrequent instances of low flow and when *both* plants are operating that the river would show any increase in phosphorus, and even then only to a miniscule extent in a few isolated locations. And it is worth emphasising that the IFC's modelling overstates the discharge of all substances into the river, including phosphorus, because the IFC's experts assumed that both the Botnia and the ENCE plants would be in operation. Without the ENCE plant, impact on the river of any phosphorus

---

[594] Final CIS, Annex D, *op. cit.*, pp. D6.19-D6.32. UCM, Vol. VIII, Annex 176.

discharged by the Botnia plant alone will be even less significant. The elimination of the ENCE plant cuts the flow of effluents to the river by 40%, and the change in phosphorus concentrations will fall by 41%.

4.45 Phosphorus can affect the health of a river because it can -- in some instances -- contribute to eutrophication, which is the slow process by which a water body evolves into a bog or marsh due to long-term increases in concentration of nutrients, such as phosphorus. However, as found by the IFC and as supported by Uruguay's own analysis, even during rare low flow conditions, the increase in phosphorus from the discharge of the Botnia plant at any relevant location would be less than 2% and well within the natural variability of phosphorus concentrations in the river[595]. It thus presents no risk of eutrophication or other harm to the river.

6. Comprehensive Monitoring Will Ensure Compliance with the CARU Standards

4.46 Finally, as discussed in detail in Chapter 7, even if, despite all the evidence, the Botnia plant were to cause exceedances of any water quality standards, there would be no significant harm to the river or its aquatic environment. Uruguay has mandated a sophisticated and comprehensive program of monitoring that will ensure that any such exceedances are rapidly detected. Uruguay has the authority to require that Botnia take all necessary measures to stop such impacts, including halting operation of the plant, and it hereby reaffirms its commitment to exercise that authority should any violations of CARU or Uruguayan standards be detected.

[595] *See ibid.*, pp. D6.19-D6.32. *See also* Dr. Charles A. Menzie, Evaluation of the Final Cumulative Impact Study for the Botnia S.A.'s Bleached Kraft Pulp Mill (Fray Bentos, Uruguay) with Respect to Impacts on Water Quality and Aquatic Resources and with Respect to Comments and Issues Raised by the Government of Argentina (Exponent, Inc.), pp. 26-27 & Ex. 5.5 (July 2007). UCM, Vol. X, Annex 213.

Section II.
Uruguay has Ensured that the Botnia Plant Will Not Alter the Ecological Balance of the River Uruguay in Violation of Article 36 of the 1975 Statute

4.47 Argentina's allegation that the Botnia plant will detrimentally affect the ecological balance of the Uruguay River is as baseless as its assertion that Uruguay has not adequately prevented pollution. This Section demonstrates that the Botnia plant will fully comply with Uruguay's obligations to protect the ecological balance of the river.

A. CARU Regulations Implement the Parties' Obligations Under Article 36

4.48 Argentina's claim concerning the ecological balance of the river is based on Article 36, which provides that the "Parties shall coordinate, through the Commission, the pertinent measures to prevent any alteration of the ecological balance and to control pests and other harmful factors in the river and its areas of influence"[596]. As with the prevention of pollution, the Parties' substantive obligations under Article 36 are given specificity in regulations adopted by CARU. In that regard, among the enumerated functions that CARU "shall perform" that are listed in Article 56 is the requirement that CARU adopt binding "rules governing" the "conservation and preservation of living resources"[597]. The central role of

---

[596] Argentina's claim also purports to be based on Articles 35 and 37. These arguments may be dismissed summarily. Article 35 provides that "[t]he Parties undertake to adopt the necessary measures to ensure that the management of the soil and woodland and the use of groundwater and the waters of the tributaries of the river do not cause changes which may significantly impair the regime of the river or the quality of the waters." However, Argentina does not make any arguments that are based on Uruguay's management of soil or woodlands. Nor has it made any allegations concerning the waters of tributaries. Accordingly, Article 35 is inapplicable to the present dispute. Argentina's claim based on Article 37 fails for similar reasons. Article 37 provides that "[t]he Parties shall agree on rules governing fishing activities in the river with regard to the conservation and preservation of living resources." However, nothing in the Memorial states a claim based on "fishing activities".

[597] 1975 Statute, *op. cit.*, Art. 56 (a)(2). UCM, Vol. II, Annex 4.

CARU in maintaining the ecological balance of the river is confirmed by Article 36 itself, which establishes that the Parties' obligations under that Article "shall" be "coordinate[d]" through CARU. Argentina and Uruguay are in agreement that CARU has enacted rules that implement the substantive obligations of Article 36. As Argentina states in its Memorial, the "[l]'objet et le but du Digeste" is to "protéger et de préserver le milieu aquatique et son équilibre écologique"[598].

B. URUGUAY HAS ENSURED COMPLIANCE WITH SUBJECT E3 OF THE CARU DIGEST

4.49 CARU regulations governing the ecological balance of the river are found, in the first instance, in Subject E3 of the CARU Digest. Subject E3 expressly states that one of its "purposes" is to protect and preserve the "ecological balance" of the river. Subject E3's use of the term "ecological balance", which precisely mirrors the language found in Article 36 of the 1975 Statute, leaves no doubt that it is intended to implement the State Parties' substantive obligations under that Article[599]. This linkage of the water quality of the river with its ecological balance is sound; the health of an aquatic ecosystem is inextricably connected to the level of contaminants in its water. As discussed in Section I above, it is beyond dispute that none of CARU water quality standards will be violated by operation of the Botnia plant, and Argentina makes no such claim. The IFC's independent experts specifically found that the discharges from both the ENCE and the Botnia plants (combined) would not cause exceedances of either CARU or the Uruguayan water quality standards, and

[598] AM, para. 3.150. ("[t]he object and purpose of the Digest" is "to protect and preserve the aquatic environment and its ecological equilibrium").

[599] CARU Digest Subject E3, *op. cit.*, Title 1, Chap. 2, Art. 1(a). UCM, Vol. IV, Annex 60.

they concluded that "[t]he mill discharge will therefore have no adverse effect on human health or aquatic life"[600].

C. URUGUAY HAS ENSURED COMPLIANCE WITH SUBJECT E4 OF THE CARU DIGEST

4.50 The Parties have further implemented the substantive obligations of Article 36 by enacting binding rules that are located in Subject E4 of the CARU Digest. These rules state that they "have as their object the regulation of the conservation and preservation of the living resources of the River and promotion of the investigation of the same in accordance with the provisions of Chapter IX, Articles 36, 37, 38, and 39 [of the 1975 Statute]"[601]. Argentina itself acknowledges that "La CARU a édicté des standards" for the "conservation et à la préservation des ressources biologiques de fleuve Uruguay" that are "sont compilé. . . en E4 du Digeste"[602]. Moreover, with respect to Subject E4, Argentina stated in a 1995 diplomatic note that this section of the Digest "determine les règles pour rendre le possible la conservation, l'utilisation et la préservation des ressources vivantes dans le tronçon du fleuve Uruguay partagé"[603].

4.51 As with Subject E3, Uruguay has required compliance with all applicable CARU regulations in Subject E4, thereby ensuring that there will be no adverse impact to the ecological balance of the river. Although many of the requirements of

---

[600] Final CIS, *op. cit.*, p. 4.57. UCM, Vol. VIII, Annex 173.

[601] Digest of the Commission for the Administration of the River Uruguay (CARU), Subject E4 (1984, as amended) (hereinafter "CARU Digest, Subject E4"), Title 1, Chap. 1, Sec. 1, Art. 1.

[602] AM, para. 3.147. ("CARU has issued standards" for the "conservation and preservation of the biological resources of the Uruguay river" that are "found in Subject E4 of the Digest").

[603] AM, para. 3.149. ("determines the rules for ensuring the conservation, use and preservation of the living resources in the shared section of the Uruguay river").

Subject E4 are inapplicable to the Botnia plant as they pertain solely to regulation of fishing and aquaculture, Subject E4 does set forth certain substantive requirements that are applicable to the plant. Uruguay has ensured that the Botnia plant complies with those requirements.

4.52 First, Subject E4 prohibits a party from introducing into the river substances that would prejudice the consumption of fishery resources[604]. No such prejudice will be caused by the operation of the Botnia plant. As discussed in detail in Chapters 5 and 6, the IFC's independent experts have concluded that operation of the Botnia plant will not impact fisheries, finding that "[t]he mill discharge[]" would "have no adverse effect on … aquatic life"[605].

4.53 Second, Subject E4 requires that any project that may affect fishing resources either adopt adequate correctional measures or attenuate its negative effects[606]. By scrupulously adhering to CARU water quality standards and Uruguayan discharge limits, the Botnia plant will not adversely impact water quality or aquatic life. Moreover, as indicated above (and discussed more fully in Chapter 7) comprehensive monitoring will ensure the rapid detection of any adverse impacts. Also as previously stated, in the unlikely event that such negative impacts occur, Uruguay has the authority, which it pledges to exercise, to adopt any and all necessary remedial measures. As was represented to the Court in June 2006 by the Director of DINAMA, "[s]hould any prohibited impacts occur . . . DINAMA

---

[604] CARU Digest Subject E4, Title 2, Chap. 2, Sec. 1, Art. 1. UCM, Vol. IV, Annex 61.

[605] Final CIS, *op. cit.*, p. 4.57. UCM, Vol. VIII, Annex 173.

[606] CARU Digest Subject E4, *op. cit.*, Title 2, Chap. 2., Sec. 1, Art. 6. UCM, Vol. III, Annex 61.

commits to use all powers at its disposal to halt those impacts and remedy their effects if any"[607].

4.54 Finally, Subject E4 requires that the proponent of a project be responsible for potential impacts to protected resources. Uruguay has ensured compliance with this requirement by mandating in the Botnia AAP that Botnia strictly monitor the river and adopt corrective measures should unexpected impacts be detected[608]. Not only does the AAP require monitoring of water quality, which pertains to the health of aquatic life, it also requires direct "monitoring of living beings"[609]. As such, any impact on the ecological balance of the river will be rapidly detected and corrective measures ordered accordingly.

D. The IFC's Independent Experts Concluded that the Botnia Plant Will Not Adversely Impact the Ecological Balance of the Uruguay River

4.55 The Botnia plant's lack of impact on the ecological balance of the river is confirmed by the findings of the independent experts retained by the IFC. These experts found that, even under extreme low flow conditions, effluents from the Botnia plant will dissipate into insignificant concentrations within 35 metres of the point of discharge. This rapid dilution necessitates the conclusion that the "water quality within this extremely small exposure area will not pose a risk to human or aquatic life"[610]. The IFC's experts further found that because the small area around the point of discharge is "confined" to the "main channel on the Uruguayan side of the river away from sensitive habitat, valued recreational areas and drinking water

---

[607] Torres Aff., *op. cit.*, Sec. VII, para. (C).

[608] Botnia AAP, *op. cit.*, Art. 2(l). UCM, Vol. II Annex 21.

[609] *Ibid*.

[610] Final CIS, *op. cit.*, p. 4.48. UCM, Vol. VIII, Annex 173.

supplies", the operation of the Botnia plant "do[es] not pose a direct risk to the valued components of the ecosystem"[611]. The experts further described as "minimal" the "potential for effects on fish", and noted that "[e]xperience at pulp mills in Canada shows that fish health responses are non-measurable" in the type of circumstances presented by the Botnia plant[612].

4.56 The IFC's independent experts also assessed potential impacts to Uruguay's Ramsar site at Esteros de Farrapos and Islas del Río Uruguay, which they observed "supports a high diversity of birds and serves as an important wildlife refuge and corridor"[613]. They found that this "area will not be exposed to wastewaters from the mill operations" and that during "most flow conditions the downstream direction of flow carries the wastewaters from [the ENCE and Botnia plants] away from this area thereby preventing all risk of exposure"[614]. Even during "rare occasions when the flow reverses direction and travels upstream", they found that "the wastewaters move upstream" only at "trace levels". As a result, the IFC's experts concluded "there is virtually no potential for mill effluents to impact the Island Delta area"[615]. Their conclusion is now even more unimpeachable in light of ENCE's decision to relocate its plant away from the Uruguay River. The only remaining plant in the area, that of Botnia, is located approximately six kilometres downstream from the former location of the ENCE plant and approximately 16

---

[611] *Ibid.*, p. 4.49.

[612] *Ibid.*

[613] *Ibid.*, p. 4.55.

[614] *Ibid.*

[615] *Ibid.*

kilometres downstream from the protected sites, rendering it impossible, even during rare reverse flow events, for its effluents to reach those sites.

4.57 The IFC's experts reached the same conclusion -- that the Botnia plant would cause no impact on the ecological balance of the Uruguay River -- even on the Argentine side. They analysed potential impacts to fish in Yaguareté Bay (Uruguay) that cross the river into Argentina. The experts concluded that because the "aquatic resources within Yaguareté Bay are not expected to be adversely affected by mill operations", the "fish species that move between Yaguareté Bay and Argentina" are "protected from the perspective of the mill operations"[616]. The IFC's experts likewise found that the area around Ñandubaysal (Argentina) would be "unaffected by mill operations" and thus there would be no impact on aquatic life[617].

4.58 In sum, Uruguay has satisfied its obligations to protect the ecological balance of the river under Article 36 by requiring strict compliance with CARU regulations found at Subjects E3 and E4 of the CARU Digest; and the IFC's technical experts have independently concluded that no adverse impacts to the ecological balance of the river will be caused by operation of the Botnia plant.

Section III.
Uruguay's Choice of Site for the Botnia Plant Complies with All Applicable Obligations

4.59 Argentina complains that the site at Fray Bentos is unsuitable for a pulp mill. To make a claim in relation to the choice of site, Argentina must show that the plant creates a risk of significant harm and that this risk could only be mitigated or removed by relocating the plant. It has made no such showing. The definitive

[616] *Ibid.*, p. 4.56.

[617] *Ibid.*, p. 4.57.

answer to Argentina's argument has already been given and need not be reiterated. If there is no prohibited pollution and no prohibited alteration of the ecological balance -- that is, no violation of Article 41 or Article 36, and no violation of CARU water quality or other regulations -- then the choice of site is wholly immaterial, since the plant, as presently located, will cause no harm to Argentina or the river. The possibility of harm is even more remote now that ENCE has decided to relocate its plant elsewhere. Moving the Botnia plant would serve no valid purpose, since its impact on the river at its present location will not be significant or harmful. The only effects of relocation would be negative. It would result in a very significant economic burden on Botnia, on the population of Fray Bentos, and on Uruguay.

4.60 State practice shows that there is no prohibition on the construction of theoretically harmful installations near international rivers or borders. There are, for example, some 500 nuclear reactors worldwide and many of these are sited near border rivers or along coastlines adjacent to other States. So are many chemical plants and smelters, including the infamous Trail Smelter, which is still in operation. The International Law Commission's Articles on Prevention of Transboundary Harm[618] deal precisely with such situations, and they too do not suggest that States must locate such facilities inland or well away from other States. States must of course regulate and control activities within their jurisdictions so as to prevent, reduce, and control transboundary pollution and environmental damage, and consult where necessary with their neighbours. But that is all they are required to do. The evidence shows that Uruguay fulfilled its obligations in this regard and gave careful

[618] Draft Articles on Prevention of Transboundary Harm from Hazardous Activities with commentaries (hereinafter "2001 Draft Articles"), appears in *Yearbook of the International Law Commission, 2001*, vol. II, Part Two.

consideration to the suitability of the location selected for the Botnia plant by analysing the potential impacts associated with the site, and concluding that it was appropriate.

4.61 As Uruguay has already shown, it has more than fulfilled its obligation to regulate and control pollution from the Botnia plant. Relocating the plant is neither necessary nor useful as a means of minimizing the risk of transboundary harm. Other measures already adopted by Uruguay fully address that issue. In the absence of any significant risk to Argentina, when authorising a site for the plant Uruguay is fully entitled to rely on its sovereign right to pursue its own environmental and developmental policies in accordance with international law and the Charter of the United Nations[619].

Section IV.
The Approach to Environmental Regulation Adopted in the 1975 Statute is Consistent with General International Law

4.62 This Section demonstrates that the approach to environmental regulation adopted in the 1975 Statute is consistent with general international law. In particular, under international law as well as the 1975 Statute, Uruguay has a right to equitable and reasonable use of the river; neither the Convention on Biological Diversity, the Ramsar Convention, nor the POPS Convention assist Argentina; and the precautionary principle neither prohibits projects where there is no risk of serious or reversible harm, nor transfers to Uruguay what is properly Argentina's burden of proof.

---

[619] Río Declaration on Environment and Development (hereinafter "Río Declaration"), Principle 2 (1992); *Legality of the Threat or Use of Nuclear Weapons*, *I.C.J. Reports 1996*, p. 242, para. 29.

A. EQUITABLE AND REASONABLE USE OF THE RIVER

4.63 International law gives Uruguay the right to make equitable and reasonable use of the river, and the Statute must be interpreted and applied accordingly[620]. Argentina concedes as much in its own Memorial[621].

4.64 As an initial matter, Uruguay's use of the river has always been, and will continue to be, equitable and reasonable. That will not change because of the operation of the Botnia plant. As Uruguay has demonstrated in Section I, the Botnia plant will not cause an exceedance of any applicable CARU or Uruguayan water quality standards, and to the extent that Uruguay's standard for phosphorus is already exceeded, that is because of the discharge of phosphorus from Argentina, which has chosen to leave phosphorus unregulated. Moreover, as shown above, the discharge of phosphorus from the Botnia plant will cause no harmful impacts to the river or its aquatic environment. Accordingly, the legitimate use to which Uruguay is putting the river, and the substantial benefits that it is deriving therefrom, will cause no harm to Argentina.

4.65 Even if, arguendo, existing water quality (*i.e.*, without the operation of the Botnia plant) is a threat to the aquatic environment, Argentina cannot deny Uruguay the right to make equitable and reasonable use of the river for industrial purposes that are authorised by the Statute, while allowing pollution from its own side to continue unchecked. Argentina's own evidence shows that it is the main contributor to pollution in the vicinity of Gualeguaychú[622] and where the Gualeguaychú River

---

[620] *Case Concerning the Gabčikovo-Nagymaros Project (Judgment), I.C.J. Reports 1997*, p. 56, para. 85.

[621] AM, paras. 3.163-3.167.

[622] Figures are given in the Argentine Memorial at para. 5.78.

empties into the Uruguay River, and it accepts that there is no automatic priority for established polluting uses of a river over new uses[623]. Article 10 of the 1997 UN Watercourses Convention recognizes this point by providing that no category of use has inherent preference over any others[624]. An inflexible rule privileging existing Argentine pollution would in effect allow the creation of servitudes. It would also be inequitable. In such circumstances, Uruguay is not required by international law to refrain from undertaking new developments which might affect the Uruguay River. Rather, it is for the Parties jointly to agree on such measures to restore water quality to such standards as are reasonable and equitable in the circumstances. Joint protection and preservation efforts must be "proportional to the measure in which they have contributed to the threat or harm to the ecosystem in question"[625]. As demonstrated in Chapter 2, at paragraph 2.23, it is a fundamental objective of the 1975 Statute to assure the "optimum" use of the Uruguay River; and both Uruguay and Argentina agree that the phrase "rational and optimum use" is best understood as "equitable and reasonable use." In the International Law Commission's words, "[t]he requirement of article 20 [of the draft Watercourses Convention] that watercourse States act 'individually or jointly' [to protect and preserve the ecosystems of international watercourses] is therefore to be understood as meaning that joint,

---

[623] AM, paras. 3.166-3.167.

[624] "Special regard" must be given to the requirements of "vital human needs", *i.e.*, drinking water and domestic uses.

[625] Draft Articles on the Law of Non-navigational Uses of International Watercourses and Commentaries Thereto (hereinafter "1994 Draft Articles"), p. 119, comment 4 (1994), appears in *Yearbook of the International Law Commission, 1994*, vol. II, Part Two.

cooperative action is to be taken where appropriate, and that such action is to be on an equitable basis"[626].

B. The Alleged Principle of Non-Harmful Use of Territory

4.66 Argentina refers to a so-called "principe de l'utilisation non-dommageable du territoire"[627], and alleges that the "principe de l'utilisation non-dommageable d'un cours d'eau international s'inscrit dans une approche écosystèmique" required by Article 35 of the 1975 Statute[628]. Insofar as Argentina asserts some rule prohibiting any theoretically harmful use of an international river, it cannot be found in Article 35 or any other provision of the Statute. Moreover, no such rule of international law exists, nor can it be derived from any of the authorities cited. The International Law Commission articulated no such rule, either in its work on international watercourses or in its Articles on Prevention of Transboundary Harm.

4.67 In the Commission's view, the obligation established by the relevant precedents, including those cases relied on by Argentina, is to take diligent measures to prevent, reduce, and control pollution[629]. Thus, Article 7 of the UN Convention on International Watercourses provides:

Obligation not to cause significant harm

---

[626] *See also Case Concerning Diversion of Water from the River Meuse (Netherlands v. Belgium) (Judgment), PCIJ Ser., A/B No 70 - Ser. C No. 81*, p. 77 (28 June 1937). Thus, if eutrophication is presently a problem for the river as a whole, then measures must be taken by both Parties to address this shared problem equitably and reasonably. Argentina cannot place the whole burden on Uruguay or on the Botnia plant. In its own words, it manifestly would not be "rational" nor "optimal" to attempt to do so. *See* AM, para. 3.168.

[627] AM, para. 3.169. ("principle of non-harmful use of territory"). Argentina relies on the *Corfu Channel Case*, the *Legality of the Threat or Use of Nuclear Weapons Advisory Opinion*, and the *Gabčikovo-Nagymaros Case*.

[628] AM, para. 3.171. ("principle of non-harmful use of an international waterway is part of an ecosystemic approach").

[629] 1997 Watercourse Convention, *op. cit.*, Art. 21(2), p. 30, paras. 164 *et seq*.

> 1. Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.
>
> 2. Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation[630].

4.68 This article is not an obligation of result. The UN Convention on International Watercourses does not prohibit all harm. It is formulated as an obligation of conduct: *to take all appropriate measures*[631] -- or to compensate in cases where, having due regard to Articles 5 and 6, the harm caused is inequitable.

4.69 Article 41 of the 1975 Statute is similarly an obligation of conduct that requires the Parties to prescribe “appropriate rules and measures” that are “in accordance with applicable international agreements and in keeping, where relevant, with the guidelines and recommendations of international technical bodies.” In this respect it is also comparable to Article 21(2) of the UN Watercourses Convention and to many other environmental treaties in setting out an obligation of due diligence in the regulation and control of pollution and environmental risks. It does not prescribe the content of those regulations or the type of controls which are to be employed, except to the extent that they must be consistent with applicable international agreements or other internationally agreed standards.

---

[630] *Ibid.*, Art. 7.

[631] Indeed, this is the response expressly contemplated in the CARU Digest. *See* CARU Digest, *op. cit.*, Subject E3, Title 2, Chap. 3, Sec. 2, Arts. 1-3.

4.70 The ILC adopted a very similar formulation of the general rule in its Articles on the Prevention of Transboundary Harm, which provides in Article 3 that "[t]he State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof"[632]. Interpreting this obligation, the Commission's commentary notes that:

> Such measures include, first, formulating policies designed to prevent significant transboundary harm or to minimize the risk thereof and, second, implementing those policies. Such policies are expressed in legislation and administrative regulations and implemented through various enforcement mechanisms[633].

As set out more fully elsewhere in this Counter-Memorial, (see especially Sections I, II and VI of this Chapter, and Chapters 5-7), Uruguay has taken all necessary measures to regulate and control the risk of pollution from the Botnia plant, to protect water quality and the aquatic ecosystem, and to secure compliance with applicable international standards. Neither the 1975 Statute nor general international law require more.

C. APPLICABLE INTERNATIONAL STANDARDS PURSUANT TO THE 1975 STATUTE

4.71 Reference to the 1992 Convention on Biological Diversity as an international standard for the purposes of the 1975 Statute does not advance the case Argentina is attempting to make. Firstly, the Convention recognizes (at Article 3) that:

> States have in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the

[632] 2001 Draft Articles, *op. cit.*, Art. 3.

[633] *Ibid.*, p. 393, comment 10.

> environment of other states or areas beyond the limits of national jurisdiction.

4.72 This is no more than a repetition of Principle 2 of the Río Declaration on Environment and Development and of customary international law.[634] It adds nothing to Argentina's case.

4.73 Secondly, the obligations undertaken by parties to the Convention are very general in character. They include: cooperation (Article 5); developing national strategies, plans, or programmes (Article 6); identifying and monitoring biological diversity (Article 7); and in-situ conservation (Article 8). All of these articles are to be implemented in so far as "possible and appropriate".

4.74 Thirdly, it is not clear in what respect Argentina claims that Uruguay is or will be in violation of the Convention. If there is significant harm to the river environment or to Argentina then it does not need to rely on the Biodiversity Convention. The 1975 Statute would itself be sufficient to sustain Argentina's claim. If there is no such harm, then the Convention remains irrelevant. As set forth in Chapter 5, the Botnia plant will not violate the Biodiversity Convention, as the IFC found in approving its participation in the Botnia project.

4.75 Nor is it clear how the 1971 Ramsar Convention assists Argentina. The Ramsar site at Esteros de Farrapos and Islas del Río Uruguay (collectively "Esteros de Farrapos") is entirely within the territory of Uruguay. The southernmost point of the Ramsar site is 16 kilometres upstream from the Botnia plant. The minimum distance between the Botnia plant and the protected area is more than two times the distance cited by Argentina. The IFC's technical experts concluded that Esteros de

[634] *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)*, *op. cit.*, p. 241, para. 29.

Farrapos could not be affected by discharges from the plant, even in conditions of reverse flow in the river[635]. Thus, in regard to Esteros de Farrapos, there is no evidence that, in the words of Article 3 of the Ramsar Convention:

> the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference[636].

4.76 Nor is the site currently included in the list of sites threatened with such change that the Ramsar Convention Bureau (known as the Montreux Record) maintains[637]. Since Esteros de Farrapos is not threatened by the operation of the Botnia plant, there can be no violation of the Convention on that basis.

4.77 Even if Esteros de Farrapos were threatened in the longer term, the relevant provisions of the Ramsar Convention (Articles 2-5) require a party to do little more than promote conservation of wetlands in some other way[638]. In such case, the obligations which arise would be essentially to notify and consult, and "as far as possible compensate for any loss of wetland resources"[639]. Uruguay has no desire to put the future of Esteros de Farrapos at any risk, still less to promote its

---

[635] Final CIS, *op. cit.*, p. ES xxi (Table ES-4 "Water quality unaffected"). UCM, Vol. VIII, Annex 173.

[636] Convention on Wetlands of International Importance Especially as Waterfowl Habitat (hereinafter "Ramsar Convention"), Art. 3(2) (1971).

[637] Recommendation 4.8. The Record is available at http://www.ramsar.org/key_montreux_ record.htm (last visited on 9 July 2007).

[638] M.J. Bowman, one of the leading experts on the Convention, concludes: "On the one hand, the Convention seems clearly to stop short of imposing a duty to avoid or prevent any change in the ecological character of listed sites, since a procedural obligation to provide notification of such changes cannot be equated with a substantive obligation to prevent them from occurring. On the other, a State which permits the total ecological degradation of its listed sites can scarcely be said to have promoted their conservation." M.J. Bowman, *Netherlands International Law Review, vol. 42*, pp. 1-52, section 6, last paragraph (1995).

[639] Ramsar Convention, Art. 4(2).

destruction. Its conservation, like other elements of the aquatic environment and biodiversity, is best assured by comprehensive monitoring and joint action, as envisaged by Article 5 of the Convention. In sum, the Ramsar Convention will not be breached by operation of the Botnia plant, a conclusion shared by the independent experts retained by the IFC.[640]

4.78 With regard to Argentina's claims about dioxins and furans, Uruguay fully accepts that, pursuant to Article 41 of the 1975 Statute, the 2001 POPS Convention is an applicable international agreement. Article 1 of the POPS Convention provides: "Mindful of the precautionary approach as set forth in Principle 15 of the Río Declaration … the objective of this Convention is to protect human health and the environment from persistent organic pollutants"[641]. Nevertheless, as Argentina notes in its Memorial[642], although this Convention requires States to minimize or eliminate as far as possible the use of dioxins and furans, it does not ban them outright. The Convention refers to the application of "available, feasible and practical measures that can expeditiously achieve a realistic and meaningful level of release reduction or source elimination"[643]. Annex C of the Convention sets out BAT standards to be applied for that purpose. Argentina's references to Annexes A and B of the Convention are irrelevant. Uruguay has fully complied with all the applicable requirements of the POPS Convention, a conclusion shared by the IFC[644].

---

[640] *See* Chap. 5.

[641] Stockholm Convention on Persistent Organic Pollutants (hereinafter "POPS Convention"), Art. 1 (2001).

[642] AM, para. 3.223.

[643] POPS Convention, *op. cit.*, Arts. 5(a) & (b).

[644] *See* Hatfield Consultants, Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, p. 5 (14 October 2006) (concluding that the dioxin discharges from the Botnia plant will be trivial). UCM, Vol. VIII, Annex 178.

As the IFC's independent experts found, because the dioxin discharges from the two proposed plants would be "trivial, and at a concentration well below US drinking water standards," they are not of concern. This finding is particularly conservative because the IFC's independent experts were considering the level of dioxins released in a situation in which both the Botnia and the ENCE plants were operating.

D. The Precautionary Principle Neither Calls into Question the Decision to Authorise the Botnia Plant Nor Transfers the Burden of Proof

4.79 Argentina relies on the precautionary principle, as defined in Principle 15 of the 1992 Río Declaration, to reinforce its arguments regarding environmental impact assessment and prevention of harm. Argentina also asserts that the precautionary principle transfers to Uruguay the burden of proving that the Botnia plant will not cause significant harm to the environment[645]. However, nothing in the precautionary principle calls into question the decision to proceed with the Botnia project or reverses the usual burden of proof.

4.80 Principle 15 of the 1992 Río Declaration provides:

> In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation[646].

4.81 Argentina accepts that this principle is applicable to environmental protection only where there is "un risque de dommages graves ou irréversibles"[647]. This standard is a high one: serious or irreversible harm requires more than mere

[645] AM, para. 5.14.

[646] Río Declaration, *op. cit.*, Principle 15.

[647] AM, para. 5.14 ("risk of serious or irreversible harm").

"significant" harm, the term used in the ILC's Articles on Prevention of Transboundary Harm. As will be shown in Chapters 5 and 6, Argentina has not come close to demonstrating that there is a real risk of serious or irreversible harm in this case. On the contrary, as set out in this and later Chapters, Uruguay has taken all necessary measures to regulate and control the risk of pollution from the Botnia plant, to protect water quality and the aquatic ecosystem, and to secure compliance with applicable national, CARU, and international standards. This is not a substandard plant that would not be permitted in Europe or North America. It is a world class facility, judged by the IFC's independent experts to perform to a standard of the top five mills in the world[648]. It will be regulated and operated to the highest international standards consistent with international law. The discharges from the plant will be within CARU limits; there is no reason to believe that such discharges will cause significant pollution; and there is no likelihood whatsoever of significant or harmful changes to the aquatic ecosystem of the river resulting from the operation of the plant. *A fortiori*, there can be no grounds for believing that the plant is likely to cause *any* harm, let alone "serious or irreversible harm" to the water quality of the Uruguay River or any other form of serious or irreversible transboundary damage.

4.82 Second, the measures taken by Uruguay would fully comply with the requirements of Principle 15 even if it were applicable. Principle 15 requires States not to use scientific uncertainty to postpone "cost-effective measures to prevent environmental degradation". But far from postponing such measures, Uruguay has

[648] Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 2. UCM, Vol. VIII, Annex 178.

actively taken and required them from the start of the Botnia authorisation process, as detailed elsewhere in this and later Chapters.

4.83 Nevertheless, what Argentina seems to want are measures that address risks that are remote, unlikely to result in significant harm, or purely hypothetical. No such measures are required by the precautionary principle. The very reference to "cost-effective measures" in Principle 15 contradicts Argentina's arguments in this respect. Nor does science cease to be relevant when judging the existence of risk. On the contrary, there still has to be some objective scientific basis for predicting the likelihood of significant harmful effects, some "reason to believe" or "reasonable grounds for concern," before it can be asserted that States have a legal responsibility to act[649]. Many of Argentina's allegations of possible harm are not based on reasonable grounds or objective evidence, as demonstrated in Chapter 6.

4.84 Nor is Argentina correct in asserting that the precautionary principle "qui transfère la charge de la preuve à l'Uruguay"[650]. Argentina's only authority for the proposition that the precautionary principle has such an effect is a misquotation from *International Law and the Environment*. Once the quoted section is read in full, it becomes apparent that only in a few exceptional cases, and only by express agreement of the parties, have treaties transferred to the respondent State the burden of proving that there is no risk of harm. The full paragraph thus reads:

---

[649] See *EC Measures Concerning Meat and Meat Products (Hormones),* WTO Appellate Body, WT/DS26/AB/R, paras. 120-125 (1998); *Japan - Measures Affecting the Import of Apples*, WTO Appellate Body, WT/DS245/AB/R, para. 202 (2003); 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972), Art. 3(1) ("reason to believe"); Convention for the Protection of the Marine Environment of the North-East Atlantic, Art. 2 (1992) ("reasonable grounds for concern"); Convention on the Protection of the Marine Environment of the Baltic Sea Area, Art. 3(2) (1992) ("reason to assume"); Gray and Bewers, 32 *Mar. Poll. Bull*. (1996), pp. 768-771 (criticising some uses of the precautionary principle for relying on "unsustainable suspicion" rather than scientific evidence).

[650] AM, para. 5.15. ("transfers the burden of proof to Uruguay").

> *Exceptionally*, in this form, it becomes impermissible to carry out an activity unless it can be shown that it will *not* cause unacceptable harm to the environment. Examples of its use in this sense include the resolutions suspending the dumping of low-level radioactive waste at sea without the prior approval of the parties to the Paris and London Conventions, the suspension of industrial dumping in the 1972 Oslo Convention area without prior justification to the Oslo Commission, and the moratorium on whaling, which can be recommenced only with the approval of the parties to the Whaling Convention. The main effect of the principle in these situations is to require states to submit proposed activities affecting the global commons to international scrutiny, although it is doubtful whether these *few rather exceptional example*s at present support the conclusion that prior consent of this kind is generally required under international law.[651]

4.85 Even the 2001 POPS Convention does not reverse the burden of proof, notwithstanding that it is expressly based on the precautionary approach set out in Principle 15 of the Río Declaration. With regard to its treatment of dioxins and furans -- which are the only substances regulated by the POPS Convention raised by Argentina -- the POPS Convention does not ban them outright or require States to show that they are harmless[652].

4.86 There is thus nothing in Principle 15 of the Río Declaration, or in the Preamble to the Convention on Biological Diversity, or in the POPS Convention, to justify interpreting the 1975 Statute to require that Uruguay show that industrial developments taking place within its territory will pose no risk of harm to the Uruguay River. On the contrary, the scheme set out in Article 7 of the Statute envisages CARU determining, in the first instance and as a preliminary matter, whether the proposed works "might cause significant damage to the other party." It

---

[651] P.W. Birnie and A. Boyle, International Law and the Environment. 3rd edition, 2002, p.118 (emphasis added).

[652] POPS Convention, *op. cit.*, Annex C.

is then for the notified party "to assess the *probable* impact of such works on navigation, the regime of the river or the quality of its waters" before responding accordingly. Article 7 plainly does not require the proponent State to demonstrate that there is no risk of harm. Argentina thus has no basis for suggesting that the 1975 Statute falls within the exceptional category of situations where such a reversal of the burden of proof has been agreed by the parties to a treaty.

4.87 In sum, Argentina has initiated the present proceedings, and it is Argentina that alleges a risk of serious or irreversible harm. In accordance with a general principles of law endorsed by the Court's consistent case law, it is Argentina's burden to prove these allegations[653]. Argentina has come nowhere close to doing so.

Section V.
The International Law of Environmental Impact Assessment

4.88 Argentina's Memorial presents a very simplistic account of the purpose of an EIA and the context in which an EIA takes place. It argues in conclusory fashion that "L'Uruguay a donc négligé de s'assurer que des évaluations environnementales complètes soient préparées préablement à ses décisions d'autoriser la construction des usines Orion et CMB "[654]. Seemingly, the most important part of this argument is the timing: an EIA must precede authorisation -- and be "complete" at that point -- or it is fatally and irretrievably flawed. Argentina contends that this alleged failure is a violation of international law, although it nowhere attempts to set out a coherent

[653] *Case Concerning the Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro)*, *I.C.J. Reports 2007*, para. 204; *Case Concerning Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v. United States of America) (Jurisdiction and Admissibility)*, *I.C.J. Reports 1984*, p. 437, para. 101.

[654] AM, para. 5.63. ("Uruguay neglected to ensure that complete environmental assessments be prepared prior to its decision to authorise the Orion and CMB plants.").

or comprehensive account of the law on this subject. This Section demonstrates the errors in Argentina's view of the law on EIA.

4.89 As demonstrated below, an EIA is inherently a national procedure, not an international one as Argentina claims. Argentina is similarly incorrect in conceiving an EIA as a static rather than a continuing process. Moreover, contrary to Argentina's claims, the only minimum content of an EIA in international law is that there must be an assessment of possible harmful transboundary effects on people, property, and the environment. The rest is a matter for national law to prescribe. Finally, an EIA is not required to assess all risk no matter how remote or speculative; it is required to assess only risks that are likely to have a significant impact.

A. Environmental Impact Assessment Is a National Procedure, Not an International One

4.90 Contrary to the view expressed by Argentina, an EIA is "a national procedure for evaluating the likely impact of a proposed activity on the environment"[655], or in the words of Principle 17 of the 1992 Río Declaration on Environment and Development, "a national instrument"[656]. The International Law Commission takes the same view. In the commentary to its draft Articles on the Prevention of Transboundary Harm, it cites Principle 17 and notes that it is the *State of origin* which should ensure that a risk assessment is undertaken[657]. The point of emphasising that it is a national instrument or procedure is to stress that it is not a joint procedure to be carried out in co-operation with other States. Argentina relies

---

[655] Convention on Environmental Impact Assessment in a Transboundary Context (hereinafter "1991 EIA Convention"), Art. 1(vi) (1991).

[656] Río Declaration, *op. cit.*, Principle 17.

[657] 2001 Draft Articles, *op. cit.*, p. 366, p. 402, comment 1.

on Principle 17 and refers to the ILC draft articles in its arguments[658]. It makes no reference to Principle 12 of the 1987 UNEP Goals and Principles of Environmental Impact Assessment (hereinafter "UNEP EIA Principles"), which require notification of an EIA to be given to States likely to be significantly affected; it does not provide for participation by other States in the EIA itself. Principle 12 reads as follows:

> When information provided as part of an EIA indicates that the environment within another State is likely to be significantly affected by a proposed activity, the State in which the activity is being planned should, to the extent possible:
>
> a) notify the potentially affected State of the proposed activity;
>
> b) transmit to the potentially affected State any relevant information from the EIA, the transmission of which is not prohibited by national laws or regulations; and
>
> c) when it is agreed between the States concerned, enter into timely consultations[659].

4.91 Even the 1991 UNECE Convention on EIA in a Transboundary Context (hereafter "1991 Convention on EIA") gives a potentially affected State the right to participate in a national EIA *only* to the extent of providing information and making representations[660]. Under neither this instrument nor the UNEP EIA Principles is the process one of prior joint approval. There is thus no basis for Argentina's complaint that a "unilateral" EIA violates international law[661]. EIAs will normally be unilateral unless they involve joint projects such as bridges, dams, or motorways between two States. The Botnia plant is in no sense a project undertaken jointly with Argentina.

---

[658] AM, paras. 3.200, 3.201.

[659] United Nations Environmental Programme Goals and Principles of Environmental Impact Assessment (hereinafter "UNEP EIA Principles"), Principle 12 (1987) .

[660] 1991 EIA Convention, *op. cit.*, Arts. 3(5) & (6).

[661] AM, para. 5.63.

B. Environmental Impact Assessment Is a Process Not an Event

4.92 Uruguay does not dispute that an EIA is required for the Botnia project. Argentina does not deny that such an EIA was in fact carried out in accordance with Uruguayan law before Botnia's AAP was granted by DINAMA on 14 February 2005, and well before any authorisations were granted for construction of the plant[662]. What Argentina appears to argue is that the adequacy of the EIA must be judged at that moment, without regard to later assessments or subsequent monitoring, and without regard to the limited character of the authorisation granted in February 2005. According to Argentina's conception of the process, Uruguay has one chance, and only one chance, to produce a full and adequate EIA, and it must be done *before* even initial authorisation of the project is given.

4.93 Leaving aside the fact that Uruguay did in fact approve a fully adequate EIA prior to authorising construction of the Botnia plant -- a conclusion that will be demonstrated later in this Chapter -- even if (contrary to the evidence) Uruguay's EIA was materially inadequate in certain respects at the initial stage, subsequent assessments and eventual monitoring have rectified any earlier deficiency.

---

[662] Construction permits were granted as follows: 12 April 2005 (removal of vegetation cover, fencing, and land movement); 22 August 2005 (construction of a chimney, concrete plant, and foundation); 18 January 2006 (construction of bleached cellulose plant); 10 May 2006 (construction of waste water treatment plant); and 9 April 2007 (construction of landfill). DINAMA Environmental Management Plan Approval for the Botnia Plant (for the removal of vegetation and earth movement) (12 April 2005). UCM, Vol. II, Annex 22. DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the concrete foundation and the emissions stack) (22 August 2005). UCM, Vol. II, Annex 23. DINAMA Environmental Management Plan Approval for the Botnia Plant (supplement to prior environmental management plans) (18 January 2006). UCM, Vol. II, Annex 26. DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the wastewater treatment plant) (10 May 2006). UCM, Vol. II, Annex, 28. DINAMA Environmental Management Plan Approval for the Botnia Plant (9 April 2007) (approving plan for the construction of solid industrial waste landfills). UCM, Vol. II, Annex 37.

4.94 EIA is not an event, but a process. The object of an EIA is to provide decision-makers with information about likely environmental effects when deciding whether to authorise the proposed activity and on what terms. An EIA will normally take place before authorisation is granted, but it may occur in several stages, for example in schemes which require an "initial environmental examination" followed by a full EIA only if a likelihood of significant harm is then identified[663]. In cases involving complex projects, where the time between initial authorisation and eventual operation is prolonged, it is often necessary to conduct several EIAs -- or at least to review and revise the initial EIA -- before the plant is authorised to commence operations. A great deal will depend on the circumstances of the case, including the need to respond to criticisms and comments from regulatory bodies, public consultations, and other governments. In the case of the Botnia plant, the fact that this process was extended should be viewed favourably, not as a defect, since it shows the rigour and seriousness with which the process was conducted.

4.95 Plainly, the response of a neighbouring State to a project as complicated as the Botnia plant may raise additional questions for consideration some time after the original EIA has been carried out. The regime of co-operation envisaged by the UNEP Principles and the 1975 Statute may thus necessitate a further EIA, or additions to the existing EIA, in order to take account of the matters raised by the other Party. It makes no sense for Argentina to say that its concerns must be taken into account, while at the same time insisting on judging the adequacy of the process by reference solely to the initial EIA. That EIA will necessarily have been carried out by Uruguay before Argentina has had any opportunity to comment on the

---

[663] *See, e.g.*, Protocol on Environmental Protection to the Antarctic Treaty (hereinafter "1991 Protocol"), Art. 8, Annex I (1991); UNEP EIA Principles, *op. cit.*, Principle 1.

findings. Argentina's simplistic assertion that Uruguay must ensure that "évaluations environmentales complètes" are prepared prior to its decision to authorise the Botnia plant takes no account of this reality[664]. If Argentina wants its concerns to be taken seriously, then it has to accept that environmental impact assessment is an ongoing process including consultations between the Parties. It is not a once-and-for-all event.

4.96 For the same reason, it makes no sense to assess the adequacy of an EIA without also considering what matters may be better addressed through monitoring. The need to take account of environmental risks does not stop at the EIA stage, nor when the project comes into operation. Some risks may be inherently difficult to assess in advance; others may be too unlikely or remote, but nevertheless merit monitoring on precautionary grounds once the project has come into operation; others may have come to light only after the initial EIA. The Court will recall how in the *Case Concerning the Gabcikovo-Nagymaros Project* it required the parties to "look afresh at the effects on the environment of the operation of the Gabcíkovo power plant"[665]. The Court's approach rightly treats prior EIA and subsequent monitoring of the ongoing risks and impacts as a continuum which will operate throughout the life of a project. This view of the relationship between EIA and monitoring (or "post project analysis") reflects State practice in many national systems and in the provisions of modern treaties such as the 1982 UN Convention on the Law of the Sea and the 1991 Convention on EIA in a Transboundary Context[666].

---

[664] AM, para. 5.63. ("complete environmental assessments").

[665] *Gabčikovo-Nagymaros Project (Judgment), op. cit.*, p. 78, para. 140.

[666] 1982 Convention, *op. cit.*, Arts. 204, 206; 1991 EIA Convention, *op. cit.*, Arts. 2, 7; *see also* 1991 Protocol, *op. cit.*, Arts. 3(2)(c),(d) & (e). In the present dispute there is plainly an

C. REQUIRED CONTENT OF A TRANSBOUNDARY ENVIRONMENTAL IMPACT ASSESSMENT

4.97 The only requirement for a transboundary EIA in international law is that there must be an assessment of possible harmful transboundary effects on people, property, and the environment.

4.98 Argentina argues that the content of an EIA must follow the listing and format given in Appendix II of the 1991 Convention on EIA[667]. The court should reject this argument for two reasons. First, the 1991 Convention is a European Convention. It is the only one of its kind in existence. It provides a particularly advanced and demanding regime of EIA, largely based on European Community law. Plainly it is not binding on Argentina or Uruguay, nor is it applicable law in the present proceedings. Nor can it be part of the context for the purpose of interpreting the 1975 Statute since it is neither a "related agreement" within the terms of Article 31(2) of the Vienna Convention on the Law of Treaties, nor is it one of the "relevant rules of international law applicable between the parties" within the terms of Article 31(3)[668]. For the same reason it cannot be counted as one of the "applicable international agreements" which provide a standard for prescribing appropriate rules and measures under Article 41(a) of the 1975 Statute. The EIA Convention is not uninteresting, but it is not law in these proceedings. Nor does it become applicable

opportunity to monitor the effect of the pulp mill on water quality and the aquatic environment, and thus a need for the Parties to agree on arrangements for doing so. Uruguay has on previous occasions repeated its regret at Argentina's refusal to enter into co-operative monitoring arrangements. *See, e.g.*, CR 2006/47, p. 30, paras. 40-43 (8 June 2006) (Boyle). It remains willing to do so when or if Argentina agrees. However good it is, an EIA is made better with effective monitoring.

[667] AM, para. 3.204.

[668] *Dispute Concerning Access to Information Under Article 9 of the OSPAR Convention (Ireland v. United Kingdom), P.C.A.*, paras. 101-105 (2003).

law merely because the IFC uses this Convention as one of the standards by reference to which it assesses project finance applications.

4.99 Second, Argentina's argument on the content of an EIA entirely ignores general international law on EIA. Appendix II of the 1991 Convention on EIA largely follows Principle 4 of UNEP's Goals and Principles of EIA[669]. Principle 4 sets out a minimum standard for *national* EIA laws that are principally focused on *internal* or *domestic* impacts[670]. Principle 4 is thus a model law for national legislation, not a statement of what international law requires States to assess in a transboundary setting. The distinction can be seen in Principle 12, the final article in the UNEP EIA Principles, which does apply to transboundary EIA, but which only requires transmission to the potentially affected State of "any relevant information from the EIA, the transmission of which is not prohibited by national law."[671] What stands out here is that there is no requirement to transmit to other States information about all of the matters listed in Principle 4.

