COUR INTERNATIONALE DE JUSTICE

RECUEIL DES ARRÊTS, AVIS CONSULTATIFS ET ORDONNANCES

AFFAIRE RELATIVE À DES USINES DE PÂTE À PAPIER SUR LE FLEUVE URUGUAY

(ARGENTINE c. URUGUAY)

ARRÊT DU 20 AVRIL 2010

2010

INTERNATIONAL COURT OF JUSTICE

REPORTS OF JUDGMENTS, ADVISORY OPINIONS AND ORDERS

CASE CONCERNING PULP MILLS ON THE RIVER URUGUAY

(ARGENTINA v. URUGUAY)

JUDGMENT OF 20 APRIL 2010

Mode officiel de citation:

Usines de pâte à papier sur le fleuve Uruguay (Argentine c. Uruguay), arrêt, C.I.J. Recueil 2010, p. 14

Official citation:

Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010, p. 14

ISSN 0074-4441 ISBN 978-92-1-071089-3 Sales number N^o de vente:

977

USINES DE PÂTE À PAPIER SUR LE FLEUVE URUGUAY (ARGENTINE c. URUGUAY)

PULP MILLS ON THE RIVER URUGUAY
(ARGENTINA v. URUGUAY)

20 APRIL 2010 JUDGMENT

TABLE OF CONTENTS

		Paragraphs
Сня	RONOLOGY OF THE PROCEDURE	1-24
I.	LEGAL FRAMEWORK AND FACTS OF THE CASE	25-47
	A. Legal frameworkB. CMB (ENCE) ProjectC. Orion (Botnia) mill	26-27 28-36 37-47
II.	SCOPE OF THE COURT'S JURISDICTION	48-66
III.	THE ALLEGED BREACH OF PROCEDURAL OBLIGATIONS	67-158
	A. The links between the procedural obligations and the sustantive obligationsB. The procedural obligations and their interrelation	71-79 80-122
	 The nature and role of CARU Uruguay's obligation to inform CARU Uruguay's obligation to notify the plans to the otl 	84-93 94-111 ner
	party	112-122
	C. Whether the Parties agreed to derogate from the procedu obligations set out in the 1975 Statute	ral 123-150
	 The "understanding" of 2 March 2004 between Arguina and Uruguay The agreement setting up the High-Level Technic Group (the GTAN) 	125-131
	D. Uruguay's obligations following the end of the negotiati period	
IV.	SUBSTANTIVE OBLIGATIONS	159-266
	A. Burden of proof and expert evidenceB. Alleged violations of substantive obligations	160-168 169-266
	 The obligation to contribute to the optimum and ration utilization of the river (Article 1) The obligation to ensure that the management of the s 	170-177
	and woodland does not impair the régime of the river the quality of its waters (Article 35)3. The obligation to co-ordinate measures to avoid change	178-180
	in the ecological balance (Article 36) 4. The obligation to prevent pollution and preserve to	181-189
	aquatic environment (Article 41)	190-266
	(a) Environmental Impact Assessment	203-219
	(i) The siting of the Orion (Botnia) mill at Fr Bentos(ii) Consultation of the affected populations	207-214 215-219

PULP MILLS (JUDGMENT)

 (b) Question of the production technology used in the Orion (Botnia) mill (c) Impact of the discharges on the quality of the waters of the river. 	220-228 229-259
of the river (i) Dissolved oxygen (ii) Phosphorus (iii) Phenolic substances	238-239 240-250 251-254
(iv) Presence of nonylphenols in the river environment(v) Dioxins and furans	255-257 258-259
 (d) Effects on biodiversity (e) Air pollution (f) Conclusions on Article 41 (g) Continuing obligations: monitoring 	260-262 263-264 265 266
V. THE CLAIMS MADE BY THE PARTIES IN THEIR FINAL SUBMISSIONS	267-281
OPERATIVE CLAUSE	282

ABBREVIATIONS AND ACRONYMS

AAP "Autorización Ambiental Previa" (initial environmental

authorization)

ADCP Acoustic Doppler Current Profiler AOX Adsorbable Organic Halogens

BAT Best Available Techniques (or Technology)

Botnia "Botnia S.A." and "Botnia Fray Bentos S.A." (two companies formed under Uruguayan law by the Finnish company Oy

Metsä-Botnia AB)

CARU "Comisión Administradora del Río Uruguay" (Administrative

Commission of the River Uruguay)

CIS Cumulative Impact Study (prepared in September 2006 at the

request of the International Finance Corporation)

CMB Celulosas de M'Bopicuá S.A." (a company formed under Uruguayan law by the Spanish company ENCE)

CMB (ENCE) Pulp mill planned at Fray Bentos by the Spanish company

ENCE, which formed the Uruguayan company CMB for that

purpose

DINAMA "Dirección Nacional de Medio Ambiente" (National Directorate for the Environment of the Uruguayan Government)

ECF Elemental Chlorine-Free

EIA Environmental Impact Assessment

ENCE "Empresa Nacional de Celulosas de España" (Spanish com-

pany which formed the company CMB under Uruguayan law)