4.100 Moreover, there is no evidence that in adopting UNEP Principle 4 the States concerned believed they were reflecting existing international law on the content of an EIA or intending to create new international law. The necessary *opinio juris* is lacking. Nor is this surprising. How States carry out EIAs internally is a matter of domestic jurisdiction. The alleged inadequacy of an EIA is not something about which they would be entitled to complain unless the failure relates to the assessment of possible transboundary impacts. No doubt Argentina would be the

---

[669] This was endorsed by United Nations General Assembly Resolution 42/184 (1987).

[670] UNEP EIA Principles, *op. cit.*, Principle 4.

[671] *Ibid*., Principle 12.

first to object if Uruguay started to draw attention to alleged inadequacies in the assessment by Argentina of environmental impacts within its own borders.

4.101 The conclusion that Argentina's proposed list does not represent international law is confirmed by the ILC Commentary to Article 7 of the draft Articles on Prevention of Transboundary Harm. It is worth setting this out in full:

> (6) The article does not specify what the content of the risk assessment should be. Obviously the assessment of risk of an activity can only be meaningfully prepared if it relates the risk to the possible harm to which the risk could lead. This corresponds to the basic duty contained in article 3. Most existing international conventions and legal instruments do not specify the content of assessment. There are exceptions, such as the Convention on Environmental Impact Assessment in a Transboundary Context, which provides in detail the content of such assessment. The 1981 study of the legal aspects concerning the environment related to offshore mining and drilling within the limits of national jurisdiction, prepared by the Working Group of Experts on Environmental Law of UNEP, also provides, in its conclusion No. 8, in detail the content of assessment for offshore mining and drilling.
>
> (7) The specifics of what ought to be the content of assessment is left to the domestic laws of the State conducting such assessment. For the purposes of article 7, however, such an assessment should contain an evaluation of the possible transboundary harmful impact of the activity. In order for the States likely to be affected to evaluate the risk to which they might be exposed, they need to know what possible harmful effects that activity might have on them.
>
> (8) The assessment should include the effects of the activity not only on persons and property, but also on the environment of other States. The importance of the protection of the environment, independently of any harm to individual human beings or property is clearly recognized[672].

4.102 We can see from this that the only minimum content of a transboundary EIA in international law, as far as the ILC is concerned, is that there must be an

[672] 2001 Draft Articles, *op. cit.*, pp. 403-405, comments 6-8.

assessment of possible harmful transboundary effects on people, property, and the environment. As shown in Section VI of this Chapter, the EIA conducted by Botnia for the Uruguayan authorities fully satisfied these obligations.

D. AN ENVIRONMENTAL IMPACT ASSESSMENT IS NOT REQUIRED TO ASSESS REMOTE OR SPECULATIVE RISKS

4.103 Argentina also fails to appreciate that an EIA is not required to assess risks that are too remote, or that are unlikely to result in significant harm, or that are too speculative. As Argentina has noted, Principle 17 of the Río Declaration provides that an EIA "shall be undertaken for proposed activities that are *likely* to have a *significant adverse impact* on the environment and are subject to a decision of a competent national authority"[673]. Although Argentina makes no reference to a threshold of "significant adverse impact", the same terminology is used by the 1992 Convention on Biological Diversity[674]. UNEP's Goals and Principles on EIA also refer to "activities that are *likely* to *significantly* affect the environment"[675]. UNEP Principle 5 further states that "[t]he environmental effects in an EIA should be assessed with a degree of detail commensurate with their likely environmental significance". Argentina cites Article 29 of the 2004 Berlin Rules on International Watercourses of the ILA, but these rules also require a threshold of "*significant* effect on the aquatic environment or sustainable development of waters"[676]. Evidently Argentina assumes that any impact, however insignificant, must be the

---

[673] Río Declaration, *op. cit.*, Principle 17 (emphasis added).

[674] Convention on Biological Diversity, Art. 14(1)(a) (1992) ("significant adverse effects").

[675] UNEP EIA Principles, *op. cit.*, Principle 1.

[676] AM, para. 3.205 & n. 365.

subject of detailed enquiry and preventive measures. This is not what international law requires.

4.104 The International Law Commission's Articles on the Prevention of Transboundary Harm provide authoritative guidance on the point. They refer to "an assessment of the possible transboundary harm caused by that activity, including any environmental impact assessment"[677]. However, the articles only apply to activities posing a risk of significant transboundary harm (Article 1). This includes "risks taking the form of a high probability of causing significant transboundary harm and a low probability of causing disastrous transboundary harm"[678]. At no point does the Commission suggest that insignificant risks must be assessed or avoided. The Commission's commentary to Article 7 says that "[t]he requirement of article 7 is fully consonant with principle 17 of the Río Declaration on Environment and Development"[679]. Clearly, the ILC does not regard Article 7 as a departure from the existing and very consistent practice reflected in Principle 17 of the Río Declaration, and adopted by consensus by the very large number of States, including Argentina and Uruguay, which participated in the 1992 UN Conference on Environment and Development.

4.105 Significant harm is neither "likely" nor "possible" within the terms of existing international precedents if it is not reasonably foreseeable on some objective basis. According to the International Law Commission, whether there is such a risk has to be determined objectively: "as denoting an appreciation of possible harm resulting

---

[677] 2001 Draft Articles, *op. cit.*, Art. 7.

[678] *Ibid.*, Art. 2(a).

[679] *Ibid.*, p. 402, comment 3.

from an activity which a properly informed observer had or ought to have had"[680]. A similar view was taken by the Appellate Body of the World Trade Organization in *Japan - Measures Affecting the Import of Apples*. Upholding the United States' complaint that restrictions on apple imports were inconsistent with the Application of Sanitary and Phytosanitary Measures, the Appellate Body concluded that Japan had failed in its duty to conduct a proper risk assessment when it assumed the existence of a risk and simply referred to generally available scientific data: there must be specific and objective data to demonstrate a significant risk arising from the particular trade that a member sought to restrain[681].

4.106 Nor would the position be any different if formulated in accordance with the precautionary principle. The International Law Commission was well aware of the precautionary principle when it drafted its Articles on Prevention of Transboundary Harm and the commentary thereto. The precautionary principle is referred to at several points in the commentary, including the commentary to Article 7[682], but nowhere does the Commission suggest that harm which is speculative or unlikely, or which cannot be measured objectively, constitutes a potentially significant adverse impact that must be assessed in an EIA. On the contrary, the

---

[680] *Ibid.*, p. 385, comment 14.

[681] *Japan - Measures Affecting the Import of Apples*, *op. cit.*, para. 202. The Appellate Body stated: "Under the SPS Agreement, the obligation to conduct an assessment of 'risk' is not satisfied merely by a general discussion of the disease sought to be avoided by the imposition of a phytosanitary measure. The Appellate Body found the risk assessment at issue in *EC - Hormones* not to be 'sufficiently specific' even though the scientific articles cited by the importing Member had evaluated the 'carcinogenic potential of entire categories of hormones, or of the hormones at issue in general.'" Applied to the present dispute this means that it is not enough for Argentina to show that pulp mills in general are known to pollute rivers. There are after all various types of pulp mills. It must be shown that a mill of the type under construction, discharging into a river with characteristics like those of the Uruguay River, is likely to cause significant harm.

[682] 2001 Draft Articles, *op. cit.*, p. 403, comment 4.

Commission interprets the phrase "significant adverse impact" in the following way: "[t]he harm must lead to a real detrimental effect on matters such as, for example, human health, industry, property, environment or agriculture in other States. Such detrimental effects must be susceptible of being measured by factual and objective standards"[683]. The Commission did not say by "subjective or opinionated views", yet that is the standard Argentina would have the Court adopt.

Section VI.
The Environmental Review of the Botnia Plant Satisfies the Requirements of the 1975 Statute and International Law

4.107 Article 7 of the 1975 Statute provides for notification of projects that can "affect" the "quality" of the "waters" of the Uruguay River. As discussed in Chapter 3, Uruguay has fully complied with its obligations under that Article. As this Section will demonstrate, to the extent the 1975 Statute imposes any additional requirements for Environmental Impact Assessment, Uruguay has fully met those requirements as well. In particular, Uruguay has comprehensively assessed the potential for all significant adverse transboundary impacts, and provided its assessment to Argentina[684]. Neither the 1975 Statute nor general international law require more.

A. URUGUAY'S LAW ON EIA

4.108 Uruguayan law requires the rigorous assessment of potential environmental impacts, and is consistent with international standards. The IFC's independent experts analysed Uruguay's environmental protection regime and

[683] *Ibid.*, p. 388, comment 4.

[684] *See infra*, Chaps. 2, 3.

concluded that "the permit setting process used by DINAMA is practical and rigorous"[685].

4.109 Before major projects like the Botnia plant can even initiate the process to obtain an AAP[686], the proponent must submit extensive information to DINAMA, including, at a minimum, a description of: the project itself; the location where the project will be executed and its area of influence; the potential environmental impact that may result from the project; and anticipated preventive, mitigation, and corrective measures[687].

4.110 Based on that submission and its own independent judgment, DINAMA places the project into one of three categories: "A", "B", or "C"[688]. Category C projects include those "entailing activities, constructions or works whose execution could cause a negative environmental impact of quantitative or qualitative significance, regardless of whether preventive or mitigation measures are planned."[689] Classification of a project as Category C (which is how DINAMA classified the Botnia plant) does not mean that negative impacts are likely or even expected to occur. Rather, a Category C classification signifies only that Uruguayan law mandates the strictest form of environmental review.

4.111 Proponents wishing to carry out Category C projects must apply for, and obtain, an AAP. To receive this, the proponent must submit for DINAMA's

---

685 Final CIS, Annex A, *op. cit.*, p. A6.7. UCM, Vol. VIII, Annex 174.

686 *See generally* Decree No. 435/994, Environmental Impact Assessment Regulation (hereinafter "Decree No. 435/994"), Art. 1 (21 September 1994). UCM, Vol. II, Annex 9.

687 *Ibid.*, Art. 4. The proponent must also provide its proposed classification of the project, according to the categories established in the following paragraph of text.

688 *Ibid.*, Art. 5.

689 *Ibid.*, Art. 5(c).

consideration: (a) Project Documentation; (b) an Environmental Impact Assessment Report; and (c) an Environmental Impact Assessment Summary.

4.112 Project Documentation must contain, at a minimum:

- the executive summary of the project, containing a project description and the basic design and plans;
- a reference to the legal and administrative framework, which must identify the applicable regulations and permits or authorisations needed;
- the location of the project and its area of influence, from the perspective of its geographic and political-administrative location;
- a description of the different activities to be carried out within the project, staff to be employed, raw materials to be used, and waste expected to be produced; and
- a description of the stages of the project (construction, operation, and termination) and of the activities it entails, both directly and indirectly[690].

4.113 The Environmental Impact Assessment Report must both "consider the project and its potential area of influence, including a general macro-environmental framework" and provide an "objective comparison between conditions prior to and after execution of the project", considering its "construction, operation and termination stages"[691]. The EIA Report must contain detailed information and analyses. It requires assessment of the features of the "receiving environment", including an assessment of the "existing use of resources" and of "sensitive or risk areas". This must entail, at a minimum, assessment of the physical environment, including "water, soil, [and] landscape", the "biotic environment", including the

[690] *Ibid.*, Art. 10.

[691] *Ibid.*, Art. 11.

"fauna, flora, [and] aquatic biota", and the "anthropogenic environment", including "population, activities, soil uses, [and] historical and cultural sites"[692].

4.114 The EIA Report must also contain a detailed "identification and assessment of impacts". This must include a "prediction of direct and indirect, simple and cumulative impacts, as well as risks derived from the environmental situation resulting from execution of the project". It must have "predictions of the evolution of negative environmental impacts, comparing the environmental state with and without the project." The EIA Report must also provide a "quantification of the identified environmental impacts, both from a geographical and temporal perspective", as well as a "comparison of results with both the present situation and accepted standards"[693].

4.115 In addition, the EIA Report must contain a "determination of mitigation measures". This must include consideration, at a minimum, of "the mitigation measures that must be applied in order to reduce identified environmental impacts"; the "compensatory or restorative measures that will need to be adopted"; the "project's environmental management plans"; and the "termination programs that will need to be adopted"[694]. Finally, the EIA Report must "clearly and explicitly state any informational deficiencies, as well as any uncertainties encountered during preparation", and must "identify the technicians who took part in its development"[695].

---

[692] *Ibid.*, Art. 12, para. I.

[693] *Ibid.*, Art. 12, para. II.

[694] Uruguayan law also provides that the EIA should include a "[m]onitoring, control and auditing plan" where such a plan is to be "implemented in connection to the related environmental factors within the project's area of influence." *Ibid.*, Art. 12, para. IV.

[695] *Ibid.*, Art. 12, para. IV.

4.116 The Environmental Impact Assessment Summary ("EIA Summary") must contain a "succinct summary of the information contained in the Project Documentation and the Environmental Impact Assessment", as well as "the conclusions of the principal environmental impacts identified in the Environmental Impact Assessment and the measures that will be adopted with respect to each impact." Because the EIA Summary is used to facilitate public review and comment, it is required to be "written in easily understood terms" while maintaining its "technical accuracy and rigor"[696].

B. Botnia's Initial Environmental Impact Assessment Submissions to DINAMA

4.117 The formal approval process for the Botnia project commenced on 30 October 2003 when Botnia notified Uruguayan regulatory authorities of its intent to undertake the project[697]. DINAMA classified the Botnia project as Category C (necessitating the strictest review), and required Botnia to apply for an AAP, which, as described above, involved the submission of Project Documentation, a comprehensive EIA Report, and an EIA Summary. DINAMA also explicitly required that the material prepared by Botnia include an evaluation of the cumulative impacts of both the Botnia and ENCE plants. Botnia retained professional environmental consulting and engineering firms to prepare the EIA Report and EIA Summary, and made its initial presentation of these materials for DINAMA's consideration on 31 March 2004. These documents provided a tremendous amount of technical information concerning the expected environmental impacts of the

[696] *Ibid.*, Art. 9.

[697] Botnia solicited its request for an authorisation of the port and duty free zones on 22 August 2004. These, however, were approved in the same Initial Environmental Authorisation as the Botnia plant. Botnia AAP, *op. cit.*, Art. 1. UCM, Vol. II, Annex 21.

project that allowed Uruguay to assess the proposed project, including its potential transboundary impacts. The 31 March 2004 submission contained, *inter alia*, voluminous information on site selection, plant operations, existing environmental conditions, and an assessment of potential impacts[698].

4.118 The 31 March 2004 submission explained that the plant's proposed location in Fray Bentos was chosen because the river in that area has a large volume of water and thus a large capacity for dilution. As a result, effluents from the plant would be quickly diluted to inconsequential concentrations. In addition, there were no ecologically sensitive sites nearby[699]. The site was also close to forest plantations; as a result, environmental impacts from transporting raw materials to the plant would be minimized. The IFC's technical experts later conducted an independent technical review of the siting of the plant, and confirmed the high river flow, the lack of sensitive sites, and the proximity of plantations. The experts found that Botnia had sufficiently considered the relevant environmental issues when deciding where to locate the plant; and they confirmed the environmental suitability of the location[700].

4.119 The 31 March 2004 report also explained the technical details of the plant's operations[701]. It included detailed discussion of, among other things: (1) the

---

[698] Botnia's Project Documentation was included in its EIA Report.

[699] Botnia Environmental Impact Assessment Submitted to DINAMA, Chap. 3, pp. 1-2 (31 March 2004). UCM, Vol. X, Annex 218.

[700] *See* Final CIS, *op. cit.*, pp. 2.9-2.12. UCM, Vol. VIII, Annex 173.

[701] *See generally* Botnia Environmental Impact Assessment Submitted to DINAMA, Chap. 4 (hereinafter "Botnia EIA, Chap. 4") (31 March 2004). UCM, Vol. VI, Annex 158. *See also* Additional Report No. 2 of the Botnia Environmental Impact Assessment (2 September 2004). UCM, Vol. VII, Annex 161. Additional Report No. 3 of the Botnia Environmental Impact Assessment (5 October 2004). UCM, Vol. VII, Annex 162. Additional Report No. 5 of the Botnia Environmental Impact Assessment (12 November 2004). UCM, Vol. VII, Annex 163.

kraft bleaching process; (2) consumption, handling, storage, and disposal of chemicals; (3) target levels of water consumption, emissions, and discharges; (4) comparison of discharge levels with IPPC BAT, U.S. Environmental Protection Agency standards, and levels achieved by state-of-the art Scandinavian facilities; (5) the chemical production plants and their expected emissions; and (6) target levels of air emissions[702]. Botnia pledged that operation of the plant would comply with IPPC BAT[703]. In their subsequent assessment, independent experts commissioned by the IFC agreed that there was sufficient information about the operation of the plant to determine that adverse impacts would not occur[704]. They also concurred that the Botnia plant would comply with IPPC BAT in all respects[705].

4.120 The EIA provided Uruguay with detailed information about the existing environmental conditions in the Uruguay River, including:

- average flows over a period of twenty years and historic variations in water levels[706];
- loading and settling of sediments;
- existing water quality based on review of historical data collected by CARU, as well as monitoring conducted by Botnia and ENCE, at several locations;

Annex VIII to Additional Report No. 5 of the Botnia Environmental Impact Assessment, Studies of Plume Dispersion and Sediment Studies (12 November 2004). UCM, Vol. VII, Annex 166. Botnia Cellulose Plant in Fray Bentos: Blueprint of the Port Works (report within Botnia EIA submissions) (December 2004). UCM, Vol. VII, Annex 167.

[702] Botnia EIA, Chap. 4, *op. cit.*, § 4. UCM, Vol. VI, Annex 158.

[703] *See Ibid.*, § 4.1 (contains 280 pages of such information).

[704] *See generally* Final CIS, Annex A, *op. cit*. UCM, Vol. VIII, Annex 174. *See also* Final CIS, Annex D, *op. cit.*. UCM, Vol. VIII, Annex 176.

[705] *See, e.g.*, Final CIS, *op. cit.*, pp. 2.21-23. UCM, Vol. VIII, Annex 173. *See generally* Final CIS, Annex A, *op. cit.* UCM, Vol. VIII, Annex 174. *See also* Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 2. UCM, Vol. VIII, Annex 178.

[706] Botnia Environmental Impact Assessment Submitted to DINAMA, Chap. 5 (hereinafter "Botnia EIA, Chap. 5") pp. 13-15 (31 March 2004). UCM, Vol. VI, Annex 159.

- existing uses of the Uruguay River, including municipal and industrial uses that may effect water quality;
- characteristics of the geology, hydrology, and subterranean waters;
- survey of the flora and vegetation species in the area of influence;
- biodiversity of the arthropodic community, freshwater fish species, bird species, bat species, and certain large mammals from among eleven different locations, including two sites along the coast of the Uruguay River, one directly in the river, and one near Yaguareté Bay;
- sampling of benthos, phytoplankton, and zooplankton from three sites, located upstream, downstream, and in the area of the plant, and an extensive literature review of these communities[707].

The IFC's independent experts later agreed that the information about the existing environmental conditions in the river was adequate to assess the potential impacts of the Botnia plant[708].

4.121 The 31 March 2004 report provided Uruguay with extensive analysis of the potential environmental impacts of the Botnia plant's operations, including potential transboundary impacts. Because the assessment of impacts contained in the EIA assumed that both the Botnia and ENCE plants would be in operation, its conclusions regarding impacts were overstated. Nonetheless, as set forth below, the report concluded that, even with both plants operating, neither Argentina nor Uruguay would be adversely affected, a conclusion later endorsed by the IFC's independent technical consultants[709].

---

[707] *Ibid.*, pp. 13-211. The Botnia EIA also conducted baseline surveys of aspects of the environment outside the scope of this dispute, including the human environment and an appraisal of the landscape, which incorporated an analysis of the recreational, cultural, and historic sites in the surrounding area. *Ibid.*, pp. 212-280.

[708] *See generally* Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.* UCM, Vol. VIII, Annex 178.

[709] *See* Final CIS, *op. cit.*, pp. 4.48-4.57 (analysing impacts to various locations on the Argentine and Uruguayan side of the river and concluding that the plant discharges will have "no adverse effect on human health or aquatic life"). UCM, Vol. III, Annex 173.

4.122 The 31 March 2004 report contained extensive modelling of the potential impacts from the plant's effluent discharge, including analysis of impacts during the average, maximum, and minimum monthly flows of the river, and during flow reversals. It also modelled the impact of effluents under a condition referred to as "summer low flows", which were calculated based on data from a period of 20 years, and under extreme low flow conditions. The EIA assessed the expected discharge, dilution ratios, and effluent concentrations at the discharge points for each of those flow conditions. The EIA modelled the expected increases for water temperature, Biologically Dissolved Oxygen ("BOD"), Chemically Dissolved Oxygen ("COD"), Total Suspended Solds ("TSS"), total nitrogen, total phosphorus, absorbable organic halides ("AOX"), chlorinated phenolic compounds, chlorates, phenols and metals, and dioxins and furans during average, summer low flow, and extreme low flow conditions, and concluded that during average flow and summer low flow conditions, the increase in the concentrations of these contaminants would be so insignificant as to be undetectable. Even during extreme low flow conditions, the EIA concluded that operation of the Botnia plant would not cause an increase in the level of nutrients and COD beyond their normal pre-existing levels in the river. It specifically assessed transboundary impacts, and found that, because the effluent discharge would reach high levels of dilution within a short distance from the diffuser, the effluents would not reach the Argentine side of the river, and therefore Argentina would not be adversely impacted[710]. Subsequent independent modelling by the IFC's technical experts endorsed all of these conclusions, and confirmed that during typical flow situations, the effluent discharge "will remain on the Uruguayan

[710] Botnia EIA, Chap. 5, pp. 2-7, 2-12, 18-20. UCM, Vol. VI, Annex 159.

side of the river and will not cross over to Argentina beyond trace levels"[711]. During rare flow reversals, the IFC's technical experts confirmed that effluent may travel to the Argentine side of the river, but at extremely small concentrations that would not cause adverse effects[712].

4.123 The 31 March 2004 report found that there would be no significant impact on recreational areas in Uruguay, and no effect whatsoever on other recreational areas, including in Argentina, even taking into account the operation of the ENCE plant. The report evaluated the impacts to the flora and fauna in the river, including in Argentina. It conducted this analysis by drawing upon studies of both the impact of pulp mills on other rivers and studies of the existing biology of the Uruguay River, and found that no adverse impacts were expected. Finally, the report assessed impacts to fish, and concluded that adverse impacts were highly unlikely in either Uruguay or Argentina[713]. The IFC's technical experts later agreed with these conclusions, finding that "[w]astewater from the two plants is treated to levels at which it poses no direct threat to aquatic life or recreational use of the river, and it is further diluted to undetectable limits within a short distance of the point of discharge"[714].

4.124 The 31 March 2004 report concluded that eutrophication would not be caused in either Uruguay or Argentina by the discharge of nitrogen or phosphorus from the Botnia plant. It found that, even under summer low flow conditions, the

---

[711] Final CIS, *op. cit.*, pp. 4.50 & 4.56-4.57. UCM, Vol. VIII, Annex 173.

[712] *Ibid.*, 4.56-57.

[713] Botnia Environmental Impact Assessment Submitted to DINAMA, Chap. 6 (hereinafter "Botnia EIA, Chap. 6"), pp. 69-70 (31 March 2004). UCM, Vol. VI, Annex 160.

[714] Final CIS, *op. cit.*, pp. 4.56-4.57. UCM, Vol. VIII, Annex 173. *See also ibid.*, pp. 4.85-4.86.

contribution of nitrogen from plant effluents would be *twenty times lower* than the amount of nitrogen required for eutrophication. It likewise found that the amount of phosphorus in the river after operation of the plant would be *forty times lower* than needed for eutrophication[715]. The IFC's independent experts likewise found that the discharge of nitrogen and phosphorus from the Botnia plant would not increase the risk of eutrophication[716].

4.125 The report assessed the impact of the Botnia plant on the quality of the water used for human consumption. It found that there would be no adverse impact for either Argentina or Uruguay because the plant would not cause an exceedance of any CARU water quality standard[717]. The IFC's independent experts concurred with this conclusion, finding that the discharges from the Botnia plant would not travel to the Argentine side of the river, and therefore would not adversely impact water used there for human consumption, and that the drinking water of Fray Bentos (on the Uruguayan side) would likewise not be affected[718].

C. URUGUAY'S RESPONSE TO THE BOTNIA ENVIRONMENTAL IMPACT ASSESSMENT REPORT

4.126 Uruguay did not simply take the analysis provided in the 31 March 2004 report at face value. Far from it, rather, Uruguay applied its independent analysis and judgment in examining the report's adequacy. DINAMA scrupulously reviewed the materials submitted by Botnia[719]. Although the conclusions in the EIA were

---

[715] Botnia EIA, Chap. 6, *op. cit.*, p. 66. UCM, Vol. VI, 160.

[716] *See* Final CIS, *op, cit.*, pp. 4.50, 4.56-4.57. UCM, Vol. VIII, Annex 173.

[717] Botnia EIA, Chap. 6, *op. cit.*, pp. 75-80. UCM. Vol. VI, Annex 160.

[718] Final CIS, *op. cit.*, pp. 4.52-53, 4.56-4.57. UCM, Vol. VIII, Annex 173.

[719] Decree No. 435/994, *op. cit.*, Art. 14. UCM, Vol. II, Annex 9.

ultimately substantiated (both by DINAMA and later by the IFC), to ensure that the potential impacts of the plant were fully assessed before deciding whether to issue an AAP, DINAMA issued five written requests for additional information[720]. These requests required significant expansions of the 31 March 2004 report, including more detailed evaluation and calculation of the dilution factors, plume modelling during low flow periods, specific concentration values at various locations on the Uruguay River[721], and more information on the chemical production line[722]. Botnia responded to these requests with additional information in August, September, October, November, December of 2004 and January of 2005. In addition, DINAMA held extensive and frequent in-person consultations with representatives from Botnia throughout this period[723].

4.127 With respect to water quality issues, the most significant additional information provided by Botnia was its 12 November 2004 report. The 12 November 2004 report presented the results of two sets of complex numerical plume

---

[720] The specific dates of the requests were 23 July, 13 August, 24 September, 19 October, and 20 December 2004. DINAMA Environmental Impact Assessment Report for the Botnia Plant (hereinafter "DINAMA EIA Report, Botnia"), p. 1 (11 February 2005). UCM, Vol. II, Annex 20.

[721] Additional Report No. 2 of the Botnia Environmental Impact Assessment, pp. 2239, 2241-2244, 2248-2254 (2 September 2004). UCM, Vol. VII, Annex 161. Additional Report No. 5 of the Botnia Environmental Impact Assessment, pp. 2415-2419 (12 November 2004). Annex VIII to Additional Report No. 5 of the Botnia Environmental Impact Assessment, Studies of Plume Dispersion and Sediment Studies, pp. 2415-2419 (12 November 2004). UCM, Vol. VII, Annex 164. Additional Report No. 7 of the Botnia Environmental Impact Assessment, p. 3792 (17 January 2005). UCM, Vol. VII, Annex 167.

[722] *See* Additional Report No. 2 of the Botnia Environmental Impact Assessment, p. 2296 (2 September 2004). UCM, Vol. VII, Annex 161. Additional Report No. 3 of the Botnia Environmental Impact Assessment, p. 2650 (5 October 2004). UCM, Vol. VII, Annex 162. Annex VIII to Additional Report No. 5 of the Botnia Environmental Impact Assessment, Studies of Plume Dispersion and Sediment Studies, pp. 2423-2425 (12 November 2004). UCM, Vol. VII, Annex, 164. Additional Report No. 7 of the Botnia Environmental Impact Assessment, pp. 3792 (17 January 2005). UCM, Vol. VII, Annex 167.

[723] DINAMA EIA Report, Botnia*, op. cit*., p. 1. UCM, Vol. II, Annex 20.

modelling studies during low flow periods in the river. The 12 November 2004 report also estimated both dilution and concentration of effluents at ten key locations along the river based on this modelling, including two key locations in Argentina: the mouth of the Gualeguaychú River and Isla el Sauzal. Based on this refined modelling, no adverse impacts to water quality were predicted. In particular, because the modelling showed that effluent discharges will rarely, if ever, cross over to the Argentine side of the river beyond trace levels, the impacts were predicted to be practically nil. This analysis is similar to the process followed in the Final Cumulative Impact Study prepared by the IFC's independent experts, and yielded very similar results. The 12 November 2004 report also presented a detailed evaluation of fish toxicity and bioaccumulation, as well as modelling and analysis of potential sedimentation impacts from the Botnia port. The results of the modelling showed that any impacts to sedimentation from the port would be small and insignificant. With respect to all of these issues, the 12 November 2004 report provided a further basis for DINAMA's ultimate conclusion that adverse impacts will not occur, including on the Argentine side of the river.

4.128 After thoroughly reviewing all of the reports and other information submitted by Botnia, DINAMA provided public notice of the project in the Official Gazette before deciding whether to issue an AAP. The notice was also published in several widely circulated newspapers: *El Páis*, *El Observador*, and *La República*[724]. The EIA Summary was also made available for public comment from 7 December

[724] Botnia AAP, *op. cit.*, subsec. (X). UCM, Vol. II, Annex 21.

2004 to 3 January 2005[725], and a public meeting was held in Fray Bentos on 21 December 2004[726].

4.129 After the public comment period ended, DINAMA published a report detailing its environmental assessment review of the potential impacts of the Botnia plant [727]. DINAMA's report, dated 11 February 2005, covered *inter alia*:

- the existing water quality of the Uruguay River and historical average flow, low flow, and flow reversal conditions;
- the existing conditions with respect to noise and air quality;
- the potential impacts from effluent discharges of contaminants, including introduction of BOD, COD, AOX, and others to both the Uruguayan and Argentine side of the river;
- the cumulative impacts of the effluent discharge from the Botnia and ENCE plants;
- the potential for eutrophication as a result of nitrogen and phosphorus discharges;
- the potential impacts to sedimentation from the Botnia port;
- the potential impacts from air emissions and noise related issues;
- soil emissions; and
- effects on the biota of the Uruguay River.

4.130 DINAMA's report concluded "that the analysis that concludes in the present report is of sufficient quality to enable the issuance of an opinion with regard to the application for environmental authorisation of the project"[728]. It found that:

> No negative residual impacts making [the project] inadmissible were found in the study of the project of cellulose plant and structures related, in the sense that the impacts generated can be

---

[725] DINAMA EIA Report, Botnia, *op. cit*., p. 2. UCM, Vol. II, Annex 20.

[726] *Ibid.*

[727] *See generally ibid.*

[728] *Ibid.*, p. 19.

> prevented, mitigated, or compensated, if activities are carried out as planned and appropriate safety measures are taken[729].

4.131 DINAMA's February 2005 report explicitly evaluated the impacts on Argentina and found that:

> The results obtained when applying the hydrodynamic model indicate that the expected increase in contaminant concentrations on the coast of Argentina is practically nil[730].

4.132 DINAMA based this conclusion on numerous factors. In particular, DINAMA found that, even under a modelled low flow condition when the river has less dilutive capacity, the dilution will still be more than sufficient so that the materials from the Botnia effluent discharge will not reach the Argentine side of the river in amounts beyond trace levels[731]. DINAMA's conclusion with respect to impacts on Argentina was well-supported by its extensive review of substances of potential concern in the Botnia effluent discharge, including BOD, COD, AOX, and phosphorus. DINAMA also concluded that no adverse impacts from the Botnia port, such as sedimentation, were likely to occur, particularly in any location outside the immediate vicinity of the port.

4.133 After careful review of the Botnia EIA, including all of the supplemental reports and information supplied by Botnia, DINAMA recommended that MVOTMA issue an AAP for the Botnia plant. By the time DINAMA made that recommendation, nearly 16 months after Botnia first requested this authorisation, DINAMA had assembled an extensive file on the project that included, among other

---

[729] DINAMA stated that a monitoring program would be required to ensure protection of the environment. *Ibid.*, pp. 28-29.

[730] *Ibid.*, p. 9.

[731] *See ibid.*, p. 9.

things, the original Botnia EIA Report and the seven supplements to the EIA, public comment, and its own internal analysis. The approximately four thousand pages of technical and scientific data contained therein were more than sufficient to assess the plant's environmental impacts. They included detailed information regarding the baseline condition of the Uruguay River, the production processes of the plant, the effluent treatment process, the effluent quality, the expected concentrations of effluent at various points in the river (including on the Argentine side), and the expected impacts to water and sediment quality, as well as to the fauna of the Uruguay River. Only after this extensive assessment was completed did MVOTMA grant Botnia its AAP, on 15 February 2005.

D. URUGUAY'S CONTINUING ENVIRONMENTAL ASSESSMENT AND CONTROL

4.134 The AAP for the Botnia plant contains explicit conditions to ensure that the actual performance of the plant will be as assessed. Effluent discharge limitations are among the most important of these conditions. DINAMA imposed the following effluent discharge limitations on the Botnia plant pursuant to Decree 253/79 and the provisions of the AAP[732]:

- Floating material - Absent
- Temperature - Maximum 30 degrees Celsius, provided that the effluent does not elevate the temperature of the water body by more than 2 degrees
- Ph - Between 6.0 and 9.0
- DBO5 - Maximum 60 mg/L
- Total Suspended Solids - Maximum 150 mg/L
- Oils and Greases - Maximum 50 mg/L
- Sulfur - Maximum 1 mg/L
- Detergents - Maximum 4 mg/L
- Phenolic substances - Maximum 0.5 mg/L
- Flow - The maximum flow cannot exceed the mean flow of the period of activity

[732] Botnia AAP, *op. cit.*, Art. 2(y) & (z). UCM, Vol. II, Annex 21.

- Amonium - Maximum 5 mg/L
- Phosphorus - Maximum 5 mg/L
- Fecal Coliforms - Maximum 5000 FC / 100 mL
- Cyanide - Maximum 1 mg/L
- Arsenic - Maximum 0.5 mg/L
- Cadmium - Maximum 0.05 mg/L
- Copper - Maximum 1 mg/L
- Cromium - Maximum 1 mg/L
- Mercury - Maximum 0.005 mg/L
- Nickel - Maximum 2 mg/L
- Lead - Maximum 0.3 mg/L
- Zinc - Maximum 0.3 mg/L.
- AOX - 6 mg/L
- Total Nitrogen - 8 mg/L
- Nitrates - 4 mg/L.

4.135 The AAP also requires that the Botnia plant operate in strict accordance with the water quality standards established both by Uruguayan law and the CARU Digest. Where these standards differ, the Botnia plant must operate in compliance with the strictest standard[733].

4.136 Uruguay's issuance of the AAP for the Botnia plant did not end its continuing assessment of the environmental impacts of the project. As explained in Chapter 3, the AAP is an *initial* environmental authorisation. It is the first in a series of environmental authorisations that must be issued by DINAMA before construction of the plant can commence, and before the plant can begin to operate. The AAP itself sets out the additional authorisations that must be issued, and the requirements that the project proponent, in this case Botnia, must satisfy in order to obtain them. Thus, as stipulated in its AAP, Botnia submitted to DINAMA detailed environmental management plans for the various construction phases, which were approved by DINAMA (and the corresponding authorisations were issued) on 12

[733] *See ibid.*, Art. 2(aa) (providing that at a minimum the Botnia plant must operate in compliance with the CARU and the Uruguayan water quality standards).

April 2005 (plan for the removal of vegetation and earth movement)[734], 22 August 2005 (plan for the construction of the concrete foundation and the emissions stack)[735], 18 January 2006 (supplement to prior environmental management plans)[736], 10 May 2006 (plan for the construction of the wastewater treatment plant)[737], and 9 April 2007 (plan for the construction of the landfill). Each of these approvals reflects a further, more detailed control by DINAMA of the project impacts.

4.137 In addition, any project involving industrial discharges to the Uruguay River must receive a Wastewater Treatment System Approval, as well as a Discharge Authorisation[738]. DINAMA first issues the Wastewater Treatment Approval which contains effluent discharge limitations (such as annual maximum loading and concentration values), with which the project must comply. Once operations have begun and compliance with the discharge limitations is verified, as a formal matter, the Discharge Authorisation is issued[739]. DINAMA has issued the Wastewater Treatment System Approval for the Botnia plant[740], which confirms requirements such as maximum permitted average monthly and annual loads for

---

[734] DINAMA Environmental Management Plan Approval for the Botnia plant (for the removal of vegetation and earth movement) (12 April 2005). UCM, Vol. II, Annex 22.

[735] DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the concrete foundation and the emissions stack) (22 August 2005). UCM, Vol. II, Annex 23.

[736] DINAMA Environmental Management Plan Approval for the Botnia Plant (supplement to prior environmental management plans) (18 January 2006). UCM, Vol. II, Annex 26.

[737] DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the wastewater treatment plant) (10 May 2006). UCM, Vol. II, Annex 28.

[738] Decree No. 253/79, *op. cit.*, Arts. 28, 29. UCM, Vol. II, Annex 6.

[739] *Ibid.*, Art. 29, para. 3.

[740] DINAMA Resolution No. 0148/07, Approval of the Wastewater Treatment System for the Botnia plant (4 July 2007). UCM, Vol. X, Annex 225.

COD, DBO, TSS, total nitrogen, total phosphorus, and AOX[741]. The Discharge Authorisation will only be issued upon verification that the Botnia plant is operating in compliance with these additional requirements, as well as the requirements of Decree 253/79. Moreover, by law, a Discharge Authorisation is only valid for eight years, and Botnia must seek a renewal of this authorisation prior to its expiration as a condition to continuing operations[742].

4.138 In addition, prior to commencing operations, Uruguay has required Botnia to obtain approval of another environmental management plan before receiving an authorisation to begin operating the plant. At a minimum, this plan must include:

- an implementation plan for mitigation measures and compensation;
- a monitoring plan;
- a contingency plan;
- an abandonment plan;
- a management plan for the part of the plot not directly affected by the plant;
- a plan for the prevention of accidents; and
- a solid waste management plant[743].

DINAMA must review and approve each of these items before operation can begin, and each approval itself entails the continuing analysis and supervision of the plant and its operations. As of the presentation of this Counter-Memorial, DINAMA has not yet approved Botnia's proposed environmental management plan for the operational phase of the project, and consequently MVOTMA has not issued an authorisation to commence operations.

4.139 The EIA process for the Botnia plant will not end even with DINAMA's approval of the Botnia's monitoring plan, contingency plan, and other environmental

---

[741] *Ibid.*, p. 2 (Table 1).

[742] Decree No. 253/79, *op. cit.*, Art. 29, para. 3. UCM, Vol. II, Annex 6.

[743] Botnia AAP, *op. cit.*, Art. 2(h) & (i). UCM, Vol. II, Annex 21.

management plans required by the AAP or the issuance of the Discharge Authorisation. It will continue throughout the life of the plant. For example, the AAP provides that Botnia may be required to submit an updated EIA before commencing operations[744]. And, as discussed more fully in Chapter 7, prior to commencing operation, the Botnia plant must receive an Authorisation to Operate ("AAO"), which will be granted only upon a showing that the project will comply with the requirements of the AAP, the representations in the EIA, and other authorisations[745]. Continued operation of the plant is contingent upon receiving a renewal of the AAO from DINAMA every three years[746]. Renewal of the AAO must include revision and updating of the environmental management plans for the plant, in addition to a review of all authorisations permitting the discharge of effluents into the Uruguay River[747]. As a condition for renewing the AAO, DINAMA may require that the Botnia plant adopt additional protective measures with respect to its monitoring and other environmental management plans, as well as its operational processes, as DINAMA deems necessary to ensure compliance with applicable law, including CARU water quality standards. Therefore, the environmental review process for the Botnia plant will continue throughout the life of the plant, and changes to effluent limitations and plant operational processes may be made as necessary.

---

744 *Ibid.*, Art. 2(d).

745 *Ibid.*, Arts. 23, 24.

746 *Ibid.*, Art. 23.

747 *Ibid.*, Art. 24, para. 2.

E. Uruguay's Compliance with the 1975 Statute

4.140 Uruguay has done precisely what it agreed to do in Articles 41 and 36 of the 1975 Statute regarding the prevention of pollution and the preservation of the ecological balance of the Uruguay River. Working jointly with Argentina, Uruguay has designed through CARU a detailed environmental regulatory regime that stipulates binding standards for the river. These mutually agreed upon regulations have as their express purpose the prevention of pollution and the maintenance of the ecological balance of the river. Accordingly, there can be no dispute that they are deemed by both Argentina and Uruguay to be adequately protective of the river.

4.141 Uruguay has ensured and will continue to ensure that neither the construction nor operation of the Botnia plant will transgress any of these CARU regulations. It has made mandatory, as a principle of its general environmental law, compliance with all CARU regulations. Uruguay has also made Botnia's fulfillment of all CARU regulations an express condition of the project's Initial Environmental Authorisation, as well as all subsequent authorisations. It has also formally and repeatedly pledged to exercise its sovereign powers to the fullest extent necessary should any violations unexpectedly occur. Simply put, there is nothing else that Uruguay could have done, or should have done, to guarantee compliance with CARU environmental standards. Argentina itself tacitly acknowledges the unimpeachable strength of Uruguay's environmental case by failing to cite a single CARU regulation that will be breached by the operation of the Botnia plant. Argentina has not done so, of course, because it cannot. All of CARU standards will be fully complied with, as the IFC's independent experts who reviewed the Botnia project so found.

4.142 Faced with a complete inability to present an environmental case based on the environmental standards it mutually agreed with Uruguay would govern the Uruguay River, Argentina has attempted to save its claim by focusing on the Botnia plant's alleged discharge of phosphorus. But this focus serves to reveal the utter poverty of Argentina's environmental case. The discharge of phosphorus is not regulated by CARU, and Argentina has never once suggested it should be. Rather, the regulation of phosphorus has fallen to the Parties' respective national regulatory systems. Although Uruguay has duly enacted both a water quality standard and a discharge limitation for phosphorus, Argentina has not. Leaving aside the hypocrisy of Argentina's claim -- that no limits apply to phosphorus discharges from the Argentine side, but Uruguay must apply its own law to limit discharges from its side -- the Botnia plant will not raise the level of phosphorus in the river beyond insignificant amounts that will have no impact on the health of the river, a fact confirmed by the IFC's independent experts.

4.143 Argentina's attempts to base its case on general international law fare no better. Nothing relating to the Botnia plant violates any provision of the Convention on Biological Diversity, the Ramsar Convention, or the POPS Convention. Nor does the precautionary principle assist Argentina, which has not, and cannot, identify any risk of serious or irreversible harm. Argentina's attempt to avoid its burden of proof by invoking the precautionary principle to transfer that burden to Uruguay is significant only as an admission by Argentina that it cannot sustain that burden; as shown above, Argentina's attempted burden-shifting lacks any foundation in law. Finally, Uruguay has fully complied with all its obligations under international law regarding environmental impact assessment since Uruguay has diligently assessed --

and is continuing to assess -- all significant risks, including those presenting potential transboundary harm. Having identified no such risks in the course of the sixteen-month permitting process that resulted in Botnia's Initial Environmental Authorisation, nor in the review that continues still, there is nothing in the international law of environmental impact assessment that suggests the project should not move forward.

4.144 In sum, Uruguay has fully complied with all the substantive environmental obligations set forth in the 1975 Statute. The proof of this lies not only in the work performed by DINAMA -- which is itself sufficient to support this conclusion -- but also in the findings of the International Finance Corporation and its independent experts. That work, which resulted in an overwhelming endorsement of the Botnia project, is the subject of the next Chapter.

CHAPTER 5.
THE CONCLUSIONS OF THE INTERNATIONAL FINANCE CORPORATION AND ITS INDEPENDENT EXPERTS

Section I.
Deference Due to the International Finance Corporation and Its Independent Technical Experts

5.1 On 21 November 2006, the Board of Directors of the International Finance Corporation (IFC), a part of the World Bank Group, approved a US$170 million investment in the Botnia plant.[748] In conjunction with this decision, the Multilateral Investment Guarantee Agency (MIGA) also approved a US$350 million guarantee for the project. As the IFC stated in announcing the approvals, the IFC and MIGA agreed to participate in the Botnia project only after they were "convinced" the plant would not only "generate significant economic benefits for Uruguay" but would also "cause no environmental harm"[749].

5.2 The IFC's decision was made only after "a thorough review of the facts" confirmed that the Botnia plant "will be operated to the highest global standards and comply with IFC and MIGA's respective environmental and social policies."[750] The IFC explained that it arrived at this conclusion after an "extensive due diligence process", which included "conclusive and positive findings of a cumulative impact study and a subsequent review of the study undertaken by independent experts (Hatfield)."[751] These expert analyses laid to rest any concerns about the environmental impact of the proposed project. In the view of the IFC, its

[748] The IFC's membership consists of the 179 States that are members of the International Bank for Reconstruction and Development (World Bank) that have signed and deposited with the Corporate Secretariat of the World Bank Group an Instrument of Acceptance of the IFC Articles of Agreement.

[749] International Finance Corporation, Press Release, "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay, 2,500 Jobs to be Created, No Environmental Harm" (hereinafter "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay, 2,500 Jobs to be Created, No Environmental Harm"), p. 1 (21 November 2006). UCM, Vol. IX, Annex 206.

[750] *Ibid*.

[751] *Ibid*.

independent experts provided "conclusive evidence that the local area, including the Argentine city of Gualeguaychú, will not experience adverse environmental impacts"[752].

5.3 The precise contents of the IFC's Final Cumulative Impact Study (Final CIS) will be examined at length below. Among the many noteworthy (and, to Argentina's case, devastating) findings it contains are:

- "ENCE and Botnia have combined their operating experience and process knowledge with vendor offers to develop mill configurations that would be accepted in Canada, the USA or Europe. The mills will employ state-of-the-art process technologies in every respect and it is anticipated that once they are operational, they will perform better than any of the companies' existing mills with respect to environmental performance."[753]
- "The expected performance with respect to bleaching effluent flow, COD content and color will be among the best in the world."[754]
- "Based on emissions levels from the IPPC-BAT (2001) and Tasmanian-AMT (2004) standards, it was found the mills are implementing BAT."[755]
- "In summary, based on the above analysis, the BEKP mills proposed by Botnia-Orion and ENCE-CMB are considered by the CIS team to be IPPC-BAT (2001) or better."[756]
- "The cumulative assessment of water quality in the Río Uruguay indicates that no water quality standards or guidelines will be exceeded as a result of the discharge of effluents from the two mills."[757]
- "The AAPs also require the mills to comply with international surface water quality standards developed by the Administrative Commission of the Río Uruguay (Comision Administradora del Río Uruguay).

---

[752] *Ibid*.

[753] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills (hereinafter "Final CIS"), p. ES.v. (September 2006). UCM, Vol. VIII, Annex 173.

[754] *Ibid.*

[755] *Ibid.*, p. ES.iv.

[756] *Ibid.*, p. ES.vi.

[757] *Ibid.*, p. ES.xx.

> These water quality standards are approved by the Governments of Argentina and Uruguay and are considered by these Governments as acceptable and adequately protective of the aquatic environment of the Río Uruguay."[758]

- On the "Rio Uruguay along the Argentina Side: Water quality unaffected."[759]
- In the "Beach Area at Ñandubaysal, Argentina: Water quality unaffected"[760].

5.4 Understandably, Argentina's Memorial studiously ignores the Botnia project's unqualified endorsement by the IFC and its impartial technical experts. Instead, Argentina asserts, in the face of all evidence, that the Botnia project will somehow cause environmental harm that will violate the substantive provisions of the 1975 Statute. Uruguay submits that the project's unchallenged compliance with CARU and Uruguayan regulations, as discussed in Chapter 4, are legally dispositive in this regard. On this basis alone, Argentina's claim that Uruguay has violated the substantive provisions of the 1975 Statute must fail. Above and beyond this basic defect in Argentina's case, the IFC's independent evaluation of the facts further confirms that Argentina's substantive environmental arguments lack merit. It is axiomatic that Argentina bears the burden of proof of establishing the technical facts upon which its claim is founded[761]. Yet, it has come nowhere close to doing so; nor could it. Especially in light of the findings of the Final CIS, the facts are clear: the

---

[758] *Ibid.*, pp. ES.i-ii.

[759] *Ibid.*, p. ES.xxi.

[760] *Ibid.*

[761] *Case Concerning the Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro), Judgment, I.C.J. Reports 2007*, p. 75, para. 204 ("On the burden or onus of proof, it is well established in general that the applicant must establish its case and that a party asserting a fact must establish it…"); *Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Jurisdiction and Admissibility, I.C.J. Reports 1984*, p. 437, para. 101 ("it is the litigant seeking to establish a fact who bears the burden of proving it").

Botnia plant is not only environmentally viable, it will be among the best such plants in the world.

A. THE WEIGHT TO BE ACCORDED THE IFC'S FINDINGS

5.5 It is, of course, the Court's responsibility to determine which of the materials submitted by the Parties "have probative value with regard to the alleged facts" and to "make its own clear assessment of their weight, reliability and value"[762]. In the present case, the Court has before it not just the assessments of the Parties themselves. It also has the benefit of a comprehensive technical assessment prepared by the independent and impartial International Finance Corporation that fully and without qualification endorses the project. The IFC's conclusions are entitled to great weight. As this Court noted in the *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, "evidence obtained" by independent persons "experienced in assessing large amounts of factual information, some of it of a technical nature, merits special attention"[763]. Independent fact-finding reports prepared by disinterested international organizations are often found to be particularly credible[764]. As the

[762] *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Judgment, I.C.J. Reports 2005*, p. 34, paras. 58-59; *see also Genocide Case (Judgment)*, *op. cit.*, p. 77, para. 212 ("The Court must itself make its own determination of the facts which are relevant to the law which the Applicant claims the Respondent has breached.").

[763] *Armed Activities (Judgment), op. cit.*, p. 35, para. 61. The report under consideration was the report of the Porter Commission, which examined persons involved in the actions at issue in the case.

[764] *Genocide Case (Judgment), op. cit.*, p. 145, para. 408 ("The Court notes the fact that the report of the United Nations Secretary-General does not establish any direct involvement by President Milošević with the massacre."); *Armed Activities (Judgment), op. cit.*, p. 34, para. 60, and p. 75, para. 237 (giving evidentiary weight to the United Nations Panels of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo); *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004*, pp. 161-162, paras. 56-58 (The

Court observed in the *Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, "evidence of a disinterested witness -- one who is not a party to the proceedings and stands to gain or lose nothing from its outcome" is "regarded as prima facie of superior credibility" than evidence prepared on behalf of a Party[765]. Thus, in the *Genocide Case*, the Court found that the United Nations Secretary-General's report on "The Fall of Srebrenica" had "considerable authority" because of the "care taken in preparing the report, its comprehensive sources and the independence of those responsible for its preparation"[766].

5.6 The IFC's independent validation of the Botnia project is precisely the sort of evidence to which considerable weight should be given. The IFC, a part of the World Bank Group, is an independent international organization of which both Argentina and Uruguay are members. The process that resulted in the IFC's approval of the Botnia project was deliberate and careful, and its outcome never predetermined. Throughout, the IFC repeatedly made clear that it would participate in the project only if Botnia demonstrated its compliance with the IFC's mandatory environmental and social standards. Convincing the IFC to its satisfaction was long and involved. In over nineteen months of due diligence, the IFC, among other things:

- reviewed extensive submissions from Botnia;

Court found "sufficient information and evidence to enable it to arrive at a judicial conclusion upon any disputed questions of fact" because it had been provided reports by the Secretary-General of the United Nations and reports by special rapporteurs and competent organs of the United Nations).

[765] *Military and Paramilitary Activities (Merits), op. cit*., p. 43, para. 69.

[766] *Genocide Case (Judgment), op. cit.*, pp. 81-83, paras. 228-230.

- conducted site visits to Argentina and Uruguay;
- commissioned a draft Cumulative Impact Study (CIS) by outside environmental experts;
- solicited and considered comments on the draft CIS from interested parties, including from Argentina and Argentine citizens and groups;
- retained further independent experts from Hatfield to evaluate whether there were deficiencies in the draft CIS;
- engaged still other experts from EcoMetrix and elsewhere to revise the draft CIS based on comments provided by Hatfield;
- retained Hatfield to assess whether its comments on the draft CIS were fully addressed by EcoMetrix in the final CIS.

5.7 Against this, Argentina has commissioned several "expert" reports solely for purposes of these proceedings. The authors of these reports are not independent; they are being paid by Argentina and are acting on its behalf. The Court's jurisprudence is clear that such reports are accorded less weight. As it stated in *Democratic Republic of the Congo v. Uganda*, and repeated in the *Genocide Case*, "[t]he Court will treat with caution evidentiary materials specially prepared for this case …"[767]. The Court's scepticism is particularly appropriate for the reports offered by Argentina in this case, for the reasons stated in Chapter 6. They are no match for the comprehensive, well-documented, and impartial reports produced by the independent experts retained by the IFC.

B. IFC Policy and Performance Standards are Detailed, Extensive, and Cover All Potential Environmental Impacts

5.8 In evaluating the weight to be accorded the IFC's conclusions, it is useful to understand the process that led to them. As a matter of policy, the IFC takes

[767] *Ibid.*, p. 77. para. 213; *Armed Activities (Judgment), op. cit.*, p. 35, para. 35.

environmental concerns with the utmost seriousness[768]. It does not participate in projects that it determines after review are environmentally harmful. This guiding principle is set forth in the IFC's *Policy on Social and Environmental Sustainability*, which mandates that "[c]entral to the IFC's development mission are its efforts to carry out its investment operations" in "a manner that 'do no harm' to people or the environment"[769]. Accordingly, IFC policy forbids the financing of "new business activity that cannot be expected to meet" the IFC's environmental and social Performance Standards[770]. To give effect to its environmental and social protection policy, the IFC requires its clients to provide a rigorous "assessment" of the "social and environmental risks and impacts of their projects" and to implement "measures to meet the requirements" of a set of comprehensive Performance Standards[771]. It

---

[768] Multilateral financial institutes, such as the IFC and MIGA, are obligated under general international law to ensure that their activities are adequately protective of the environment. As one commentator has stated, "multilateral development banks" have a "sufficient degree of international personality to subject them to certain duties under international law, including duties which arise under the operation of general and specific rules of international environmental law." Sands, Philippe: Principles of International Environmental Law. 2nd Edition. Cambridge, Cambridge University Press, 2003, pp. 1024-1025. As a result, "[m]ultilateral development banks are under an obligation to comply with general principles of international law relating to the protection of the environment, and any failure to comply with such obligations might entail their international responsibility, as well as liability for damages". *Ibid*.

[769] International Finance Corporation, *Policy on Social and Environmental Sustainability* (hereinafter "IFC Policy"), para. 8 (30 April 2006), *available at* http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/pol_SocEnvSustainability2006/$FILE/SustainabilityPolicy.pdf (last visited on 9 July 2007). The IFC has a long and distinguished history of promoting sustainable development by participating only in projects that it determines will not be harmful to the environment. Even prior to the adoption of the current *Policy on Social and Environmental Sustainability*, the IFC's policies in this regard were manifested in its *Operational Policies on Environmental Assessment*, including Operational Policy 4.01, which governed Environmental Assessment, and Operational Policy 7.50, which governed Projects on International Waterways. These operational policies, now superseded by the *Policy on Social and Environmental Sustainability*, imposed strict requirements regarding the assessment of potential environmental impacts, including those of a transboundary nature.

[770] IFC Policy, *op. cit.,* para. 17.

[771] *Ibid.*, para. 10.

then reviews the client's assessment, assists it in developing "measures to avoid, minimize, mitigate or compensate for social and environmental impacts". and monitors its "social and environmental performance throughout the life of IFC's investment"[772].

5.9 The IFC's social and environmental review of a potential project comprises three "key components" that it uses to ascertain whether the project can be expected to meet the Performance Standards. First, the IFC reviews the "social and environmental risks and impacts of the project as assessed by the client."[773] If the client's assessment is insufficient, the IFC "requires the client to undertake additional Assessment or, where appropriate, to commission Assessment by external experts"[774]. Second, the IFC analyses the client's "commitment and capacity" to "manage these expected impacts, including the client's social and environmental management system."[775] Third, the IFC assesses the "role of third parties in the project's compliance with the Performance Standards"[776].

5.10 In conducting its environmental and social review, the IFC places a high premium on the engagement of local stakeholders. In that regard, the IFC has "committed" itself to putting "into practice processes of community engagement that ensure the free, prior, and informed consultation of the affected communities"[777]. To ensure that such local consultation takes place, the IFC "reviews the client's

---

[772] *Ibid.*, para. 11.

[773] *Ibid.*, para. 15.

[774] *Ibid.*

[775] *Ibid.*

[776] *Ibid*.

[777] *Ibid.*, para. 20.

documentation of the engagement process"[778]. The IFC also, prior to presenting the project for approval by the IFC's Board of Directors, engages in its "own investigation" to "assure[] itself that the client's community engagement is one that involves free, prior, and informed consultation"[779].

5.11 In addition, the IFC requires projects to "set up and administer appropriate mechanisms or procedures to address project-related grievances or complaints" regarding social and environmental issues[780]. To that end, the IFC has established a mechanism through the Compliance Advisor/Ombudsman (CAO) -- who is independent of IFC management and reports directly to the President of the World Bank Group -- to "enable individuals and communities affected by IFC projects to raise their concerns to an independent oversight authority"[781]. The CAO is tasked with responding to complaints relating to IFC-funded projects and overseeing "audits of IFC's social and environmental performance, particularly in relation to sensitive projects, to ascertain compliance with policies, guidelines, procedures, and systems"[782].

C. THE IFC'S PERFORMANCE STANDARDS

5.12 The IFC's *Policy on Social and Environmental Sustainability* is realized through eight Performance Standards that are intended to "manage social and

---

[778] *Ibid*.

[779] *Ibid.*, para. 20.

[780] *Ibid.*, para. 31.

[781] *Ibid.*, para. 32.

[782] *Ibid.*, para. 33.

environmental risks and impacts"[783]. Compliance with the Performance Standards is required "throughout the life of an investment by IFC"[784]. The Performance Standards are meant to be comprehensive. They address the following topics:

1. Social and Environmental Assessment and Management System;
2. Labour and Working Conditions;
3. Pollution Prevention and Abatement;
4. Community Health, Safety and Security;
5. Land Acquisition and Involuntary Resettlement;
6. Biodiversity Conservation and Sustainable Natural Resources Management;
7. Indigenous Peoples; and
8. Cultural Heritage.

5.13 Importantly, the Performance Standards take full account of obligations under international environmental law by incorporating into the standards, *inter alia*:

- the Convention on Environmental Impact Assessment in a Transboundary Context;
- the POPS Convention;
- the Convention on Long-Range Transboundary Air Pollution;
- the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes;
- the Convention on Biological Diversity;
- the Convention on Wetlands;
- the Rotterdam Convention of Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade;

[783] International Finance Corporation, *Performance Standards on Social and Environmental Sustainability* (hereinafter "IFC Performance Standards"), Introduction, para. 1 (30 April 2006), *available at* http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/pol_PerformanceStandards2006_full/$FILE/IFC+Performance+Standards.pdf (last visited on 9 July 2007). The standards, published on 30 April 2006, were a result of two and a half years of evaluation both within the IFC through public solicitation of outside input. They were subject to a stakeholder comment process, and are meant to reflect the expectation of broad constituencies, including environmental NGOs and private sector entities.

[784] *Ibid*.

- the Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- the Convention Concerning the Protection of World Cultural and Natural Heritage; and
- the Convention on Migratory Species.

Moreover, separate and independent of the Performance Standards, the IFC requires a project to "comply with applicable national laws, *including those laws implementing host country obligations under international law*"[785]. As a result, in approving the Botnia project, the IFC necessarily determined that the project complied with all applicable Uruguayan environmental laws and regulations, and with all applicable international legal obligations, specifically including the 1975 Statute and CARU regulations, and each of the aforementioned Conventions.

5.14 Four Performance Standards are particularly pertinent to these proceedings.

1. Performance Standard 1

5.15 Performance Standard 1 requires that a project be comprehensively assessed for potential environmental and social impacts and that it have a satisfactory management system to address all environmental and social issues. At a minimum, the management system must incorporate a Social and Environmental Assessment; a management program; sufficient organisational capacity; training; community engagement; monitoring; and reporting[786]. In the words of the IFC, Performance Standard 1 "underscores the importance of managing social and

[785] *Ibid*., Introduction, para. 3 (emphasis added).

[786] *Ibid.*, Performance Standard 1, para. 3.

environmental performance throughout the life of a project"[787]. To that end, the objectives of the standard are:

- To identify and assess social and environmental impacts, both adverse and beneficial, in the project's area of influence;
- To avoid, or where avoidance is not possible, minimize, mitigate, or compensate for adverse impacts on workers, affected communities, and the environment;
- To ensure that affected communities are appropriately engaged on issues that could potentially affect them; and
- To promote improved social and environmental performance of companies through the effective use of management systems.

5.16 As discussed in Chapter 4, an assessment of environmental risk is not intended to be accomplished in a single report, but rather is an ongoing process. This approach is reflected in the IFC assessment regime, which requires an "effective social and environmental management system" based on a "*dynamic, continuous process*" that involves a "thorough assessment of potential social and environmental impacts and risks from the early stages of project development, and provides order and consistency for mitigating and managing these on an *ongoing basis*."[788]

5.17 Performance Standard 1 imposes strict requirements for a project's Social and Environmental Assessment. The Assessment must "consider in an integrated manner the potential social and environmental (including labour, health, and safety) risks and impacts of the project."[789] It must be "based on current information, including an accurate project description, and appropriate social and environmental

---

[787] *Ibid*., Performance Standard 1, para. 1.

[788] *Ibid*. (emphasis added).

[789] *Ibid*., Performance Standard 1, para. 4.

baseline data."[790] Importantly, the IFC mandates that the Assessment consider "all relevant social and environmental risks and impacts of the projects" and "those who will be affected by such risks and impacts."[791] Further, the Assessment must take into account the "[a]pplicable laws and regulations of the jurisdictions in which the project operates that pertain to social and environmental matters, including those laws implementing host country obligations under international law."[792]

5.18 The impacts that must be assessed are comprehensive. The IFC requires that "[r]isks and impacts" be analysed in the context of the project's area of influence, which is defined as encompassing:

> (i) the primary project site(s) and related facilities that the client (including its contractors) develops or controls, such as power transmission corridors, pipelines, canals, tunnels, relocation and access roads, borrow and disposal areas, construction camps;
>
> (ii) associated facilities that are not funded as part of the project (funding may be provided separately by the client or by third parties including the government), and whose viability and existence depend exclusively on the project and whose goods or services are essential for the successful operation of the project;
>
> (iii) areas potentially impacted by cumulative impacts from further planned development of the project, any existing project or condition, and other project-related developments that are realistically defined at the time the Social and Environmental Assessment is undertaken; and
>
> (iv) areas potentially affected by impacts from unplanned but predictable developments caused by the project that may occur later or at a different location. The area of influence does not include potential impacts that would occur without the project or independently of the project[793].

---

[790] *Ibid*.

[791] *Ibid*.

[792] *Ibid.*

[793] *Ibid.*, Performance Standard 1, para. 5.

5.19 Such risks and impacts must be assessed for all "key stages of the project cycle, including pre-construction, construction, operation, and decommission or closure", as well as, where relevant, the "role and capacity of third parties (such as local and national governments, contractors and suppliers), to the extent that they pose a risk to the project."[794]

5.20 Significantly for the present case, Performance Standard 1 requires that the Assessment "consider potential transboundary effects, such as pollution of air, or use or pollution of international waterways, as well as global impacts, such as the emission of greenhouse gasses."[795] In that regard, the Performance Standard is intended to give effect to the Convention on Environmental Impact Assessment in a Transboundary Context, which, in the view of the IFC, "lays down the general obligation of states to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries"[796]. Thus, even if the 1991 Convention is not directly applicable to Uruguay, in approving the Botnia project the IFC found that Uruguay had satisfied all obligations thereunder.

5.21 In addition to requiring a comprehensive assessment of the social and environmental impacts of the project, the IFC mandates that a project adopt a Management Program. This must consist of operational policies, procedures, and practices that take "into account the relevant findings of the Social and

---

[794] *Ibid.*, Performance Standard 1, para. 6.

[795] *Ibid*.

[796] International Finance Corporation, *Guidance Notes: Performance Standards on Social and Environmental Sustainability*, (hereinafter "IFC Guidance Notes") (30 April 2006), Guidance Note 1, p. 31, *available at* http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/pol_GuidanceNote_full/$FILE/GuidanceNote_full.pdf (last visited on 9 July 2007).

Environmental Assessment and the result of consultation with affected communities."[797] The Management Program must "favor avoidance and prevention of impacts over minimization, mitigation, or compensation, where technically and financially feasible", and where "risks and impacts cannot be avoided or prevented, mitigation measures and actions" must be "identified so that the project operates in compliance with applicable laws and regulations, and meets the requirements" of all of the IFC's Performance Standards.[798] The IFC also requires a project to submit periodic Monitoring Reports based on its management program throughout the life of the investment, to consult with affected communities, and to establish a grievance mechanism[799].

5.22 In sum, by finding that the Botnia project satisfied Performance Standard 1, the IFC found that Botnia had, among other things, properly assessed all relevant social and environmental impacts, including potential transboundary effects, and that it had done so in accordance with the 1991 Convention and all other applicable international legal obligations; adopted adequate policies, procedures, and practices to take account of the assessment; sufficiently consulted with stakeholders; and adequately committed to monitor the project.

2. *Performance Standard 3*

5.23 Performance Standard 3 establishes the IFC's requirements for Pollution Prevention and Abatement. It is based on the recognition that "increased industrial activity" can "generate increased levels of pollution to air, water, and land" that can

---

[797] IFC Performance Standards, *op. cit.*, Performance Standard 1, para. 13.

[798] *Ibid.*, Performance Standard 1, para. 14.

[799] *Ibid.*

"threaten people and the environment at the local, regional, and global level."[800] Performance Standard 3's objective is therefore to "avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities."[801] To achieve this objective, it imposes an expansive definition of "pollution", which it defines as including "both hazardous and non-hazardous pollutants in the solid, liquid, or gaseous forms."[802] The definition is expressly intended to encompass other forms of pollution as well, including "nuisance odors, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light."[803] As a result, the IFC's definition of pollution is significantly broader than the one found in the 1975 Statute.

5.24 Performance Standard 3 sets several binding requirements regarding pollution that are particularly pertinent to the present case. First, the standard mandates that during the "design, construction, operation and decommissioning of the project", it must "consider ambient conditions and apply pollution prevention and control technologies and practices (techniques) that are best suited to avoid or, where avoidance is not feasible, minimize or reduce adverse impacts on human health and the environment while remaining technically and financially feasible and cost-effective."[804] These pollution prevention and control techniques must be "tailored to the hazards and risks associated with project emissions and consistent

---

[800] *Ibid.*, Performance Standard 3, para. 1.

[801] *Ibid*.

[802] *Ibid.*, Performance Standard 3, para. 1, note 1.

[803] *Ibid.*

[804] *Ibid.*, Performance Standard 3, para. 3.

with good international industry practice, as reflected in internationally recognized sources, including the IFC's Environmental, Health and Safety Guidelines."[805]

5.25 Second, Performance Standard 3 requires the project to "avoid the release of pollutants or, when avoidance is not feasible, minimize or control the intensity or load of their release."[806] This requirement, by its terms, "applies to the release of pollutants due to routine, non-routine or accidental circumstances with the potential for local, regional and transboundary impacts", including those covered by the Convention on Long-Range Transboundary Air Pollution.[807]

5.26 Third, Performance Standard 3 requires the project to "avoid or minimize the generation of hazardous and non-hazardous waste materials as far as practicable."[808] Where "waste generation cannot be avoided but has been minimized", the project must "recover and reuse waste."[809] If such waste cannot be recovered or reused, the project must "treat, destroy, and dispose of it in an environmentally sound manner."[810] Where the generated waste is considered hazardous, as defined by local legislation or international conventions, the project must "explore commercially reasonable alternatives for its environmentally sound disposal considering the limitations applicable to its transboundary movement."[811]

---

[805] *Ibid*.

[806] *Ibid*., Performance Standard 3, para. 4.

[807] *Ibid.,* and note 4.

[808] *Ibid*., Performance Standard 3, para. 5.

[809] *Ibid*.

[810] *Ibid*.

[811] *Ibid.*

This must be done in a manner consistent with the objectives of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes.[812]

5.27 Fourth, the Performance Standard stipulates that the project must "avoid or, when avoidance is not feasible, minimize or control the release of hazardous materials resulting from their production, transportation, handling, storage and use for project activities."[813] The project must further "avoid the manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs" due to, among other things, "high toxicity to living organisms", "environmental persistence", and "potential for bioaccumulation."[814] This requirement is expressly intended to be interpreted consistent with the objectives of the POPS Convention. In that regard, a project is required to "minimize the unintentional generation and release" of chemicals listed in Annex C of the POPS Convention, which includes dioxins and furans[815]. In addition, the project must review the list of chemicals in Annex III of the Rotterdam Convention of Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade, and "seek to prevent their manufacture, trade and use"[816].

5.28 Fifth, Performance Standard 3 requires the project to be "prepared to respond to process upset, accident, and emergency situations in a manner appropriate to the operational risks and the need to prevent their potential negative

---

[812] *Ibid*., & note 6.

[813] *Ibid*., Performance Standard 3, para. 6.

[814] *Ibid*.

[815] IFC Guidance Notes, *op. cit.,* Guidance Note 3, para. G20.

[816] *Ibid*., Guidance Note 3, para. G21.

consequences."[817] This must include having a "plan that addresses the training, resources, responsibilities, communication, procedures, and other aspects required to effectively respond to emergencies associated with project hazards."[818]

5.29 Sixth, the Performance Standard requires the project to refer to the current version of the Environmental Health and Safety Guidelines, which "contain the performance levels and measures that are normally acceptable and applicable to projects", when evaluating and selecting pollution prevention and control techniques. If the host country's regulations differ from the levels and measures found in the EHS Guidelines, the project must "achieve whichever is more stringent."[819]

5.30 Finally, to address "adverse project impacts on existing ambient conditions", such as air, surface and groundwater, and soils, the project must consider, among other things, the "finite assimilative capacity of the environment", *i.e.*, the "capacity of the environment for absorbing an incremental load of pollutants while remaining below a threshold of unacceptable risk to human health and the environment."[820] It must also take account of existing and future land use; the existing ambient conditions; the project's proximity to ecologically sensitive or protected areas; and the potential for cumulative impacts with uncertain and irreversible consequences. Further, the project must "promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when

---

[817] IFC Performance Standards, *op. cit.*, Performance Standard 3, para. 7.

[818] *Ibid*.

[819] *Ibid*., Performance Standard 3, para. 8.

[820] *Ibid*., Performance Standard 3, para. 9 & note 9.

the project has the potential to constitute a significant source of emissions in an already degraded area."[821] Such strategies must include, among other things, the "evaluation of project location alternatives and emissions offsets."[822]

5.31 In sum, in finding that the Botnia project has complied with the requirements of Performance Standard 3, the IFC found, among other things, that the project was designed and would be constructed and operated in a manner best suited to avoid pollution, including with respect to transboundary impacts covered by the Convention on Long-Range Transboundary Air Pollution; that it adequately addressed hazardous and non-hazardous materials, consistent with the POPS Convention, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes, and the Rotterdam Convention on Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade; that it had evaluated and selected pollution prevention and control techniques in accordance with the EHS Guidelines; and that it had sufficiently addressed adverse impacts on ambient conditions, including on air, surface and groundwater, and soils.

3. Performance Standard 4

5.32 Performance Standard 4 sets forth the IFC's requirements for Community Health, Safety, and Security. It is based on the IFC's recognition that projects can "increase the potential for community exposure to risks and impacts arising from equipment accidents, structural failures, and releases of hazardous materials", and that communities may also be "affected by impacts on their natural resources."[823]

---

[821] *Ibid*., Performance Standard 3, para. 9.

[822] *Ibid*.

[823] *Ibid.*, Performance Standard 4, para. 1.

The Performance Standard therefore is intended “to avoid or minimize risks to and impacts on the health and safety of the local community during the project life cycle from both routine and non-routine circumstances.”[824]

5.33 Performance Standard 4 requires the project to “evaluate the risks and impacts to the health and safety of the affected community during the design, construction, operation, and decommissioning of the project” and to “establish preventive measures to address them in a manner commensurate with the identified risks and impacts”[825]. In establishing such measures, the project must “favour the prevention or avoidance of risks and impacts over minimization and reduction”[826]. To fulfil these obligations, the IFC requires that, among other things, the project “design, construct, and operate and decommission the structural elements or components of the project in accordance with good international industry practice” and to “prevent or minimize the potential for community exposure to hazardous materials that may be released by the project”[827].

5.34 In sum, by approving the Botnia project, the IFC determined that Botnia had properly evaluated the risks and impacts to the health and safety of the affected community.

4. Performance Standard 6

5.35 Performance Standard 6 concerns Biodiversity Conservation and Sustainable Natural Resource Management. It is founded upon the IFC’s view that “protecting and conserving biodiversity -- the variety of life in all its forms,

---

[824] *Ibid*.

[825] *Ibid*., Performance Standard 4, para. 4.

[826] *Ibid*.

[827] *Ibid.*, Performance Standard 4, paras. 6-7.

including genetic, species and ecosystem diversity -- and its ability to change and evolve, is fundamental to sustainable development."[828] The Performance Standard takes as its reference point the approach to biodiversity in the Convention on Biological Diversity, which defines biodiversity to include "ecosystems and habitats, species and communities, and genes and genomes, all of which have social economic, cultural and scientific importance."[829] By its terms, Performance Standard 6 reflects the "objectives of the Convention on Biological Diversity to conserve biological diversity and promote use of renewable natural resources in a sustainable manner."[830] It is therefore meant to address how a project "can avoid or mitigate threats to biological diversity arising from" its operation as well as "sustainably manage renewable natural resources."[831] Performance Standard 6 is also intended to reflect the "standards set" by the Convention on Wetlands; the Convention on International Trade in Endangered Species of Wild Fauna and Flora; the Convention Concerning the Protection of World Cultural and Natural Heritage; and the Convention on Migratory Species[832].

5.36 Performance Standard 6 mandates that, in order to "avoid or minimize adverse impacts to biodiversity in the project's area of influence", the project must "assess the significance of project impacts on all levels of biodiversity as an integral part of the Social and Environmental Assessment process", which is required to

[828] *Ibid.*, Performance Standard 6, para 1.

[829] *Ibid.*

[830] *Ibid*.

[831] *Ibid*.

[832] IFC Guidance Notes, *op. cit.,* Guidance Note 6, p. 124.

"take into account the differing values attached to biodiversity by specific stakeholders, as well as identify impacts on ecosystem services."[833]

5.37 In sum, by approving the Botnia project, the IFC found that the project had properly assessed potential impacts on biodiversity in accordance with the standards set in the Convention on Biological Diversity and other applicable treaties.

Section II.
The Botnia Plant Was Evaluated According to the IFC's Performance Standards Prior to the Decision to Finance the Project

5.38 Botnia's request for IFC financing subjected it to evaluation under the Performance Standards described above. The IFC's ultimate decision to participate in the Botnia project was made only after it concluded that all requirements set forth in those standards were fully satisfied. As the IFC stated in announcing its funding decision: the Botnia plant "will be operated to the highest global standards and *comply with IFC and MIGA's respective environmental and social standards*"[834].

5.39 In December 2004, Botnia submitted its extensive Environmental Impact Assessment (EIA) prepared during the Uruguayan environmental permitting process to the IFC. The EIA, in nearly 1,000 pages exclusive of the seven additional informational supplements, assessed the anticipated environmental impact of the Botnia plant. As discussed in more detail in Chapter 4, it included, among other things, details regarding the pulp manufacturing process to be used at the plant, anticipated effluents and emissions, the potential environmental impacts, mitigation to prevent environmental risks, emergency/accident management plans, and a

---

[833] IFC Performance Standards, *op. cit*., Performance Standard 6, para 1.

[834] "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay, 2,500 Jobs to be Created, No Environmental Harm," p. 1 (emphasis added). UCM, Vol. IX, Annex 206.

comprehensive monitoring plan. The Botnia EIA also detailed the plant's compliance with EU BAT and with IPPC directives.

5.40 In April 2005, the IFC publicly released the Botnia EIA pursuant to its internal disclosure policies. To ensure compliance with its environmental and social policies, the IFC also commissioned an independent Cumulative Impact Study (CIS) to evaluate the impacts of the Botnia and ENCE plants taken together. The Draft CIS was publicly released on the IFC website on 19 December 2005, and was then opened to a 60-day public comment period. Stakeholder input was solicited in both written form and in public forum held in Buenos Aires and Montevideo in February 2006[835].

5.41 Simultaneously, the IFC's Compliance Advisor Ombudsman (CAO) conducted its own oversight pursuant to a complaint issued in September 2005 by an Argentine non-governmental organization, the Center for Human Rights and Environment. The CAO issued a preliminary assessment in November 2005 and a final audit report in February 2006, which recommended that the IFC "systematically document its appraisal of the adequacy of the clients' social and environmental processes and documentation prior to public disclosure of

[835] International Finance Corporation, Transcription of Public Meeting Concerning the Cumulative Impact Study of Uruguayan Pulp Mills, Puente Carrasco, Buenos Aires (16 February 2006), *available at* http://www.ifc.org/ifcext/lac.nsf/AttachmentsByTitle/Uruguay_Transcript_BA_Feb06/$FILE/Uruguay_Transcript_BA_02-16-06.pdf (last visited on 9 July 2007); International Finance Corporation, Transcription of Public Meeting Concerning the Cumulative Impact Study of Uruguayan Pulp Mills, Torre de los Profesionales, Montevideo (14 February 2006), *available at* http://www.ifc.org/ifcext/lac.nsf/AttachmentsByTitle/Uruguay_Transcript_Mont_Feb06/$FILE/Uruguay_Transcript_Mont_02-14-06.pdf (last visited on 9 July 2007).

[Environmental Assessment] documents, so that IFC in detail outlines the findings of its environmental and social due diligence"[836].

5.42 In order to ensure that the Botnia plant would be environmentally sound, the IFC retained Hatfield Consultants Ltd. ("Hatfield") of Canada, a team of experienced environmental consultants, to serve as an Independent Expert Panel charged with critically reviewing the draft CIS and Botnia EIA. The independence and expertise of these consultants is not in dispute; Argentina itself has repeatedly referred to them as "indépendants"[837], and referenced their work no less than thirteen times in its Memorial[838]. On 27 March 2006, Hatfield issued a report categorically rejecting as "unsupported" and "unreasonable" claims that "the mills will cause catastrophic environmental damage"[839]. It "did not find any reason to support the predictions of catastrophic environmental damage in the receiving environment that have been presented by several stakeholders"[840]. In so finding, the independent experts rejected the dire environmental consequences that had been predicted in comments provided to the consulting team by Argentina and the Center for Human Rights and the Environment.

5.43 Although Hatfield concluded there was no rational basis for these criticisms, it did find that the draft CIS had some inadequacies, which it emphasized

---

[836] Compliance Advisor Ombudsman, CAO Audit of IFC's and MIGA's Due Diligence for Two Pulp Mills in Uruguay, Final Report, p. 2 (22 February 2006). UCM, Vol. IX, Annex 202.

[837] AM, paras. 5.58, 7.1. ("independent").

[838] AM, paras. 4.78, 5.17, 5.34, 5.39, 5.58, 5.59, 5.71, 7.5, 7.7, 7.42, 7.96, 7.107, 7.108.

[839] Hatfield Consultants, Report of Expert Panel on the Draft Cumulative Impact Study for the Uruguay Pulp Mills (hereinafter "Report of Expert Panel on the Draft Cumulative Impact Study"), p. 2 (27 March 2006). UCM, Vol. VIII, Annex 170.

[840] *Ibid*.

were primarily the result of a "lack of information, rather than environmentally deficient factors in the proposed mill designs and operations"[841].

5.44 The IFC would not approve participation in the project given the deficiencies identified by Hatfield, however limited they were. It required that these deficiencies be rectified before participation could occur. In pursuance of this objective, on 9 May 2006, the IFC announced that Hatfield had identified a need for "additional information and analysis about the environmental impacts" of the Botnia project and had recommended certain "technical improvements for consideration that could enhance" the plant's "environmental performance"[842]. To follow up on these findings and recommendations, the IFC and Botnia agreed to "undertake" actions to "complete" the "IFC's environmental and social due diligence"[843]. These included the retention of new "independent consultants" by the IFC to "gather additional data, perform additional analysis, and recalculate cumulative impacts" in keeping with the recommendations of Hatfield for incorporation into the final CIS.[844] Hatfield would then review the "revised CIS and updated environmental information" to "verify consistency and responsiveness to the findings and recommendations of their report."[845] After its completion, the revised CIS would be publicly disclosed for sixty days and would be an "essential factor" in the IFC's decision whether to participate in the project.[846] In other words, the IFC publicly

---

[841] *Ibid*.

[842] International Finance Corporation, Uruguay Pulp Mills: IFC Action Plan Based on Findings of Independent Expert Panel, p.1 (9 May 2006). UCM, Vol. IX, Annex 203.

[843] *Ibid*.

[844] *Ibid*.

[845] *Ibid*.

[846] *Ibid*.

committed to participating in the project only if the deficiencies identified by Hatfield were fully addressed.

5.45 The IFC commissioned EcoMetrix, an independent environmental consulting firm based in Toronto, to revise and complete the CIS in accordance with Hatfield's findings and recommendations. Specifically, EcoMetrix was tasked with revising the December 2005 draft CIS, including its annexes, "to include additional information to address all points raised by the expert panel in its April 2006 report" and to "correct any inaccuracies, based on the latest available information"[847]. Over the following months, EcoMetrix completed extensive modelling and analysis, and also visited Uruguay to meet with DINAMA and to conduct a field visit to the site of the Botnia plant[848]. The Final CIS was released on 12 October 2006. As summarized above, and as detailed more fully in the sections to follow, the Final CIS enthusiastically endorsed the Botnia and ENCE projects as "among the best in the world."[849]

5.46 As it had with the draft CIS, the IFC retained the Hatfield consultants to review the Final CIS. On 14 October 2006, Hatfield issued its report. After noting that it had previously identified "deficiencies in the draft CIS" and had "recommended courses of action", Hatfield dispelled any doubt about the environmental and social soundness of the project, and gave it an unqualified endorsement: "We consider that the revised CIS of September 2006 effectively

---

[847] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex H, p. H2.0 (September 2006). UCM, Vol. X, Annex 228.

[848] *See ibid.*, p. H3.6 (terms of reference requiring interaction with project management teams and a field visit). UCM Vol. X, Annex 228. *See also* Final CIS, *op. cit.,* p. 4.104 (noting that the Final CIS team met with staff members of DINAMA). UCM, Vol. VIII, Annex 173.

[849] Final CIS, *op. cit*., p. ES.v.

addresses the issues raised by ourselves and by stakeholders" for the Botnia project.[850] The report found that the plant would be built to the highest and most sophisticated design specifications, concluding that "the mills are designed in accordance with modern, environmentally sustainable practices, in accordance with BAT, as defined by IPPC and other regulatory agencies experienced with pulp industry issues."[851] Further, Hatfield concluded that the "current design and planning process is appropriate for sustainable, environmentally sound operations, with no impacts on the health of people in the area, on either side of the Rió Uruguay."[852] Indeed, the independent experts noted that "[w]e consider that these mills will probably perform to a standard of the top five in the world" and that they would discharge "lower quantities of pollutants than most of the older, smaller mills in Latin America, USA and Canada."[853]

5.47 With regard to the concentration of possible pollutants, Hatfield noted that the "Rió Uruguay is a very large river by world standards, the local meteorology and topography have no features that lead to high concentrations of air pollutants, and no urban or industrial areas exist in the region that may cause high concentrations of air pollutants."[854] Regarding the "concern expressed by many stakeholders regarding dioxin discharges from the mills" -- a concern that was stressed by Argentina at the June 2006 hearing on provisional measures -- Hatfield found this "concern to be

---

[850] Hatfield Consultants, Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills (hereinafter "Report of Expert Panel on the Final Cumulative Impact Study"), p. 2 (14 October 2006). UCM, Vol. VIII, Annex 178.

[851] *Ibid*.

[852] *Ibid*.

[853] *Ibid*.

[854] *Ibid*.

unnecessary, given that the dioxin discharges from the two proposed mills will be trivial, and at a concentration well below US drinking water standards."[855]

5.48 Based on Hatfield's unqualified endorsement of the Botnia project, the IFC's Board of Directors approved participation in it on 21 November 2006 by a vote of 24-1, with only the Argentine delegate voting against the project. It did so because, in the view of the IFC, the Botnia project complied with all of the required Performance Standards and applicable international legal obligations[856]. In sum, the IFC has verified through independent technical experts that the Botnia project will cause no environmental harm. Uruguay submits that, on this basis alone, Argentina's claims that the project will violate the substantive obligations of the 1975 Statute must be rejected.

Section III.
The Evaluation in the Final Cumulative Impact Study

A. The Exhaustive Environmental Review in the CIS Demonstrates that the Botnia Plant Will Not Harm the Environment

5.49 The thorough review by independent scientific experts retained by the IFC leaves only one conclusion: there is no reasonable or objective scientific basis for believing that the Botnia plant will cause any meaningful adverse impacts to the Uruguay River[857].

---

[855] *Ibid*, p. 5.

[856] "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay, 2,500 Jobs to be Created, No Environmental Harm," *op. cit.,* p. 1 (noting that the Botnia plant "will be operated to the highest global standards and comply with IFC and MIGA's respective environmental and social standards"). UCM, Vol. IX, Annex 206.

[857] The First Hatfield Report was principally authored by Dr. L. Wayne Dwernychuk, but involved the assistance of six other scientists in the fields of fisheries, pulp mull effluent, effluent plume delineation modelling, process engineering, forestry, and air modelling . Report of Expert Panel on the Draft Cumulative Impact Study, *op.cit.,* p. 29. UCM, Vol. VIII, Annex 170. The Final CIS was prepared by a team of twenty scientists, including scientists from EcoMetrix Inc. (aquatic assessment, overall project coordination), Processys Inc. (process

5.50 The First Hatfield Report, on which Argentina heavily relies, concluded that "[t]he panel did not find any reason to support the predictions of catastrophic environmental damage in the receiving environment that have been presented by several stakeholders"[858]. The Second Hatfield Report, which Argentina conspicuously ignores in the Memorial[859], goes even farther and concludes that the Botnia plant will have "sustainable environmentally sound operations, with no impacts on the health of the people in the area, on either side of the Rió Uruguay":

> We further consider that the CIS shows that the mills are designed in accordance with modern, environmentally sustainable practices, in accordance with BAT, as defined by the IPPC and other regulatory agencies experienced with pulp industry issues. *The current design and planning process is appropriate for sustainable environmentally sound operations, with no impacts on the health of the people in the area, on either side of the Uruguay River.*
>
> *We consider that these mills will probably perform to a standard of the top five in the world if operated to design specifications, discharging lower quantities of pollutants than most of the older, smaller mills in Latin America, USA and Canada.*[860]

5.51 Predictably, Argentina attempts to criticise the conclusions of the Final CIS and the other earlier studies that found an absence of meaningful risk to the environment. But Argentina has not come close to meeting its burden of proving on the basis of scientifically sound information that the conclusions of the Final CIS

---

technology), SENES Consultants Ltd. (air quality, socio-economic assessment, economic assessment, human health assessment), and independent consultants for hydrodynamic modelling and plantation assessments. Final CIS, *op. cit.,* p. 1.10. UCM Vol. VIII, Annex 173. The Second Hatfield Report was authored by Dr. Dwernychuk and Neil McCubbin of Hatfield Consultants Inc.

[858] Report of Expert Panel on the Draft Cumulative Impact Study, *op. cit.*, p. 2. UCM, Vol. VIII, Annex 170.

[859] *See* AM, para. 7.7.

[860] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.,* p. 2 (emphasis added). UCM, Vol. VIII, Annex 178.

and other scientific studies are erroneous and that significant adverse impacts are likely to occur.

5.52 The remaining sections of this Chapter summarize the conclusions reached in the Final CIS.

B. The Impacts Analysis in the Final CIS Assumed the Construction of Both the ENCE and Botnia Plants, and Thus Significantly Overstated the Impacts from Operation of the Botnia Plant Alone

5.53 Although the Final CIS is generally conservative, it is *extraordinarily* conservative in one obvious and important way: the Final CIS assumed that both the ENCE and the Botnia plants would operate in Fray Bentos, as ENCE had not announced its decision to relocate the ENCE plant at the time the Final CIS was prepared. The authors of the Final CIS thus properly state that:

> [R]eaders of this cumulative study, which was initiated 14 months prior to ENCE's announcement, should now view all references to *cumulative impact on the environment of the region as being correspondingly less* taking into account only the Orion [Botnia] pulp mill will be operating at the Fray Bentos location[861].

The Second Hatfield Report confirms this conclusion, noting that "if only the Botnia mill is built, there would be an additional margin of safety in all predictions of potentially adverse environmental impacts, with some loss in the positive economic benefits and impacts"[862]. Indeed, the removal of the ENCE facility eliminated a plant with a cellulose production capability of 500,000 tons/year and total effluent flow of 46 million litres per day[863]. The allowable discharge rates from the ENCE

---

[861] Final CIS, *op. cit.,* p. 1.1 (emphasis added). UCM, Vol. VIII, Annex 173.

[862] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.*, p. 10. UCM, Vol. VIII, Annex 178.

[863] Final CIS, *op. cit.,* p. 2.20. UCM Vol. VIII, Annex 173

facility, although very low, were somewhat higher than the rates permitted for the Botnia plant.[864] The ENCE mill was located closer to the Esteros de Farrapos protected wetlands, which Argentina has asserted may be threatened from the operation of the plants. Since even the effluents from the ENCE plant would not reach the upstream area of Esteros de Farrapos, as demonstrated in the Final CIS, there is absolutely no risk that those from the Botnia plant, which is located approximately six kilometres further downstream, will even come close to reaching that area. In short, ENCE's decision has conclusively resolved one of the principal concerns of Argentina prior to the initiation of this action, that two mills should not be sited in such close proximity to one another. Therefore, the analysis and the conclusions of the Final CIS are highly conservative and, to the extent they anticipate impacts at all, they overstate the magnitude of those impacts.

C. The Botnia Plant Will Comply with the Requirements of IPPC BAT and Will Operate as One of the Best Plants in the World

5.54 DINAMA has from the outset required that the Botnia plant be a state-of-the-art facility. To that end, Botnia's Initial Environmental Authorisation explicitly requires that plant operations and technology comply with the Integrated Pollution Prevention and Control Best Available Techniques Requirements of the European Union ("IPPC BAT (2001)"), the requirements of which are contained in the Integrated Pollution Prevention and Control contained in the IPPC BAT Reference document ("IPPC BREF")[865]. IPPC BAT (2001) reflects the most widely accepted

[864] *Ibid.*, p. 2.7

[865] MVOTMA Initial Environmental Authorisation for the Botnia Plant (hereinafter "Botnia AAP"), Art. 2(bb) (14 February 2005). UCM, Vol. II, Annex 21.

definition of "best available techniques" for pulp mill operations[866]. After extensively analysing the processes and technology to be employed by the Botnia plant, the Final CIS concluded that the plant design complies with or exceeds IPPC BAT and otherwise represents the "state-of-the-art" with respect to cellulose plant technology[867]. For example, the Final CIS notes that in terms of water usage, the Botnia mill will be in the top 5% of mills in North America and Europe and "among the best in the world"[868]. In terms of effluent treatment, the Final CIS concluded that the extended aeration activated sludge treatment facility meets or exceeds the levels identified as IPPC-BAT[869]; the Second Hatfield Report concurred, indicating that "treatment systems . . . incorporate all the features of high performance BAT designs"[870]. The "ECF-light" bleaching technology received similar endorsement[871]. In short, the Final CIS found that the "expected performance with respect to bleaching effluent flow, COD content, and colour will be among the best in the world"[872]. The Final CIS undertook a rigorous analysis of numerous other factors relating to mill operations, including: overall emission rates, energy issues, auxiliary

---

[866] Final CIS, *op. cit.,* p. 2.30. UCM, Vol. VIII, Annex 173.

[867] The Final CIS's complete comparison between the performance of the Botnia plant and BAT is included in Annex A to the Final CIS.

[868] Final CIS, *op. cit.,* p. 2.21. UCM, Vol. VIII, Annex 173.

[869] *Ibid.*, p. 2.23.

[870] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.*, p. 3. UCM, Vol. VIII, Annex 178.

[871] Although in earlier filings, much was made of the difference between TCF and ECF bleaching, the Final CIS concluded that TCF pulp and ECF pulp have similar environmental impacts on water emissions and neither emit dioxins at environmentally significant levels, and both are acceptable under the POPS Convention, IPPC BAT, US EPA and all significant permitting authorities. Final CIS, *op. cit.,* p. 2.25. UCM, Vol. VIII, Annex 173. In short, the Final CIS concluded that there is no objective reason for requiring the use of TCF over the selected bleaching process, particularly in light of the inferior quality of pulp produced by the TCF process.

[872] Final CIS, *op. cit.*, p. 2.26.

boilers, evaporation and recovery, liquor spills collection, odour management, residuals management, compliance monitoring, and environmental management. In each case, the Final CIS concluded that the process met or exceeded BAT and is otherwise state-of-the-art[873].

5.55 The Second Hatfield Report confirmed the Final CIS's conclusion as to plant technology, noting that the Botnia plant "is designed in accordance with modern environmentally sustainable practices, in accordance with BAT, as defined by IPPC and other regulatory agencies experienced with pulp industry issues" and concluding that it "will probably perform to a standard of top five in the world . . ."[874].

D. The Botnia Plant Will Not Adversely Impact Water Quality or the Ecological Balance of the River, and Any Potential Impacts Are Likely to Be Immeasurable

5.56 The Final CIS concluded that the combined effluent discharge *from both the Botnia and ENCE plants* would not adversely affect either human health or aquatic life, nor would it cause an exceedance of the applicable water quality standards. The conclusion is all the stronger with the elimination of ENCE's discharge.

5.57 The Final CIS rigorously assessed water quality, involving two different types of complementary mathematical modelling[875]. The first involved "near-field"

---

[873] *See, e.g.*, International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex A, p. A8.10 (September 2006). UCM, Vol. VIII, Annex 174. *See also* Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.*, p. 3. UCM, Vol. VIII, Annex 178. ("Analysis shows that both mills comply with the letter and spirit of BAT as defined by the IPPC, as well as US and Australian concepts of BAT.")

[874] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.*, p. 2. UCM, Vol. VIII, Annex 178.

[875] Final CIS, *op. cit.*, p. 4.9. UCM, Vol. VIII, Annex 173.

modelling, which predicts water quality changes at the point of discharge. Two separate near-field models were used[876]. The CORMIX model, which was developed by Cornell University, in New York, was used as the primary near-field model. The VPLUME model, which is distributed by the US Environmental Protection Agency, was used as a cross-check to ensure that the results obtained using the CORMIX model were valid and conservative. Far-field modelling, which predicts impacts at greater distances based on the hydrodynamics, bathymetry, and shoreline geometry of the river, was conducted using a series of models available from the US Army Corps of Engineers[877]. These included two- and three-dimensional finite element hydrodynamic models. Together, these models compute the lateral and longitudinal distribution of water surface elevation and horizontal velocity and the vertical distribution of velocity. Based on the results of those analyses, the transport, dispersion, and fate of water quality constituents were then calculated[878]. These models are widely accepted and are used all over the world as conservative predictors of the impacts of industrial sources on water quality[879].