ESAP Environmental and Social Action Plan

GTAN "Grupo Técnico de Alto Nivel" (High-Level Technical Group

established in 2005 by Argentina and Uruguay to resolve their dispute over the CMB (ENCE) and Orion (Botnia) mills)

IFC International Finance Corporation

IPPC-BAT Integrated Pollution Prevention and Control Reference Docu-

ment on Best Available Techniques in the Pulp and Paper

Industry

MVOTMA "Ministerio de Vivienda, Ordenamiento Territorial y Medio

Ambiente" (Uruguayan Ministry of Housing, Land Use Plan-

ning and Environmental Affairs)

Orion (Botnia) Pulp mill built at Fray Bentos by the Finnish company Oy Metsä-Botnia AB, which formed the Uruguayan companies

Botnia S.A. and Botnia Fray Bentos S.A. for that purpose

OSE "Obras Sanitarias del Estado" (Uruguay's State Agency for

Sanitary Works)

POPs Persistent Organic Pollutants

PROCEL "Plan de Monitoreo de la Calidad Ambiental en el Río Uru-

guay en áreas de Plantas Celulósicas" (Plan for monitoring water quality in the area of the pulp mills set up under CARU)

PROCON

"Programa de Calidad de Aguas y Control de la Contaminación del Río Uruguay" (Water quality and pollution control programme set up under CARU)

INTERNATIONAL COURT OF JUSTICE

YEAR 2010

20 April 2010

2010 20 April General List No. 135

CASE CONCERNING PULP MILLS ON THE RIVER URUGUAY

(ARGENTINA v. URUGUAY)

Legal framework and facts of the case.

1961 Treaty of Montevideo — 1975 Statute of the River Uruguay — Establishment of the Administrative Commission of the River Uruguay (CARU) — CMB (ENCE) pulp mill project — Orion (Botnia) pulp mill project — Port terminal at Nueva Palmira — Subject of the dispute.

*

Scope of the Court's jurisdiction.

Compromissory clause (Article 60 of the 1975 Statute) — Provisions of the 1975 Statute and jurisdiction ratione materiae — Lack of jurisdiction for the Court to consider allegations concerning noise and visual pollution or bad odours (Article 36 of the 1975 Statute) — Air pollution and impact on the quality of the waters of the river addressed under substantive obligations.

Article 1 of the 1975 Statute — Definition of the purpose of the 1975 Statute — Joint machinery necessary for the optimum and rational utilization of the river — Significance of the reference to the "rights and obligations arising from treaties and other international agreements in force for each of the parties" — Original Spanish text — Statute adopted by the parties in observance of their respective international commitments.

Article 41 (a) of the 1975 Statute — Original Spanish text — Absence of a "referral clause" having the effect of incorporating within the ambit of the Statute the obligations of the parties under international agreements and other norms envisaged in the Statute — Obligation for the parties to exercise their regulatory powers, in conformity with applicable international agreements, for the protection and preservation of the aquatic environment of the River Uruguay — Rules for interpreting the 1975 Statute — Article 31 of the Vienna

Convention on the Law of Treaties — Distinction between taking account of other international rules in the interpretation of the 1975 Statute and the scope of the jurisdiction of the Court under Article 60 of the latter.

*

Alleged breach of procedural obligations.

Question of links between the procedural obligations and the substantive obligations — Object and purpose of the 1975 Statute — Optimum and rational utilization of the River Uruguay — Sustainable development — Co-operation between the parties in jointly managing the risks of damage to the environment — Existence of a functional link, in regard to prevention, between the procedural obligations and the substantive obligations — Responsibility in the event of breaches of either category.

Interrelation of the various procedural obligations laid down by Articles 7 to 12 of the 1975 Statute — Original Spanish text of Article 7 — Obligation to inform, notify and negotiate as an appropriate means of achieving the objective of optimum and rational utilization of the river as a shared resource — Legal personality of CARU — Central role of CARU in the joint management of the river and obligation of the parties to co-operate.

Obligation to inform CARU (Article 7, first paragraph, of the 1975 Statute) — Works subject to this obligation — Link between the obligation to inform CARU, co-operation between the parties and the obligation of prevention — Determination by CARU on a preliminary basis of whether there is a risk of significant damage to the other party — Content of the information to be transmitted to CARU — Obligation to inform CARU before issuing of the initial environmental authorization — Provision of information to CARU by private operators cannot substitute for the obligation to inform laid down by the 1975 Statute — Breach by Uruguay of the obligation to inform CARU.

Obligation to notify the plans to the other party (Article 7, second and third paragraphs, of the 1975 Statute) — Need for a full environmental impact assessment (EIA) — Notification of the EIA to the other party, through CARU, before any decision on the environmental viability of the plan — Breach by Uruguay of the obligation to notify the plans to Argentina.