5.58 As with any water body, the flow volume of the Uruguay River is not constant. To ensure that the Final CIS considered the impacts of the effluent discharges under any reasonably anticipated scenarios, it evaluated the dilutive effect of river flow under three conditions: typical flow (6,230 m^3/s), extreme low flow

---

[876] *Ibid*.

[877] *Ibid.*, p. 4.10.

[878] *Ibid*.

[879] Dr. J. Craig Swanson & Dr. Eduardo A. Yassuda, Hydrologic Analysis for the Proposed Botnia Cellulose Plant on the Uruguay River, p. 20 (Applied Science Associates, Inc.) (June 2007). UCM Vol. X, Annex 214.

(500 m^3/s), and flow reversal during extreme low flow[880]. The latter two conditions, low flow and flow reversal, represent unusual "worst case" scenarios. The "extreme low flow" condition represents river flow during serious drought or other conditions and is expected to occur only once every 5 to 20 years, which is a more conservative scenario (lower flow) than is required by provisions of the CARU Digest relating to river modelling; the CARU Digest requires low flow modelling to consider only the lowest flow that is expected to occur once every 5 years. Flow reversal, where the river flows "backwards", is a rare, short-term event[881].

5.59 Apart from effluent quality (which for Botnia will be "among the best in the world"), a critical factor in evaluating potential impacts to the environment is the degree of effluent dilution -- the larger the dilution, the lower the effect. The relatively high flows of the river, combined with offshore, submerged, multi-port diffusers located in the deepest, fastest flowing portion of the river, mean that the effluents from the Botnia plant rapidly disperse[882]. The Final CIS modelled the degree of dispersion using the near- and far-field modelling.

5.60 The Final CIS used as one benchmark the standards of Environment Canada, the environmental regulatory authority of Canada. Applying Environment Canada standards, the Final CIS noted that where dilution is more than 100:1 (where one litre of effluent is mixed with 100 litres of river water), no environmental impacts are generally expected to occur. Dilution ratios of 1000:1 are considered to reflect background conditions, *i.e.*, as if the plant had never been placed into

---

[880] Final CIS, *op. cit.*, p. 4.47. UCM Vol. VIII, Annex 173.

[881] *Ibid.*, p. 4.47; *see also* Final CIS Annex D, *op. cit.*, pp. D3.3, D6.4 (reverse flow expected a few times a year or less). UCM, Vol. VIII, Annex 176.

[882] Final CIS, Annex D, *op. cit.*, p. D4.3. UCM, Vol. VIII, Annex 176.

operation[883]. Environment Canada developed these reference dilution ratios as a result of the Environmental Effects Monitoring program for the pulp and paper sector in Canada, which constitutes the most comprehensive monitoring program in the world for assessing the effects of the effluent discharges from pulp and paper mills[884], and should therefore be given considerable weight.

5.61 In addition to the dilution factors, the Final CIS also predicted the actual changes in concentration of pollutants in the river, and compared them against water quality standards under a variety of flow conditions. Both the dilution analysis and the prediction of changes in pollutant concentrations in the river result in the same conclusion: operation of the Botnia and ENCE plants together -- and certainly the operation of the Botnia plant alone -- will not have any adverse effect on the river.

5.62 Under typical flow conditions, the combined effluent of the Botnia and ENCE plants would constitute 0.02% of the average flow of the river; the Botnia plant alone, of course, would be more than one-third less[885]. Due to the high river flow and the functioning of the Botnia plant's effluent diffuser, the discharged effluents will be rapidly mixed and diluted to at least 100:1 (1%) within a few metres of the diffuser[886]. Based in part on the Environment Canada dilution ratio of at least 100:1, the Final CIS concluded that no adverse impacts are expected to occur. Trace levels of effluent would extend further downstream, but even then would quickly reach a dilution ratio of 1000:1 in the area of Yaguareté Bay, Uruguay (1.5 km

---

[883] Final CIS, *op. cit.*, pp. 4.47-4.48. UCM, Vol. VIII, Annex 173.

[884] *Ibid.*, p. 4.48.

[885] *Ibid*.

[886] *Ibid*.

downstream), which the Final CIS considers representative of "background" conditions[887].

5.63 Under an extreme low flow condition, the combined effluent of the Botnia and ENCE plants would constitute 0.28% of the flow of the river; the Botnia plant alone would be more than one-third less[888]. Under this rare condition, the Final CIS concluded that the 100:1 dilution exposure area is expected to extend no more than 35 metres downstream from the Botnia plant diffuser and 200 metres along the length of the diffuser[889]. Because fish usually range over areas significantly larger than 35 metres, the Final CIS found minimal potential for adverse effects, even under this worst case scenario[890]. Moreover, the boundary of this exposure area is located a great distance from the boundary line separating Uruguayan and Argentine waters; thus, the exposure area would be entirely within Uruguayan waters and would have no transboundary impact whatsoever. Outside of this 35 meter radius, trace levels of effluent might be diluted to a ratio of 200:1 in the vicinity of Fray Bentos (Uruguay), but, as noted, these levels are far below anything that could reasonably be expected to cause adverse effects[891].

---

[887] *Ibid.*, p. 4.47.

[888] *Ibid*.

[889] As part of its analysis of the impacts expected to occur at the diffuser, the Final CIS analysed the impact of the temperature differential between the effluent discharge and the Uruguay River. The Final CIS noted that within the very small mixing zone at the diffuser, the temperature change is estimated to be 0.3 degrees Celsius, and once fully mixed, 0.1 degrees Celsius at low flow. Final CIS, Annex D, *op. cit.*, pp. D4.4-D4.5. UCM, Vol. VIII, Annex 176. Given the extremely minor quality of these variations, the Final CIS concluded that such temperature changes are "indistinguishable from the natural variability in the river." *Ibid.*, p. D4.5.

[890] Final CIS, *op. cit.,* p. 4.47. UCM, Vol. VIII, Annex 173.

[891] *Ibid.*, p. 4.49.

5.64 As noted in the Final CIS, flow reversals of the Uruguay River are rare, occurring only during low flow periods, and are expected to occur only a few times per year or less[892]. These events are caused by a rapid change in the water elevation of the River Plate and do not last more than a few hours[893]. Nevertheless, the IFC's independent experts analysed the impact of the Botnia plant under such conditions. The Final CIS concluded that the effluent plumes of the Botnia and ENCE plants (combined) may extend upriver (instead of downriver), but that they would achieve the 100:1 dilution within 35 metres of discharge[894]. Trace levels of effluent at a dilution ratio of 700:1 may extend into water on the Argentine side, also well below the levels that could potentially cause any adverse effect. Assuming the existence of both the Botnia and ENCE plants, the Final CIS concluded that trace levels of effluent may also extend further upstream to a maximum point of 7 kilometres above the former location of the ENCE plant, at a dilution ratio of 1000:1 or more (background concentrations)[895]. Of course, the absence of the ENCE plant will greatly diminish the actual reach of the effluent plume because the Botnia plant is located approximately 6 kilometres downstream from the former location of the ENCE plant[896].

5.65 The Final CIS predicted the expected impact that the operations of the Botnia plant will have on levels of numerous pollutants and other effluent characteristics. To complement the near field and far field water quality monitoring

---

[892] *Ibid.*, p. 4.48.

[893] *Ibid*.

[894] *Ibid*.

[895] *Ibid.*, p. 4.48.

[896] *Ibid.*, p. 1.2.

exercise described above, the Final CIS analysed the potential impacts from the combined effluent discharges of the Botnia and ENCE plants at eleven specific water receptor sites, including two on the Argentine side of the river[897]. Analysis of these particular sites was conducted because they were deemed "of particular interest from the perspective of water quality, recreation, and environmental effects due to the value of aquatic resources"[898]. Parameters evaluated included temperature, colour, conductivity, bacteria, biochemical oxygen demand, nitrogen, phosphorus, ammonia, total suspended solids, AOX, phenols, dioxins and furans, TCDDs, endocrine disrupting compounds, and metals[899]. With respect to each receptor site, the Final CIS concluded that no adverse impacts would occur and that the effluent discharges would not contribute to any exceedances of CARU or Uruguayan water quality standards[900]. Among other conclusions, the Final CIS documented that the contribution of phosphorus to those receptor sites from the operation of the Botnia plant would be immeasurable[901]. Although Argentina's Memorial stresses the importance of phosphorus as a potential cause of eutrophication, the Final CIS confirmed that the contribution of phosphorus from the Botnia plant to the river will

---

[897] *Ibid.*, p. 4.48-4.57. The specific water receptors analysed by the Final CIS are: 1) the diffuser of the Botnia plant in the Uruguay River; 2) Yaguareté Bay (Uruguay); 3) Playa Ubici at the Downstream Edge of Yaguareté Bay (Uruguay); 4) Fray Bentos Drinking Water Intake (Uruguay); 5) Beach Area near Arroyo Fray Bentos (Uruguay); 6) Beach Area at Las Cañas (Uruguay); 7) The River Plate; 8) Esteros de Farrapos and Islas del Río Uruguay (Uruguay); 9) the Black River (Uruguay); 10) The Uruguay River on the Argentine Side; and 11) Beach Area at Ñandubaysal (Argentina). *Ibid*.

[898] Final CIS, Annex D, *op. cit.*, p. D6.1. UCM, Vol. VIII, Annex 176

[899] *Ibid.*, p. D5.6.

[900] Section 4.6 and Annex D of the Final CIS contain an extensive analysis of the potential impacts to each of the eleven receptor sites.

[901] Final CIS, *op. cit.,* p. 4.57. UCM, Vol. VIII, Annex 173.

be insignificant, and its operations will not increase the likelihood of eutrophication in the Uruguay River.

5.66 The following paragraphs document the results of the water quality modelling in the Final CIS for those water receptor sites that Argentina has placed at the forefront of the dispute, which include Yaguareté Bay (Uruguay), the beach at Arroyo Fray Bentos (Uruguay), Esteros de Farrapos (Uruguay), the Argentine side of the river, and the beach at Ñandubaysal (Argentina). Before proceeding further, however, it must be observed that three of these four sites lie entirely within Uruguayan sovereign territory. It is thus not at all clear that Argentina has standing to voice concerns about them. The focus of the 1975 Statute is ensuring each Party's uses of the river do not unfairly impair the other's correlative rights to use the river. Thus, for example, Article 7 requires notification of a project to CARU only when the project is "capable of causing significant harm to the other Party"[902]. As the former head of Argentina's delegation to CARU put it at the time of the discussions within CARU about the Transpapel cellulose plant discussed in Chapter 2: "[T]he goal of the consultation in accordance with the Statute of the River Uruguay is solely to determine if the undertaking causes significant harm to the other Party"[903]. Even setting aside this sizable problem and assuming that Argentina does have some basis to raise concerns about nominal harms occurring entirely in Uruguay, the following paragraphs demonstrate that there is no legitimate scientific basis for concern.

5.67 Yaguareté Bay, Uruguay. The Final CIS analysed the potential impacts to Yaguareté Bay, which is a relatively shallow embankment on the Uruguayan side of

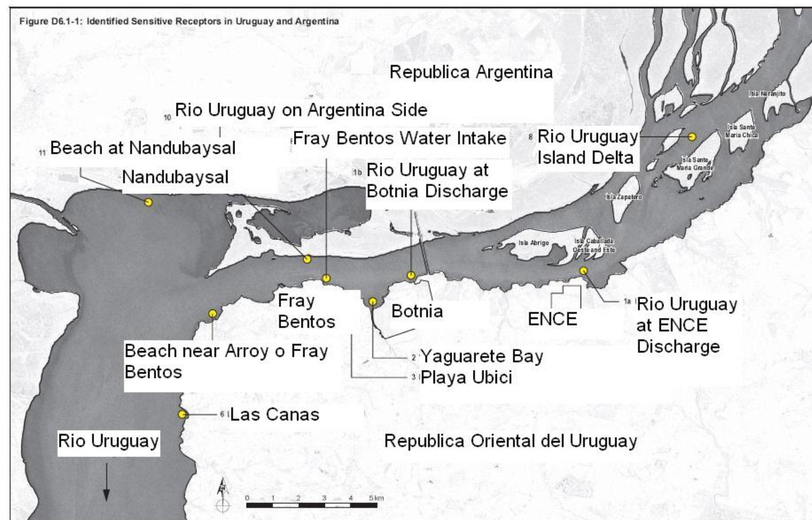
---

[902] Statute of the River Uruguay (hereinafter "1975 Statute"), Art. 7 (26 February 1975). UCM, Vol. II, Annex 4.

[903] CARU Minutes No. 7/96, p. 1077 (23 August 1996). UCM, Vol. IV, Annex 82.

the river, located approximately 1.5 kilometres downstream from the Botnia plant[904]. This location is shown in Figure 5-1.

Figure 5-1[905]



5.68 Yaguareté Bay serves as a habitat for various fish species[906]. The Final CIS examined potential impacts to sedimentation and specific contaminants to water quality and concluded that no adverse impacts can be expected to occur. Although Yaguareté Bay is shallower and the water flow is slower than in the rest of the river, the Final CIS concluded that currents, waves, and other factors prevent undue accumulation of sediments[907]. The Final CIS also concluded that the Botnia plant would not change sedimentation in the bay because the effluent contains very low

[904] Final CIS, *op. cit.*, p. 4.49. UCM, Vol. VIII, Annex 173.

[905] Figure adopted from Final CIS, Annex D, *op. cit.*, Figure D6.1-1.

[906] Final CIS, *op. cit.*, p. 4.49. UCM, Vol. VIII, Annex 173.

[907] *Ibid.*, p. 4.50. *See also* Final CIS, Annex D, *op. cit.*, p. D6.7. UCM, Vol. VIII, Annex 176.

levels of suspended solids[908]. The Final CIS acknowledged that, under existing conditions at Yaguareté Bay (*i.e.*, without the Botnia plant), eutrophication is a potential issue due to the presence of nitrogen and phosphorus. However, even assuming the operation of both the Botnia and ENCE plants, and even under extreme low flow conditions, the Final CIS concluded that plant operations would not cause any measurable change in phosphorus levels in water and sediments[909]. Likewise, the Final CIS concluded that the operation of the plants would not measurably elevate the concentration of chlorinated organics in Yaguareté Bay, and that no adverse effects would be experienced even under extreme low flow conditions[910]. Further, given the extraordinarily low concentrations of dioxins and furans in the effluent of the Botnia and ENCE plants, the Final CIS concluded that measurable concentrations of those chemicals in the bay are not expected to change, again even under extreme low flow conditions, and that concentrations would be compliant with the water quality guidelines established by the United States Environmental Protection Agency for protection of fish consumption[911]. The Final CIS also found that the presence of phytosterols in the Botnia plant's effluents is unlikely to affect the reproductive success of fish in Yaguareté Bay. Under a worst case scenario, phytosterols from the effluents of the plants will be diluted at a ratio of at least 300:1

---

[908] Final CIS, *op. cit.*, p. 4.50. UCM, Vol. VIII, Annex 173.

[909] *Ibid*.

[910] Final CIS, Annex D, *op. cit.*, p. D6.8. UCM, Vol. VIII, Annex 176.

[911] *Ibid*. The Second Hatfield Report found that the "[l]evels in the CIS are conservative. It is expected that the actual discharge levels will probably be lower than that specified. At either level no threat will exist to the receiving environment." Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.,* p. 3. UCM, Vol. VIII, Annex 178. The Second Hatfield Report continued: "We believe . . . concern [regarding dioxin discharges] to be unnecessary, given that the dioxin discharges from the two proposed mills will be trivial, and at a concentration well below US drinking water standards." *Ibid.*, p. 5.

in the bay, resulting in no measurable change and well below any threshold level of induction of estrogenic effects in fish, and well below the levels that have been associated with reproductive effects[912].

5.69 Finally, the Final CIS addressed the issue of fish tainting, a phrase that refers to the build up of contaminants in fish, which can affect their odour and taste. It concluded that no such tainting would occur because fish tainting is not associated with effluent concentrations above a 25:1 to 50:1 dilution ratio, even in older, higher polluting pulp mills, and the dilution ratio in Yaguareté Bay will generally be at 300:1 or higher[913]. In addition, the Final CIS noted that fish tainting is never observed in the vicinity of modern pulp mills with adequate secondary treatment systems, like the treatment system at the Botnia plant[914]. The Second Hatfield Report unequivocally endorsed these conclusions[915].

5.70 Beach Area Near Arroyo Fray Bentos, Uruguay. The beach near Arroyo Fray Bentos, located downstream from the Fray Bentos municipal discharge, is used in Uruguay for swimming and other outdoor recreational activities[916]. It is shown on Figure 5-1. The Final CIS concluded that the Botnia plant operations will not cause exceedances of water quality standards and will have no adverse effects on human health or aquatic life in this area[917].

---

[912] Final CIS, Annex D, *op. cit.*, p. D6.8. UCM, Vol. VIII, Annex 176.

[913] *Ibid*.

[914] *Ibid*.

[915] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.*, p. 3. UCM, Vol. VIII, Annex 178.

[916] Final CIS, *op. cit.,* p. 4.54. UCM, Vol. VIII, Annex 173.

[917] *Ibid*.

5.71 Esteros de Farrapos and Islas del Río Uruguay, Uruguay. The Final CIS fully assessed the impacts to Esteros de Farrapos and Islas del Río Uruguay (collectively "Esteros de Farrapos"), a site protected under the Ramsar Convention, and concluded that the effluent discharges from the operation of the Botnia and ENCE plants collectively would not impact them. Generally, all effluents will be flowing downstream from the plants, and hence away from Esteros de Farrapos. On the brief rare occasions when the flow of the river reverses, the Final CIS concluded that the combined effluent of both plants would be diluted to a completely harmless 1000:1 dilution ratio at seven kilometres upstream from the former location of the ENCE plant[918]. As indicated, the Botnia plant is located six kilometres downstream from the former ENCE location. Thus, the upper boundary of the combined plume under these conditions would be thirteen kilometres upstream from the Botnia plant, which would be nine kilometres downstream from the southernmost point of the protected area. Therefore, the Final CIS concluded, "there is virtually no potential for mill effluents to impact the [Esteros de Farrapos] area"[919].

5.72 The Argentine Side of the River and Ñandubaysal Beach. The Final CIS also examined the potential impacts of the Botnia plant on the water quality of the Argentine side of the river generally, and specifically examined the impact to the area of Ñandubaysal Beach. See Figure 5-1. The Final CIS concluded that, under almost all scenarios, effluents from the Botnia plant will remain on the Uruguayan side of the river and will only cross over to Argentine waters at trace levels. During

---

[918] *Ibid.*, p. 4.55.

[919] *Ibid*. Argentina's Memorial contains significant inaccuracies and misrepresentations with respect to the potential impacts to Esteros de Farrapos. These specific issues are discussed in Chapter 7.

typical and extreme low flow conditions, the modelling demonstrated that the dilution ratio of the effluents in Argentine waters will exceed 1000:1, which is equivalent to background conditions[920]. During the rare times that the flow of the river reverses, the water quality modelling showed that the dilution ratio on the Argentine side may be less than 1000:1, but well above the 100:1 no-adverse-effect guidance adopted by Environment Canada. Most significantly for purposes of this case, at all times, the effect on water quality will be well within the standards established by CARU[921]. As regards the effect on aquatic life, the Final CIS concluded that fish species that move between Yaguareté Bay or other places on the Uruguayan side of the river and the Argentine side of the river are not expected to be adversely impacted[922]. Finally, the Final CIS considered the potential impacts on tourism raised in Argentina's Memorial[923] and determined that there would be no adverse effect[924].

5.73 Indeed, to the extent there are or will be water quality problems on the Argentine side of the river, they are due to Argentina's current poor pollution control and have nothing whatsoever to do with the Botnia plant. Today, before the plant

---

[920] *Ibid.*, p. 4.56.

[921] *Ibid*.

[922] *Ibid*. Given the Final CIS's conclusions regarding the dilution ratios and impacts to the river, this conclusion would apply to all parts of the river that fish use as migratory pathways, and thus Argentina's concern about potential exposures in those other pathways as a general matter is unfounded. *See* AM, para. 7.47.

[923] *See, e.g.*, AM, para. 5.72(5).

[924] Final CIS, *op. cit.*, p. 4.83-4.84. UCM, Vol. VIII, Annex 173. Argentina criticises the Final CIS because "la même CIS ne fait aucune reférénce a des problèmes locaux ou de dépassements de critères de qualité des eaux du côté argentin du fleure." AM, para. 7.42. ("the same CIS makes no reference whatsoever to local problems or to exceeding water quality criteria on the Argentinean Bank of the River.") As with many of Argentina's other assertions, this statement is patently false as the analysis contained in the Final CIS with respect to the Ñandubaysal Beach demonstrates.

begins operation, the phosphorus levels in Ñandubaysal Bay (Argentina) occasionally exceed Uruguayan water quality standards[925]. As Argentina acknowledges in its Memorial, the mouth of the Gualeguaychú River empties just a short distance from Ñandubaysal Bay, and the Argentine industrial, agricultural and municipal sources that discharge to the Gualeguaychú River are major contributors of phosphorus[926] and organic matter[927] to the Uruguay River. The Final CIS reached this same conclusion[928]. The Botnia plant will not exacerbate these problems because effluent discharge from the plant will remain largely along the Uruguayan shoreline and will not disperse across the river[929]. As the expected dilution ratio at Ñandubaysal under both typical and low flow conditions will exceed 1000:1, the Final CIS concluded that the beach area at Ñandubaysal will be unaffected by the

---

[925] *See* Final CIS, *op. cit.,* p. 4.57. UCM, Vol. VIII, Annex 173.

[926] Historical records from CARU show that the phosphorus levels at the discharge of the Gualeguaychú River are 0.102 milligrams per litre, Final CIS Annex D, D3.20, in comparison with the DINAMA water quality standard for phosphorus, which is 0.025 milligrams per litre.

[927] AM, para. 6.32; *see also* Final CIS, *op. cit.*, p. 4.57. UCM, Vol. VIII, Annex 173.

[928] Final CIS, *op. cit.*, p. 4.57 (noting that elevated phosphorus levels are most likely influenced by the water quality of the Gualeguaychú River). UCM, Vol. VIII, Annex 173. As a general matter, problems with water quality are widespread in Argentina. For instance, the Reconquista River, which flows into the Lujan River and eventually into the River Plate, was characterised by the Argentine Environmental Ombudsman as an "open-air sewer" due to the amount of pollution. Special Report: Basin of the Reconquista River (Part 1) at 2. The Argentine Environmental Ombudsman found that, in comparison with other rivers on a global basis, the water quality of the Reconquista River was low to very low and that the state of pollution presents "[a]n extremely grave risk to the health of the 4,200,000 inhabitants [in the area.]" Argentina Defender of the People of the Nation, Special Report on Reconquista River Basin (9 April 2007). UCM, Vol. VIII, Annex 179. In addition, it was found that 22% of the organic matter, hydrocarbons, and metals present in the River Plate come from the Reconquista River. *Ibid*. Finally, and most astoundingly, the Argentine Ombudsman noted that the public authorities were not even aware of this severe state of pollution. *Ibid*. Indeed, the contribution of contamination to the River Plate from Argentina is so substantial that Dr. Mario Feliz has estimated that 95% of that contamination comes from Argentina. La República, "Unexpected: At a Crucial Time, Argentine Scientists Speak Out in Favour of the Uruguayan Plants," p. 7 (31 March 2006). UCM, Vol. IX, Annex 186.

[929] Final CIS, *op. cit.*, p. 4.57. UCM, Vol. VIII, Annex 173.

plant. Even under rare occasions of flow reversal, the modelling predicted that effluents from the Botnia plant will move at no more than trace levels towards Ñandubaysal[930]. Hence the Final CIS concluded that the Botnia plant would not cause adverse impacts with respect to drinking water, aquatic life, human health[931], or tourism (discussed more fully below)[932]. The Final CIS further concluded that because discharges from the plant will not cause any adverse water quality impacts, operations of the Botnia plant will pose no direct threat to recreational use of the Uruguay River or to tourism in Gualeguaychú, in particular to the area of Ñandubaysal[933].

5.74 Impacts on Tourism. The Final CIS included an extended evaluation of impacts on tourism on both sides of the Uruguay River[934] and concluded that no effects on recreation would occur due to air or water emissions from the Botnia plant[935]. This conclusion, though well-substantiated, is only marginally relevant to the dispute at hand, because impacts to tourism can only come under the jurisdiction of the 1975 Statute if they are the direct result of adverse impacts to water quality, and the remainder of the Final CIS demonstrates that there is no basis for concluding that such impacts will occur.

---

[930] *Ibid*.

[931] *Ibid*.

[932] *Ibid.*, p. 4.86.

[933] *Ibid.*, p. 4.9.

[934] *Ibid.*, pp. 4.82-4.91; International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex E (hereinafter "Final CIS, Annex E") pp. 5.27-5.35 (September 2006). UCM, Vol. X, Annex 227.

[935] Final CIS, *op. cit.*, pp. 4.85-4.86. UCM Vol. VIII, Annex 173.

5.75 The IFC's independent experts found that "[t]ourism is well established in and around the area of the pulp mills and that Gualeguaychú in Argentina is also an important center of tourist activity"[936]. The IFC's assessment showed beyond doubt that tourism will not be impacted in any meaningful way by emissions from the plant. With regard to impact to tourism resulting from a potential decline in water quality -- the only impact to tourism over which the Court can even arguably exercise jurisdiction -- the Final CIS concluded that tourism would not be affected by water discharged by the Botnia plant because the water "is treated to levels at which it poses no direct threat to aquatic life or recreational use of the river, and is further diluted to undetectable levels within a short distance of the point of discharge"[937]. In that regard, the IFC's experts noted that their "detailed computer modeling" confirmed "the rapid dilution of the treated waste to undetectable levels" even when both the Botnia and ENCE plants were "considered together"[938].

5.76 The IFC's experts also found that tourism will not be affected by air emissions from the Botnia plant[939]. Leaving aside the fact that the Court has no jurisdiction over air quality, the Final CIS concluded that "there will be no significant impacts to air quality in the region" and that both the Botnia and ENCE plants have "advanced technology to capture and eliminate . . . odours."[940] The Final CIS specifically concluded that under normal conditions odour "will not be detectable" at the Argentine recreational site at Ñandubaysal. Likewise, the IFC's

---

[936] *Ibid.*, pp. 4.82-4.83.

[937] *Ibid.*, p. 4.85.

[938] *Ibid.*, p. 4.85-4.86.

[939] *Ibid*.

[940] *Ibid.*, p. 4.85.

independent experts found that the visual impact of the Botnia plant -- another factor outside the Court's jurisdiction -- will not impact tourism in Ñandubaysal[941].

5.77 Argentina has not challenged the conclusions of these independent experts in any defensible manner. The report of Argentina's consultants is a picture of vagueness. It merely asserts -- without any support -- that "various factors" "suggest there *may* be a reduction in the number of visitors to the area"[942]. The report does *not* predict that tourism will be negatively impacted, or explain why it might occur. Nor did Argentina's consultants even speculate as to the size of any reduction, stating instead it would be "difficult to estimate."[943] In any event, many factors identified by Argentina's consultants as potentially contributing to a loss of tourism -- for example, air quality impacts and visual impacts -- are outside the Court's jurisdiction, and the alleged impact to water quality has been comprehensively refuted by the IFC's independent experts.

E. THE TREE PLANTATIONS WILL NOT CAUSE ADVERSE IMPACTS TO THE URUGUAY RIVER.

5.78 The Final CIS engaged in an extensive analysis of the environmental impacts associated with the ongoing operation of eucalyptus plantations, including the plantation holdings of Forestal Oriental ("FOSA"), which will supply the Botnia plant with a majority of its wood. The Final CIS concluded that "[i]n all cases, these impacts have been found to be low to medium, and can be mitigated"[944]. The

---

[941] *Ibid.*, p. 4.90.

[942] AM, Vol. V, Annex 3, p. 11.

[943] *Ibid*.

[944] Final CIS, *op. cit.*, p. 4.27. UCM, Vol. VIII, Annex 173 .

Second Hatfield Report concluded that the Final CIS had adequately and accurately assessed the effects of the existing tree plantations[945].

5.79 The conclusions of the Final CIS were based on numerous key facts. First, sufficient pulpwood supplies exist in currently established plantations owned by Botnia or available from third-party suppliers[946]. This has two implications that sever any effects of the plantations from the Botnia plant: (1) any impacts associated with existing plantations currently exist and are not connected to the construction of the Botnia plant; and (2) the construction of the Botnia plant will not necessitate the creation of new plantations or the creation of any new environmental effects. To the extent that new plantations are being planned for the area, the Final CIS found that they will be used "principally for saw logs and exports"[947].

5.80 Second, the Final CIS noted the careful controls Uruguay has placed on its forest industry to ensure that plantations are developed and maintained in an environmentally sustainable manner[948]. Uruguay has enacted a detailed and rigorous regulatory system mandating sustainable forestry practices. Applications to create new forest plantations are evaluated by the Ministry of Herding, Agriculture, and Fishing to determine whether the proposed area has adequate drainage and capacity

---

[945] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit.*, pp. 2, 4. UCM, Vol. VIII, Annex 178.

[946] Final CIS, *op. cit.*, p. 4.29. UCM, Vol. VIII, Annex 173. The Final CIS noted that the pulpwood industry has been long-established in Uruguay, historically for the purpose of exporting wood chips abroad. *Ibid.*, p. 4.27. It found that "the total existing plantation area owned by, and potentially available to, the companies exceeds the area required to supply both mills at full production." *Ibid.*, p. 4.28 Finally: "there are sufficient existing plantations to supply all of the required fibre. Hence any impacts (positive and negative) due to the conversion of former grazing areas have already taken place." Final CIS, Annex B, p. B6.1. UCM, Vol. 175.

[947] Final CIS, *op. cit.*, p. 4.28. UCM, Vol. VIII, Annex 173.

[948] *Ibid.*, p 4.27

for the trees to take root[949]. Plantations are permitted only in areas specially designated by the Comisión Nacional de Estudio Agroeconomico de la Tierra[950]. Further, proposed plantations larger than 100 hectares are required to submit to the environmental review process pursuant to Decree 349/005 and thus must apply for and obtain an AAP and possibly other approvals from MVOTMA before planting[951].

5.81 Third, the Final CIS noted the commitments independently undertaken by Botnia to ensure that its pulp consumption would not negatively impact the environment by seeking certification of its suppliers from the Forest Stewardship Council, which has developed an internationally respected standard for sustainable forest management[952]. To obtain certification, a plantation must submit to an audit by an independent certifying body which, if warranted, may issue a certification of compliance[953]. Botnia's affiliated company, Forestal Oriental and its partner the Otegui Group, which collectively will supply approximately 72.9% of Botnia's wood, have been so certified[954].

5.82 The Final CIS did note that "[t]he main environmental effect of Eucalyptus is known to be its heavy use of groundwater. Since water is not currently a limiting

---

[949] Decree 452/988, Ministry of Livestock, Agriculture, and Fish, Regarding Forest Designation, Arts. 3 & 5(II)(a) (6 July 1988). UCM, Vol. II, Annex 8.

[950] *Ibid.*, Art. 5(II)(b).

[951] Decree No. 349/005, Environmental Impact Assessment Regulation revision, Art. 2(30), Art. 29-31(21 September 2005). UCM, Vol. II, Annex 24. Law No. 17,283, General Law for the Protection of the Environment, Art. 14 (28 November 2000), UCM, Vol. II, Annex 11.

[952] The FSC's Forest Management Principles are set out at page B5.2 of the Final CIS, Annex B, and include conservation of biological diversity, water resources, soils and ecosystems, and mandatory management and maintenance plans to ensure the continued protections of these values.

[953]Final CIS, Annex B, *op. cit*. UCM Vol. VIII, Annex 174.

[954] *Ibid.*, p. B5.3. The third-parties that will supply the bulk of the remainder are also in the process of becoming certified pursuant to FSC criteria. *Ibid*.

factor in Uruguay, this is apparently not of immediate concern"[955]. Argentina alleges that the plantations may have an impact on surface water, specifically the flow of the Uruguay River,[956] but supplies no scientific basis for its allegation, and, as discussed in Chapter 6, its own experts found that there will be no particular effect on river flow, and Uruguay's experts have indicated that even if flow somehow did decline as a result of plantations, the impact on water quality would be insignificant.

5.83 In sum, the trees that are the apparent subject of Argentina's claim already exist, having been planted years ago, and have grown to maturity, without complaint (until the Memorial) from Argentina. As the IFC's independent experts observed, these plantations are "currently producing round wood and chips for export" and that the only change that will be brought about by the commissioning of the Botnia plant is that "this wood will instead be directed to domestic pulp production"[957], thereby allowing Uruguay to reap the economic benefits of value-added processing. The construction or operation of the Botnia plant thus will have no bearing on any theoretical environmental impact from these trees. Even if hypothetically, additional wood supplies were needed, those new plantations would be carefully regulated under Uruguayan law and internationally recognised certification programs. At bottom, unable to state a viable case with respect to the operation of the Botnia plant, Argentina has resorted to complaining about actions taken decades ago to promote

---

[955] *Ibid.*, p. B4.7 (quoting Forest Management Certification Report on ENCE's *Plantations*, SGS Qualifor), p. 29 (31 July 2003)).

[956] AM, para. 5.80.

[957] Final CIS, *op. cit.*, p. 4.27. UCM, Vol. VIII, Annex 173.

the cultivation of sustainable plantation forests. Argentina's case on the forests fares no better than its other environmental claims.

Section IV.
Conclusions with Respect to the International Finance Corporation

5.84 Although the clear compliance of the Botnia project with applicable law and the exhaustive review conducted by Uruguay described in Chapter 4 set forth a dispositive argument that Uruguay has met its substantive obligations under the 1975 Statute, the IFC's independent review process has left no doubt that the Botnia plant will not cause unacceptable environmental harm to the Uruguay River. Botnia submitted itself to a searching, nineteen month, multi-layered and comprehensive critique by the impartial IFC to determine whether the project would comply with the IFC's rigorous environmental and social performance standards. Those standards incorporate, *inter alia*, the Convention on Environmental Impact Assessment in a Transboundary Context, the POPS Convention, the Convention on Biological Diversity, the Convention on Wetlands, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention Concerning the Protection of World Cultural and Natural Heritage, and the Convention on Migratory Species. Moreover, by mandating that the project "comply with applicable national laws, including those laws implementing host country obligations under international law", the IFC had to examine whether the Botnia project would comply with all applicable Uruguayan environmental laws and regulations, and with all applicable international legal obligations, specifically including the 1975 Statute and CARU regulations.[958]

---

[958] IFC Performance Standards, *op. cit.*, Performance Standard 1, para. 4.

5.85 The IFC's unambiguous conclusion that the Botnia plant fully satisfies each and every one of these requirements was made only after internationally reputable independent technical experts used universally accepted techniques and referenced internationally accepted standards to thoroughly assess the plant and its potential impacts. Their conclusion, that the project would have "no impacts on the health of the people in the area, on either side of the Río Uruguay" and that it would be in the "top five of the world"[959] -- is scientifically unimpeachable, a fact that is further demonstrated in the following Chapter.

[959] Report of Expert Panel on the Final Cumulative Impact Study, *op. cit*., p. 2.

CHAPTER 6.
THE OPINIONS OF THE EXPERTS RETAINED BY THE PARTIES

Section I.
Argentina Has Failed to Show that the Botnia Plant Will Harm the Environment

6.1 As the preceding Chapters have established, there is overwhelming evidence that the Botnia plant will meet or exceed all applicable legal requirements, and that it will not cause significant harm to Argentina. This is shown by the Botnia plant's compliance with CARU water quality standards, a fact which Argentina has not challenged, and the conclusions of the independent experts who have studied the environmental impact of the plant as set forth in (i) the First Hatfield Report; (ii) the Second Hatfield Report; and, of course, (iii) the Final CIS itself.

6.2 Argentina's attempts to criticise the conclusions of the Final CIS and the other independent studies, which found no meaningful risk to the environment, are without scientific basis of any kind. As discussed in Chapter 4, Argentina has the burden of proving that the Botnia plant will cause adverse impacts on the basis of scientifically sound information. It has come nowhere close to doing so.

6.3 Argentina recognises, as it must, that the Final CIS, supported by the Second Hatfield Report, is definitive on the subject of the Botnia plant's compliance with all national and international environmental standards, and on the absence of risk of significant harm to the Uruguay River or its aquatic environment. Put simply, Argentina understands that the IFC's independent studies close the book on its case. In these circumstances, Argentina did what determined litigants generally do. It went out and hired its own consultants to issue reports supporting its own arguments, and criticising the conclusions reached by the IFC's independent experts. To attack the Final CIS and the Second Hatfield Report, Argentina hired: Latinoconsult S.A., ("Assessment of the Fluvial Environment of the Proposed Botnia

Pulp Mill on Uruguay River and Fray Bentos, Uruguay")[960], Howard Wheater and Neil McIntire ("Review of the IFC Final Cumulative Impacts Study of Botnia's Uruguay Pulp Mill")[961], and Marcelo Conti ("Consultancy Report on Pulp Mills")[962]. The Latinoconsult Report contains a document entitled "Highlights of the Findings of the Independent Argentinean Environmental Study Team (IAEST) in the Environmental Analysis of the Botnia Pulp Mill," a report addressed to Professor Philippe Sands dated 26 November 2006.

6.4 The reports produced by Argentina were, of course, not available to the IFC at the time the Final CIS and the Second Hatfield Report were issued. Thus, there would have been no way for the IFC's independent experts to anticipate, address or rebut the arguments made by Argentina's hired consultants. (Nor were the independent experts asked by the IFC to respond to Argentina's reports). Even so, Uruguay will demonstrate that in many cases the issues raised in Argentina's reports can be refuted simply by the findings of the Final CIS or the documents relied on by the Final CIS.

6.5 In addition, Uruguay has also retained its own internationally qualified scientific experts to review and address the comments of Argentina's experts. The experts consulted by Uruguay conclude that the findings of the Final CIS and Second Hatfield Report are justified, and that the criticisms offered by Argentina are unfounded. Uruguay's experts are:

6.6 William Sheate is a senior academic in the field of Environmental Assessment at Imperial College London. Mr. Sheate has over two decades

---

[960] AM, Vol. V, Annex 3 (hereinafter "Latinoconsult Report").

[961] AM, Vol. V, Annex 5 (hereinafter "Wheater Report").

[962] AM, Vol. V, Annex 4 (hereinafter "Conti Report").

experience in the environmental impact assessment field, with experience in consultancy, academia, and the private sector. Mr. Sheate is founder and editor of the *Journal of Environmental Assessment Policy and Management*, published by World Scientific Publishing. Mr. Sheate concluded that the environmental impact assessment processes were robust and met the standards of international environmental law.

6.7 The international consulting firm Applied Sciences Associates, Inc. ("ASA") provides expert opinion on hydrodynamic modelling. ASA, based in Narragansett, Rhode Island, and Sao Paolo, Brazil, is led by Dr. Craig Swanson. Dr. Swanson specializes in the development and application of hydrodynamic, water quality and sediment transport models for rivers and other water bodies. He applies these models and associated field programs to solve surface water environmental problems, including those associated with industrial facilities such as liquefied natural gas terminals and pipelines, power plants, and sewerage discharges. Dr. Swanson is supported by his Brazilian colleague, Dr. Eduardo Yassuda. They conclude that the modelling conducted by the IFC accurately predict the dispersion of effluents and find significant errors in the reports of Argentina's experts.

6.8 The international consulting firm Exponent, Inc. provides expert opinions on plant technology and ecological impacts. The analysis of plant technology and, in particular, pollution control techniques employed by the Botnia plant was conducted by Dr. Thomas Deardorff of Irvine, California and Douglas Pryke of Ontario, Canada. Dr. Deardorff is an expert in the areas of wastewater treatment, environmental impacts of industrial sources to aquatic ecosystems, fate and transport of dioxins and furans. He has fifteen years of direct experience in the pulp and paper

industry and has published dozens of papers related to the environmental effects of pulp and paper facilities. Mr. Pryke is an internationally recognised expert in pulp and paper bleaching technology, with more than thirty years of industry experience. He has consulted extensively in the development and implementation of ECF pulp bleaching technology and is the Executive Director of the Alliance for Environmental Technology (AET), an international association of chemical manufacturers dedicated to improving the environmental performance of the pulp and paper industry. In this capacity, Mr. Pryke has managed large-scale scientific projects and presented recommendations regarding the ecological risks associated with pulp mills. These experts conclude that the Botnia plant will employ state-of-the-art technology.

6.9 Exponent's analysis of the ecological effects of the operation of the Botnia plant was coordinated by Dr. Charles Menzie of Arlington, Virginia. Dr. Menzie has over three decades experience in many nations examining the impacts and risks of wastewater discharges on rivers and other aquatic environments, including those from pulp mills. His work includes assessments of nutrient impacts, solids discharges, and toxic chemicals such as dioxins. His work is supported by Pieter Booth of Bellevue, Washington, an expert in ecological risk assessment. Mr. Booth has led numerous projects addressing sediments and wetlands, including projects in Argentina. These experts conclude that the discharges from the Botnia plant will have none of the calamitous adverse effects hypothesized in Argentina's experts reports.

6.10 The conclusions reached by the IFC's independent experts and confirmed by Uruguay's experts are also supported by impartial technical experts from

Argentina -- although not the ones Argentina hired to support its claims. In particular, technical studies of the environmental impacts of the Botnia plant were performed by, *inter alia*, the Argentine National Academy of Engineering, the National Institute of Technology and Industry of the Republic of Argentina, and other leading Argentine academics. These Argentine studies were not performed at the initiative of Argentina or Uruguay, or paid for by Argentina or Uruguay. Like the IFC, but unlike Argentina's paid experts, they conclude that the Botnia plant will produce no meaningful adverse environmental impacts. Finally, even the actions of the Government of Argentina itself show no confidence in the conclusions of its own experts: Argentina's recently announced program of pulp mill modernisation fails to require Argentina's own pulp mills to adopt the technologies that Argentina's experts assert are necessary for Botnia.

6.11 The remainder of this Chapter analyses Argentina's main criticisms of the Final CIS and Second Hatfield Report, and demonstrates that those criticisms are invalid. Uruguay relies principally on the Final CIS and the Second Hatfield Report themselves to refute Argentina's criticism. Uruguay also relies, where appropriate, on the reports of the experts identified above, and on the conclusions reached by Argentine academic experts.

Section II.
Argentina Has Failed to Show that Potential Impacts of the Botnia Plant Have Been Inadequately Assessed

A. Argentina Seeks to Impose a Standard on Environmental Impact Assessment that No Project Could Ever Meet

6.12 The years of review of the project by DINAMA, then in the GTAN, and then by the IFC Cumulative Impact Study process have resulted in an extraordinarily comprehensive and conservative assessment of the impacts of the Botnia plant. As

set forth in Chapters 4 and 5, these assessments meet and exceed the requirements of the 1975 Statute, CARU regulations, and of applicable international law for notification and environmental assessment.

6.13 Nonetheless, Argentina persists in arguing that the assessments are inadequate or incomplete. It does so by positing an impossible standard that no project in the world has ever been required to meet or ever could meet. If the standard posited by Argentina were to become law, no project of any kind or of any magnitude would ever be allowed to be constructed. The result would be a gross distortion of the Parties' rights to optimal use of the Uruguay River under the 1975 Statute and a negation of the principle of sustainable development.

6.14 Argentina's Latinoconsult Report overtly displayed its bias:

> The main approach of the IAEST ["Independent Argentinean Environmental Study Team"] … followed the precept that science can only disprove null hypotheses. In the case of the Botnia pulp mill development, the null hypothesis was "The development is not safe for the environment", and the environmental analysis carried out was an attempt to disprove this null hypothesis.[963]

6.15 Stated differently, Argentina's experts at Latinoconsult and the IAEST (whose findings are included as part of the Latinoconsult Report) began with the assumption (the "null hypothesis") that the project will cause unacceptable environmental impacts. It then set out to disprove that assumption. And, because the assumption could not be disproved to a mathematical certainty, Argentina's Memorial uses the Latinoconsult Report to conclude that the project is *unsafe*.

6.16 Under the standard set forth by Latinoconsult, if there were a one-in-a-billion statistical chance that the project could harm the environment, there would be

[963] Latinoconsult Report, *op.cit.,* p. 12. AM, Vol. V, Annex 3.

no mathematical certainty that the plant is not unsafe and it would fail the review. This, of course, is not the standard that applies to the 1975 Statute, nor to any other obligation imposed by international law.

6.17 Tellingly, the Latinoconsult Report expressly states that its review was conducted "entirely separate from regulation"[964]. Both Latinoconsult and Argentina thus recognise that, only by ignoring the legal standards of the 1975 Statute, CARU regulations, and applicable international law, is it possible to posit an entirely new standard -- invented solely to support Argentina's claims in this case -- and argue that the Botnia plant fails to meet it. By itself, this throws the utility of the Latinoconsult Report into serious question. How can it be proper to ignore Uruguay's compliance with substantive provisions of the 1975 Statute and the regulatory requirements of the CARU Digest, which were jointly adopted by the Parties, following rigorous scientific review by CARU, a body established precisely to determine those requirements? In this regard, it should be recalled that CARU's requirements are comparable to standards set by other responsible environmental regulatory authorities, such as the European Union, Australia, and the World Health Organization, and therefore are considered as protective as those representative standards[965].

6.18 The problems with the Latinoconsult Report, and the reports of Argentina's other experts, are compounded by the fact that their objections to the adequacy of the DINAMA/Botnia EIA, and more particularly to the Final CIS, rest

---

[964] *Ibid.*

[965] *See* International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex D (hereinafter "Final CIS, Annex D"), p. D2.5 (September 2006). UCM, Vol. VIII, Annex 176.

on speculation about risks that would never normally be the subject of detailed environmental assessment. For example, Argentina criticises the Final CIS for failure to assess what would happen if significant climate shifts happen in the future[966], if new dams are constructed[967], or if there is an increase in the rate of flow reversal[968]. It criticises the Final CIS for failing to acknowledge that if the Uruguay River was located in Europe, it might be subject to a different (although not necessarily more stringent) regulatory regime[969]. It claims the assessment is deficient because despite "clear evidence that the aquatic environment has improved since the implementation of secondary treatment and improved processes … bioactive substance … may be present … but undetectable with current resources"[970]. One of its hired experts claims: "the range of chemicals in mill wastewater … are too complex to reach conclusions about the reasons for detrimental effects and further research is needed"[971]. Presumably Argentina's experts do not mean to suggest that these uncertainties should mean the immediate

---

[966] AM, paras. 7.26, 7.28. Of course, even if the climate changed as Argentina asserts it might, there would be no measurable change in the impact of the Botnia plant on the environment. *See* Dr. J. Craig Swanson & Dr. Eduardo A. Yassuda, Hydrologic Analysis for the Proposed Botnia Cellulose Plant on the Uruguay River (hereinafter "Swanson Report"), p. 18 (Applied Science Associates, Inc.) (June 2007). UCM, Vol. X, Annex 214; Dr. Charles A. Menzie, Evaluation of the Final Cumulative Impact Study for the Botnia S.A.'s Bleached Kraft Pulp Mill (Fray Bentos, Uruguay) with Respect to Impacts on Water Quality and Aquatic Resources and with Respect to Comments and Issues Raised by the Government of Argentina (hereinafter "Menzie Report"), p. 15 (Exponent, Inc.) (July 2007). UCM, Vol. X, Annex 213.

[967] AM, para. 7.29. Construction of new dams in the future would require a separate EIA process, at which point the impact of the dam construction would be assessed.

[968] AM, para. 7.26. The frequency and extent of current reversals alleged by Argentina is belied by observations and is a function of erroneous modelling by Argentina, *see* Swanson Report, *op. cit.*, pp. 10-13. UCM, Vol. X, Annex 214; and in any event an increase in reversals would not have an adverse effect, Menzie Report, *op. cit.*, pp. 26-28. UCM, Vol. X, Annex 213.

[969] AM, para. 7.50.

[970] Wheater Report, *op.cit.,* Sec. 1. AM, Vol. V, Annex 5.

[971] *Ibid.*

shutdown of all pulp mills everywhere, and the resulting end to the world's paper supply. That is exactly, however, the implication that would have to be drawn if the Court were to accept the standards advocated by Argentina for assessment of the Botnia plant and its expected impacts. These standards plainly (and deliberately) set the bar at an impossibly high level, inconsistent with factual and objective standards set by the International Law Commission and by international law. Uruguay is under no obligation under the 1975 Statute or international law to assess the highly remote and purely theoretical risks required by Argentina in advance of authorising the Botnia plant. Argentina has cited no legal authority in support of the standards it attempts to apply to the Botnia plant, because there is none.

6.19 Uruguay does not dispute that the precise impacts of the plant cannot be predicted with 100 percent certainty. That is precisely why the assessments performed by Botnia and the IFC consistently employ conservative methodology that tends to overstate impacts. To cite the most obvious example, the Final CIS retains the existence of the ENCE plant and all of its impacts even though that plant will no longer be constructed in or near Fray Bentos. Other less obvious examples include the discharge estimates used in the Final CIS, particularly for dioxins and furans, which the Second Hatfield Report confirmed are conservative[972]; the use of two types of models to cross-check the validity of the results obtained[973]; the use of an "extreme low flow" value lower than what is required under CARU

[972] Hatfield Consultants, Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills (hereinafter "Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills", p. 3 (A5) & 5 (C12) (14 October 2006). UCM, Vol. VIII, Annex 178. *See also* Final CIS, Annex D, *op. cit.*, p. D4.3. UCM, Vol. VIII, Annex 176.

[973] Final CIS, Annex D, *op. cit.*, p. D5.2. UCM, Vol. VIII, Annex 176.

regulations[974]; and the assumption that all water quality parameters do not react, decompose, or transform in any way in the ambient environment[975].

6.20 Uncertainty about eventual impacts of the plant is also addressed by means of the comprehensive supervision and monitoring program that has been designed for the plant, and that will be implemented as soon as it commences operations. Thus, Uruguay asserts not only that the assessments that have been prepared by DINAMA, Botnia, and the IFC's independent experts fully satisfy CARU regulations and all applicable international standards; it also asserts that the extensive monitoring program that has been designed will ensure that the true impacts are identified, assessed, and, if necessary, addressed and remediated through existing regulatory programs[976]. In some cases, the alleged "risks" described in Argentina's Memorial as insufficiently addressed in the Final CIS are ones where the impacts can be properly addressed (and can *only* be addressed) through a combination of monitoring and regulatory oversight[977]. Argentina's continuing refusal to participate in any monitoring of the river is, therefore, impossible for Uruguay to comprehend. The monitoring program for the plant is discussed in detail

---

[974] *Ibid.*, p. D5.5. As explained in the Final CIS, the extreme low flow scenario of 500 m^3/s analysed in the Final CIS generally occurs in intervals of 5 to 20 years. *Ibid.* CARU regulations, whose occurrence interval was used in the Final CIS, require that the extreme low flow intervals be assessed only on a 5 year basis. *Ibid.* The "low flow" value used in the Final CIS is lower (and more conservative) than what CARU requires, and thus predicts a greater change in water quality characteristics than would be predicted if the 5 year low flow were to be used.

[975] *Ibid.*, p. D5.6. Although these subjects are outside the scope of this dispute, the Second Hatfield Report acknowledged that the Final CIS employed conservative estimates with respect to air emissions and, in particular, with respect to odour. Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, pp. 6 & 9. UCM, Vol. VIII, Annex 178.

[976] *See generally* Chap. 7, Sec. 1.

[977] *See* Menzie Report, *op. cit.*, p. 30 (uncertainties should be managed and resolved through a comprehensive monitoring program). UCM, Vol. X, Annex 213.

in Chapter 7, as is Argentina's persistent refusal to accept Uruguay's repeated invitations to participate as an equal partner in a joint monitoring effort.

B. The Impacts of the Botnia Plant Have Been Thoroughly and Adequately Assessed

6.21 Putting aside the impossible legal standard asserted by Argentina, Argentina is simply wrong when it claims that inadequate information has been provided about the Botnia plant. Indeed, even Argentina's experts agree that the reports prepared are consistent with international norms and standards of care. The Wheater Report noted: "The final Cumulative Impact Assessment (CIS) was much improved, and mainly consistent with what might reasonably be expected from an international impact assessment."[978] Similarly, the Latinoconsult Report states that "the FCIS is consistent with current professional practice"[979].

6.22 Argentina sometimes criticises the provision of information by reference to the very first submissions of Botnia to DINAMA, without recognising the later submissions that followed[980]. Yet, as Chapter 4 shows, environmental impact assessment is a *process*, not a single event[981]. The fact that DINAMA criticised the initial filings of Botnia is not a defect in the process, as Argentina argues[982], but a confirmation that it worked as intended. DINAMA, and ultimately the IFC, would not be meeting their statutory or organisational mandates if they accepted at face value the initial submissions of a project proponent. Thus, the repeated

---

978 Wheater Report, *op.cit.,* p. 1 (introductory para.). AM, Vol. V, Annex 5.

979 Latinoconsult Report, *op. cit.,* p. 13. AM, Vol. V, Annex 3.

980 AM, paras. 2.53, 4.49, 5.56.

981 *See also* Mr. William Sheate, Comments on the EIA Process (hereinafter "Sheate Report"), pp. 3-4, 6-9 (Collingwood Environmental Planning) (June 2007). UCM, Vol. X, Annex 216.

982 AM, paras. 2.53, 4.49, 5.56.

supplementation of information required of Botnia by DINAMA is precisely what would be expected of a thorough and careful review of the environmental impacts of a project. The same can be said of the IFC, which did not accept Botnia's initial submissions at face value, but rather required independent review of the draft CIS, development of an action plan, subsequent revisions to the draft CIS, issuance of a Final CIS, and a second independent review[983].

6.23 Argentina is equally wrong to rely solely on the Final CIS to evaluate the sufficiency of the information provided, which is what each of Argentina's principal experts did: For example, the Latinoconsult Report pays "special attention" to the Final CIS[984], and rarely, if ever references any of the prior submissions. The Conti Report was based solely on the review of the Final CIS[985]. The Wheater Report is based solely on review of the same[986]. Although the Final CIS is extraordinarily comprehensive, it does not include all of the information that has been available to

---

[983] *See generally* Chap. 5, Sec. 2.

[984] *See* Latinoconsult Report, *op.cit.,* p. 1 (introductory para.). AM, Vol. V, Annex 3, (noting that, although many reports have analysed the impacts of the Botnia plant, the report pays special attention to the Final CIS), 12 (same), 13 (section entitled "Characteristics of the environment that are not fully or erroneously characterized in the FCIS"), 18 (section entitled "Risks not addressed in the FCIS"), & 20 (subsection to "Risks to Water Quality in the Rio Uruguay" entitled "FCIS Rationale for No Significant Impact").

[985] Conti Report, *op.cit.,* p. 1. AM, Vol. V, Annex 4. The failure of the Conti Report to consider other documents is the least of its problems. Because it is rarely referenced in Argentina's Memorial, it will not be addressed in detail in this Counter-Memorial. However, the Conti Report suffers from a number of glaring errors, including its confusion of the process of making cellulose (which the Botnia plant will do) with the process of making paper (which the Botnia plant will not). *Ibid.,* pp. 5-6. Its comments on the cellulose industry are general, and make virtually no reference to the specific technology and pollution prevention mechanisms that Uruguay has required of the Botnia plant, nor does it consider the vast quantity of scientific research pertaining to the industry or the Botnia plant itself. Rather, it references irrelevant topics such as asbestos contamination in abandoned industrial sites, and occupational exposure to palladian and platinum in a catalyst plant. *Ibid.*, pp. 11, 23. It states that the Uruguay River is a complex ecosystem -- a proposition that the Final CIS does not dispute -- but fails to make any affirmative argument using generally accepted scientific techniques that the Botnia plant is likely to disrupt or harm that system.

[986] Wheater Report, *op. cit.,* p. 1. AM, Vol. V, Annex 5.

the Parties, including Argentina. Argentina's conclusions that insufficient information has been provided cannot stand when those conclusions take into account only some of the information that exists. For instance, Uruguay submitted numerous documents relating to the potential impacts of the Botnia plant during the GTAN process, the contents of which are comprehensively described in Chapter 3. Moreover, the entire file leading to the issuance of Botnia's Initial Environmental Authorisation is approximately 4,000 pages long, and was made available to Argentina in its entirety. As explained in Chapter 4, the adequacy of the EIA process must be judged on the totality of information that is made available and not on any single document. Therefore, although the Final CIS is extraordinarily comprehensive and alone is more than enough to satisfy the international law requirements of EIA, it must be remembered that this process has involved extensive environmental review, not all of which has been included in the Final CIS, but all of which has been made available to Argentina.

6.24 Regardless of which reports were reviewed, Argentina has not made a case that the EIA process was deficient. As set forth in Chapters 3 and 4, DINAMA allowed the project to move forward only after exhaustive environmental evaluation. As set forth in Chapter 5, the IFC would not have acted if it did not have adequate information to understand the potential impacts, and to assure itself that its rigorous Performance Standards were satisfied.

6.25 Mr. Sheate, Uruguay's expert on EIA, has opined that the process of preparing the EIA was robust and consistent with international norms[987]. He confirmed that the EIA process must be judged as a whole process, rather than solely

---

[987] *See* Sheate Report, *op. cit.*, p. 1. UCM, Vol. X, Annex 216.

at the point of submission of the initial filing by Botnia in 2004, and that as a whole, especially when considering how closely linked Uruguay's approval process is to the EIA process, the process met international standards[988]. Mr. Sheate also notes that "[i]n the nature of complex projects with multiple elements it is possible that the consenting process and therefore the EIA process may be a multi-stage process, i.e. an initial authorisation with subsequent authorisations for sub-projects as these come forward over time"[989]. Mr. Sheate confirms that the "the original EIA and the CIS together provide a transparent approach to the determination of significance in relation to emission to the water environment"[990], in this case primarily by comparison to applicable water quality standards. Mr. Sheate also notes the conservative nature of the Final CIS, specifically by continuing to include the impacts of the ENCE plant[991].

6.26 Although environmental impact assessment can take many forms depending upon its national context, Mr. Sheate identifies a basic principle that underpins EIA worldwide, which is stated in Principle 17 of the Río Declaration: "Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have significant adverse impact on the environment and are subject to a decision of a competent national authority."[992] Mr. Sheate concludes that it is not necessary to include in the assessment activities that are unlikely to have a significant adverse impact.

---

[988] *Ibid.*, pp. 2-4 & 9.

[989] *Ibid.*, p. 8.

[990] *Ibid.*, p. 6.

[991] *Ibid.*

[992] *Ibid.*, p. 5 (internal quotations and citation omitted).

6.27 Uruguay's other technical experts -- Drs. Swanson, Menzie, and Deardorff and Mr. Booth -- concur that the information provided in the environmental impact assessment should address the activities that might have a significant adverse impact, and that the information is sufficient to satisfy a conclusion that the plant will not cause a significant risk of harm[993]. Their conclusions are discussed in more detail in later parts of this Chapter.

6.28 Section III of this Chapter will show why Argentina has failed to show that the Botnia plant will be anything other than a world-class performer. Section IV will show why Argentina has also failed to show that this world-class performer will have any unacceptable impacts on the Uruguay River or its aquatic environment.

Section III. Argentina Has Done Nothing to Disturb the Conclusion that the Botnia Plant Will Perform on a World-Class Level.

6.29 In response to overwhelming evidence that the Botnia plant will meet IPPC BAT and that it "will probably perform to a standard of top five in the world"[994], Argentina's Memorial raises some isolated questions, none of which present any meaningful challenge to this conclusion. Specifically, Argentina challenges the conclusions of the Final CIS with respect to (i) effluent treatment technology; (ii) bleaching technology; (iii) emergency basins; (iv) chemical synthesis; (v) emergency management; and (vi) facility siting. As Uruguay will now demonstrate, each of these challenges can be easily and completely dismissed.

---

[993] *See, e.g.*, Menzie Report, *op. cit.*, pp. 12-13, 15, 22. UCM, Vol. X, Annex 213. Swanson Report, *op. cit.*, pp. 7, 10, 13-15, 19-22. UCM, Vol. X, Annex 214. Mr. Pieter Booth, Sufficiency of EIA and GTAN Information for Determination of Environmental Impacts - Botnia, S.A., Fray Bentos Uruguay (hereinafter "Booth Report"), pp. 10-12 (Exponent, Inc.) (June 2007). UCM, Vol. X, Annex 217.

[994] Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 2. UCM, Vol. VIII, Annex 178.

6.30 Effluent Treatment Technology. Argentina's argument that the IFC's independent experts, Hatfield and EcoMetrix are wrong and that the Botnia plant does not meet BAT is primarily focused on wastewater treatment, and specifically the lack of so-called "traitement tertiaire"[995]. It is not disputed that all wastewater produced in the cellulose production process will be treated by the Botnia plant's wastewater treatment plant. The plant will use both "primary" and "secondary" treatment processes[996]. The Final CIS concluded that "[t]he effluent flows of Botnia-Orion … comply with the IPPC-BAT (2001) range and are among the best in the world."[997]

6.31 In spite of that finding, Argentina argues that the Botnia plant should have been required to consider tertiary treatment of its wastewater to remove phosphorus. Argentina's argument is utterly devoid of proof, and relies solely on the assertion in the Wheater Report (based on a 1999 report by another author) that "*typical* nutrient removal by an ASR [the basic form of wastewater treatment to be employed at the Botnia plant] is 30-35%"[998]. Dr. Wheater asserts -- not by reference to any site-specific analysis or to BAT requirements, but rather by reference to a 1991 Study pertaining to Urban Wastewater Treatment in the European Union -- that the Botnia

---

[995] AM, paras. 5.52, 5.75, 7.40, 7.90, 7.124, 7.180-186 ("tertiary treatment").

[996] Final CIS, *op. cit.*, p. 2.22. UCM, Vol. VIII, Annex 173. "Primary" treatment is defined in the Final CIS as "Process and equipment intended to remove suspended solids from the effluent…. Primary treatment is a prerequisite for most secondary treatment processes." "Secondary" treatment is defined in the Final CIS as "a stage of waste treatment in which micro-organisms decompose organic constituents in the effluent.… Most secondary treatment processes also reduce toxicity." International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex I (hereinafter "Final CIS, Annex I"), pp. I.9-I.10 (September 2006).

[997] Final CIS, *op. cit.*, p. 2.21. UCM, Vol. VIII, Annex 173. *See also ibid.*, p. 2.26 ("The expected performance with respect to bleaching effluent flow, COD content, and colour will be among the best in the world.").

[998] Wheater Report, *op. cit.,* Sec. 6 (emphasis added). AM, Vol. V, Annex 5.

plant "would require tertiary treatment to meet the following standards: a minimum 70% reduction in total nitrogen load and a minimum 80% reduction in total phosphorus load"[999].

6.32 The fact that this assertion is not based on any site-specific analysis or reference to BAT standards should be enough on its own to dismiss it. That Dr. Wheater is plainly wrong that Botnia's ASR will only achieve 30-35% nutrient reduction ends the discussion. The Botnia plant, which employs advanced ASR, will achieve significantly higher removals than that: indeed, the Final CIS indicates that the Botnia plant's treatment system "fulfills all recommendations of IPPC-BAT" and that "treatment efficiency is expected to be in the upper range (or higher) of the recommended treatment efficiency"[1000]. In fact, the Final CIS found that phosphorus removal will be on the order of 84%, which is *higher* than the minimum removal rate recommended by Dr. Wheater[1001].

---

[999] *Ibid.*

[1000] Final CIS, Annex D, *op. cit.*, p. D4.1. UCM, Vol. VIII, Annex 176. IPPC BAT guidelines indicate that phosphorus removal for activated sludge reactors for BAT-compliant pulp mills is 40-85%, noting that "[t]he more recent plants have reduction figures in the upper part of the ranges given." European Commission, Integrated Pollution Prevention and Control (IPPC) Reference Document on Best Available Techniques in the Pulp and Paper Industry, p. 38 (December 2001) *available at* http://eippcb.jrc.es/pages/FActivities.htm (last visited on 9 July 2007). *See also ibid.*, p. 84.

[1001] *Ibid.* The Wheater Report's citation for phosphorus removal efficiency was to a chapter by Shieh and Nguyan in a volume entitled *Environmental Engineer's Handbook*. David H.F. Liu (ed.), Environmental Engineer's Handbook (2nd ed.) (hereinafter "*Environmental Engineer's Handbook*"), p. 704 (1997). The Wheater Report first misquotes the article by indicating that phosphorus removal using a typical ASR system is 30-35%; in fact, the article indicates that the phosphorus removal is *at least* 30%. The Wheater Report further distorts the finding because the percentage removal cited is applicable to *municipal* wastewater, not to cellulose plants. As set forth elsewhere in the *Environmental Engineer's Handbook*, phosphorus is a significant problem with municipal/sanitary wastes; municipal discharges account for over 82% of the "point sources" of phosphorus discharges worldwide. *Environmental Engineer's Handbook*, p. 531. In contrast, phosphorus must actually be *added* in precisely measured and minimal amounts to the wastewater at the Botnia plant prior to treatment to ensure optimal functioning of the ASR. *See* Final CIS, Annex A, *op. cit.*, p. A7.14. UCM, Vol. VI, Annex 174; *see also* MVOTMA Initial Environmental Authorisation for the Botnia Plant (hereinafter "Botnia

6.33 The Final CIS specifically evaluated the issue of tertiary treatment and concluded that any additional benefits from tertiary treatment are likely to be marginal and insignificant[1002], and that tertiary treatment is not necessary to meet the applicable water quality standards[1003]. As further support, it noted that tertiary treatment is very rarely used in pulp mills[1004]. The conclusion in the Final CIS is strengthened by studies concluding that tertiary treatment should not be considered BAT. For instance, tertiary treatment may actually result in harmful effects by increasing the chemical load on the environment and needlessly complicating the wastewater treatment system[1005]. Given that the nutrient removal levels that will be reached at the Botnia plant will approach or exceed those achieved with tertiary treatment, and especially because the detailed ecological modelling showing that nutrient levels in the Uruguay River will not meaningfully change as a result of the Botnia plant, the risks clearly outweigh any theoretical, marginal benefit that could result from tertiary treatment.

6.34 Uruguay's pulp mill experts confirm the conclusion of the IFC's experts that "[t]ertiary treatment is not necessary for the Botnia mill to achieve world-class discharge releases for typical environmental parameters"[1006]. As evidence of how

---

EIA"), Chap. 4, Sec. 4.2.3. (14 February 2005). UCM, Vol. II, Annex 21. As indicated in the Final CIS, phosphorus emissions from the Botnia plant are expected to be well within the IPPC-BAT guidelines. Final CIS, *op. cit.*, p. 2.29. UCM, Vol. VIII, Annex 173.

[1002] Final CIS, *op. cit.*, p. 2.23. UCM, Vol. VIII, Annex 173.

[1003] Final CIS, Annex A, *op. cit.*, p. A8.15. UCM, Vol. VIII, Annex 174.

[1004] Final CIS, Annex I, *op. cit.*, p. I.10. UCM, Vol. X, Annex 222.

[1005] Final CIS, *op. cit.*, p. 2.23. UCM, Vol. VIII, Annex 173. *See* Final CIS, Annex A, *op. cit.*, pp. A8.13-A8.15 for a full discussion of this issue. UCM, Vol. VIII, Annex 174.

[1006] Available Technologies and Best Environmental Management Practices for Botnia S.A.'s Bleached Kraft Pulp Mill, Fray Bentos Uruguay, Dr. Thomas L. Deardorff & Mr. Douglas

infrequently tertiary treatment is actually used, the Deardorff Report indicates that, to the experts' knowledge, only two of the one hundred and thirty pulp mills in the United States employ tertiary treatment, and then only in highly unusual circumstances, specifically relating to minimising colour loading on aesthetically sensitive receiving waters[1007]. The Deardorff Report indicates that, to the experts' knowledge, no pulp mills are planning conversions to tertiary treatment, and that the newest mills in the world, the Stendal mill in Germany and the Stora Enso Veracel mill in Brazil also do not have tertiary treatment[1008]. Similarly, although Argentina provides a list of pulp mills in Annex 2 of Volume 5 to its Memorial ("Tableau comparatif des usines de pate a papier dans le monde"), it fails to identify any that employ tertiary treatment.

6.35 In all contexts other than this litigation, Argentina itself does not endorse the use of tertiary treatment for kraft pulp mills. Argentina has announced a comprehensive program of modernisation of its pulp mills -- the Restructuring Plan for the Cellulose and Paper Industry ("Argentine Pulp Mill Restructuring Program") -- that explicitly aims to bring the operation of Argentine cellulose plants into conformance with BAT. The guidelines set forth in the Technical Evaluation Manual for the Argentine Restructuring Plan "are based on the Best Available

---

Pryke (Exponent, Inc.) (hereinafter "Deardorff Report"), pp. 8-9 (8 July 2007). UCM, Vol. X, Annex 215.

[1007] *Ibid.*, p. 30. When tertiary treatment is used, it is usually to lessen aesthetic impacts with respect to the colour of the effluent discharge. *See* Final CIS, Annex A, *op. cit.*, p. A8.13. UCM, Vol. VIII, Annex 174. Colour is not expected to affect the aesthetic quality of the Uruguay River. The only expected aesthetic impact from the colour of the effluent discharge is that during low flow conditions an observer on the international bridge may notice a "slight" differential in colour, but this impact is expected to be minimal. Final CIS, *op. cit.*, p. 4.46. UCM, Vol. VIII, Annex 173. Indeed, the Final CIS concluded that with respect to colour, the effluent of the Botnia plant will be among the best in the world. *Ibid.*, p. 2.26.

[1008] Deadorff Report, *op. cit.*, p. 31. UCM, Vol. X, Annex 215.

Techniques (BATs) for the Pulp and Paper Industry established by the [IPPC]"[1009]. Nowhere in the implementing guidelines of the Argentine Restructuring Plan is there any requirement that any pulp mill consider, much less install, tertiary treatment of effluents[1010]. Pursuant to this restructuring program, Argentina has signed an agreement with the Alto Paraná S.A. pulp mill that does not require the use of tertiary treatment[1011]. Hence, by its actions Argentina has conceded that tertiary treatment is not a requirement for BAT[1012].

6.36 In addition, nothing in the Technical Evaluation Manual for the Argentine Restructuring Plan requires any pulp mill to take specific action to lessen or otherwise control phosphorus discharges, which is the Wheater Report's basis for asserting that tertiary treatment is required.

[1009] Secretariat of the Environment and Sustainable Development, Restructuring Plan for the Cellulose and Paper Industry: Technical Evaluation Manual (hereinafter "Argentine Restructuring Plan: Technical Evaluation Manual"), p. 13 (January 2007). UCM, Vol. III, Annex 49.

[1010] *Ibid.*, p. 17 (recommending only primary and secondary treatment as BAT).

[1011] Agreement of the Argentine Secretariat of the Environment on Restructuring of the Pulp Mill Alto Paraná, Appx. 2, Objective 3 (8 May 2007). UCM, Vol. III, Annex 51.

[1012] This conclusion is all the more forceful because, as Secretary of the Environment, Dr. Romina Picolotti has played a prominent role in the development of the Argentine Restructuring Plan. *See generally* Argentine Restructuring Program: Technical Evaluation Manual, *op. cit.*, p. 1. UCM, Vol. III, Annex 49. *See also* Secretariat of the Environment, "The Secretariat of the Environment and the Alto Paraná Company Sign an Agreement in the Framework of the Industrial Restructuring Plan," Press Release (8 May 2007). UCM, Vol. III, Annex 53. Dr. Picolotti is the founder of the Center for Human and Environmental Rights (CEDHA, per its Spanish initials), an Argentine NGO that was an early and ardent opponent of the Botnia plant. Dr. Picolotti was president of CEDHA when she represented Argentina in the Court at the hearings on Argentina's provisional measures request on 8-9 June 2006. *See generally* CEDHA, "Romina Picolotti Named Head of Argentina's Environmental Secretariat," p. 1 (27 June 2006). UCM, Vol. IX, Annex 187. In her new position as Secretary of the Environment, Dr. Picolotti would have every incentive to require Argentine pulp mills to adopt the best available water treatment technologies. Thus, it is noteworthy that the Technical Evaluation Manual for the Argentine Restructuring Plan sets forth the same requirements with which Botnia must comply, including use of secondary treatment for pulp mills using kraft technology.

6.37 Finally, contrary to the Wheater Report's suggestion that tertiary treatment is required due to some unique features of the receiving environment[1013], the Uruguay River in the vicinity of the Botnia plant is not a sensitive environment warranting tertiary treatment. After engaging in an extensive analysis of the environmental characteristics of the Uruguay River, the Final CIS and the Second Hatfield Report unequivocally found that the environment into which the plant will discharge effluent is not one that would be deemed "sensitive" under IPPC BAT, which would be the only context in which using tertiary treatment would even be considered[1014]. This conclusion was affirmed by the Second Hatfield Report, which found that "[r]elative to most sites for pulp mills and other large process industries, Fray Bentos is not an environmentally sensitive site"[1015].

6.38 Uruguay's experts confirm that there is no reason to conclude that the Uruguay River is a particularly sensitive environment:

> [T]he fauna found in the [Uruguay River] is representative of that found typically in large rivers with variable substrates. This is also true for the fish community.… The variation that has been seen across habitats is typical of such environments, and the fact that the Latinoconsult report identified different species is neither unusual nor alarming. There is nothing especially unique about the planktonic or benthic communities identified in either the studies referenced in the Latinoconsult Report or the FCIS. Thus, they do not provide any information that would suggest there will be any unique concerns relating to the impacts of the operation of the Botnia mill in the Uruguay River that has

---

[1013] Wheater Report, *op. cit.,* Sec. 6. AM, Vol. V, Annex 5.

[1014] *See* Final CIS, *op. cit.*, p. 2.23 (concluding that tertiary treatment is not required). UCM, Vol. VIII, Annex 173. Final CIS, Annex A, *op. cit.*, p. A8.14 (the Uruguay River is not a sensitive environment warranting the use of tertiary treatment). UCM, Vol. VIII, Annex 174. Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 2 ("Relative to most sites for pulp mills, and other large process industries, Fray Bentos is not an environmentally sensitive site"). UCM, Vol. VIII, Annex 178.

[1015] *See* Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 2. UCM, Vol. VIII, Annex 178.

> not been addressed in the environmental evaluation carried out in the FCIS.[1016]

6.39 The discussion of effluent treatment technology underscores the reality that the cellulose plants of today differ radically from their historic predecessors of even two or three decades ago. The First Hatfield Report noted that "comments expressing concern that the mills will cause catastrophic environmental damage are unsupported, unreasonable and *ignore the experience in many other modern bleached kraft pulp mills*"[1017]. The Second Hatfield Report, in reference to concerns about dioxins, noted that "perhaps stakeholders have been misled by the extensive body of older literature that simply refers to 'pulp mills' and in reading it do not realise the dramatic difference between the discharges from modern ECF mills and the several older ones using chlorine without any chlorine dioxide"[1018]. The conclusions in the Final CIS are underscored by the Deardorff Report, which sets out in detail the dramatic improvement in overall performance of cellulose plants over

---

[1016] Menzie Report, *op. cit.*, p. 23. UCM, Vol. X, Annex 213. The Wheater Report relies heavily on the presence of endangered bird species and amphibians to argue that the Uruguay River would be considered a "sensitive environment" within the meaning of IPPC BAT. Wheater Report, *op. cit.,* Sec. 1. AM, Vol. V, Annex 5. The Menzie Report, however, specifically analysed the ecology of these endangered birds, and found that adverse impacts are unlikely to occur because each of these species will have limited contact with the Uruguay River, and no information was found to indicate that these birds feed on aquatic life. Menzie Report, *op. cit.*, pp. 25-26. UCM, Vol. X, Annex 213. Given the limited opportunity for exposure of these species to the effluent discharges in the Uruguay River, there is no basis for concluding that the presence of endangered bird species renders the Uruguay River a "sensitive environment" warranting the inclusion of tertiary treatment. Similarly, the amphibian species that Argentina claims may be impacted by the effluent discharge are highly unlikely to come into contact with the mill effluent. As the Menzie Report explains, the amphibian species of concern prefer terrestrial environments and their breeding grounds usually involve temporary, calm water bodies -- characteristics that the main channel of the Uruguay River where the effluent will be discharged does not share. *Ibid.*, pp. 24-25.

[1017] Report of Expert Panel on the Draft Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 2 (emphasis added). UCM, Vol. VIII, Annex 170.

[1018] Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 5. UCM, Vol. VIII, Annex 178.

the past 30 years. The further improvements in the 1990s and 2000s are due in part to the development of international standards, including New Source Performance Standards in the United States (1998), Integrated Pollution Prevention and Control (IPPC) Best Available Technologies in the European Union (2001), and Environmental Management Best Practices in Australia (2004)[1019]. The development of "minimum impact manufacturing" through the application of new technologies and these standards has led to dramatic declines in water use (70% reduction since 1994), BOD water emissions (85% decline since 1994; 95% decline since 1975), COD water emissions (60% decline since 1994), and sulphur dioxide and odorous compounds air emissions (95% decline since 1994). Total suspended solids have declined by 90%, and persistent organic pollutants such as dioxins have virtually been eliminated[1020]. As documented in the affidavit of Timo Piilonen, Botnia has been a leader in improving the performance of cellulose plants, both as a general matter, and for the plant in Fray Bentos specifically[1021]. Moreover, as the Deardorff Report confirms, the Botnia plant will achieve emissions levels consistent with state-of-the-art pulp mills[1022]. Thus, much or all of the evidence of pulp mill impacts from the past have no relevance to the Botnia plant.

6.40 Eminent Argentine scientists have expressed the same view. Of particular significance are the evaluations conducted by the Argentine National Academy of Engineering, which confirmed the conclusions reached in the Final CIS that the

---

[1019] Deardorff Report, *op. cit.*, pp. 10-15. UCM, Vol. X, Annex 215.

[1020] *Ibid.*, pp. 24-27.

[1021] Affidavit of Timo Piilonen, Senior Vice-President for Uruguay Operations of Botnia and Managing Director of Botnia South America, S.A. (hereinafter "Timo Piilonen Aff."), paras. 6-27 (1 June 2006). UCM, Vol. IX, Annex 204.

[1022] Deardorff Report, *op. cit.*, pp. 21-14. UCM, Vol. X, Annex 215.

Botnia plant (and the ENCE plant) would not cause adverse impacts to the Uruguay River[1023]:

> The mills *have been designed so that liquid effluents at the discharge point have received a complete secondary treatment*[1024], which reduces the suspended solids and biodegradable organic components in compliance with international standards. The dilution rates were estimated for worst-case scenarios [in the Draft CIS], for extremely low levels of water in the Uruguay River (500 m3/sec versus a mean module of 4000 m3/sec). Under these conditions, the discharge flows of both plants merge, but they run on the Uruguayan margin of the river and do not reach the Argentine coast. *If the mills operate as designed, in no case do the polluting elements affect the biodiversity of the river or its coasts . . . .*[1025]
>
> * * * *
>
> [T]he resulting environmental parameters from the pulp mills' operations are within the strict limits of the applicable national standards. In accordance, no adverse effects on health or biodiversity are to be expected, and no pollution shall affect Argentine coasts or territory.[1026]

6.41 The Argentine National Academy of Engineering is an independent body specifically created by Argentine federal law, and is charged with the mission of "studying the diverse aspects of Engineering, particularly those that are of concern to the Nation," and "expressing its opinion, when deemed advisable, on such aspects"[1027]. In accordance with that mission, the Argentine National Academy of Engineering sent its findings to President Nestor Kirchner to aid in the discussions

---

[1023] *See generally* National Academy of Engineering, Buenos Aires, Argentina, Letter to President Kirchner and Document on the Cellulose Pulp Mills on the Uruguay River, (hereinafter "National Academy of Engineering - Letter to President Kirchner) (12 June 2006). UCM, Vol. VIII, Annex 172.

[1024] (emphasis in original).

[1025] (emphasis added).

[1026] National Academy of Engineering - Letter to President Kirchner, *op. cit*., pp. 3-4. UCM, Vol. VIII, Annex 172.

[1027] Bylaws of the National Academy of Engineering, Approved by Decree of the National Executive Power No. 2347 (11 November 1980). UCM, Vol. VI, Annex 155.

with Uruguay concerning the ENCE and Botnia plants[1028]. This report, however, like most of the objective and independent evidence regarding the Botnia plant, has been wholly disregarded by Argentina in its Memorial.

6.42 Other Argentine experts have also confirmed that operation of the Botnia plant will not cause adverse impacts. For instance, the President of the National Institute of Technology and Industry of the Republic of Argentina concluded that the "the contamination they produce is irrelevant [and] does not entail any release of harmful products into the ecosystem"[1029]. Similarly, Dr. Mario Feliz of the University of the Plate and Dr. Alberto Venica, concluded that the Botnia plant will use state-of-the-art technology, and that the contamination of the river will be minimal and will present no adverse health effects. Dr. Feliz has also stated that the notion that the plants will cause irreparable harm is a "fraud that is increasingly difficult to uphold"[1030].

6.43 Bleaching Technology. Although Argentina argued during the provisional measures phase that the Botnia plant should have been required to use a so-called "TCF" process for bleaching instead of the "ECF-light"[1031] process authorised by

---

[1028] National Academy of Engineering - Letter to President Kirchner, *op. cit.*, p. 1. UCM, Vol. VIII, Annex 172.

[1029] La República, "Unexpected: At a Crucial Time, Argentine Scientists Speak Out in Favour of the Uruguayan Plants" (hereinafter "Unexpected: At a Crucial Time, Argentine Scientists Speak Out in Favour of the Uruguayan Plants"), p. 1 (31 March 2006). UCM, Vol. IX, Annex 186.

[1030] *Ibid.*, p. 4.

[1031] The Final CIS defines ECF or "Elemental Chlorine Free" bleaching as: "ECF pulps are bleached exclusively with chlorine dioxide rather than elemental chlorine gas or hypochlorites as a bleaching agent. This virtually eliminates the discharge of detectable dioxins in the effluent of pulp manufacturing facilities." TCF, or "Total Chlorine Free" process "refers to bleaching pulp without use of chlorine in any form. Hydrogen peroxide, oxygen ozone, or peracetic acid are the most common TCF bleaching agents." Final CIS, Annex I, *op. cit.*, pp. I.5 & I.11. UCM, Vol. X, 222.

Uruguay, Argentina's Memorial retreats from this position and makes no real effort to assert that the TCF process will confer significant environmental benefits relative to ECF-light. Rather, it alleges only that no alternative to the ECF-light bleaching process was considered[1032]. This is patently false. As the Final CIS notes, Botnia has been one of the leaders in the adoption of TCF technology and did consider TCF[1033]. More importantly, as the Final CIS concluded, TCF pulp and ECF pulp have similar environmental impacts on water emissions, neither technology emits dioxins at environmentally significant levels, and both are acceptable under the POPS Convention, IPPC BAT, United States Environmental Protection Agency, and all significant permitting authorities[1034]. These facts are acknowledged explicitly in Argentina's Memorial, as well[1035]. Thus, the Final CIS concluded that there is no objective reason for requiring the use of TCF over the ECF-light bleaching process, particularly in light of the inferior quality of pulp produced by the TCF process and the fact that TCF requires more wood than EFC-light to produce the same amount of cellulose[1036], which generates a series of separate ramifications for environmental protection including increased energy use and pollution. Argentina's Memorial also notes that the World Bank Pollution Prevention and Abatement Handbook agrees that ECF technology is acceptable[1037].

[1032] AM, para. 7.76 & n. 683.

[1033] Final CIS, *op. cit.*, p. 2.24. UCM, Vol. VIII, Annex 173.

[1034] *Ibid.*, p. 2.25. Final CIS, Annex A, *op. cit.*, p. A9.16. UCM, Vol. VIII, Annex 174.

[1035] AM, paras. 7.75 -7.77.

[1036] Final CIS, Annex A, *op. cit.*, p. A9.18. UCM, Vol. VIII, Annex 174.

[1037] AM, para. 7.97.

6.44 In addition, the Technical Evaluation Manual for the Argentine Pulp Mill Restructuring Program contains no requirement that mills using the kraft technology (like the Botnia plant) install TCF technology over ECF[1038]. Either is acceptable to Argentina. Specifically, the BAT guidelines contained in the Technical Evaluation Manual for the plan explicitly allow for mills (such as the Botnia plant) using kraft pulping technology the "[i]nstallation of elemental chlorine free bleach (ECF with low emissions of AOX)"[1039]. The only technology not deemed to comply with BAT in the Technical Evaluation Manual is the conventional chlorine system used by the majority of existing Argentina mills. Accordingly, the agreement entered into by the Alto Paraná mill and Argentina pursuant to the Argentine Restructuring Plan does not require the use of TCF technology[1040]. Therefore, the question of whether the Botnia plant's use of an ECF-light bleaching system complies with BAT and is environmentally acceptable has now been answered in the affirmative by Argentina itself.

6.45 The Piilonen Affidavit further supports the absence of environmental benefits of TCF compared to ECF. It notes that "there is a scientific consensus that ECF and TCF are indistinguishable in their ecotoxicity effects: they have an identically low ecotoxic potential before effluent treatment and an identically negligible one after the kind of effluent treatment that will be used with the [Botnia] mill."[1041] This conclusion is confirmed in the Final CIS, which notes that a recent

---

[1038] Argentine Restructuring Plan: Technical Evaluation Manual, *op. cit.*, p. 16. UCM, Vol. III, Annex 49.

[1039] *Ibid.*

[1040] Agreement of the Argentine Secretariat of the Environment on Restructuring of the Pulp Mill Alto Paraná, *op. cit.*, Appx. 2, Objective 1. UCM, Vol. III, Annex 51.

[1041] Timo Piilonen Aff., *op. cit.*, para. 16. UCM, Vol. VII, Annex 204.

study examining pulp mills all over the world found that "TCF pulp and ECF pulp have similar environmental impacts from air and water emissions, and that neither emit dioxins at environmentally significant levels"[1042]. Finally, as shown in the Final CIS, in contrast to the rapid expansion of ECF technology, there has been essentially no new TCF production over the past decade[1043].

6.46 Finally, the Argentine National Academy of Engineering has also confirmed that the choice of ECF bleaching technology was "justified"[1044]. This conclusion was based on the acknowledgement that neither TCF nor ECF bleaching will emit elemental chlorine and that ECF produces a higher quality of paper[1045].

6.47 Emergency Basins. Argentina argues that the Botnia plant's spills collection system has inadequate storage capacity and that an additional emergency basin is required[1046]. The Final CIS specifically considered this issue and concluded that the emergency basins for the Botnia's wastewater treatment plant are sufficient and will comply with IPPC BAT. The Botnia wastewater treatment plant will be equipped with a system of three equalisation and safety basins with a storage capacity of 25,000 m^3 each, which can be used to contain spills of materials[1047]. During normal operation of the plant, one of these basins is empty, one is being

---

1042 Final CIS, *op. cit.*, p. 2.25. UCM, Vol. VIII, Annex 173.

1043 Final CIS, Annex A, *op. cit.*, p. A9.16. UCM, Vol. VIII, Annex 174. Only about 5% of the world's production is TCF; since 1990, ECF production has grown from insignificant levels to more than 80% of the world's production.

1044 National Academy of Engineering - Letter to President Kirchner, *op. cit.*, p. 2. UCM, Vol. VI, Annex 172. *See also* Unexpected: At a Crucial Time, Argentine Scientists Speak Out in Favour of the Uruguayan Plants, *op. cit.*, p. 2 (statements of Enrique Martinez). UCM, Vol. VII, Annex 186.

1045 National Academy of Engineering - Letter to President Kirchner and Document on the Cellulose Pulp Mills on the Uruguay River, *op. cit.*, p. 2. UCM, Vol. VI, Annex 172.

1046 AM, paras. 5.52, 5.76,7.122, 7.124, 7.178-7.188.

1047 Final CIS, Annex A, *op. cit.*, p. A7.14. UCM, Vol. VIII, Annex 174.

filled with process effluent, and the other is being emptied into the biological treatment system[1048]. The Final CIS concluded that this design was adequate to protect against emergency spills in accordance with IPPC BAT:

> The design incorporates generous equalization and emergency basins, and in particular has an innovative design to avoid high organic loads to be charged into the AST. This design includes three 8-h[our] retention time basins (equalization/emergency) that operate in a semi-continuous manner. . . . In the event that a spill occurred in the mill, the basin contents would have a high COD and would be discharged into the AST in a manner that does not overload the system.[1049]

6.48 Argentina has provided no evidence to support its assertion, or to undermine the conclusion of the Final CIS. It has provided no explanation for why emergency storage capacity of many millions of litres is insufficient to contain the effluent from a plant that can be shut down promptly in the event of an emergency. Thus, although in the Latinoconsult Report, the IAEST recommended (without explanation) that the "emergency basin be designed with 18 to 24 hours of operation"[1050], IPPC BAT contains no guidelines with respect to the size of emergency spill basins or to the volume representing a certain period of operation[1051], nor does IAEST provide any technical justification for its recommendations.

6.49 Not surprisingly, Argentina's own Argentine Pulp Mill Restructuring Program includes no minimum size for an emergency basin. Rather, the BAT

[1048] *Ibid.*

[1049] *Ibid.*, p. A8.10.

[1050] *See* Report to Professor Philippe Sands (26 November 2006), Appendix B to the Latinoconsult Report, *op. cit.,* p. 4. AM, Vol. V, Annex III. (Annexes to the Latinoconsult Report formerly available at http://www.ecopaedia.com.ar/publico/ea_report/ (username: ea_annex ; password: ea_annex) (last visited on 9 July 2007).

[1051] Deardorff Report, *op. cit.*, p. 33. UCM, Vol. X, Annex 215.

guidelines for the Argentine Restructuring Plan require only "[a]rrangement of intermediate storage tanks of sufficient size for the storage of spilled liquors from the cooking processes, recovery, and dirty condensates to prevent occasional abrupt load peaks and/or overflows in the effluent treatment plant"[1052]. As these guidelines are expressly based on IPPC BAT, Argentina itself has conceded that there is no minimum size requirement; it need only be shown that the emergency basins are of a sufficient capacity for the pulp mill in question.

6.50 Uruguay's experts concur with the conclusions of the Final CIS that the emergency basin is adequately sized. As the Deardorff Report notes, the spill capacity of the emergency basins is not only adequate but is actually within the values recommended by IAEST, after appropriately disregarding the IAEST's inaccurate statement that the extra basin cannot be considered an emergency basin in that "it is more an operation facility"[1053]. Even excluding this third basin, the emergency basin system will provide 16 hours of storage capacity under typical operating conditions, and 24 hours of storage capacity under other operational scenarios[1054].

6.51 Similarly, Argentina's own National Academy of Engineering raised no concern that the emergency basins do not meet BAT, when it unequivocally concluded that "[t]he mills *have been designed* pursuant to IPPC BAT . . . standards"[1055].

[1052] Argentine Restructuring Plan: Technical Evaluation Manual, *op. cit.*, p. 17. UCM, Vol. II, Annex 49.

[1053] Deardorff Report, *op. cit.*, pp. 33-35. UCM, Vol. X, Annex 215.

[1054] *Ibid.*, pp. 34-35.

[1055] National Academy of Engineering - Letter to President Kirchner, *op. cit.*, p. 3 (emphasis in original). UCM, Vol. VI, Annex 172.

6.52 Chemical synthesis. The Botnia plant will include an area for synthesis of chemicals, both for use by the plant, and potentially for use elsewhere. These chemicals are essential for the environmentally friendly ECF-light bleaching process, and as noted in the Second Hatfield Report, the production has significant potential to be environmentally beneficial because it enables conventional bleaching mills (such as the majority of mills in Argentina) to convert economically to the lower polluting ECF technology[1056]. Argentina claims, not that these processes will cause a risk, but rather that they were not assessed[1057]. This is simply incorrect: as noted in the Final CIS, the chemical synthesis process was analysed within the CIS[1058]. Moreover, in addition to the information contained in the Botnia EIA, as submitted on 31 March 2004, Botnia, in response to DINAMA's request, submitted additional information regarding the onsite chemical production, which included information on the production method and capacities of these units, the potential for air and effluent emissions, and wastes[1059]. Finally, the emergency management and response plans for the chemical synthesis is part of the Botnia plant's overall emergency management system[1060].

[1056] Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills, *op. cit.*, p. 10. UCM, Vol. VIII, Annex 178.

[1057] AM, paras. 7.133-7.137.

[1058] *See*, *e.g.*, Final CIS, *op. cit.*, pp. 1.3, 4.1, 4.97. UCM, Vol. VI, 173. Final CIS, Annex A, *op. cit.*, p. A7.13. UCM, Vol. VIII, Annex 173.

[1059] *See* Additional Report No. 2 of the Botnia Environmental Impact Assessment, p. 2296 (2 September 2004). UCM, Vol. VII, Annex 161. Additional Report No. 3 of the Botnia Environmental Impact Assessment, p. 2650 (5 October 2004). UCM, Vol. VII, Annex 162. Annex VIII to Additional Report No. 5 of the Botnia Environmental Impact Assessment, Studies of Plume Dispersion and Sediment Studies, pp. 2423-2425 (12 November 2004). UCM, Vol. VII, Annex, 164. Additional Report No. 7 of the Botnia Environmental Impact Assessment, pp. 3792 (17 January 2005). UCM, Vol. VII, Annex 167.

[1060] *See* Botnia AAP, Art. 2(h). UCM Vol. II, Annex 21. Argentina erroneously asserts that the chemical synthesis facility is to be used to transform pulp into paper. AM, para. 7.113. This,

6.53 Emergency Management. The Botnia EIA presented a preliminary analysis of emergency and accidental events that are most likely to occur at pulp mills, as well as the measures that it will take to prevent such accidents and responsive actions to be taken[1061]. It found that incidents of accidental bypassing of the effluent treatment are very rare[1062]. The Final CIS found that the worst case scenario for an industrial accident at the Botnia plant would be an explosion at the recovery boiler, but, even for that extreme event, any harmful consequences would occur within a few meters of the boiler inside the confines of the project site[1063]. Given the preventative measures that will be put in place at the Botnia plant, the Final CIS found that "[t]he event of a serious industrial accident at either or both plants during operation is highly unlikely as appropriate measures have been taken to prevent spills of chemical products, fires, contaminating emissions, etc."[1064].

6.54 Given the unpredictability and infrequency of accidental and emergency events, rather than speculate as to their potential impacts, the most appropriate approach is to require appropriate preventive measures and a comprehensive emergency response plan, which is exactly what DINAMA has done with respect to the Botnia plant. As discussed in detail in the Final CIS, the Botnia plant must and will comply with the requirements of IPPC BAT, which incorporate rigorous

---

however, is inaccurate as the production of the Botnia plant will be limited to the production of pulp, which will then be exported to paper producing plants in Europe, Asia, and other regions. Final CIS, *op. cit.*, p. 1.2. UCM, Vol. VIII, Annex 173.

[1061] Botnia Environmental Impact Assessment Submitted to DINAMA (hereinafter "Botnia EIA Submitted to DINAMA"), Chap. 7, pp. 2-11 (31 March 2004). UCM, Vol. X, Annex 219.

[1062] Botnia Environmental Impact Assessment Submitted to DINAMA, Chap. 8, p. 2. (31 March 2004). UCM, Vol. X, Annex 220.

[1063] Final CIS, *op. cit.*, p. 4.86. UCM, Vol. VIII, Annex 173.

[1064] *Ibid.*, p. 4.86.

preventative measures. In addition, pursuant to its Initial Environmental Authorisation, Botnia is required to submit a contingency plan and a plan for the prevention of accidents that will address such events at both the plant and the port[1065]. The plan for prevention of accidents will focus on the measures that Botnia will take to prevent the occurrence of emergency and accidental events, while the contingency plan will set forth the manner in which Botnia personnel should respond to those events if they occur despite preventative measures. Operations can only commence after DINAMA has found that the preventative measures and response actions in these plans are appropriate.

6.55 Landfill. As part of the operation of the plant, Botnia is constructing an onsite landfill to dispose of its non-hazardous waste. Argentina's complaint regarding the onsite landfill focuses on the alleged inadequacy of the environmental review process, rather than potential negative environmental impacts[1066]. Argentina's criticism is wholly unfounded given the rigorous review to which the landfill was subjected. Moreover, this strenuous review has resulted in a location and design that will cause no adverse impacts to the Uruguay River, and Argentina has not alleged, much less proven, otherwise.

6.56 The landfill constitutes an integral part of the Botnia plant; its potential environmental impacts were properly assessed as part of the ongoing permitting process for the plant as a whole. As initially proposed, the landfill was to be located in an area known as Cañada de los Perros[1067]. DINAMA, however, found this

---

[1065] Botnia AAP, *op. cit.*, Art. 2(h). UCM, Vol. II, Annex 21.

[1066] AM, para. 7.117.

[1067] Argentina's Memorial incorrectly states that the landfill is to be located at Cañada de los Perros, and hence overlooks a significant part of the environmental review process for the

location unsuitable, and required Botnia to submit a separate proposal regarding where to locate the landfill[1068]. In accordance with the Initial Environmental Authorisation, Botnia submitted its Environmental Management Plan for the construction of the onsite landfill to DINAMA[1069]. Botnia also submitted a plan of operation for the landfill for DINAMA's approval[1070]. The application for the landfill describes the manner in which the landfill will be operated and the steps that will be taken to minimize and prevent impacts from its operation. After careful review, DINAMA approved both of these submissions on 9 April 2007. By approving the landfill project, DINAMA determined that it will be operated in an environmentally sound manner that will minimize impacts, if any. The wastes deposited there must be non-hazardous, and any wastes not expressly authorised by DINAMA may not be deposited[1071]. As a result of the additional review by DINAMA, the landfill has been located on the eastern border of Botnia's plot and poses absolutely no risk to the Uruguay River[1072]. Although DINAMA has approved the construction and proposed manner of operation of the landfill, its operation cannot commence until DINAMA approves Botnia's Monitoring Plan and the

---

landfill, as expressly set forth in the Initial Environmental Authorisation (AAP). AM, para. 7.117.

[1068] Botnia AAP, *op. cit.*, Art. 2(dd). UCM, Vol. II, Annex 21.

[1069] *See* DINAMA Environmental Management Plan Approval for the Botnia Plant (9 April 2007) (approving plan for the construction of solid industrial waste landfills). UCM, Vol. II, Annex 37.

[1070] *See* DINAMA Environmental Management Plan Approval for the Botnia Plant (authorising industrial non-hazardous waste landfill) (9 April 2007). UCM, Vol. II, Annex 36.

[1071] *Ibid.*, Arts. 1 & 2(b).

[1072] DINAMA Maps of Landfill Location (June 2007). UCM, Vol. X, Annex 223.

Environmental Management Plan for Solid Wastes, as required by the Initial Environmental Authorisation[1073].

6.57 In addition to the review conducted by DINAMA, the Final CIS reviewed the design of the landfill to be located at the Botnia plant (and the one that would have been constructed at the ENCE plant) and concluded that "[b]oth landfill designs are consistent with state-of-the-art practice. . . . The landfills are designed to minimize potential environmental impacts to groundwater or adjacent surface waters"[1074].

6.58 Facility Siting. Argentina complains that inadequate information was provided about facility siting[1075]. In fact, the Final CIS contained a detailed evaluation of siting criteria, including a thorough analysis of the water supply, capacity of the receiving waters to assimilate effluent, potential conflict with other water uses, and the existence of sensitive receptors, and ultimately did not dispute the environmental acceptability of the Botnia plant's location[1076]. It also included consideration of the availability of land, labour and energy, the proximity of forests and availability of transportation infrastructure. Three potential areas were evaluated, and Fray Bentos was chosen as the optimal site. Once Fray Bentos was selected, a micro-scale analysis was conducted to locate the plant where the water is deeper and relatively remote from the conservation areas upstream at Esteros de Farrapos. Locations further downstream were disfavoured because they were closer

---

[1073] Botnia AAP, *op. cit.*, Art. 2(h) & (i). UCM, Vol. II, Annex 21. *See also* DINAMA Environmental Management Plan Approval for the Botnia Plant (authorising industrial non-hazardous waste landfill), *op. cit.*, Art. 2(d). UCM, Vol. II, Annex 36.

[1074] Final CIS, *op. cit.*, p. 4.70. UCM, Vol. VIII, Annex 173.

[1075] AM, paras. 7.107-7.110.

[1076] Final CIS, *op. cit.*, pp. 2.7 -2.12. UCM, Vol. VIII, Annex 173.

to recreational areas. As the Final CIS noted, this work was not done solely for the Final CIS; it was done in 2003 prior to the initiation of permitting activities[1077].

6.59 Of course, there is no requirement in the 1975 Statute that a project even undergo a siting analysis. What is required is that information be provided about the project (Article 7) and that the project not cause unacceptable environmental harm (discussed in Chapter 4). Here, because the scientific evidence shows that the project will not cause unacceptable environmental harm, Argentina can make no separate claim that the siting process was inadequate, or somehow contrary to the requirements in the 1975 Statute.

Section IV.
Argentina Has Not Met Its Burden of Showing that the Botnia Plant Will Adversely Impact Water Quality or the Ecological Balance of the River

6.60 The Final CIS concluded that the effluent discharge from the Botnia plant will not adversely affect either human health or aquatic life, nor will it cause an exceedance of the applicable water quality standards. It is of particular importance here to recall that the conclusions of the Final CIS reflect the assumption that the ENCE plant would also be in operation. Hence the anticipated impacts of the Botnia plant alone will be proportionally less than those described in the Final CIS[1078]. Argentina's Memorial tries to brush off this important fact, stating that the removal of the ENCE plant -- and the elimination of a 500,000 ton/year pulp mill with its

---

[1077] *See ibid.*, p. 2.9. UCM, Vol. VIII, Annex 173. Argentina alleges that Uruguay misrepresented the extent to which the site was suitable with regard to its navigability because maintaining navigability will require dredging. AM, para. 5.67. Other than its unfounded allegations with respect to the effluent dispersion, which are discussed below, Argentina provides no reason why this would affect the Final CIS's conclusion that the site is suitable and the Botnia plant will have no adverse impacts.

[1078] As set forth in Chapter 1, relocation of the ENCE plant will reduce total effluent flow by 40%, phosphorus by 41%, AOX by 38%, COD by 35%, BOD by 50%, and total suspended solids by 39%. *See* Final CIS, Annex D, *op. cit.*, pp. D4.7-9 (Tables D4.2-1, D4.3-1 & 4.3-2). UCM, Vol. VIII, Annex 176.

related discharges into the river -- "n'affecte pas en substance le différend"[1079]. Much as it would like, Argentina is not free to ignore or cast aside important facts that undermine its case.

6.61 In an attempt to meet its burden of proof of showing that the Botnia plant will impermissibly affect water quality, Argentina raises a number of concerns about the water quality evaluation performed by Botnia, DINAMA, and the authors of the Final CIS. Specifically, Argentina claims that (1) the Final CIS misused dilution factors to predict areas of no adverse impact; (2) the frequency of current reversals was underestimated, and the protected Esteros de Farrapos site was therefore threatened; (3) the "low flow" estimate generated in the Final CIS was not low enough because the models did not account for climate change, wet/dry cycles, potential changes in operations of the upstream Salto Grande Dam, and impacts of plantations; (4) the impacts of sedimentation were not adequately considered; (5) the assessments understated the ecological impacts of the effluents, especially with respect to phosphorus; and (6) the Final CIS did not fully consider impacts to fish and other wildlife. Argentina's claims are unfounded and incorrect, and, with respect to modelling, even if the claims were correct, they would make no difference to the overall conclusions that the plant will not cause unacceptable environmental effects.

6.62 (1) Dilution Factor/No Adverse Impact Area. Argentina incorrectly asserts that the Final CIS improperly used dilution ratios as one benchmark against which to measure impacts of the Botnia plant[1080]. A dilution ratio is a measure of

---

[1079] AM, para. 0.5 (the relocation of the ENCE project "did not materially affect the dispute").

[1080] AM, paras. 7.171-7.176.

the degree to which the effluent of the Botnia plant is mixed with the waters of the Uruguay River. A dilution ratio of 100:1 means that every litre of effluent has been mixed with 100 litres of river water. In general, the greater the dilution, the lower the concentration of effluent-related parameters in the river. The Final CIS relied upon the experience of Environment Canada, the environmental regulatory authority of Canada, when it selected dilution ratios as a tool to evaluate the impacts of the Botnia plant[1081]. Environment Canada's 2005 Technical Guidance,[1082] which reflects numerous studies of pulp mills, finds the 100:1 dilution ratio delineates the boundary outside of which adverse environmental effects are not likely to occur. With respect to fish habitat, the Technical Guidance also suggests that zones less than 250 meters in dimension are simply too small to result in measurable effects on local fish[1083]. The zone of 100:1 dilution at the Botnia plant will extend less than 250 meters from the discharge. Indeed, as previously stated, the dilution ratio will reach 100:1 even under low flow conditions at only 35 meters from the point of effluent discharge[1084].

6.63 In the face of extensive Environment Canada evidence, the Wheater Report criticises the use of dilution ratios in assessing impacts on aquatic life, calling it "contradictory"[1085]. But the utility of dilution ratios is confirmed by the applicable

---

[1081] Final CIS, *op. cit.*, pp. 4.47-48. UCM, Vol. VIII, Annex 173.

[1082] Environment Canada 2005 *Pulp and Paper EEM Technical Guidance Document* (Environment Canada 2005) *available at* http://www.ec.gc.ca/eem/english/PulpPaper/Guidance/default.cfm (last visited on 9 July 2007).

[1083] *Ibid.*, Chap. 1, p. 1-12.

[1084] Final CIS, *op. cit.*, pp. 4.47-4.48.

[1085] Wheater Report, *op. cit.,* Sec. 2. AM, Vol. V, Annex 5.

Canadian Technical Guidance document[1086]. Another expert for Argentina specifically acknowledges that dilution ratios are an accepted basis from which to predict meaningful exposure levels:

> In Canada it has been generally accepted that dilution ratios between 1:100 and 1:1,000 may be used to guide the conduct of the Canadian Pulp and Paper Environmental Effects Monitoring (EEM) Program. In particular, "Environment Canada" defines areas beyond 1:1,000 as potential reference areas, and considers them representative of background conditions.[1087]

6.64 Uruguay's experts also contest the criticisms that Argentina has levied against the use of the dilution ratios in the Final CIS. As Dr. Menzie explains, dilution estimates provide a "well accepted and scientifically valid" framework for judging expected impacts, particularly when relied upon in conjunction with other key pieces of information, including the treatment technology, the nature and volume of the effluent, the characteristics of the receiving environment, the degree of dilution during typical and low flow conditions, the length of time of the exposure, and experience from other facilities[1088]. Dr. Menzie found that the Final CIS properly considered the dilution ratios in conjunction with all of those factors[1089].

6.65 Moreover, the Menzie Report confirms that technical studies on Canadian pulp mills shows that "effects, if any, are likely to be minimal between dilutions of

---

[1086] Environment Canada *Pulp and Paper EEM Technical Guidance Document*, Chap. 2, 2-30 *available at* http://www.ec.gc.ca/eem/english/PulpPaper/Guidance/default.cfm (last visited on 9 July 2007).

[1087] Ronco, A.E., G.M. Somoza, P. Carriquiriborde, and G.D. Bulus Rossin (2006) Biological Effects of the Pulp Mill Effluents on the Aquatic Biota (hereinafter "Ronco, *et al.*,"), Annex C to the Latinoconsult Report, *op. cit.,* p. 16. AM, Vol. V, Annex 3. (Annexes to the Latinoconsult Report formerly available at http://www.ecopaedia.com.ar/publico/ea_report/ (username: ea_annex ; password: ea_annex) (last visited on 9 July 2007)).

[1088] Menzie Report, *op. cit.*, pp. 12-15. UCM, Vol. X, Annex 213.

[1089] *Ibid.*, pp. 12-13.

1:100 and 1:1,000" because extensive experience in monitoring the impacts of pulp mill effluent has shown that impacts generally do not occur at dilutions greater than 1:100[1090]. As further noted in the Menzie Report, reliance on the Canadian experience is particularly conservative in Botnia's case because the Botnia plant will be a state-of-the-art facility, so the effluent to be diluted is cleaner than the average effluent from the pulp mills used to derive the dilution ratio[1091]. Because the quality of the effluent will be the same or, more likely, better than the effluent discharges used to develop the Environment Canada guidance, "there is high confidence that the plant will have an effluent that will not present any unusual characteristics"[1092].

6.66 The Menzie Report further demonstrates that Argentina's attempt to refute the utility of the 100:1 benchmark is weak and of no particular relevance to the Botnia plant. Ronco, *et al.* (part of Argentina's IAEST team) reviewed 200 papers on mill effluent[1093]. No effects of any kind were identified when dilution ratios exceeded 1000:1[1094]. Dr. Menzie then assessed the studies identified by Ronco, *et al.* and concluded that, where effects were found at a dilution ratio between 100:1 and 1,000:1, those effects were not negative in nature[1095]. Specifically, Dr. Menzie found that at dilutions greater than 100:1, "none of the studies support a conclusion that there will be adverse impacts on fish growth, reproduction, condition, or

---

[1090] *Ibid.*, pp. 15 & 21.

[1091] *Ibid.*, p. 3.

[1092] *Ibid.*

[1093] Ronco, *et al.*, *op. cit.*, Annex C to the Latinoconsult Report, *op. cit.,* p. 16. AM, Vol. V, Annex 3. (Annexes to the Latinoconsult Report formerly available at http://www.ecopaedia.com.ar/publico/ea_report/ (username : ea_annex ; password : ea_annex) (last visited 9 July 2007)).

[1094] Menzie Report, *op. cit.*, p. 18. UCM, Vol. X, Annex 213.

[1095] *Ibid.*

survival"[1096]. In fact, of the 13 primary studies used by Ronco, *et al.* to extrapolate its proposed "safe" dilution ratio of 10,000:1, nine found no adverse impacts at all, nine involved exposure to completely undiluted effluent or effluent diluted to 8:1 or less, and all involved continual exposures to this concentrated effluent of seven days or longer[1097], conditions bearing no resemblance to what will actually exist in the Uruguay River. Of course, as noted in the Final CIS, even under worst case conditions, the 100:1 exposure area will be very small and the effluent discharge is otherwise expected to dilute rapidly beyond those levels[1098]. Since fish and other aquatic life are mobile, they would spend minimal time in the 100:1 exposure area; the duration of exposure to effluents is critical for understanding the impacts[1099]. This is why Environment Canada has concluded that because of the mobility of fish, it is not necessary to even evaluate impacts to fish when the 100:1 exposure area is less than 250 meters[1100].

6.67 Against all of the evidence, the Latinoconsult Report asserts that a dilution factor of 10,000:1 should be employed, a conclusion Dr. Menzie found was "seriously flawed" and which "should not be relied upon for making any recommendation concerning safe dilution levels of pulp mill effluents employing state of the art technology"[1101]. The Latinoconsult recommendation is 100 times more stringent than the dilution factor used by Environment Canada for the design of

---

[1096] *Ibid.*, p. 21.

[1097] *Ibid.*, p. 21, Exhibit 5.2.

[1098] Final CIS, *op. cit.*, pp. 4.47-4.48. UCM, Vol. VI, 173. *See also* Menzie Report, *op. cit.*, p 3. UCM, Vol. X, Annex 213.

[1099] *Ibid.*, p. 3. UCM, Vol. X, Annex 213.

[1100] *Ibid.*, p. 15.

[1101] *Ibid.*, p. 21.

impact studies, far more stringent than any other standard that exists anywhere in the world, and completely unsubstantiated by the facts and science[1102]. Given the lack of a scientific basis, the Latinoconsult Report falls far short of showing even a slight, much less a reasonable, likelihood of adverse effects upon the fish community. Yet, only by adopting such an unsupportable thesis -- accepted nowhere in the world -- can Argentina find fault with the Final CIS.

6.68 It should be noted that Argentina does not attempt to challenge meaningfully the *calculation* of the ratio by which the Botnia plant's effluent will actually be diluted in the Uruguay River. In fact, Argentina agrees that the dilution zone of 100:1 will be small[1103]. The Swanson Report not only reaffirms the modelling techniques used in the Final CIS but also notes "the LATINOCONSULT report fundamentally agrees with the dilution factors calculated in the Final CIS"[1104]. For example with respect to dilutions in Argentina, it concludes that:

> The LATINOCONSULT report states that lower dilution factors (up to 500:1) can be found for short periods of time. However, as demonstrated by all the modelling studies (Botnia EIA, draft CIS, FCIS, and LATINOCONSULT Report figures 4.1.4 to 4.1.28) the Botnia effluent plume is clearly attached to the Uruguayan margin of the river even during the flow reversal events, which delimitates its area of influence. The FCIS analysis of the potential effects of the discharge on the Beach Area at Ñandubaysal (Annex D, Section D6.4.2) concluded that the dilution rate inside the Bay "*exceeds 1,000:1 under both*

[1102] *Ibid.*, p. 4.

[1103] For example, Figure 9 to Annex A of the Latinoconsult Report shows that at a distance of only 100 meters from the discharge, dilution will *always* be greater than 100:1, and that it will be greater than 200:1 over 99% of the time, and greater than 500:1 92% of the time. Annex A to the Latinoconsult Report, *op. cit.* AM, Vol. V, Annex 3. (Annexes to the Latinoconsult Report formerly available at http://www.ecopaedia.com.ar/publico/ea_report/ (username : ea_annex ; password : ea_annex) (last visited on 9 July 2007)). *See also* Swanson Report, *op. cit.*, pp. 14-15. UCM, Vol. X, Annex 214.

[1104] Swanson Report, *op. cit.*, p. 15. UCM, Vol. X, Annex 214.

> *average and low flow conditions (Table D6.2-1), and therefore is considered to be unaffected by mill operations.*"[1105]

The Swanson Report indicates that its analysis of the Argentine modelling report shows the fundamental agreement between Argentina and Uruguay that effluents will be dramatically diluted before entering Argentina:

> The results of the LATINOCONSULT Report study, as shown in Figures 4.1.4 to 4.1.28 of Annex XX, are in close agreement with the BOTNIA EIA and the final CIS study with dilution factors from 1000:1 to 10000:1 in the area of Ñandubaysal. The plume trajectory shown in the LATINOCONSULT report is always close to the Uruguayan side, even during flow reversal events, and any water that enters the Bay in the reversal scenario is clearly coming from the Argentinean side of the river. Thus, even when there is a flow reversal, effluent from the plant is not predicted to accumulate in the Bay.
>
> The LATINOCONSULT report shows that during mean and low flow conditions in the Rio Uruguay the dilution levels at Ñandubaysal, Argentina are greater than 1000:1. During rare reversal events the LATINOCONSULT report shows that dilution drops slightly to 693:1. This difference is not significant because the dilution is great (i.e., above the amount that is likely to generate any adverse effects), even at 693:1.[1106]

6.69 Thus, the modelling undertaken by Latinoconsult leads to essentially the same conclusions of the Final CIS with respect to the amount of dilution. Any differences are minor and do not serve as a basis for finding that the Botnia plant will cause negative impacts to the Uruguay River.

6.70 Of course, as valuable as the Environment Canada conclusions relating to dilution factors are, the Final CIS did not rely solely on these dilution factors. For example, as set forth in Chapter 5, complex water modelling was used to predict changes to over two dozen contaminants at more than ten sensitive locations under

---

[1105] *Ibid.*

[1106] *Ibid.*, p. 14.

three flow regimes. Comparisons of the resultant change in concentrations of these substances to CARU and Uruguayan water quality standards show that water quality impacts will be negligible. As the Swanson Report points out, this approach (considering dilution ratios in conjunction with concentration changes in water quality) is standard in US Environmental Protection Agency-approved models[1107].

6.71 (2) Current Inversions and the Effect on Esteros de Farrapos. Argentina argues erroneously that the current inversions modelled in the Final CIS and elsewhere will occur much more frequently than predicted[1108]. Argentina also erroneously argues that these "more frequent" current inversions will impact negatively on Esteros de Farrapos and Islas del Río Uruguay (collectively "Esteros de Farrapos"), a designated Ramsar site located within Uruguayan territory and sixteen kilometres[1109] upstream from the Botnia plant[1110]. Even assuming Argentina had standing to voice concerns about potential effects to Uruguayan territory, its arguments are entirely unsupported and lack merit. Its conclusions about the frequency of flow reversal are inaccurate, and even if they were correct, there would

---

[1107] *Ibid.*, pp. 14-16.

[1108] AM, paras. 7.14-7.19, 7.60 & 7.179.

[1109] Argentina erroneously asserts that the site is only 7 kilometres upstream of Botnia. AM, para. 5.67.

[1110] Argentina claims that "[C]e qui n'a été eroqué dans avcon des études d'impact esr qu'a seviement quelques kilomètres en amont de l'usine orion se situe ie site Ramsar ae Esteros de Farrapos." AM, para. 5.46. ("[s]omething that has not been discussed in any of the impact studies is the Ramsar de Esteros de Farrapos site is located just a few kilometres upstream from the Botnia plant.") Given the extensive analysis of this site in the Final CIS, and Argentina's own criticisms of that analysis, this allegation, of course, is false. In addition, in paragraph 7.61 of its Memorial, Argentina argues that the potential impacts to the Islas Fiscales del Río Uruguay have not been evaluated. This is yet another oversight by Argentina. The Islas Fiscales del Río Uruguay (also referred to as the Islas del Río Uruguay) constitute the southern portion of the Ramsar site, and the Final CIS expressly considered the impact to those islands in conjunction with its analysis of the potential impacts to Esteros de Farrapos. Final CIS, *op. cit.*, at 4.55 (considering the potential impacts to "Esteros de Farrapos *e Islas del Río Uruguay*"). UCM, Vol. VIII, Annex 173.

be no negative impact on the indicated Ramsar sites and the conclusions in the Final CIS about the environmental impact of the flow reversal would stand.

6.72 The Final CIS indicated that flow reversals of the Uruguay River are rare, occurring only during low flow periods, and occur only a few times per year or less, lasting no more than a few hours[1111]. Under these conditions (combined with a low flow volume), the Final CIS concluded that the combined effluent plumes of the Botnia and ENCE plants (together) may extend upriver, but that they would achieve the 100:1 dilution concentration within 35 metres of discharge and that trace levels of effluent at a dilution ratio of 1000:1 would extend no further upstream than a maximum point of seven kilometres above the former location of the ENCE plant[1112]. Of course, the elimination of the ENCE plant will greatly reduce the actual upstream reach of the effluent plume because the Botnia plant is located approximately six kilometres downstream from the former location of the ENCE plant, *i.e.*, six kilometres further downstream from the Ramsar sites. Therefore, the Final CIS had ample basis to conclude "there is virtually no potential for mill effluents to impact the [Esteros de Farrapos] area."[1113]

[1111] Final CIS, *op. cit.*, p. 4.48. UCM, Vol VIII, Annex 173.

[1112] *Ibid.*, pp. 4.48 & 4.55.

[1113] *Ibid.* In addition, Argentina criticises the Final CIS for not specifically considering wetlands in addition to Esteros de Farrapos. AM, para. 7.61. With respect to wetlands located in Argentina, a specific analysis of the potential impacts was not necessary because the Final CIS concluded that, under a worst case condition of low flow with flow reversal, the potential for effluent to exceed background levels on the Argentine side was marginal, and in any event, the water quality would remain "well within the standards provided by CARU." Final CIS, *op. cit.*, p. 4.56. The wetlands of Potrero and Islas del Río Negro are located downstream from Fray Bentos. The Final CIS determined that the water quality in the Fray Bentos area would not be adversely impacted by the plant's effluent discharges. Final CIS, *op. cit.*, p. 4.54 (finding no adverse impacts at Las Cañas, a beach area downstream from Fray Bentos). Because these wetlands are even further from the discharge point, impacts there would be even less.

6.73 The modelling used by Argentina utterly fails to prove its point. First, even if the modelling in Argentina's reports is accepted exactly as presented, they do not show that the flow reversal would cause any effluent to reach Esteros de Farrapos. Instead, the model shows that diluted effluent would reach no closer than 2.5 kilometres below the southern reaches of the protected wetlands, completely precluding any possibility of adverse effects[1114].

6.74 Second, the modelling performed by Latinoconsult contains significant errors that account for the misstatements in the Memorial about the frequency of flow reversals. As noted in the analysis of Uruguay's expert, Dr. Swanson, the modelling actually performed by Latinoconsult and cited in the Latinoconsult Report and the Memorial do not support the statements in both that flow reversal conditions exist "22% of the time, that is, an average of 80 days per year"[1115]. In fact, although the Latinoconsult Report did not present adequate information from which to conduct a detailed review of its model, it is clear that Latinoconsult counted as a "day" any time when the flow is predicted to reverse by as little as an hour[1116]. Thus, the approximately "80 days" of flow reversal referred to in the Memorial and the Latinoconsult Report[1117] could actually be 80 hours[1118]. The Wheater Report merely relies on the Latinoconsult Report and thus contributes no independent support for Argentina's assertions.

[1114] AM, para. 7.179 ("la frontière en amont du modèle de dispersion est seulement à 2,5 kilomètres au sud du site Ramsar") ("the upstream boundary of the dispersion model is only 2.5 kilometres south of the Ramsar site").

[1115] Swanson Report, *op. cit.*, pp. 10-11. UCM, Vol. X, Annex 214. Latinoconsult Report, *op. cit.,* p. 3. AM, Vol. V, Annex 3.

[1116] Swanson Report, *op. cit.*, p. 12. UCM, Vol. X, Annex 214.

[1117] Latinoconsult Report, *op. cit.,* p. 3. AM, Vol. V, Annex 3.

[1118] Swanson Report, *op. cit.*, p. 12 (internal quotations omitted). UCM, Vol. X, Annex 214.

6.75 In further confirmation of the errors in Argentina's Memorial, Uruguay's expert Dr. Swanson conducted an in-depth review of the Final CIS modelling and concluded that the assessment by the IFC's independent experts was "performed conservatively and in accordance with generally prevailing scientific and professional practice"[1119]. He confirmed that the modelling referenced in the CIS was appropriate, employed internationally recognised dispersion models for hydrodynamics and water quality, used conservative estimates as to river flow, and met the requisite standard of care for conducting complex modelling[1120].

6.76 Dr. Swanson also found that the "very basic" one dimensional model used by Latinoconsult "grossly simplified and distorts the actual behavior of the river, and in the vicinity of the Botnia discharge overstates the reversal frequency"[1121]. The use of a one dimensional model assumes that the entire river behaves like a unidirectional "tube," which may be "particularly misleading in the vicinity of the Botnia discharge, which is the deepest and fastest flowing part of the river and thus the part least likely to experience complete flow reversal"[1122]. The model is also flawed because it takes its flow inputs from 300 kilometres upstream and 100 kilometres downstream of the Botnia plant, rather than from more proximate gauging stations. As Dr. Swanson concludes: "[t]he net effect is that the LATINOCONSULT model provides almost no useful information about flow reversal patterns of the river near the Botnia plant"[1123].

[1119] *Ibid.*, p. 12.

[1120] *Ibid.*

[1121] *Ibid.*, pp. 11-13.

[1122] *Ibid.*

[1123] *Ibid.*, p 13.

6.77 Finally, even if, contrary to all evidence, the water dispersion modelling conducted by the Final CIS and confirmed by Dr. Swanson was incorrect, and the modelling by Latinoconsult was correct, and effluent from the Botnia plant did reach the Esteros de Farrapos, it would reach the wetlands at such diluted concentrations that no adverse effects would be expected. As already noted and specifically recognised in the Latinoconsult Report[1124], if the effluent did extend that far upstream, dilutions would be substantially greater than 100:1. Therefore, the water quality impacts would be negligible, and no negative impacts on the benthic and fish communities would be expected.

6.78 The Swanson Report further confirms that Argentina has vastly overstated the importance of flow reversal frequency and that adverse impacts are unlikely to occur if the modelling is accurate:

> It should also be emphasized that the precise duration and frequency of flow reversals is unimportant in understanding the overall water quality impacts associated with the operation of the Botnia mill. This is because under any flow regime modeled or suggested by Argentina the effluents become highly diluted within a very short distance of the discharge point. Once so diluted the effluent is unlikely to affect water quality regardless of the direction of river flow.[1125]

6.79 (3) "Low Flow" Estimates. Argentina spends considerable time arguing that the Uruguay River may at some point now or in the future contain less water than is predicted in the "extreme low flow" situation modelled by the Final CIS. However, as Uruguay's experts show, even if the "low flow" of the River is as Argentina predicts, there would be no meaningful change in the results of the analysis performed by the IFC's independent experts as part of the Final CIS.

[1124] Latinoconsult Report, *op. cit.,* p. 13. AM, Vol. V, Annex 3.

[1125] Swanson Report, *op. cit.*, p. 14. UCM, Vol. X, Annex 214.

6.80 The Final CIS modelled a low river flow of 500 cubic metres/second. CARU requirements for modelling low flow are to use a 5-year low flow (the lowest flow that is predicted to occur during any 5-year period)[1126]. As Argentina's Wheater Report acknowledges[1127], the Final CIS in fact used a more stringent 10-year low flow (the lowest flow that is predicted to occur during any 10-year period). Argentina cannot credibly dispute the appropriateness of this figure for an analysis of the low flow conditions. The CARU Digest specifically provides how low flow is to be calculated and the Final CIS went beyond even these mutually-agreed, conservative standards.

6.81 Argentina argues that an *even lower* flow should be used, despite the complete absence of regulatory or scientific support for doing so. It argues that the lower flow should be used because: (1) the climate *might* change in the future, and the change *might* include reduced rainfall; (2) the method of operation of the (upstream) Salto Grande Dam *may* change; and (3) new trees *might* need to be planted to support the plant, which in turn *might* change the hydrologic flow in the river[1128]. The net result, Argentina argues, is that the low flow should have been modelled at 440 cubic metres/second, not 500.

6.82 As for Argentina's argument on climate change, Dr. Swanson concludes that there is no scientific basis to predict a change in rainfall. As his report notes, ample data indicate increases in precipitation over the period from 1921 to 2003[1129].

[1126] Digest of the Administrative Commission of the River Uruguay (CARU), Subject E3, Title 2, Chap. 5, Sec. 1, Art. 6(g) (1984 as amended). UCM, Vol. III, Annex 60.

[1127] Wheater Report, *op. cit.,* Sec. 4. AM, Vol. V, Annex 5.

[1128] AM, paras. 7.14, 7.20, 7.22, 7.29, 7.62-7.63. Wheater Report, *op. cit.,* Sec. 3-4, 9. AM, Vol. V, Annex 5. Latinoconsult Report, *op. cit.,* pp. 16-18. AM, Vol. V, Annex 3.

[1129] Swanson Report, *op. cit.*, p. 16. UCM, Vol. X, Annex 214.

Moreover, other evidence shows that flows in the river are increasing at a rate greater than precipitation[1130]. Indeed, the article on which Section 2.3 of the Latinoconsult Report relies specifically states although a humid cycle *began* in 1971, "[w]hat is less clear is the change in tendency from a cycle of medium characteristics to one of dry characteristics, which has been indicated in prior studies for about 1943. *In fact, the present study has not found any firm evidence of such a change*."[1131] Thus, Argentina's argument is contradicted by its own evidence.

6.83 As for a possible change in the operation of the Salto Grande Dam, Argentina presents absolutely no evidence that the method of operation of this decades-old dam will change. Of course, any significant change in operation of the dam would require review by CARU (pursuant to the 1975 Statute) at which point the environmental consequences of that change would be fully considered. Moreover, since the dam is jointly administered by Argentina and Uruguay (through their delegates to CARU), Argentina could block the unanimous consensus that would be required to authorise any significant change in dam operations. In any event, it is hard to fathom why either Argentina or Uruguay would approve a significant change to dam operations that would allow the Uruguay River to run dry[1132]. Accordingly, Argentina's argument about a theoretical change in dam operations fails to make its case.

[1130] *Ibid.,* p. 18.

[1131] *Ibid.* (quoting GTAN/DU/14/14-09-05, Extract of Analysis of Climate Statistics and Development and Evaluation of Climatic and Hydrological Scenarios in the Main Hydrographic Basins of Uruguay and the Coastline Thereof (Uruguay River, Negro River, Merin Lagoon, River Plate, the Atlantic Ocean), prepared by the Climate Change Unit, DINAMA (14 September 2005) (emphasis added). UCM, Vol. V, Annex 134).

[1132] Argentina's allegation that the Final CIS ignored potential changes in flow rates due to potential future modifications in the Salto Grande Dam is false. The Final CIS specifically noted that operations of the Salto Grande Dam can "substantially" affect flow rates and that the

6.84 As for the possible impacts of future tree plantations on the hydrologic cycle, the Final CIS found that there will be no change in the number of plantations resulting from operation of the Botnia plant because sufficient wood already exists[1133]. The only criticism levied by Argentina against the Final CIS with respect to tree plantations is based on the Wheater Report. That report said only that the effects of the plantations on the hydrologic cycle "depend[] on the local hydrology and hydrogeology, *and require proper assessment*"[1134]. Dr. Wheater did not actually do the assessment he recommended, but Latinoconsult did. After reviewing the local hydrology, Latinoconsult found that there would be *no change* in the hydrologic cycle:

> The area has a precipitation regimen of approximately 1300 mm. year-1, enough to balance the expected envirotranspiration of *Eucalyptus* plantations in the area. . . . [C]onsidering the small slope of the land and the heavy texture of most of the soils, *only a small effect is expected from the plantations on the waster [sic] regime of the rivers of the region, and only if conservationist criteria are used in the installation of the plantations*[1135].

In addition, Uruguayan law provides that any new plantation of more than 100 hectares is required to undergo an environmental review process and receive an Initial Environmental Authorisation prior to its establishment[1136]. Based on the findings of the Final CIS and the Latinoconsult Report, there is no reason to believe

---

bringing on- and off- line of turbines can likewise cause abrupt changes. Final CIS, Annex D, *op. cit.*, p. D3.2. UCM, Vol. VI, Annex 176.

[1133] *See* Final CIS, *op. cit.*, p. 4.28-29. UCM, Vol. VI, Annex 173.

[1134] Wheater Report, *op. cit.,* Sec. 9 (emphasis added). AM, Vol. V, Annex 5.

[1135] Latinoconsult Report, *op. cit.,* p. 49 (emphasis added). AM, Vol. V, Annex 3.

[1136] Decree No. 349/005, Environmental Impact Assessment Regulation revision, Art. 2 (30) (21 September 2005). UCM, Vol. II, Annex 24.

that existing or any possible future plantations will adversely affect the regime of the Uruguay River or its water quality.

6.85 Finally, even if, despite all the evidence to the contrary, Argentina is right, and the appropriate "low flow" should have been 440 cubic metres/second, instead of 500 cubic metres/second, there still would be no adverse impact on the regime of the river or water quality. The Swanson Report evaluated this issue and concluded that because the change is small relative to the flow of the river, and because such a low flow would only occur in the most unusual circumstances, it would have no meaningful effect on any of the calculations or conclusions of the Final CIS. Specifically, the Swanson Report explains that the insignificance between a low flow of 440 cubic metres/second and 500 cubic metres/second is in fact demonstrated by the results of the Latinoconsult Report, which show, even using this extreme low flow condition, dilution ratios that are very similar to those presented in the Final CIS[1137].

6.86 (4) Sedimentation. Argentina criticises three aspects of the Final CIS pertaining to sediments: (1) the sedimentation rates used by the Final CIS; (2) the alleged failure to consider the geomorphology of the river and its impacts on sedimentation; and (3) the adequacy of the analysis of the impact to sediment quality, particularly with respect to chlorophenols. Each of these criticisms is unwarranted.

6.87 With respect to sedimentation rates, Argentina, through the Wheater Report, alleges that the Final CIS incorrectly used an unreasonably low sedimentation rate to find that the Botnia port and the operations of the plant would

---

[1137] Swanson Report, *op. cit.*, p. 18. UCM, Vol. X, Annex 214.

not cause adverse impacts.[1138] The Final CIS specifically considered both of these issues. With regard to the port, it examined earlier estimates projecting that the Botnia port could have a potential 50% increase in the sedimentation rate in localised areas, specifically Uruguay's Yaguareté Bay. The Final CIS dismissed the concern after it concluded that these estimates were unrealistically high due to factors that would act to mitigate this accumulation, such as currents and waves[1139]. The Final CIS also specifically evaluated whether the discharge of effluent from the Botnia plant itself could cause sedimentation. The Final CIS concluded that the effect of suspended solids from the discharge of the Botnia plant will be exceedingly low, even under low flow conditions, in comparison with baseline data[1140].

6.88 Argentina's Wheater Report criticises these conclusions as "counter-intuitive" and "no[t] convincing."[1141] But it makes no attempt to rebut the specific data relied upon in the Final CIS. By contrast, Dr. Swanson concurs with the conclusions in the Final CIS that the Botnia port will not alter the present circulation patterns of the river. He also concludes that any impacts will be highly localised (generally within 35 metres of the port), and that erosion processes will further reduce any effects[1142]. The Swanson Report further confirms that because the water discharged from the Botnia plant will have comparable suspended sediment levels as

---

[1138] Wheater Report, *op. cit.,* Sec. 5. AM, Vol. V, Annex 5.

[1139] Final CIS, *op. cit.*, p. 4.50. UCM, Vol. VIII, Annex 173.

[1140] *Ibid.*, p. 4.50 (finding that contribution of sediments to Yaguareté Bay is exceedingly low and that net sedimentation levels are unlikely to change). UCM, Vol. VIII, Annex 173. *See also* Swanson Report, *op. cit.*, p. 19. UCM Vol. X, Annex 214.

[1141] Wheater Report, *op. cit.,* Sec. 5. AM, Vol. V, Annex 5.

[1142] Swanson Report, *op. cit.*, p. 19. UCM, Vol. X, Annex 214.

the ambient levels in the river as a whole, no matter how much effluent is discharged by the plant, that effluent will not cause an increase in sedimentation.[1143]

6.89 Argentina's argument with respect to geomorphologic changes likewise fails to expose a defect in the Final CIS. The Wheater Report argues that the patterns of sedimentation can never be precisely predicted (with or without the installation of the Botnia plant)[1144]. If the failure to predict precisely future unknowable events reflects a fatal defect in the Final CIS, then no project located near any aquatic resource would ever be allowed to proceed. Hence, the more reasonable approach is to consider potential affects based on actual, current sedimentation rates, as the Final CIS did[1145]. To address the uncertainty raised by Dr. Wheater, the appropriate response is to institute a long-term monitoring program, such as the one that the Botnia plant and DINAMA will employ, as described in Chapter 7. In fact, as of the issuance of the Final CIS, daily monitoring had shown no impacts on water quality from the construction of the Botnia port[1146].

6.90 Finally, as noted in the Menzie Report[1147], although geomorphologic changes cannot always be predicted, these changes are unlikely to affect river flow or the effluent plumes. Changes in geomorphology will be slow relative to the lifespan of the facility. River flow will be largely dictated by rainfall, and effluent mixing and dispersion will be dictated by river flow. Monitoring during plant operations will determine whether slow processes such as changes in

---

[1143] *Ibid.*

[1144] Wheater Report, *op. cit.,* Sec. 5. AM, Vol. V, Annex 5.

[1145] *See* Menzie Report, *op. cit.*, pp. 28-29. UCM, Vol. X, Annex 213.

[1146] Final CIS, *op. cit.*, p. 2.14. UCM, Vol. VIII, Annex 173.

[1147] Menzie Report, *op. cit.*, pp. 28-29. UCM, Vol. X, Annex 213.

geomorphology and sedimentation have any influence on water quality, and if the impacts are observed, then appropriate remedial measures can be taken.

6.91 Argentina's final criticism regarding sediments also relies upon the Wheater Report. Argentina asserts that the Final CIS neglected to consider the impacts of effluent discharge on sediment quality, *i.e.*, whether pollutants in the effluent will cause harm to organisms living in the sediments. This is incorrect. The Final CIS concluded that the fauna in the river are not currently under stress from toxic chemicals, an important consideration when judging the potential impacts of new effluent discharges[1148]. (Argentina's Latinoconsult Report reaches the same conclusion[1149].) Given this consideration and the state-of-the-art technology to be employed by the Botnia plant, the Final CIS concluded that negative impacts to sediment quality were not expected to occur[1150]. In reaching this conclusion, the Final CIS engaged in an extensive literature review of the impacts of two classes of contaminants of historical concern, (i) dioxins and furans, and (ii) endocrine-disrupting compounds[1151]. Based on this review and the expected effluent concentrations of *both* the Botnia and the ENCE plants, the Final CIS concluded that effluent discharges would not measurably change, would be below the baseline concentrations for the Uruguay River, or would not accumulate at concentrations of concern, for both classes of chemicals[1152]. The Wheater Report offers no specific evidence to rebut these conclusions, only citing to a study involving a lake in

---

[1148] Final CIS, *op. cit.*, p. 4.51. UCM, Vol. VIII, Annex 173.

[1149] Latinoconsult Report, *op. cit.,* p. 7. AM, Vol. V, Annex 3. *See also* Menzie Report, *op. cit.*, p. 29. UCM, Vol. X, Annex 213.

[1150] *See, e.g.*, Final CIS, *op. cit.*, pp. 4.49-50. UCM, Vol. VIII, Annex 173.

[1151] Final CIS, Annex D, *op. cit.*, pp. D5.7-11. UCM, Vol. VIII, Annex 176.

[1152] *Ibid.*, D6.3-4.

Finland that received discharges from an antiquated pulp mill over a period of decades. And, even there, the Wheater Report indicates that (i) the contaminants in sediments fell "significantly" after pollution control technology similar to what will be employed at the Botnia plant had been installed, and (ii) the rate of contaminant accumulation in the Uruguay River will be lower than what was observed in the lake. In short, that study indicates that old-style mills can cause sediment contamination in lakes, but says nothing about what will actually be encountered in the Uruguay River near the Botnia plant.[1153]

6.92 Dr. Menzie reviewed the data on potential accumulation of contaminants in sediments and confirmed the results of the Final CIS, concluding that any accumulation is expected to be insignificant, and no adverse effects are expected[1154].

6.93 (5) Phosphorus and Eutrophication. Argentina repeatedly asserts that operation of the Botnia plant might increase phosphorus levels in the river, and that any such increase may increase the risk of eutrophication, or algal blooms[1155]. Argentina's assertions stand in stark contrast to the careful (and unchallenged) calculations in the Final CIS that effluents from the Botnia plant will not measurably change the amounts of phosphorus in the Uruguay River[1156]. Thus, the Final CIS found that the operation of the Botnia plant will not contribute to any exceedances of

---

[1153] *See* Wheater Report, *op. cit.,* Sec. 5. AM, Vol. V, Annex 5.

[1154] Menzie Report, *op. cit.*, pp. 29-30. UCM, Vol. X, Annex 213.

[1155] AM, paras. 7.38, 7.41, 7.189-7.190. The Latinoconsult Report, which is the nominal source of the allegations, provides no information to support them. Rather, it only raises the spectre of a potential for risk and wholly ignores the scientific analyses that have been conducted specifically with respect to the Botnia plant that predict that the dire results simply will not occur. *See* Laltinoconsult Report, *op. cit.,* pp. 39-44. (listing potential adverse health effects from exposure to algae blooms, but not predicting that algae blooms will be caused by the operation of the Botnia plant). AM, Vol. V, Annex 3.

[1156] *See, e.g.*, Final CIS, *op. cit.*, p. 4.50. UCM, Vol. VIII, Annex 173.

the DINAMA water quality standard for phosphorus, and will not increase the potential for eutrophication in the Uruguay River. (As noted, CARU has established no standards or other limits for phosphorus discharges into the river). The conclusion reached in the Final CIS by the IFC's independent experts is confirmed by Dr. Menzie, whose report notes that "even under worst-case conditions of extreme low flow the changes in the phosphorus levels are 'de minimis'"[1157]. Dr. Menzie found:

> There are three basic reasons why this change in phosphorus levels is not of scientific concern. First, because changes in phosphorus concentrations of this magnitude would not cause eutrophication, even if they were persistent and widespread. Second, the changes are not persistent and widespread, because measurable impacts only occur in small locations during rare periods of extreme low flow. Third, they are within the natural variability of the phosphorus concentrations in the river[1158].

The Menzie Report specifically found that, even under worst case conditions, the effluent discharges would not cause any perceptible change in the algal biomass[1159]. In addition, as discussed below, to the extent that Argentina is experiencing elevated concentration levels of phosphorus on its own side of the river, the evidence shows, and Argentina concedes[1160], that this is most likely due to discharges from its own territory. These discharges from Argentine territory, particularly the water emanating from the Gualeguaychú River, are major contributors to elevated phosphorus in Ñandubaysal Bay (on Argentina's side of the river). The Botnia plant

---

[1157] Menzie Report, *op. cit.*, p. 26. UCM, Vol. X, Annex 213.

[1158] *Ibid.*, p. 26.

[1159] *Ibid.*, pp. 27-28. Although it is not entirely clear, Argentina appears to allege that Botnia has admitted that its effluent discharges will aggravate the problem of eutrophication. AM, para. 7.169. Botnia made no such statement, and the material cited contains none.

[1160] AM, para. 6.32.

will not exacerbate these problems because its effluent discharge will remain along the Uruguayan shoreline, and will not disperse across the river in measurable quantities[1161].

6.94 The Menzie Report confirms that changes in phosphorus levels predicted in the Final CIS are well within the natural variation of phosphorus levels in a water body, and are not the type of changes that result in eutrophication[1162]. With respect to the normal variation of phosphorus levels in the river, Dr. Menzie found that:

> The small potential increases in phosphorus will be undetectable within the natural variability of phosphorus in the river. This can be seen when small changes (a few percent at most) are compared to the ranges observed at various locations in the river. Table D3.2-1 of the FCIS presents ranges observed during the CARU Program for the years 1987-1990. The ranges in phosphorus values for four locations on the river are 0.02-0.31 mg/L at Salto, 0.04-0.32 mg/L at Paysandu, 0.01-0.72 mg/L at Gualeguaychú, and 0.04-24 mg/L at Fray Bentos. Sampling performed in the river at Botnia on seven occasions during 2005 and 2006 yielded phosphorus values that ranged between 0.03 and 0.11 mg/L [Table D3.2-4 of the FCIS]. These ranges reflect natural variability that spans factors of 3 to 70 at specific locations. Changes on the order of a few percent would not be observable against this range of natural variability[1163].

6.95 (6) Impacts to Fish, Benthic Organisms, and Other Animals. Argentina asserts that there is a *possibility* that migrating fish, birds, benthic organisms[1164], and other animals *might* be affected by effluent from the Botnia plant[1165]. The Latinoconsult Report claims that "a very strong probability" exists that effluent

---

[1161] Final CIS, *op. cit.*, p. 4.57. UCM, Vol. VIII, Annex 173.

[1162] Menzie Report, *op. cit.*, pp. 26-28. UCM, Vol. X, Annex 213.

[1163] *Ibid.*, p. 27.

[1164] The Final CIS defines "benthic" organisms as "a form of aquatic plant or animal life that is found on or near the bottom of a stream, lake or ocean." Final CIS, Annex I and I2. International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex I, p. I.2 (September 2006). UCM, Vol. X, Annex 222.

[1165] AM, paras. 7.46-7.48.

discharges will affect the fish community of the Uruguay River even when the dilution exceeds the 1:100 exposure envelope[1166]. The Memorial also cites the Wheater Report for the proposition that it is difficult to predict precisely the impacts of effluent on aquatic life; the Wheater Report itself, however, does not predict any adverse effects.

6.96 As set forth in Chapter 5, the Final CIS concluded that adverse impacts to fish will not occur. Even under extreme low flow conditions (which only last a short time), the water quality modelling relied on by the IFC's independent experts showed that the dilution of effluent rapidly (within 35 metres of the discharge) exceeds 100:1 (the level adopted by Environment Canada beyond which adverse impacts are generally not found). And, even within those small areas (ranging from a few metres under normal conditions to 35 metres under low flow), the exposure to effluent with lower dilution poses no threat to fish because they naturally move and can be expected to remain in the very small affected area for only brief periods[1167].

6.97 In fact, because the 100:1 dilution area is so small and adverse impacts to aquatic species so unlikely, the Environment Canada guidance would dismiss the need for monitoring of fish[1168]. As set forth in Chapter 7, however, despite the remote likelihood of adverse impacts, DINAMA will require Botnia to conduct chronic and acute toxicity tests for the fish population. These tests will ensure that the effluent is not harmful to fish and that any long-term impacts, if any, are detected and that appropriate remedial measures can be taken.

[1166] AM, para. 7.176. As discussed earlier in this Chapter, the Latinoconsult Report suggested as a protective standard a dilution ratio of 1:10,000.

[1167] Final CIS, *op. cit.*, p. 4.49. UCM, Vol. VIII, Annex 173. *See also* Menzie Report, *op. cit.*, p. 15. UCM, Vol. X, Annex 213.

[1168] Menzie Report, *op. cit.*, p. 14. UCM, Vol. X, Annex 213.

6.98 The Latinoconsult Report also did not show any likelihood of impacts to fish. Specifically, although Annexes H and I to that report contain population models regarding a fish known as Sabalo, the model does not even attempt to consider impacts from the Botnia plant in that model and thus cannot provide any meaningful information about whether the plant will affect the fish[1169].

6.99 Finally, Argentina has not shown that other vertebrates or amphibians will experience more exposure to the effluent discharge than fish or benthic communities, nor has it alleged that they are ecologically more sensitive to effluent discharges with limited exposure. In fact, the Menzie Report confirms that the Final CIS appropriately evaluated exposures to fish and other species.

> With regard to exposures associated with aqueous effluents, the FCIS adequately describes the major exposure pathways [to the effluent discharges] and adequately describes the major types of effects. Potentially exposed species are primarily those that live in the aquatic environments (i.e., fish, invertebrates, and plants). Thus, exposures to other animals that do not live in the aquatic environment (birds and reptiles) with respect to aqueous discharges are best evaluated by considering how they might come into contact with the aquatic system; animals that have low or incidental contact with the river will have a lower exposure to the effluent from the mill, and thus would be expected to be affected even less than fish, benthic organisms, or aquatic plants[1170].

6.100 With respect to endangered birds, the Menzie Report points out that due to the ecology of these bird species, their exposure to the aquatic environment is limited. Moreover, there is no evidence that any of them feed on aquatic organisms. Therefore, any impacts to these endangered species will be "negligible"[1171].

[1169] *Ibid.*, p. 24.

[1170] *Ibid.*

[1171] *Ibid*, p. 25.

Similarly, the Menzie Report explains that there is no scientific basis from which to conclude that any of the amphibian species identified by the Latinoconsult Report will be impacted by the Botnia plant's effluent discharge. Each species generally prefers terrestrial environments for the majority of their lives[1172]. As Dr. Menzie explains, during the reproductive stage, these species prefer temporary water bodies, such as puddles, small ponds/lakes, flooded grasslands, or low current streams -- aquatic environments that are very different from the main channel of the Uruguay River where the effluent will be discharged[1173]. Therefore, the chances of any of these amphibian species coming into contact with, and thus being impacted by, the effluent discharge from the Botnia plant are extremely remote.

6.101 Argentina also asserts that the conclusions of the Final CIS are unreliable because of a lack of baseline data with respect to fish and other aquatic life.[1174] Contrary to Argentina's assertion, the Final CIS engaged in an extensive characterisation not only of the fish community but also of the benthic community, the phytoplankton, and the zooplankton of the Uruguay River[1175]. The Final CIS also evaluated information regarding the levels in fish of several contaminants of concern[1176]. Review by Dr. Menzie confirms that the Final CIS contains an adequate description and analysis of the fauna of the Uruguay River from which to analyse the potential impacts of the Botnia plant's effluents[1177]. Moreover, based on a review of

---

[1172] *Ibid.*, pp. 24-25.

[1173] *Ibid.*

[1174] AM, para. 7.129.

[1175] Final CIS, Annex D, *op. cit.*, pp. D3.7-17. UCM, Vol. VIII, Annex 176.

[1176] *Ibid.*, D3.15-16.

[1177] *See, e.g.*, Menzie Report, *op. cit.*, p. 22. UCM, Vol. X, Annex 213.

the information in the Final CIS, Dr. Menzie concluded that the Uruguay River biota are similar to those of other large rivers. Given the information provided with respect to the biota of the Uruguay River, its similarity to other large water bodies, and the well-studied state-of-the-art technology employed by the Botnia plant, Dr. Menzie concluded that "there is high confidence that the plant will have an effluent that will not present unusual chemical characteristics that will pose unknown or unanticipated risks to aquatic life."[1178]

6.102 Argentina's concerns that emissions of COD, AOX, or other parameters could have adverse impacts on the aquatic ecosystem[1179] are also unfounded. After extensive analysis of the plant technology and process to be used and the estimated contents of the Botnia plant's effluent discharge, the Final CIS specifically concluded that "[t]he expected performance with respect to bleaching effluent flow [and] COD content . . . will be among the best in the world."[1180] The Deardorff Report confirms that the discharge of COD from the Botnia plant will be equivalent to other state-of-the-art pulp mills[1181]. Dr. Menzie notes that the extensive literature evaluating the impacts from modern pulp mills further increases the confidence in the predictive tools and studies used in the Final CIS[1182]. Argentina has provided no evidence showing that the effluent discharges of COD, AOX, temperature, suspended solids, or phosphorus will be greater than those estimated in the Final

---

[1178] *Ibid.*, p. 3.

[1179] *See, e.g.*, AM, para. 7.169.

[1180] Final CIS, *op. cit.*, p. 2.26. UCM, Vol. VIII, Annex 173.

[1181] Deardorff Report, *op. cit.*, p. 23. UCM, Vol. X, Annex 215.

[1182] Menzie Report, *op. cit.*, p. 3. UCM, Vol. X, Annex 213.

CIS, would not be equivalent to other state-of-the-art pulp mills, or that the estimated levels would result in adverse impacts to the aquatic environment.

6.103 The Final CIS concluded that, given the state-of-the-art technology to be used at the Botnia plant, "the expectation is that treated mill effluents will not show acute toxicity to aquatic biota"[1183]. Argentina nevertheless criticises the Final CIS and Botnia for not having conducted acute and chronic toxicity studies "comme le recommande l'USEPA"[1184]. However, this comment is inconsistent with or misinterprets the recommendation of the Hatfield Report, which calls for such tests only on final plant effluents. A chronic toxicity study of final plant effluents could only begin *after* the Botnia plant commences operations[1185]. Thus, these studies will be part of the monitoring program for the Botnia plant, to be implemented after operations begin. As detailed in Chapter 7, Botnia has committed to performing acute toxicity tests once mill operations commence as recommended by the Final CIS, and by the Hatfield and Menzie Reports[1186].

Section V.
The Conclusions of the IFC's Final Cumulative Impact Statement Are Valid in All Respects

6.104 As the above analysis demonstrates, Argentina's attempts to criticise the findings of the Final CIS with respect to the Botnia plant are completely without merit. Argentina has come nowhere close to meeting its burden of proof. It has

---

[1183] Final CIS, Annex D, *op. cit.*, p. D7.3. UCM, Vol. VIII, Annex 176.

[1184] AM, para. 7.170 ("as recommended by the US EPA").

[1185] Per the recommendation of the Final CIS, *see* Final CIS, Annex D, *op. cit.*, p. D7.4. UCM, Vol. VIII, Annex 176, Botnia is committed to using chronic toxicity testing to monitor the impacts of the plant, *ibid.*, and DINAMA and The Technological Laboratory of Uruguay ("LATU" per the Spanish initials) are coordinating its implementation. *See ibid.*, D7.3.

[1186] Final CIS, Annex D, *op. cit.*, p. D7.3. UCM, Vol. VIII, Annex 176.

furnished no evidence capable of sustaining a finding that significant harm to the Uruguay River or its aquatic environment is likely to result from the operation of the Botnia plant. Because it cannot satisfy the burden of proof established by law, Argentina has attempted to set forth a standard of environmental review that no project could ever hope to meet, and that is not required by any applicable law. Even if one accepts this impermissibly heightened burden, however, the results of the exhaustive environmental review conducted during the DINAMA permitting process, the IFC application process, and by Uruguay's own experts demonstrate that there is not a scintilla of evidence that adverse impacts will occur. With respect to challenges raised by Argentina regarding particular technical issues, review by Uruguay's experts has confirmed and corroborated the findings of the Final CIS in all respects. Therefore, the only reasonable conclusion is that the potential impacts of the Botnia plant were adequately assessed by the IFC's independent experts and that unacceptable impacts will not occur. As the next Chapter will explain, the comprehensive monitoring and oversight program for the Botnia plant will confirm these conclusions and ensure that any unanticipated impacts to water quality or the ecological balance of the river will be quickly identified and addressed.

CHAPTER 7.
ENSURING PROTECTION OF THE URUGUAY RIVER AND THE AQUATIC ENVIRONMENT

7.1 Chapters 4 through 6 demonstrated that Uruguay has complied with all of the substantive requirements of the 1975 Statute, CARU regulations, and general international law; and they documented the comprehensive environmental review to which the Botnia plant has been and continues to be subject by Uruguay and the IFC. This Chapter describes the measures taken, and the framework that has been put in place, to ensure that in the highly unlikely event that operations cause adverse impacts, they will be rapidly detected and necessary remedial measures will immediately be implemented. These include comprehensive pre- and post-operational monitoring, and Uruguay's authority, technical capacity, and commitment to require the Botnia plant to adopt whatever remedial measures are necessary to prevent any prohibited adverse impacts. This Chapter also explains why Argentina's proposed remedy of demolishing the Botnia plant for alleged violations of the 1975 Statute is unjustified, unprecedented, and unreasonable.

Section I.
Extensive Pre- and Post-Operational Monitoring of the Botnia Plant Will Ensure Rapid Detection and Correction of Any Prohibited Impacts

7.2 The environmental studies conducted to date convincingly demonstrate that operation of the Botnia plant will have none of the impacts hypothesized in Argentina's Memorial. However, in the unlikely event that adverse impacts occur that have not been anticipated by Uruguay or the IFC's independent experts, those impacts will be quickly detected and remedied through a combination of pre-operational baseline data collection and post-operational sampling, as well as by vigorous enforcement of Uruguay's rigorous environmental laws and regulations.

7.3 The extensive pre-operational monitoring data collected by CARU, Uruguay, and Botnia already establish a substantial baseline against which to gauge

whether impacts occur as a result of the operation of the Botnia plant[1187]. Moreover, the collection of additional baseline monitoring data has been and will be an integral aspect of the remaining steps in the permitting and commissioning process of the Botnia plant prior to commencement of operations, and monitoring will continue after the operations begin. The robust pre- and post-operational monitoring will allow for the rapid detection of any unacceptable impacts.

A. Monitoring of the Water Quality and Aquatic Life of the Uruguay River to Date

7.4 Until February 2006, CARU took primary responsibility for monitoring the water quality and aquatic health of the Uruguay River. In fulfillment of that function, CARU developed two primary water monitoring plans: 1) the Pollution Control and Prevention Program ("PROCON", per the Spanish initials); and 2) the Uruguay River Environmental Quality Monitoring Plan for Areas with Cellulose Plants ("PROCEL", per the Spanish initials).

7.5 CARU developed and approved PROCON in 1987[1188]. This monitoring program covered the entirety of the Uruguay River, extending from Bella Unión, approximately 323 kilometres upstream of the Botnia plant, to Nueva Palmira, approximately 85 kilometres downstream of the plant[1189], and included 30 sampling

[1187] A compilation of baseline information available at the time the Final CIS was prepared is compiled in Annex D of the Final CIS. International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex D (hereinafter "Final CIS, Annex D"), pp. D3.19-D3.31 (September 2006). UCM, Vol. VIII, Annex 176. ENCE also compiled extensive baseline data as part of the environmental review of the formerly proposed plant, which was incorporated into the Final CIS. *Ibid.*, p. D3.24.

[1188] El Telegrafo, "President of CARU: Argentina Lacks the Political Will to Control the Quality of the Water in the Uruguay River," p. 1 (17 Aug. 2006). UCM, Vol. IX, Annex 187A.

[1189] *Ibid.*, p. 1. *See also* DINAMA Press Release, "New Environmental Monitoring of the Uruguay River" (hereinafter "DINAMA August 2006 Press Release"), p. 1. (17 August 2006). UCM, Vol. II, Annex 32.

locations[1190]. Since the beginning of PROCON, CARU has engaged in water quality monitoring in four annual campaigns[1191], comprised of more than 50 water quality monitoring events[1192]. In 2005, the GTAN (the High-Level Technical Group established by Argentina and Uruguay) collected the most recent data available from CARU and combined it with older data from the sampling points near the locations of the Botnia and ENCE plants, and produced an updated summary of the water quality of the Uruguay River[1193].

7.6 In addition to water quality, CARU has also analysed various other environmental conditions of the Uruguay River, including 1) metal and organic contaminant data for sediments[1194]; and 2) data on various aspects of fish communities, including diversity of populations[1195], spawning of fish species[1196], and levels of certain contaminants in fish flesh[1197].

7.7 To further ensure that any environmental impacts by the Botnia and ENCE plants would be detected, in November 2004, CARU approved the PROCEL monitoring program[1198]. Monitoring pursuant to the PROCEL program was to include an analysis of water and sediment quality, the benthic communities, and the

---

[1190] *Ibid.*, p. 1. UCM, Vol. II, Annex 32.

[1191] *Ibid.*

[1192] Final CIS, Annex D, *op. cit.*, p. D3.4. UCM, Vol. VIII, Annex 176.

[1193] *Ibid.*, pp. D3.4-D3.5, D3.20 (Table D3.2-2).

[1194] *Ibid.*, p. D3.7.

[1195] *Ibid.*

[1196] *Ibid.*, p. D3.10.

[1197] *Ibid.*, p. D3.16.

[1198] Diplomatic Note CARU-ROU No. 014/06 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation, p. 2 (25 May 2006). UCM, Vol. IV, Annex 117.

fish communities. Annual progress reports were planned as a result of these monitoring activities[1199].

7.8 In February, June, August, and November 2005[1200], monitoring campaigns were undertaken by CARU pursuant to PROCEL. In addition, in December 2005 and January 2006[1201], studies of fish communities were undertaken.

7.9 Unfortunately, these monitoring activities by CARU have now been suspended at Argentina's insistence. Argentina first blocked CARU from carrying out any further monitoring activities under PROCON or PROCEL in February 2006, shortly before it initiated the present legal proceedings against Uruguay[1202]. Since that date, Argentina has consistently refused to allow CARU's monitoring activities to resume. Uruguay has repeatedly expressed its deep regret at the suspension of monitoring efforts, and consistently reiterated its desire for CARU to resume those efforts, to no avail[1203]. As of the date of this Counter-Memorial, Argentina continues to veto any monitoring activities related to the Botnia plant[1204].

7.10 Uruguay strongly favors joint monitoring of the river and its aquatic environment, either via CARU (as set forth in the 1975 Statute) or through direct

---

[1199] *Ibid.*

[1200] *Ibid.*

[1201] *Ibid.*

[1202] *See, e.g.*, Diplomatic Note CARU-ROU No. 024/06 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation, p. 1 (18 September 2006). UCM, Vol. IV, Annex 120. Diplomatic Note CARU-ROU No. 033/06 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation, p. 1 (13 October 2006). UCM, Vol. IV, Annex 121.

[1203] *See, e.g.*, Diplomatic Note CARU-ROU No. 024/06, *op. cit.*, p. 1. UCM, Vol. IV, Annex 120. *See also* Diplomatic Note CARU-ROU No. 033/06, *op. cit.*, p. 1. UCM, Vol. IV, Annex 121.

[1204] *See, e.g.*, Diplomatic Note DACARU No. 019/06 sent from President of the CARU Argentine Delegation to the President of the CARU Uruguayan Delegation, p. 1 (20 October 2006). UCM, Vol. III, Annex 122.

bilateral cooperation of the two States. However, because Uruguay is committed to ensuring that the water quality of the Uruguay River remains within the agreed upon standards, with or without the cooperation of Argentina, DINAMA has been conducting a monitoring program of its own. DINAMA has thus assumed responsibility for acquiring additional baseline data with respect to the water quality, sediments, and biota of the river in the plant's areas of influence. DINAMA released a draft of its monitoring plan in March 2006 (the "March 2006 Monitoring Plan"), shortly after Argentina insisted on the suspension of CARU's monitoring activities[1205].

7.11 DINAMA revised its March 2006 Monitoring Plan in August 2006 (the "August 2006 Monitoring Plan")[1206]. As ENCE did not announce its decision to relocate its plant until September 2006, the August 2006 Monitoring Plan required monitoring that would assess environmental conditions in the areas of influence of both plants. Due to the relocation of the ENCE plant, DINAMA made minor changes to the August 2006 Monitoring Plan, which are reflected in a May 2007 Monitoring Plan[1207]. Even given the relocation of the ENCE plant, the May 2007 and August 2006 Monitoring Plans are highly similar. Since Argentina and Uruguay

---

[1205] Draft of March 2006 "DINAMA Monitoring Plan for Cellulose Plants in Fray Bentos" (Borrador de marzo de 2006 "Plan de seguimiento DINAMA plantas de celulosa en Fray Bentos") *available at* http://www.dinama.gub.uy/modules.php?op=modload&name= dinama&file=actualizacion_inf_celulosa_26-4-06 (last visited 9 July 2007).

[1206] DINAMA Monitoring Plan for Cellulose Plants in Fray Bentos, Preliminary Draft (hereinafter "August 2006 Monitoring Plan") (August 2006). UCM, Vol. II, Annex 31. *See also ibid.*, Annex 1. The August 2006 monitoring plans also provided for the establishment of baseline data with respect to air quality. *Ibid.*, Annex 2.

[1207] DINAMA Monitoring Plan for Cellulose Plant in Fray Bentos (hereinafter "May 2007 Monitoring Plan") (May 2007). UCM, Vol. II, 39. The May 2007 Monitoring Plan is not a new plan; rather, it reflects the monitoring that DINAMA has undertaken since the relocation of the ENCE plant, although DINAMA did not incorporate these minor modifications into a formal document until May 2007.

had previously agreed on the adequacy of the PROCEL program, the August 2006 and May 2007 Monitoring Plans were specifically designed to take into account the requirements of PROCEL[1208]. In addition, DINAMA plans to post the results of its pre-operational monitoring on its website before the Botnia plant commences operations.

7.12 The water quality parameters monitored pursuant to the May 2007 Monitoring Plan are comprehensive[1209]. In accordance with the plan, Uruguayan authorities have conducted pre-operational water quality monitoring activities every two months since August 2006, with each monitoring event lasting three days[1210]. Water quality monitoring has been conducted at 15 different locations, including locations not expected to be impacted by the plant's operations, which serve as control sites[1211]. Six of the monitoring locations are upstream from the Botnia plant, including one located approximately 10.3 kilometres upstream in the secondary canal east of Isla Zapatero[1212]. Monitoring at these six locations will provide additional pre-operational baseline data from which it can be determined whether operation of the plant causes an increased presence of contaminants upstream. Monitoring will also be conducted at nine downstream locations, the furthest being located 16.5 kilometres downstream of the plant. In total, the monitoring program covers a 26.8 kilometres stretch of the river, considerably more than enough to determine whether any impacts occur upstream or downstream of the plant.

[1208] August 2006 Monitoring Plan, *op. cit.*, § 1.1.1. UCM, Vol. II, Annex 31. May 2007 Monitoring Plan, *op. cit.*, Annex A, § A1. UCM, Vol. II, 39.

[1209] May 2007 Monitoring Plan, *op. cit.*, Annex A, § A1. UCM, Vol. II, 39.

[1210] *Ibid*., Annex A, § A3.

[1211] *Ibid.*, Annex A, § A2.

[1212] *Ibid.*, Annex A, § A2.

7.13 Monitoring of sediments is conducted at various locations, which correspond to the water quality monitoring stations in the coastal area[1213]. Assessment of EOX and TOX (which are the technical corollaries to measuring the presence of AOX in sediments, as opposed to water), dioxins, furans, and PCBs are included in the monitoring parameters[1214]. As with the assessment of water quality, in the pre-operational period samples of sediments have been taken every two months for a period of three days[1215].

7.14 Uruguayan authorities have also collected baseline data for the benthic and fish communities in the Uruguay River. The May 2007 Monitoring Plan provides for three monitoring locations for the benthic community, which include both upstream and downstream locations[1216], and includes the following parameters: taxanomic identification, pulp weight, density, diversity, composition, and mercury and lead levels[1217].

7.15 With respect to the fish community, the May 2007 Monitoring Plan provides for six pre-operational monitoring campaigns. Parameters monitored include taxanomic identification, longitudes, total and eviscerated weight, sex, gonadal and liver weight, number and weight of eggs, bone structure, mercury, lead,

---

[1213] *Ibid.*, Annex A, § B2.

[1214] *Ibid.*, Annex A, § B1.

[1215] *Ibid.*, Annex A, § B3.

[1216] *Ibid.*, Annex C, § C2.

[1217] *Ibid.*, Annex C, § C1.

dioxins, furans, AOX, PCB, and polyhydrocarbons[1218]. Monitoring occurs at a total of three locations, including upstream and downstream locations[1219].

7.16 In addition to the pre-operational monitoring performed by DINAMA, Botnia itself has also collected significant baseline data. Baseline data was obtained by Botnia at various locations and for several parameters, which include, among others, colour, temperature, pH, dissolved oxygen, BOD5, detergents, phenolics, ammonia, nitrites, phosphorus, nitrogen fecal coliforms, arsenic, cadmium, copper, chromium, mercury, lead, and AOX[1220]. The results of this monitoring are presented in Annex D of the Final CIS[1221]. As discussed in Chapter 4, the Botnia EIA also included extensive baseline data with respect to the biota of the Uruguay River. As of the date of this Counter-Memorial, Botnia continues to collect baseline data.

7.17 In sum, the efforts by CARU (until early 2006) and by Uruguay and Botnia have resulted in the establishment of comprehensive baseline data from which it will be possible to determine rapidly whether unexpected adverse impacts are occurring after the Botnia plant commences operations[1222].

[1218] *Ibid.*, Annex D, § D1.

[1219] *Ibid.*, Annex D, § D2. As a technical matter, two locations are being monitored in the Las Cañas area. *Ibid.*, Annex D, § D2.

[1220] Final CIS, Annex D, *op. cit.*, p. D3.21-D3.22 (Table D3.2-3). UCM, Vol. VIII, Annex 176.

[1221] *Ibid.*, pp. D3.21-D3.22 (Table D3.2-3).

[1222] Dr. Charles A. Menzie, Evaluation of the Final Cumulative Impact Study for the Botnia S.A.'s Bleached Kraft Pulp Mill (Fray Bentos, Uruguay) with Respect to Impacts on Water Quality and Aquatic Resources and with Respect to Comments and Issues Raised by the Government of Argentina (Exponent, Inc.), pp. 30-31 (July 2007). UCM, Vol. X, Annex 213. Mr. Pieter Booth, Sufficiency of EIA and GTAN Information for Determination of Environmental Impacts - Botnia, S.A., Fray Bentos Uruguay (Exponent, Inc.), p. 1 (June 2007). UCM, Vol. X, Annex 217.

B. POST-OPERATIONAL MONITORING BY DINAMA

7.18 DINAMA's monitoring activities will intensify after the Botnia plant commences operations, pursuant to the provisions of the May 2007 Monitoring Plan. Post-operational monitoring by DINAMA will be conducted with respect to the following areas:

- operational compliance of the Botnia plant with the requirements of Uruguayan law and its environmental management plans (including its monitoring and contingency plans);
- water quality;
- sediment quality;
- the benthic community; and
- the fish community[1223].

7.19 This Section summarizes the monitoring that will be undertaken with respect to the above-listed issues. Many aspects of the monitoring of the water quality, the sediment quality, and the biota of the Uruguay River will be highly similar to DINAMA's pre-operational monitoring to ensure continuity of information, although DINAMA may make modifications in light of monitoring results and other information obtained during the operational phase[1224]. All data collected, and monitoring and testing procedures conducted, during this time will conform to strict quality control requirements[1225]. The post-operational monitoring will allow DINAMA to ensure that the Botnia plant is operating in compliance with the conditions of the requirements of its Initial Environmental Authorisation, Environmental Management Plans, and the Wastewater Treatment System Approval,

---

[1223] *See generally* May 2007 Monitoring Plan, *op. cit.*, Annexes A-D, F, G. UCM, Vol. II, Annex 39.

[1224] *Ibid.*, § 1.2.

[1225] *See generally ibid.*, Annex G.

including the applicable discharge limitations and water quality standards in those permits. It will also allow DINAMA to detect rapidly whether the Botnia plant is causing any unacceptable adverse impacts and to respond appropriately and immediately by requiring Botnia to undertake any additional remedial or protective measures that DINAMA deems necessary. As discussed in Chapter 6, Argentina's experts do not show that any particular adverse impacts from operation of the plant are likely; instead, they complain of "uncertainties" as to the potential impacts caused by effluent discharges from the plant. Alleged "uncertainties" are not sufficient in themselves to satisfy Argentina's burden of proof of likely significant harm to the river. But, to the extent they identify risks, however theoretical, these will be fully addressed via Uruguay's post-operational monitoring program. Thus, even the abstract "uncertainties" of Dr. Wheater will be addressed in the monitoring program, and any unexpected adverse impacts resulting from his "uncertainties" will be quickly detected and remedied.

7.20 To ensure Botnia's compliance with the applicable provisions of Uruguayan law (including CARU water-quality regulations, which have been incorporated into Uruguayan law), the AAP, the Wastewater Treatment System Approval, and other permits required by Uruguayan law, DINAMA will scrupulously monitor the operations of the plant. This monitoring will occur in two phases[1226]. The first phase will correspond to the plant's start-up and commencement of operations, and is anticipated to last a minimum of six months and a maximum of one year (the "Start-Up Phase"), depending upon the operational performance of the plant. During the Start-Up Phase, DINAMA will closely

---

[1226] *See generally ibid.*, Annex F, § F1.

monitor the Botnia plant, including conducting an analysis of impacts on water-quality, an evaluation of the operational aspects of the plant, an assessment of the monitoring results obtained by Botnia, and a review of the information provided by the Follow-up Committee (discussed in Part C). DINAMA will also conduct management inspections every two months during this time. The purpose of these management inspections is to evaluate the plant's compliance with its environmental management plans for the entire facility, including its monitoring and contingency plans. DINAMA will also issue monthly reports during the Start-Up Phase detailing the results of its monitoring efforts.

7.21 The second phase, denominated the Continuous Operation Phase, is expected to commence at month seven of the plant's operations and to extend through the life of the plant. During this period, and assuming no adverse impacts by DINAMA monitoring activities are detected during the Start-Up Phase, DINAMA will monitor the operations of the plant on a monthly basis, and will conduct management inspections on a half-yearly basis. The results of DINAMA's monitoring and inspections will be validated every two months[1227].

7.22 With regard to water quality, DINAMA will scrutinise Botnia's compliance with the effluent discharge limitations under Uruguayan law (including CARU regulations on water quality) and its AAP and Wastewater Treatment Plant Approval[1228]. This will entail the inspection and monitoring of Botnia's effluent at the wastewater treatment plant before it is discharged into the Uruguay River, to allow a determination of the exact effluent concentrations. DINAMA will closely

---

[1227] *Ibid.*, Annex F, § F1.

[1228] *Ibid.*, Annex F, Table F2.

monitor Botnia's effluent for the following parameters: pH, biological and chemical oxygen demand, phenols, AOX, acute toxicity, nitrogen, phosphorus, chlorine, colour, mercury, dioxins, and furans. DINAMA will also evaluate the solid waste generated as a result of the Botnia plant's operations, as well as the operation of its landfill, to ensure that adverse impacts are not caused by these activities[1229].

7.23 In addition to monitoring the plant's operational compliance, DINAMA will continue to undertake extensive monitoring of the Uruguay River and its biota to ensure the rapid detection of any potential impacts resulting from the plant's operation. As with the pre-operational monitoring, DINAMA will conduct post-operational monitoring of water quality at the same 15 locations as the pre-operational monitoring[1230]. Results from the six upstream stations will enable DINAMA to confirm the environmental effects in the event of a flow reversal. The other nine locations include the area of the effluent discharge, and extend downstream from there, with two stations in the area of Yaguareté Bay and a station at the drinking water intake for the city of Fray Bentos. The two stations furthest downstream from the Botnia plant will be in the area of Las Cañas (Uruguay), approximately 16.5 kilometres from the plant. DINAMA will make the results of its monitoring publicly available through its website[1231]. This extensive monitoring will allow DINAMA to detect any exceedances of CARU and/or Uruguayan water quality standards rapidly and to undertake corresponding remedial measures as deemed necessary. Through these procedures, the questions regarding dilution

[1229] DINAMA will conduct weekly monitoring of the Botnia plant's compliance with the air emissions limitations. *Ibid.*, Annex F, Table F2.

[1230] *Ibid.*, Annex A, § A2.

[1231] *Ibid.*, Annex A, § A5.

ratios, and low flow and flow reversal conditions will be answered conclusively and will no longer remain a matter of conjecture. If, contrary to the conclusions reached by the IFC's independent experts, impermissible impacts unexpectedly occur, they will be detected and remedied promptly. In essence, DINAMA's comprehensive, rigorous and thoroughly transparent monitoring program constitutes an insurance policy against all of the hypothetical, remote, and imaginative "risks" conjured by Argentina's consultants.

7.24 DINAMA will conduct post-operational monitoring of sediment quality for the same parameters and at the same nine locations as the pre-operational monitoring[1232]. As sediment quality is of particular importance with respect to Yaguareté Bay, monitoring will be conducted at two locations in that area. Sediment quality will be monitored every two months, with each monitoring event lasting three days, and the results will be made available on DINAMA's website[1233]. This monitoring will answer the concerns expressed in the Wheater Report about the need for AOX monitoring[1234], it will conclusively establish whether or not unacceptable impacts to sediment quality are occurring due to the presence of AOX in the effluent discharge, and allow this impact to be remedied if, in fact, it is occurring.

7.25 Monitoring of the benthic community will take place at the same three stations as pre-operational monitoring, one located upstream from the Botnia plant in the area of Isla Abrigo, and two located downstream in the areas of Yaguareté Bay

---

[1232] *Ibid.*, Annex B, § B2.

[1233] *Ibid.*, Annex B, § B5.

[1234] AM, Vol. V, Annex V, § 5. As explained in Part 1(A), EOX and TOX are the technical corollaries for AOX with respect to sediments.

and Las Cañas[1235]. Parameters that will be monitored include density, diversity, and composition of the benthic community, as well as dioxin and furan levels. One annual campaign is planned during each of the first three years of the Botnia plant's operations[1236]. DINAMA will issue annual reports containing the monitoring results that will track any changes in the benthic community[1237]. After the first three years of the plant's operation, the necessity and frequency of additional monitoring will be determined by DINAMA, based on the data obtained during this time.

7.26 Monitoring of potential impacts to fish populations will be conducted for the same parameters and at the same locations as in the pre-operational monitoring[1238]. One annual monitoring campaign is planned during each of the first three years of the plant's operations, and annual reports tracking any changes to the fish community will be issued. DINAMA will then determine the necessity and frequency of additional monitoring based on the data obtained.

7.27 DINAMA's post-operational monitoring of the fish and benthic communities will be more than sufficient to dispel the concerns expressed by Argentina in its Memorial. Indeed, with respect to this issue, the Wheater Report largely confines itself to the following:

> Given the need for precautionary measures, there should be a commitment to monitoring fish, rather than just conceptual designs as a contingency measure. . . and developing capacity to do tests. . . . A well-defined operable programme of testing should be in place before operations begin[1239].

[1235] May 2007 Monitoring Plan, *op. cit.*, Annex C, § C2. UCM, Vol. II, Annex 39.

[1236] *Ibid.*, Annex C, § C1.

[1237] *Ibid.*, Annex C, § C5.

[1238] *Ibid.*, Annex D, § D2.

[1239] AM, Vol. V, Annex V, § 1.

Uruguay agrees and, to those ends, DINAMA has established a rigorous post-operational monitoring program. The particular monitoring program for the benthic and fish communities that DINAMA will undertake once plant operations begin, in conjunction with the substantial baseline data already collected, more than satisfies this recommendation. DINAMA is committed to this monitoring effort even though the high standards set by Environment Canada do not require fish monitoring in this situation[1240].

C. THE FOLLOW-UP COMMITTEE

7.28 As a complement to the environmental monitoring that will be conducted by DINAMA, a Follow-Up Committee has been established pursuant to Article 2(x) of Botnia's AAP[1241]. The purpose of this Follow-Up Committee is to supplement the technical monitoring that DINAMA will undertake by formulating observations and recommendations to ensure that environmental monitoring and management are carried out effectively, and to promote the participation of and effective exchange of information between Botnia, the Government of Uruguay, and various local actors[1242]. The Director of MVOTMA will preside over the Committee and will work in conjunction with the following governmental and nongovernmental entities as Committee members:

[1240] International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, p. 4.47 (September 2006). UCM, Vol. VIII, Annex 173.

[1241] MVOTMA Initial Environmental Authorisation for the Botnia Plant (hereinafter "Botnia AAP"), Art. 2(x) (14 February 2005). UCM, Volume II, Annex 21. *See generally* MVOTMA Resolution No. 113/2007, Creating Follow-Up Committee for the Botnia Pulp Mill (hereinafter "MVOTMA Resolution No. 113/2007) (March 2007) . UCM, Vol. II, Annex 33.

[1242] MVOTMA Resolution No. 113/2007, Creating Follow-Up Committee for the Botnia Pulp Mill, Art. I (Considerations). UCM, Vol. II, Annex 33. *See also* Botnia AAP, *op. cit.*, Art. 2(x). UCM, Vol. II, Annex 21.

- the Ministry of Foreign Relations;
- the Ministry of Industry, Energy, and Mining;
- the Ministry of Public Health;
- the City Councils of the Municipalities of Río Negro and Soriano;
- the Provincial Governments of the Departments of Río Negro and Soriano;
- Botnia[1243]; and
- seven representatives of non-governmental stakeholders, including non-governmental agencies[1244].

7.29 The non-governmental actors currently forming part of the Follow-Up Committee include the Commercial and Industrial Association of Río Negro, the Young Ecological Group, the Interunion Plenary Group, and the Rural Society of Río Negro[1245]. The Committee already has met four times, on 28 March, 13 April, 18 May, and 15 June 2007. It functions as an additional oversight mechanism with respect to DINAMA's monitoring of the Botnia plant, and ensures the effective disclosure and exchange of information between DINAMA, Botnia, the various governmental and non-governmental entities represented on the Committee, and the public at large. The Committee will continue to meet for as long as the Botnia plant operates.

D. Post-Operational Monitoring by Botnia

7.30 Botnia, too, will conduct ongoing monitoring to supplement the work by DINAMA and provide additional assurance that operations of the plant are not causing adverse impacts. The requirement that Botnia undertake comprehensive

[1243] Both Botnia S.A. and Botnia Fray Bentos S.A. are members of the Follow-Up Committee.

[1244] MVOTMA Resolution No. 113/2007, Creating Follow-Up Committee for the Botnia Pulp Mill, *op. cit.*, Art. 2(i). UCM, Vol. II, Annex 33.

[1245] DINAMA Botnia Follow-Up Committee, Inaugural Meeting, Minutes No. 1, Introductory para. (28 March 2007). UCM, Vol. II, Annex 35.

post-operational monitoring -- under the direction and review of DINAMA -- has been an integral aspect of DINAMA's approval process. As with many other aspects of the approval process, the post-operational monitoring that Botnia will be required to conduct has been and continues to be part of a careful and incremental process in which monitoring requirements have been and will continue to be added as further information becomes available. Ultimately, these requirements will be embodied in a monitoring plan to be approved by DINAMA prior to the commencement of operations (the "Botnia Monitoring Plan").

7.31 The Botnia EIA set forth a preliminary, proposed monitoring plan for the post-operational phase of the plant[1246]. With respect to monitoring of the effluent treatment plant, the proposed monitoring plan identified the locations within the wastewater treatment plant to be monitored, the corresponding parameters, and the frequency of the monitoring[1247]. The Botnia EIA proposed that results for parameters of potential concern, including materials such as COD, suspended solids, AOX, and phosphorus be made available to the public[1248].

7.32 Botnia proposed that monitoring of water quality be conducted by independent professional parties[1249]. The Botnia EIA proposed four locations to monitor water quality: the Fray Bentos drinking water intake, the mouth of the Gualeguaychú River, a point one kilometre upstream of the plant, and a point one

---

[1246] Botnia Environmental Impact Assessment Submitted to DINAMA, Chap. 8, pp. 5-7 (31 March 2004). UCM, Vol. X, Annex 220. The Botnia EIA set forth a proposed plan with respect to monitoring of air emissions, air quality, and other potential impacts to the environment. *See ibid.*, pp. 7-12. Potential impacts to air and other environmental media, however, are not within the Court's jurisdiction.

[1247] *Ibid.*, pp. 5-6.

[1248] *Ibid.*, p. 6 (Table 8-2).

[1249] *Ibid.*, p. 1.

kilometre downstream[1250]. The Botnia EIA proposed monitoring various parameters at these sites, including temperature, colour, phosphorus, nitrogen, and other effluent components, as well as monitoring benthic and fish communities at appropriate locations[1251]. It also proposed making the results of this monitoring available to the public.

7.33 For purposes of issuing the AAP, DINAMA found the monitoring plan proposed in the Botnia EIA to be sufficient. In addition to the minimum monitoring requirements proposed by Botnia in the Botnia EIA, the AAP specified that monitoring must at least include the following:

- effluent discharges and the quality of surface and groundwater[1252];
- sediment quality[1253];
- an assessment of one species of sessile benthic fauna indicating the presence of AOX[1254]; and
- the sampling frequency, location, methodology, and analytical technique to be used[1255].

7.34 As the permitting process for the Botnia plant has progressed, DINAMA has continued to specify the effluent monitoring requirements with which Botnia must comply, as set forth in the Botnia plant's Wastewater Treatment System Approval. Pursuant to the Wastewater Treatment System Approval, Botnia must monitor the concentrations of its final effluent for the following parameters on a weekly basis:

[1250] *Ibid.*, p. 7.

[1251] *Ibid.*, p. 8.

[1252] Botnia AAP, *op. cit.*, Art. 2(m). UCM, Vol. II, Annex 21.

[1253] *Ibid*.

[1254] *Ibid.*, Art. 2(l).

[1255] *Ibid*., Art. 2(k).

- Total nitrogen;
- Total phosphorus;
- Chlorate;
- AOX;
- Phenolic substances;
- Chlorophenols; and
- Fecal coliform[1256].

7.35 On a monthly basis, the Wastewater Treatment System Approval requires Botnia to monitor the concentrations of its final effluent with respect to the following parameters:

- Resin/acids;
- Sterols;
- Metals (arsenic, cadmium, copper, chromium, nickel, lead, and zinc);
- Iron;
- Sodium; and
- Acute toxicity[1257].

7.36 Botnia must also monitor certain parameters, including the following, on a daily or on a continuous basis: conductivity, colour, pH, and total suspended solids[1258]. Chemical dissolved oxygen and biological dissolved oxygen will be monitored on a daily basis[1259]. Concentrations of dioxins and furans will be monitored every two months[1260].

7.37 In addition to the monitoring of the final effluent concentrations, Botnia must also submit on a monthly basis the following information to DINAMA: (i) the average monthly production of pulp; (ii) the amount of chlorine dioxide consumed;

[1256] DINAMA Resolution No. 0148/07, Approval of the Wastewater Treatment System for the Botnia Plant, pp. 3-4 (hereinafter "Wastewater Treatment System Approval") (4 July 2007). UCM, Vol. X, Annex 225.

[1257] *Ibid.*, p. 4.

[1258] *Ibid.*, p. 3.

[1259] *Ibid.*

[1260] *Ibid.*, p. 4.

(iii) the amount of chlorate produced; and (iv) the amount of nutrients used in the wastewater treatment process[1261]. Botnia must also submit to DINAMA information with respect to its daily discharge flow and information about any upset or spill at the wastewater treatment plant[1262].

7.38 Within 90 days of commencing operations, Botnia must submit to DINAMA a report detailing the results of this effluent monitoring[1263]. Thereafter, Botnia must submit technical reports every two months, detailing, among other things, its monitoring results[1264]. In addition, six months after the commencement of operations, Botnia must evaluate these initial monitoring steps and submit another report to DINAMA addressing potential modifications to the monitoring plan[1265].

7.39 In addition to these minimum monitoring and reporting requirements, the Wastewater Treatment System Approval requires Botnia to submit reports on the optimisation of water consumption at various intervals, and two years after operations commence, a program for the optimisation of the consumption of water, which must include a program to minimize the consumption of chlorine dioxide to 10 kg/Adt[1266].

7.40 These effluent monitoring requirements are rigorous and comprehensive. Moreover, as noted above, these requirements may be enhanced by DINAMA as necessary pursuant to the AAP (discussed below). Finally, the requirement that

---

[1261] *Ibid.*, p. 3.

[1262] *Ibid.*

[1263] *Ibid.*, p. 4.

[1264] *Ibid.*

[1265] *Ibid.*, p. 3.

[1266] *Ibid.*, pp. 4-5.

Botnia submit reports detailing the results of its monitoring on a frequent basis, in conjunction with the post-operational monitoring that DINAMA itself will conduct, ensures constant and thorough oversight by DINAMA. Through this oversight, DINAMA will ensure that the Botnia plant operates in compliance with the discharge limits of Uruguayan law and those set forth in the various authorisations, and that its operations are not causing unacceptable environmental impacts.

7.41 The final approved Botnia Monitoring Plan will include even more comprehensive information on the monitoring parameters, the frequency of monitoring, what entities will conduct the monitoring, the frequency of monitoring, and the methodology. In addition, the Botnia Monitoring Plan must include quality control procedures to ensure reliability of the data collected, as well as the proper processing and reporting of that data.

7.42 DINAMA's involvement with the monitoring that Botnia must undertake does not end with the Wastewater Treatment System Approval and DINAMA's initial approval of the Botnia Monitoring Plan. As discussed more fully in the following section, continued operations at the Botnia plant are contingent upon receiving an Initial Authorisation to Operate, and its renewal by MVOTMA every three years[1267]. These renewals specifically require review and updating of environmental management plans, including the Monitoring Plan[1268], as deemed necessary by MVOTMA and DINAMA, which are fully empowered to require more rigorous and additional monitoring, if the circumstances warrant.

[1267] Decree No. 349/005, Environmental Impact Assessment Regulation revision (hereinafter "Decree No. 349/005"), Arts. 23, 24 (21 September 2005). UCM, Vol. II, Annex 24.

[1268] *Ibid.*, Art. 24, para. 2.

7.43 The post-operational monitoring conducted by DINAMA and Botnia will be rigorous and will rapidly detect any unexpected, adverse impacts from the Botnia plant's operations. Nevertheless, Uruguay believes that monitoring through CARU is preferable, and again invites Argentina to allow CARU to resume monitoring pursuant to PROCON and PROCEL.

Section II.
Uruguay Has Broad Authority to Require Remedial Measures if Prohibited Impacts Occur

7.44 In the unlikely event that prohibited environmental impacts occur, the monitoring programs described above will detect those impacts and, in the still more unlikely event that Botnia does not address such impacts proactively, DINAMA and MVOTMA have broad authority to require Botnia to undertake the corrective measures necessary to prevent and halt such impacts, including, if necessary, the cessation of the Botnia plant's operations.

7.45 Uruguayan law prohibits actions or activities that cause unacceptable environmental impacts, and all persons, whether legal or natural, have an obligation to avoid such actions and activities[1269]. Uruguayan law charges MVOTMA with an affirmative duty to deny authorisation for any activities that will cause prohibited impacts to the environment[1270]. As the rigorous environmental review of the Botnia plant demonstrates, MVOTMA and DINAMA carefully assessed the potential environmental impacts of the plant prior to granting the AAP and conditioned all further authorisations on strict monitoring requirements, thus ensuring that they had

---

[1269] Law No. 17,283, General Law for the Protection of the Environment (hereinafter "Law 17,283), Art. 3 (28 November 2000). UCM, Vol. II, Annex 11.

[1270] Decree No. 349/005, *op. cit.*, Art. 17, para. 6. UCM, Vol. II, Annex 24.

and would continue to fulfil their duties under the law to prevent prohibited environmental impacts.

7.46 Decree 253/79 establishes water quality and effluent limitations with which all industrial sources must comply. DINAMA has consistently interpreted Decree 253/79 as prohibiting any discharge that causes exceedances of the Uruguayan and CARU water quality standards[1271]. In furtherance of those objectives, Decree 253/79 provides that "[i]n all cases, if the authorized facilities are insufficient to achieve the objectives of this law, new facilities or complementary processes may be demanded"[1272]. This makes clear that if the Botnia plant causes exceedances of the applicable water quality standards, DINAMA is fully authorised to require additional protective measures[1273]. As reinforcement of that broad authority, Decree 253/79 further provides that the approval of treatment plants and the granting of discharge authorisations do "not release the owner of the industrial facility from having to carry out any and all works that may be necessary in the event that the plant, as constructed, is insufficient to satisfy its commitments"[1274]. To emphasise, DINAMA and MVOTMA expect no such problems to arise; however, Uruguay assures the Court that there is sufficient authority in its domestic laws to address and remedy them if they do.

7.47 Express authority to order the suspension of the Botnia plant's operations is provided in Law 17,283. It states that, with respect to any prohibited

---

[1271] *See* Decree No. 253/79, Regulation of Water Quality (hereinafter "Decree No. 253/79"), Arts. 8, 9 (9 May 1979, as amended). UCM, Vol. II, Annex 6.

[1272] *Ibid.*, Art. 17.

[1273] Sworn Declaration of Alicia Torres, Director of Department of the Environment (hereinafter "Torres Aff."), para. VII(c) (June 2006). UCM, Vol. II, Annex 30.

[1274] Decree No. 253/79, *op. cit.*, Art. 28. UCM, Vol. II, Annex 6.

environmental impacts, or the violation of any environmental regulations, MVOTMA may "[o]rder the preventive suspension of any allegedly hazardous activity, while the corresponding investigations to corroborate said hazard or the studies or tasks for analyzing or preventing contamination of or damage to the environment are being carried out"[1275].

7.48 MVOTMA has exercised its authority pursuant to Law 17,283 in the past. For example, MVOTMA ordered the suspension of operations of a chemical plant, which produced chromium and vitamin K, when its operations resulted in unacceptable impacts to the environment[1276]. If the post-operations monitoring reveals prohibited environmental impacts, MVOTMA commits to using its authority to remedy that impact, including, if necessary, to exercise its authority under Law 17,283 to order suspension of the plant's operations.

7.49 Decree 349/005 provides for additional oversight and authority to require protective measures. Pursuant to this decree, Botnia is required to obtain an "Authorisation to Operate" from MVOTMA prior to commencing operations[1277]. This authorisation has not yet been granted. It can only be granted upon Botnia's demonstration of compliance with the provisions of the AAP and the representations in its EIA[1278].

7.50 Decree 349/005 also requires Botnia to obtain a renewal of its Authorisation to Operate from MVOTMA every three years[1279]. This renewal

---

[1275] Law No. 17,283, *op. cit.*, Art.14(D). UCM, Vol. II, Annex 11.

[1276] Torres Aff., *op. cit.*, para. II(c)(5). UCM, Vol. II, Annex 30.

[1277] Decree No. 349/005, *op. cit.*, Art. 23. UCM, Vol. II, Annex 24.

[1278] *Ibid.*, Art. 24, para. 1.

[1279] *Ibid.*, Art. 23.

process ensures continuous monitoring of environmental impacts, assessment of whether additional protective measures are needed, and an opportunity for MVOTMA to order the plant to implement those measures:

> Renewals shall include review and updating of the environmental management plans and the other approvals regarding emissions and waste management within the jurisdiction of [MVOTMA], as well as any environmental analysis of the operative or functioning changes, reforms or extensions not requiring an Initial Environmental Authorization[1280].

Thus, the ongoing renewal process imposes an affirmative and continuous obligation on both Botnia and MVOTMA to assess the plant's compliance with applicable environmental laws at successive stages, and to assess the adequacy of the applicable environmental management plans as a condition to continued operations. It also provides MVOTMA with authority to require additional protective measures, if necessary, as a condition for renewal of the plant's Authorisation to Operate.

7.51 In sum, if operations of the Botnia plant cause prohibited environmental impacts, or should DINAMA determine that modifications are necessary to prevent such impacts, MVOTMA and DINAMA have a wide-range of powers to halt and correct any such impacts. Although the impacts are highly unlikely to occur, given the state-of-the-art technology to be employed and the exhaustive analyses to which the Botnia plant has been subjected, Uruguay reaffirms its commitment made to this Court in June 2006 to use its powers to the fullest extent necessary to ensure the plant's compliance with all applicable legal requirements[1281].

[1280] *Ibid.*, Art. 24, para. 2.

[1281] Torres Aff., *op. cit.*, para. VII(C) (June 2006). UCM, Vol. II, Annex 30.

7.52 Nowhere in its lengthy Memorial does Argentina question the authority conferred on MVOTMA or DINAMA by Uruguayan law, the commitment of MVOTMA and DINAMA to exercise their authority to the fullest extent possible to prevent or remedy any adverse environmental impacts resulting from the Botnia plant's operation, or the good faith of MVOTMA, DINAMA or the Government of Uruguay as a whole. Uruguay respectfully submits that, likewise, there is no reason for the Court to question Uruguay's authority, commitment, or good faith in assuring the environmentally sound operation of the plant, and the avoidance of any harm to the Uruguay River or aquatic environment.

Section III.
The Question of Remedies for Alleged Violation of the 1975 Statute

7.53 Uruguay is confident that it has breached no obligation under the 1975 Statute. It scrupulously complied with all applicable national and international commitments, laws, and regulations, and it will continue to do so. However, even if, purely for the sake of argument, Argentina were correct in alleging that Uruguay has violated the provisions of the 1975 Statute (a proposition that Uruguay steadfastly denies), there are available remedies that are far more reasonable -- and more consistent with the Statute's objective of promoting the sustainable use of the Uruguay River -- than Argentina's disproportionate request that the Court order the demolition of the Botnia plant.

7.54 Argentina maintains that permanent closure of the plant is required to remedy the breach of any obligation under the 1975 Statute, procedural or substantive."Seul le démantèlement de l'usine et de ses installations connexes" or transfering them permanently to other uses, is "de nature à rétablir le *status quo*

ante"[1282]. Such a draconian measure is without precedent, and Argentina has cited none to support this absolutist position that, given the circumstances of the present case, goes well beyond anything that a State is entitled to request under international law.

7.55 Article 35 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts disclaims a State's responsibility for making restitution that would "impose a burden out of all proportion to the benefit deriving from restitution instead of compensation"[1283]. As the International Law Commission explained in its Commentary, restitution is inappropriate "where the benefit to be gained from restitution is wholly disproportionate to its cost to the responsible State." This is determined "based on considerations of equity and reasonableness"[1284].

7.56 Ordering the demolition of the Botnia plant would be grossly disproportionate and antithetical to any sound notion of equity and reasonableness. It would impose grave costs on Uruguay and its people without giving Argentina any meaningful benefit. The facility, which will create over 8,000 jobs and contribute more than US$270 million annually to Uruguay's economy, has been built at a cost of approximately US$1 billion; it is the largest foreign investment in Uruguay's history. It represents an integral part of the Uruguayan national strategy for achieving sustainable development by allowing Uruguay to capture the economic benefits of value-added processing of its forest resources. All these benefits to

[1282] AM, para. 8.24 (emphasis in original). ("Only the dismantling of the plant and its related facilities" . . . "sufficient to restore the status quo ante.")

[1283] Draft Articles on Responsibility of States for Internationally Wrongful Acts with commentary, Art. 35 (2001).

[1284] *Ibid.*, Art. 35, comment 11.

Uruguay and its citizens will be irretrievably lost if the plant is ordered to be destroyed. Moreover, Argentina would not receive any meaningful benefit from the destruction of the Botnia plant because it poses no objective risk of significant harm to the river or its aquatic environment. As demonstrated by objective scientific evidence and the conclusions of impartial experts, operation of the plant will not adversely affect water quality or aquatic life, and any hypothetical impacts will be detected rapidly by Uruguay's comprehensive monitoring program and cured by its vigourous law enforcement efforts. As the Court determined in the *Case Concerning the Gabčikovo-Nagymaros Project*, when confronted with already-constructed industrial works that were found to be in violation of treaty obligations, "[i]t would be an administration of the law altogether out of touch with reality if the Court were to order … the works at Čunovo to be demolished when the objectives of the Treaty can be adequately served by the existing structure"[1285]. Thus, rather than order the works destroyed, as Argentina seeks in the present case, the Court in *Gabčikovo* refused to do so, and instead ordered the parties to resume cooperation[1286]. Uruguay respectfully submits that demolition of the Botnia plant in the circumstances presented here -- including the unimpeachable evidence that the plant will not harm the river or its aquatic environment -- would likewise be "altogether out of touch with reality."

7.57 As Uruguay has demonstrated, it has committed to a strict program of monitoring that will be fully capable of assessing any unanticipated adverse environmental impacts from the Botnia plant. Uruguay will thus be able to detect

---

[1285] *See Case Concerning the Gabčikovo-Nagymaros Project (Judgment)*, *I.C.J. Reports 1997*, p. 77, para. 136.

[1286] *Ibid*., p. 80, para. 150.

any changes in the river environment rapidly. If Argentina believes that some aspect of the monitoring is inadequate for these purposes, Uruguay again invites Argentina to resume its cooperation in a joint monitoring program. With or without Argentina's cooperation, should any detrimental changes be detected, Uruguay will be in a position to exercise its authority under the relevant Botnia permits and Uruguayan environmental laws to require that Botnia take corrective action, and, if necessary, even to order that operation of the plant cease until such corrections are implemented. If any damage is caused to Argentina in violation of the 1975 Statute in the brief period before such corrective measures are completed, Uruguay can pay an appropriate level of compensation for that damage, as contemplated by Article 43. Moreover, if problems develop and Uruguay fails to take action -- though there is no reason whatsoever to think this might occur -- the Court could then order the installation of a technically appropriate modification to the plant. Or, as in the *Gabčikovo-Nagymaros Dam Case*, it can order the Parties to meet and agree on preventive or corrective measures.

7.58 Indeed, by developing an extensive restructuring program for its own pulp mills[1287], Argentina has implicitly conceded that corrective measures are the appropriate response should adverse impacts occur from plant operations. Many of Argentina's pulp mills are far from state-of-the-art, and have seriously harmed the water quality of Argentina's rivers. Yet, Argentina's response has not been to shut down these antiquated plants, but simply to require that they make the technical and mechanical improvements necessary to comply with the requirements of IPPC BAT

[1287] *See generally* Secretariat of the Environment and Sustainable Development, Restructuring Plan for the Cellulose and Paper Industry: Technical Evaluation Manual (January 2007). UCM, Vol. II, Annex 49.

-- the very same requirements with which the Botnia plant must comply (and with which the IFC's independent experts concluded it does comply)[1288]. If the Botnia plant were somehow found to cause harm, the same opportunity should be provided; that is, to make the necessary technical and mechanical improvements to remedy the problem and avoid further adverse impacts.

7.59 Argentina argues that even if it has not proven a substantive violation of the 1975 Statute -- in the form of actual or likely harm to water quality or the aquatic environment -- the Court should order the decommissioning of the Botnia plant in response to Uruguay's alleged violations of the procedural obligations imposed by the Statute in Articles 7-12. Argentina's argument is unsupportable and should be rejected by the Court. First, as demonstrated in Chapters 2 and 3, *supra*, Uruguay has fully complied with its obligations under Articles 7-12, and Argentina has failed to demonstrate any material breaches of these obligations by Uruguay. Second, both the 1975 Statute itself and international law in general are clear that procedural requirements such as those set forth in Articles 7-12 are intended to safeguard against substantive harm to the environment; they are not an end in themselves. In the words of the International Law Commission, "[t]he purpose of consultations is for the parties to find acceptable solutions regarding measures to be adopted in order to prevent significant transboundary harm, or at any event to minimize the risk

[1288] Any argument that the Botnia plant requires additional protective measures to be taken because the Uruguay River is a fragile or sensitive environment is baseless, as demonstrated in Chapters 5 and 6. Nor can Argentina argue that the Botnia plant requires additional protective measures due to its large production capacity, as it is not the production capacity that determines the need for protective measures but rather the environmental performance of the plant, namely the quality of the effluent discharge and the dilutive capacity of a given water body, among other factors. As detailed in Chapter 5, it is undisputed that the Botnia plant will be among the best in the world in this respect.

thereof"[1289] . As noted in Chapter 2, Argentina expressly acknowledges in its Memorial that "[d]es obligations de contenu plus procédural comme la notification et la consultation permettent la mise en oeuvre d'obligations à contenu substantiel comme le principe de l'utilisation équitable et raisonnable et le principe de ne pas causer un préjudice sensible"[1290]. The remedy for breach of an alleged procedural obligation must therefore be crafted with regard to the underlying substantive right the procedure is intended to safeguard.

7.60 Accordingly, in the circumstances presented here -- where the evidence overwhelmingly establishes that there have been no violations of the 1975 Statute's substantive provisions -- it would be wildly disproportionate and manifestly inequitable to order, as Argentina requests, the plant's closure based on alleged violations of the Statute's procedural requirements (with which, in any event, Uruguay has previously demonstrated its complete compliance).

7.61 No international tribunal has ever made such an order, nor do the ILC Articles on Prevention of Transboundary Harm or the UN Watercourses Convention envisage such an outcome. In cases where one State has failed to notify or consult another -- which is not the case here -- the only remedy identified by the ILC[1291], case law[1292], or State practice[1293], is for the non-notified State to request the

---

[1289] 2001 Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities with commentaries (hereinafter "2001 Draft Articles"), p. 411, comment 5.

[1290] AM, para. 3.31. ("obligations of a more procedural nature like notification and consultation are used to implement obligations of a substantive nature like the principle of fair and reasonable use and the principle of not causing any significant damage.")

[1291] 2001 Draft Articles, *op. cit.*, Art. 11. Convention on the Law of the Non-navigational Uses of International Watercourses (hereinafter "1997 Watercourse Convention"), Art. 18 (1997).

[1292] *Lake Lanoux Arbitration (France v. Spain)*, *International Law Reports*, vol. 24, p. 138 (16 November 1957) ("if a neighbouring State has not taken the initiative, the other State cannot be

necessary information and initiate consultations. Where it is alleged that an environmental impact assessment has not been conducted, the only remedy so far afforded by any international tribunal is to order appropriate studies to be carried out[1294]. Where the measures taken to protect neighbouring States from environmental damage are inadequate, international tribunals have ordered additional measures to be taken[1295]. In most such disputes, the parties are ordered to co-operate; they are never ordered to return to the *status quo ante*, if by that is meant the cessation or removal of the activity in dispute[1296].

7.62 The circumstances of the present case do not remotely justify departing from these precedents. Any alleged procedural deficiencies, if proven, can be rectified such that no damage to Argentina can follow from any failure to comply at an earlier stage with the procedures required by the 1975 Statute. In comparable circumstances in the *Gabcikovo-Nagymaros Dam Case*, the Court concluded that "[i]n this case, the consequences of the wrongful acts of both Parties will be wiped

---

denied the right to insist on notification of works or concessions which are the object of a scheme").

[1293] *See e.g. Sudanese-Egyptian dispute regarding the Aswan High Dam* and *US-Mexico dispute regarding salinity of the Colorado River*, cited in *Report of the ILC*, pp. 131-133 (1988); *see also* Kirgis, F.: Prior Consultation in International Law: A Study in State Practice, Charlottesville, University Press of Virginia, 1983, pp. 43, 66.

[1294] *Trail Smelter Arbitration*, *33 AJIL 182*, Part Four, p. 209 (1939); *Gabčikovo-Nagymaros Project (Judgment), op. cit.*, p. 78, para. 140; *Case Concerning Land Reclamation by Singapore in and Around the Straits of Johor (Malaysia v. Singapore) (Provisional Measures)* (hereinafter "*Land Reclamation (Provisional Measures)*"), *ITLOS No. 12*, para. 106 (2003).

[1295] *Trail Smelter Arbitration*, *35 AJIL 684*, Sec. 3, p. 726 (1941); *Gabčikovo-Nagymaros Project (Judgment), op. cit.*, p. 82, para. 155(2); *Case Concerning Land Reclamation by Singapore in and Around the Straits of Johor (Malaysia v. Singapore) (Arbitral Award)* (hereinafter "*Land Reclamation (Arbitral Award)*"), operative para. 2, Annex (2005).

[1296] *Gabčikovo-Nagymaros Project (Judgment), op. cit.*, p. 80, para. 150; *The MOX Plant Case (Ireland v. United Kingdom) (Provisional Measures), ITLOS No. 10*, para. 82 (2001); *Land Reclamation (Provisional Measures)*, *op. cit.*, para. 92; *Land Reclamation Case (Arbitral Award)*, *op. cit.*, operative para. 2 and Annex.

out 'as far as possible' if they resume their co-operation in the utilization of the shared water resources of the Danube"[1297] and it ordered them to do so. The same outcome in the present case would afford Argentina entirely adequate reparation for any violation of the 1975 Statute -- if it were proven that Uruguay violated the procedural obligations of the Statute, which Uruguay insists is not the case.

7.63 Finally, to make the order requested by Argentina would impose severe and unwarranted limitations on Uruguay's sovereign right to pursue sustainable economic development while ensuring that activities within its jurisdiction do not cause damage to the environment of other States, in accordance with customary international law as set out in Principle 2 of the 1992 Río Declaration on Environment and Development, and the case law of the Court[1298]. The economic consequences for Uruguay of a closure of the Botnia plant would be enormous and greatly outweigh any conceivable benefit to Argentina. No considerations of equity have been identified by Argentina which might even begin to justify such a disproportionate outcome. In these circumstances, ordering the removal of the Botnia plant would go far beyond any concept of reparation and amount to a punitive and unjust imposition on Uruguay. Accordingly, there is no basis upon which to order the closure or demolition of the Botnia plant. Nor, as Uruguay has demonstrated in this Counter-Memorial, is there a legal or factual basis on which to grant Argentina any of the other relief it has requested in these proceedings. Based on the applicable law, and based on the evidence, all of Argentina's claims -- both

---

[1297] *Gabčikovo -Nagymaros Project (Judgment), op. cit.*, p. 80, para. 150.

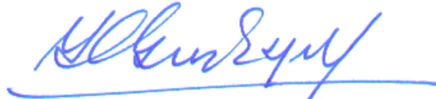
[1298] *Advisory Opinion on the Legality or Threat of Use of Nuclear Weapons, I.C.J. Reports 1996*, p. 242, para. 29.

procedural and substantive -- are entirely without merit. Uruguay respectfully submits that they be rejected by the Court in their entirety.

SUBMISSIONS

On the basis of the facts and arguments set out above, and reserving its right to supplement or amend these Submissions, Uruguay requests that the Court adjudge and declare that the claims of Argentina are rejected.

20 July 2007,

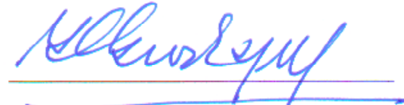


Ambassador Hector Gros Espiell

Agent of Uruguay

Certification

I certify that the annexes are true copies of the documents referred to
and that the translations provided are accurate.



Ambassador Hector Gros Espiell

Agent of Uruguay

LIST OF DOCUMENTS IN SUPPORT[*]

VOLUME II

Annex

TREATIES AND JOINT DECLARATIONS

Treaty Concerning the Boundary Constituted by the River Uruguay (7 April 1961) 1

Uruguayan-Argentine Joint Declaration on Water Resources (9 July 1971) 2

Treaty Concerning the Río de la Plata and the Corresponding Maritime Boundary (19 November 1973) 3

Statute of the River Uruguay (26 February 1975) 4

GOVERNMENT DOCUMENTS (URUGUAY)

Constitution of Uruguay, Art. 47 (1967). 5

Decree No. 253/79, Regulation of Water Quality (9 May 1979, as amended)........... 6

Law No. 15,939, Forestry Law (28 December 1987). 7

Decree 452/988, Ministry of Livestock, Agriculture, and Fish, Regarding Forest Designation (6 July 1988).. 8

Decree No. 435/994, Environmental Impact Assessment Regulation (21 September 1994).. 9

Ministry of Housing, Land Use Planning and the Environment (hereinafter "MVOTMA") Initial Environmental Authorisation for Transpapel (11 August 1995) 10

Law No. 17,283, General Law for the Protection of the Environment (28 November 2000).. 11

[*] Pursuant to Article 50 of the Rules of Court, whenever Uruguay has included only excerpts of the relevant documents in its annexes, full copies of that document will be provided to the Registry of the Court.

Department of the Environment (hereinafter "DINAMA") Environmental Impact Assessment Report for the ENCE Plant (2 October 2003) 12

MVOTMA Initial Environmental Authorisation for the ENCE Plant (9 October 2003)..13

Presidency of the Republic of Uruguay Web Site, "Agreements on Mercosur, Environment and Human Rights" (9 October 2003), *available at* http://www.presidencia.gub.uy/noticias/archivo/2003/octubre/2003100902.htm (last visited on 29 June 2007). 14

Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro (28 October 2003)...15

Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro (4 November 2003)...16

Presidency of the Republic of Uruguay Web Site, "M'Bopicuá: Working Methodology Established" (3 March 2004), *available at* http://www.presidencia.gub.uy/noticias/archivo/2004/marzo/2004030301.htm (last visited on 4 July 2007)...17

Memorandum from Minister Counsellor Daniel Castillos to Ambassador Dr. Alberto Volonté Berro (1 April 2004)...18

Ministry of Livestock, Agriculture, and Fish, General Forestry Division, Code of Good Forestry Practices (September 2004) (excerpt) 19

DINAMA Environmental Impact Assessment Report for the Botnia Plant (11 February 2005) 20

MVOTMA Initial Environmental Authorisation for the Botnia Plant (14 February 2005) 21

DINAMA Environmental Management Plan Approval for the Botnia Plant (for the removal of vegetation and earth movement) (12 April 2005)......................22

DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the concrete foundation and the emissions stack) (22 August 2005)...23

Decree No. 349/005, Environmental Impact Assessment Regulation revision (21 September 2005) 24

DINAMA Environmental Management Plan Approval for the ENCE Plant (for the removal of vegetation and earth movement) (28 November 2005).............25

DINAMA Environmental Management Plan Approval for the Botnia Plant (supplement to prior environmental management plans) (18 January 2006) 26

DINAMA Environmental Management Plan Approval for the ENCE Plant (amendment to prior approval) (22 March 2006) 27

DINAMA Environmental Management Plan Approval for the Botnia Plant (for the construction of the wastewater treatment plant) (10 May 2006).................28

Preliminary Considerations Submitted by DINAMA on the 27 March 2006 Hatfield Report (April 2006) 29

Sworn Declaration of Alicia Torres, Director of Department of the Environment (June 2006) 30

DINAMA Monitoring Plan for Cellulose Plants in Fray Bentos, Preliminary Draft (August 2006) 31

DINAMA Press Release, "New Environmental Monitoring of the Uruguay River" (17 August 2006) 32

MVOTMA Resolution No. 113/2007, Creating Follow-Up Committee for the Botnia Pulp Mill (March 2007) 33

MVOTMA Resolution No. 169/2007, Establishing Composition of the Follow-Up Committee for the Botnia Pulp Mill (22 March 2007) 34

DINAMA Botnia Follow Up Committee, Inaugural Meeting, Minutes No. 1 (28 March 2007)..35

DINAMA Environmental Management Plan Approval for the Botnia Plant (9 April 2007) (authorising industrial non-hazardous waste landfill) 36

DINAMA Environmental Management Plan Approval for the Botnia Plant (9 April 2007) (approving plan for the construction of solid industrial waste landfills) 37

DINAMA Botnia Follow-Up Committee, Minutes No. 2 (13 April 2007)...............38

DINAMA Monitoring Plan for Cellulose Plants in Fray Bentos (May 2007) 39

VOLUME III

GOVERNMENT DOCUMENTS (ARGENTINA)

Note to the Executive Branch Accompanying Bill 21.413 (7 September 1976).......40

Law No. 6260 on Prevention and Control of Contamination on the Part of Industries, Government of Entre Ríos (9 November 1978) 41

Regulatory Decree No. 5837, Government of Entre Ríos (26 December 1991).......42

Regulatory Decree No. 5394, Government of Entre Ríos (7 April 1997)................43

Argentine National Directorate for Public Investment and Project Finance, Report on Gualeguaychú River Basin Cleanup (August 1997) 44

National Water Institute, Sub-Ministry of Water Resources, Ministry of Public Works and Services, Republic of Argentina, Analysis of the Hydrological Regimes of the Paraná and Uruguay Rivers (July 2002) (excerpts) 45

Statement by Argentine Ministry of Foreign Affairs, International Trade and Culture, *included in* Report of the Head of the Argentine Cabinet of Ministers, Alberto Angel Fernandez, to the Argentine Chamber of Deputies, Report No. 64 (March 2005) (excerpts). 46

Statement by Argentine Ministry of Foreign Affairs, International Trade and Culture, *included in* Report of the Head of the Cabinet of Ministers, Alberto Angel Fernandez, to the Argentine Senate, Report No. 65 (March 2005) (excerpts)...47

Annual Report on the State of the Nation for 2004, Ministry of Foreign Affairs, International Trade and Culture (1 March 2005) (excerpts) 48

Secretariat of the Environment and Sustainable Development, Restructuring Plan for the Cellulose and Paper Industry: Technical Evaluation Manual (January 2007)...49

Secretariat of the Environment, "Technical Experts from the Secretariat of the Environment Will Inspect Two Paper Mills in Jujuy," Press Release (12 April 2007) 50

Agreement of the Argentine Secretariat of the Environment on Reconversion of the Pulp Mill Alto Paraná (8 May 2007) 51

Secretariat of the Environment, "A Strong Action by the National Secretariat of the Environment: The Benfide Cellulose Company was Fined for Violations in Waste Treatment," Press Release (8 May 2007) 52

Secretariat of the Environment, "The Secretariat of the Environment and the Alto Paraná Company Sign an Agreement in the Framework of the Industrial Restructuring Plan," Press Release (8 May 2007) 53

DIPLOMATIC NOTES (URUGUAY)

Diplomatic Note DGAP3 603/2003, sent from Minister of Foreign Affairs of Uruguay to the Embassy of Argentina in Uruguay (3 October 2003)......................54

Diplomatic Note 05/2003, sent from Ministry of Foreign Affairs of Uruguay to the Embassy of Argentina in Uruguay (27 October 2003).......................................55

Diplomatic Note DGAP/711/2003, sent from Ministry of Foreign Affairs of Uruguay to the Embassy of Argentina in Uruguay (7 November 2003)..................56

Diplomatic Note 066/07 sent from the Embassy of Uruguay in Buenos Aires to the Ministry of Foreign Affairs, International Trade and Culture of Argentina (2 March 2007)...56A

DIPLOMATIC NOTES (ARGENTINA)

Diplomatic Note No. 149/2005, sent from Argentine Ministry of Foreign Affairs, International Trade and Culture to Ambassador of Uruguay in Argentina, D. Francisco Bustillo (14 December 2005)..57

Diplomatic Note No. 154/05, sent from Argentine Ministry of Foreign Affairs, International Trade and Culture to Ambassador of Uruguay in Argentina, D. Francisco Bustillo (26 December 2005) 58

Diplomatic Note sent from Argentine Ministry of Foreign Affairs, International Trade and Culture to Uruguayan Ambassador in Argentina, D. Francisco Bustillo (12 January 2006) 59

VOLUME IV

CARU DIGEST

Digest of the Administrative Commission of the Uruguay River (CARU), Subject E3 (1984, as amended) 60

Digest of the Administrative Commission of the Uruguay River (CARU), Subject E4 (1984, as amended). 61

Digest of the Administrative Commission of the Uruguay River (CARU), Subject E3 (June 2006 proposed revisions) 62

CARU MINUTES AND SUBCOMMITTEE REPORTS

CARU Special Minutes No. 1 (29 November 1979) (excerpts)...............................63

Subcommittee on Navigation and Works Report No. 21 (10 March 1981), *approved in* CARU Minutes No. 2/81 (11 March 1981) 64

CARU Minutes No. 2/81 (11 March 1981) (excerpts) 65

CARU Minutes No. 5/81 (21 August 1981) (excerpts) 66

CARU Minutes No. 8/81 (13 November 1981) (excerpts) 67

CARU Minutes No. 9/81 (18 December 1981) (excerpts).......................................68

CARU Minutes No. 6/83 (29 July 1983) (excerpts) 69

CARU Minutes No. 7/85 (13 December 1985) (excerpts).......................................70

Annex A to Subcommittee on Pollution and Research Report No. 57 (9 April 1987), *approved in* CARU Minutes No. 3/87 (10 April 1987) (excerpts) 71

CARU Technical-Legal Symposium (17-18 September 1987) (excerpts)................72

CARU Minutes No. 6/88 (22 July 1988) (excerpts) 73

CARU Minutes No. 2/89 (17 March 1989) (excerpts) 74

CARU Minutes No. 8/90 (13 July 1990) (excerpts) 75

Subcommittee on Pollution Report No. 108 (22 November 1991), *approved in* CARU Minutes No. 10/91 (22 November 1991)...76

CARU Minutes No. 5/95 (23 June 1995) (excerpts)..77

CARU Minutes No. 6/95 (21 July 1995) (excerpts) 78

Subcommittee on Water Quality and Prevention of Pollution Report No. 148 (20 July 1995), *approved in* CARU Minutes No. 6/95 (21 July 1995).....................79

CARU Minutes No. 2/96 (15 March 1996) (excerpts) 80

Subcommittee on Navigation, Works and Erosion, Report No. 185 (18 April 1996), *approved in* CARU Minutes No. 3/96 (19 April 1996) (excerpts) 81

CARU Minutes No. 7/96 (23 August 1996) (excerpts) 82

CARU Minutes No. 8/96 (27 September 1996) (excerpts)......................................83

Annex B to Subcommittee on Water Quality and Prevention of Pollution Report No. 167 (18 April 1997), *approved in* CARU Minutes No. 4/97 (18 April 1997) 84

Subcommittee on Legal and Institutional Affairs Report No. 115 (20 June 1997), *approved in* CARU Minutes No. 6/97 (20 June 1997). 85

CARU Minutes No. 9/97 (12 September 1997) (excerpts). 86

CARU Minutes No. 4/98 (17 April 1998) (excerpts) 87

Report on Meeting with Concordia Development Association, Annex E to Subcommittee on Water Quality and Prevention of Pollution Report No. 192 (21 July 1999), *approved in* CARU Minutes No. 11/99 (23 July 1999) 88

"Proposed Activities to be Carried Out in the Year 2000," Annex to Subcommittee on Water Quality and Prevention of Environmental Pollution Report No. 196 (10 November 1999), *approved in* CARU Minutes No. 18/99 (12 November 1999) 89

Letter SET -8952-AR sent from CARU President, Dr. Rodolfo Zanoniani, to Fana Química (10 February 2000) 90

CARU Minutes No. 03/01 (16 March 2001) (excerpts) 91

CARU Minutes No. 14/01 (14 December 2001) (excerpts) 92

Subcommittee on Legal and Institutional Affairs Report No. 165 (11 December 2001), *approved in* CARU Minutes No. 14/01 (14 December 2001). 93

CARU Minutes No. 08/03 (15 August 2003) (excerpts) 94

Subcommittee on Water Quality and Prevention of Pollution Report No. 239 [*sic*] (12 August 2003), *approved in* CARU Minutes No. 08/03 (15 August 2003) (excerpts) 95

Subcommittee on Water Quality and Prevention of Pollution Report No. 239 (9 September 2003), *approved in* CARU Minutes No. 09/03 (12 September 2003) 96

CARU Minutes No. 11/03 (17 October 2003) (excerpts) 97

Draft Plan for Monitoring the Environmental Quality of the Uruguay River in the Areas of the Pulp Mills (2004). 98

CARU Minutes No. 01/04 (15 May 2004) (excerpts) 99

CARU Inter-Plenary Session, Report No. 09/2004 (15-16 April 2004), *approved in* CARU Minutes No. 02/04 (21 May 2004) 100

CARU Inter-Plenary Session, Report No. 10/2004 (29-30 April 2004), *approved in* CARU Minutes No. 02/04 (21 May 2004). 101

Subcommittee on Water Quality and Prevention of Pollution Report No. 243 (13 July 2004), *approved in* CARU Minutes No. 04/04 (16 July 2004). 102

CARU Minutes No. 05/04 (13 August 2004) (excerpts) 103

Draft Plan for Monitoring the Environmental Quality of the Uruguay River in the Areas of the Pulp Mills, Annex A to Subcommittee on Water Quality and Prevention of Pollution Report No. 244 (11 August 2004), *approved in* CARU Minutes No. 05/04 (13 August 2004) (excerpts) 104

CARU Inter-Plenary Session, Report No. 16/2004 (30 July 2004), *approved in* CARU Minutes No. 05/04 (13 August 2004) 105

Diplomatic Note 168/05 sent from the President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (15 August 2005) 105A

Letter sent from Vice President of Celulosas M'Bopicuá, Rosario Pou Ferrari, to CARU Uruguayan Delegation President, Architect Walter Belvisi (24 August 2004)..106

Draft Plan for Monitoring the Environmental Quality of the Uruguay River in the Areas of the Pulp Mills, Annex A to Subcommittee on Water Quality and Prevention of Pollution Report No. 246 (12 October 2004), *approved in* CARU Minutes No. 07/04 (15 October 2004) (excerpts) 107

CARU Minutes No. 08/04 (12 November 2004) (excerpts) 108

Subcommittee on Water Quality and Prevention of Pollution Report No. 247 (8-12 November 2004), *approved in* CARU Minutes No. 08/04 (12 November 2004) 109

CARU Inter-Plenary Session, Report No. 26/2004 (25-26 October 2004), *approved in* CARU Minutes No. 08/04 (12 November 2004)...............................110

CARU Minutes No. 09/04 (10 December 2004) (excerpts)...................................111

Subcommittee on the Environment and Sustainable Water Use Report No. 03 (7-11 February 2005), *approved in* CARU Minutes No. 02/05 (11 February 2005) 112

Diplomatic Note OCARU No. 032/2005 sent from the President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (13 October 2005)....113

CARU Minutes No. 09/05 (14 October 2005) (excerpts)....114

Diplomatic Note OCARU No. 129/2005 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (10 November 2005)....115

CARU Minutes No. 02/06 (17 February 2006) (excerpts)....116

Diplomatic Note CARU-ROU No. 014/06 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (25 May 2006)....117

Diplomatic Note DACARU No. 147/2006 sent from President of the CARU Argentine Delegation to the President of the CARU Uruguayan Delegation (23 June 2006)....118

Diplomatic Note DACARU No. 152/2006 sent from President of the CARU Argentine Delegation to the President of the CARU Uruguayan Delegation (24 August 2006)....119

Diplomatic Note CARU-ROU No. 024/06 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (18 September 2006)....120

Diplomatic Note CARU-ROU No. 033/06 sent from President of the CARU Uruguayan Delegation to the President of the CARU Argentine Delegation (13 October 2006)....121

Diplomatic Note DACARU No. 019/06 sent from President of the CARU Argentine Delegation to the President of the CARU Uruguayan Delegation (20 October 2006)....122

Subcommittee on Environment and Sustainable Water Use Report No. 16 (17 to 20 October 2006), *approved in* CARU Minutes No. 07/06 (20 October 2006)....123

Diplomatic Note DACARU No. 022/06 sent from President of the CARU Argentine Delegation to the President of the CARU Uruguayan Delegation (20 October 2006)....124

Diplomatic Note CARU-ROU No. 032/07 sent from President of the CARU Uruguayan Delegation to the Argentine President of the CARU Notifying CARU of Mixing Zone for the Botnia Mill (25 May 2007) 125

VOLUME V

GTAN DOCUMENTS

Joint Argentine-Uruguayan Press Release Constituting GTAN, No. 176/05 (31 May 2005) 126

First Meeting of the Uruguayan-Argentine High-Level Technical Group (GTAN) (3 August 2005) 127

GTAN/DU/7/31-08-05, Response to Request for Information on Both Pulp Mills from Argentina, submitted to GTAN on 3 August 2005 (31 August 2005) 128

GTAN/DU/8/31-05-05, Reflections on Document GTAN/DA4/19-05-05 (31 August 2005) 129

GTAN/DU/9/14-09-05, Supplementary Information Responding to a Request for Information on the Pulp Mills, submitted in the Meeting of the High-Level Technical Group on 3 August 2005 (14 September 2005).....................................130

GTAN/DU/10/14-09-05, Supplementary Response to Document DA/4/19-08-05 (14 September 2005). 131

GTAN/DU/11/14-09-05, Supplementary Information Responding to a Request for Information on the Pulp Mills, submitted in the Meeting of the High-Level Technical Group on 3 August 2005 (14 September 2005).....................................132

GTAN/DU/13/14-09-05, Climate Change, Climate Variability, Climate Trends, Variability between Decades, prepared by Professor José Luis Genta of the Institute of Mechanics and Fluids and Environmental Engineering, School of Engineering, Universidad de la República (14 September 2005)...........133

GTAN/DU/14/14-09-05, Extract of Analysis of Climate Statistics and Development and Evaluation of Climatic and Hydrological Scenarios in the Main Hydrographic Basins of Uruguay and the Coastline Thereof (Uruguay River, Negro River, Merin Lagoon, River Plate, the Atlantic Ocean), prepared by the Climate Change Unit, DINAMA (14 September 2005)...............................134

GTAN/DU/15/14-09-05, Comments on Document GTAN/DA/5/31-08-05, prepared by DINAMA (undated)..135

GTAN/DU/17/30-09-05, Pulp Mills Production Process, prepared by Chemical Engineer Cyro Croce, DINAMA (30 September 2005)....136

GTAN/DU/18/30-09-05, Influence of Paper Pulp Technology on Case Study Generation, prepared by Chemical Engineer Alberto Hernández, MSc. Institute of Chemical Engineering, Universidad de la República (30 September 2005)....137

GTAN/DU/19/04-11-05, Botnia EIA additional report in connection with Document GTAN/DA/14/20-10-05 (4 November 2005)....138

GTAN/DU/20/04-11-05, Technical Considerations with Regard to Documents GTAN/DA/7/31-08-05 and GTAN/DA/9/14-09-05 on Botnia (4 November 2005) 139

GTAN/DU/21/07-11-05, Technical Considerations with Regard to Documents GTAN/DA/4/19-08-05 and GTAN/DA/8/31-08-05 on ENCE (7 November 2005) 140

GTAN/DU/22/07-11-05, Analysis of the Gas Emissions Derived from the BOTNIA and M'BOPICUÁ Pulp Mills, prepared by Chemical Engineer Cyro Croce, Hydr. & Environm. Engineer Eugenio Lorenzo, DINAMA (7 November 2005) (excerpts)....141

GTAN/DU/23/07-11-05, Analysis of the Solid Waste Derived from the BOTNIA and M'BOPICUÁ Pulp Mills, prepared by Chemical Engineer Cyro Croce, Hydr. & Environm. Engineer Eugenio Lorenzo, DINAMA (7 November 2005) (excerpts)....142

GTAN/DU/24/07-11-05, Analysis of the Fluid Emissions Derived from the BOTNIA and M'BOPICUÁ Pulp Mills, prepared by Chemical Engineer Cyro Croce, Hydr. & Environm. Engineer Eugenio Lorenzo, DINAMA (7 November 2005)....143

GTAN/DU/25/21-11-05, Botnia EIA 2nd Additional Report in Connection with Document GTAN/DA/14/20-10-05 (21 November 2005)....144

GTAN/DU/26/21-11-05, Reply to Request for Information Submitted by the Argentine Delegation at the High-Level Technical Group sent in Note No. 2015/05 from the Ministry of Foreign Affairs, International Trade and Culture (21 November 2005)....145

GTAN/DU/27/25-11-05, Emissions and Environmental Quality Monitoring in Connection with the M'Bopicuá and Botnia Pulp Mills, prepared by DINAMA (25 November 2005)....146

GTAN/DU/28/25-11-05, Environmental Impact Assessment Procedure, prepared by DINAMA (25 November 2005)..147

GTAN/DU/30/09-12-05, Additional Report Providing Information on Botnia's Production Process in Connection with Document GTAN/DA/15/21-10-2005 (9 December 2005) (excerpts). 148

GTAN/DU/31/16-12-05, Social and Economic Impact, prepared by DINAMA (16 December 2005) (excerpts) 149

GTAN/DU/32/16-12-05, Clarification of Items Raised during the 6th GTAN Meeting, prepared by DINAMA (16 December 2005)..150

GTAN/DU/33/21-12-05, Additional Report on the Celulosas de M'Bopicuá Project in Connection with Documents GTAN/DA/4/19-08-05 and GTAN/DA/8/14-09-05 (21 December 2005) (excerpts)..151

GTAN/DU/34/18-01-06, Effect of the Discharges of the Future Botnia and M'Bopicuá Pulp Mills on Various Items of Interest, in a Scenario Where the Load Factor is Not Considered, prepared by DINAMA (18 January 2006). 152

Meeting of Water Subgroup of GTAN (27 January 2006) 153

First Report of the Uruguayan Delegation to the GTAN (31 January 2006) 154

VOLUME VI

TECHNICAL DOCUMENTS

Bylaws of the Argentine National Academy of Engineers, Approved by Decree of the National Executive Power No. 2347 (11 November 1980) 155

ENCE Environmental Impact Assessment, Table of Contents (July 2002)............156

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 1 (31 March 2004)...157

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 4 (31 March 2004)...158

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 5 (31 March 2004)...159

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 6 (31 March 2004)...160

VOLUME VII

Additional Report No. 2 of the Botnia Environmental Impact Assessment (2 September 2004)........161

Additional Report No. 3 of the Botnia Environmental Impact Assessment (5 October 2004)........162

Additional Report No. 5 of the Botnia Environmental Impact Assessment (12 November 2004)........163

Annex VIII to Additional Report No. 5 of the Botnia Environmental Impact Assessment, Studies of Plume Dispersion and Sediment Studies (12 November 2004) 164

Botnia Cellulose Plant in Fray Bentos: Blueprint of the Port Works (report within Botnia EIA submissions) (December 2004) 165

Summary Environmental Report in the Botnia Environmental Impact Assessment (2 December 2004) 166

Additional Report No. 7 of the Botnia Environmental Impact Assessment (17 January 2005) 167

Forest Stewardship Council Certification for Tile Forestal S.A. (23 August 2005) 168

Forest Stewardship Council Certification for Compañía Forestal Oriental S.A. (6 January 2006)........169

VOLUME VIII

Hatfield Consultants, Report of Expert Panel on the Draft Cumulative Impact Study for the Uruguay Pulp Mills (27 March 2006)........170

Special Communiqué about the Cellulose Pulp Mills, Uruguayan Engineers Association (May 2006) 171

National Academy of Engineering, Buenos Aires, Argentina, Letter to President Kirchner and Document on the Cellulose Pulp Mills on the Uruguay River (12 June 2006). 172

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills (September 2006). 173

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex A (September 2006)........174

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex B (September 2006)........175

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex D (September 2006)........176

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex H (September 2006)........177

Hatfield Consultants, Report of Expert Panel on the Final Cumulative Impact Study for the Uruguay Pulp Mills (14 October 2006)........178

Argentina Defender of the People of the Nation, Special Report on Reconquista River Basin (9 April 2007)........179

[Intentionally Omitted]........180

VOLUME IX

PRESS ARTICLES

Cristina Mara Besold, EcoPortal.net, "No One for Contamination in the Paraná River" (17 May 2001)........181

La Nación (Argentina), “Kirchner, Satisfied with His Meeting with Jorge Battle” (9 October 2003). 182

La Nación (Argentina), “Uruguay Promises to Inform the Government about the Paper Mill” (3 March 2004)........183

El Clarín (Argentina), “Mass Protest in Entre Ríos Against Installation of Pulp Mills” (1 May 2005)........184

Ecoportal.net, "Paraguay Denounces Argentina for its Paper Mill Contamination" (27 February 2006)........185

La República, "Unexpected: At a Crucial Time, Argentine Scientists Speak Out in Favour of the Uruguayan Plants (31 March 2006)........186

CEDHA, "Romina Picolotti Named Head of Argentina's Environmental Secretariat" (27 June 2006)........187

El Telegrafo, “President of CARU: Argentina Lacks the Political Will to Control the Quality of the Water in the Uruguay River” (17 August 2006) 187A

Diario El Argentino, “Residents of the Don Pedro District Complain” (25 October 2006)...188

El Tribuno, “There Are Tons of Toxic Wastes in the Uruguay River” (3 December 2006) 189

El Diario, "Gualeguaychú is Again a Main Attraction for Tourism at the Start of the Carnival Celebration" (5 January 2007) 190

El Diario, "The Rain Dampened Tourism: Easter Week Did Not Produce the Expected Results in Gualeguaychú" (8 April 2007). 191

Radio Sudamerica, "Tourism Increase of 6 Percent This Season" (7 May 2007)...192

Misiones Online, "Alto Paraná Continues to Move Forward with Better Technologies for Cellulose Production" (8 May 2007). 193

Misiones Online, "Government Disagrees with the Fine Imposed by the Nation on the Piray Cellulose Plant" (9 May 2007) 194

Ultimas Noticias, "Forestation Does Not Imply Risk to Streams, According to Experts" (21 May 2007). 195

MISCELLANEOUS

United Nations General Assembly Resolution 2995 (15 December 1972).............196

Session of General Assembly (6 December 1974) 197

Julio A. Barberis, Shared Natural Resources Among States and International Law (1979) (excerpts) 198

Botnia Press Release, “Botnia Investigates Prospects for Starting Pulp Production in Uruguay” (24 October 2003)..199

Proposed Special Minutes, Final Version (28 April 2004) 200

2005 Environmental Sustainability Index, World Economic Forum. 201

Compliance Advisor Ombudsman, CAO Audit of IFC's and MIGA's Due Diligence for Two Pulp Mills in Uruguay, Final Report (22 February 2006).........202

International Finance Corporation, Uruguay Pulp Mills: IFC Action Plan Based on Findings of Independent Expert Panel (9 May 2006)............................203

Affidavit of Timo Piilonen, Senior Vice-President for Uruguay Operations of Botnia and Managing Director of Botnia South America, S.A. (1 June 2006).......204

Award of the "Ad Hoc" Arbitral Tribunal of Mercosur (6 September 2006).........205

International Finance Corporation, Press Release, "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay, 2,500 Jobs to be Created, No Environmental Harm" (21 November 2006)..206

"Fanaquimica is a Guarantee of Quality," *available at* http://www.fanaquimica.com/NuestraEmpresa/Default.aspx (last visited on 6 June 2007)..207

"Las Camelias: Historical Evolution," *available at* http://www.lascamelias/com.ar (last visited on 29 June 2007)..............................208

"Gualeguaychú Industrial Park," *available at* http://www.pigchu.com.ar/ubicación_parque.htm (last visited on 27 June 2007)..209

"Nuestra PYMES/Textile/Rontaltex," *available at* http://pymesriouruguay.com.ar/pymes (last visited on 6 June 2007).....................210

"Baggio-RPB: The Company," *available at* http://www.baggio.com.ar/english/the company.html (last visited on 29 June 2007)..211

"Union Bat: Small History of a Great Company," *available at* http://unionbat.eurofull.com/shop/otraspaginas.asp?paginanp=12&t=NuestraEmpresa (last visited on 6 June 2007)..212

VOLUME X

EXPERT REPORTS

Evaluation of the Final Cumulative Impact Study for the Botnia S.A.'s Bleached Kraft Pulp Mill (Fray Bentos, Uruguay) with Respect to Impacts on Water Quality and Aquatic Resources and with Respect to Comments and Issues Raised by the Government of Argentina, Dr. Charles A. Menzie (Exponent, Inc.) (July 2007)..213

Hydrologic Analysis for the Proposed Botnia Cellulose Plant on the Uruguay River, Dr. J. Craig Swanson & Dr. Eduardo A. Yassuda (Applied Science Associates, Inc.) (June 2007) 214

Available Technologies and Best Environmental Management Practices for Botnia S.A.'s Bleached Kraft Pulp Mill, Fray Bentos Uruguay, Dr. Thomas L. Deardorff & Mr. Douglas Charles Pryke (Exponent, Inc.) (8 July 2007). 215

Comments on the EIA Process, Mr. William Sheate (Collingwood Environmental Planning) (June 2007) 216

Sufficiency of EIA and GTAN Information for Determination of Environmental Impacts - Botnia, S.A., Fray Bentos Uruguay, Mr. Pieter Booth (Exponent, Inc.) (June 2007) 217

SUPPLEMENTAL DOCUMENTS

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 3 (31 March 2004) (excerpts) 218

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 7 (31 March 2004) 219

Botnia Environmental Impact Assessment Submitted to DINAMA, Chapter 8 (31 March 2004) (excerpts) 220

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex E (September 2006) (excerpts) 221

International Finance Corporation, Cumulative Impact Study, Uruguay Pulp Mills, Annex I (September 2006) (excerpts) 222

DINAMA Maps of Landfill Location (June 2007) 223

Ministry of Industry, Energy and Mining, "Works on the River Uruguay" (June 2007) 224

DINAMA Resolution No. 0148/07, Approval of the Wastewater Treatment System for the Botnia plant (4 July 2007) 225

"Water: Consumption and Effluents," *available at* http://stage.masisa.com/Content.aspx?idioma=2&lang+2&site=&content=96&menu=175 (last visited on 5 July 2007) 226

Sworn Declaration of Martín Ponce de León, Undersecretary of the Ministry of Industry, Energy, and Mining of Uruguay (June 2006) 227