Ouestion of whether the Parties agreed to derogate from the procedural obligations — "Understanding" of 2 March 2004 — Content and scope — Since Uruguay did not comply with it, the "understanding" cannot be regarded as having had the effect of exempting Uruguay from compliance with the procedural obligations — Agreement setting up the High-Level Technical Group (GTAN) — Referral to the Court on the basis of Article 12 or Article 60 of the 1975 Statute: no practical distinction — The agreement to set up the GTAN had the aim of enabling the negotiations provided for in Article 12 of the 1975 Statute to take place, but did not derogate from other procedural obligations — In accepting the creation of the GTAN, Argentina did not give up the procedural rights belonging to it by virtue of the Statute, nor the possibility of invoking Uruguay's responsibility; nor did Argentina consent to suspending the operation of the procedural provisions of the Statute (Article 57 of the Vienna Convention on the Law of Treaties) — Obligation to negotiate in good faith — "No construction obligation" during the negotiation period — Preliminary work approved by Uruguay — Breach by Uruguay of the obligation to negotiate laid down by Article 12 of the 1975 Statute.

Obligations of Uruguay following the end of the negotiation period — Scope of Article 12 of the 1975 Statute — Absence of a "no construction obligation" following the end of the negotiation period and during the judicial settlement phase.

Alleged breaches of substantive obligations.

Burden of proof — Precautionary approach without reversal of the burden of proof — Expert evidence — Reports commissioned by the Parties — Independence of experts — Consideration of the facts by the Court — Experts appearing as counsel at the hearings — Question of witnesses, experts and expert witnesses.

Optimum and rational utilization of the River Uruguay — Article 1 of the 1975 Statute sets out the purpose of the instrument and does not lay down specific rights and obligations — Obligation to comply with the obligations prescribed by the Statute for the protection of the environment and the joint management of the river — Regulatory function of CARU — Interconnectedness between equitable and reasonable utilization of the river as a shared resource and the balance between economic development and environmental protection that is the essence of sustainable development (Article 27 of the 1975 Statute).

Obligation to ensure that the management of the soil and woodland does not impair the régime of the river or the quality of its waters (Article 35 of the 1975 Statute) — Contentions of Argentina not established.

Obligation to co-ordinate measures to avoid changes to the ecological balance (Article 36 of the 1975 Statute) — Requirement of individual action by each party and co-ordination through CARU — Obligation of due diligence — Argentina has not convincingly demonstrated that Uruguay has refused to engage in the co-ordination envisaged by Article 36 of the 1975 Statute.

Obligation to prevent pollution and preserve the aquatic environment — Normative content of Article 41 of the 1975 Statute — Obligation for each party to adopt rules and measures to protect and preserve the aquatic environment and, in particular, to prevent pollution — The rules and measures prescribed by each party must be in accordance with applicable international agreements and in keeping, where relevant, with the guidelines and recommendations of international technical bodies — Due diligence obligation to prescribe rules and measures and to apply them — Definition of pollution given in Article 40 of the 1975 Statute — Regulatory action of CARU (Article 56 of the 1975 Statute), complementing that of each party — CARU Digest — Rules by which the existence of any harmful effects is to be determined: 1975 Statute, CARU Digest, domestic law of each party within the limits prescribed by the 1975 Statute.

Environmental impact assessment (EIA) — Obligation to conduct an EIA — Scope and content of the EIA — Referral to domestic law — Question of the choice of mill site as part of the EIA — The Court is not convinced by Argentina's argument that an assessment of possible sites was not carried out — Receiving capacity of the river at Fray Bentos and reverse flows — The CARU water quality standards take account of the geomorphological and hydrological characteristics of the river and the receiving capacity of its waters — Question

of consultation of the affected populations as part of the EIA — No legal obligation to consult the affected populations arises from the instruments invoked by Argentina — Consultation by Uruguay of the affected populations did indeed take place.

Production technology used in the Orion (Botnia) mill — No evidence to support Argentina's claim that the Orion (Botnia) mill is not BAT-compliant in terms of the discharges of effluent for each tonne of pulp produced — From the data collected after the start-up of the Orion (Botnia) mill, it does not appear that the discharges from it have exceeded the prescribed limits.

Impact of the discharges on the quality of the waters of the river — Post-operational monitoring — Dissolved oxygen — Phosphorus — Algal blooms — Phenolic substances — Presence of nonylphenols in the river environment — Dioxins and furans — Alleged breaches not established.

Effects on biodiversity — Insufficient evidence to conclude that Uruguay breached the obligation to protect the aquatic environment, including its fauna and flora.

Air pollution — Indirect pollution from deposits into the aquatic environment — Insufficient evidence.

On the basis of the evidence submitted, no breach by Uruguay of Article 41 of the 1975 Statute.

Continuing obligations: monitoring — Obligation of the Parties to enable CARU to exercise on a continuous basis the powers conferred on it by the 1975 Statute — Obligation of Uruguay to continue monitoring the operation of the Orion (Botnia) plant — Obligation of the Parties to continue their co-operation through CARU.

Claims made by the Parties in their final submissions.

Claims of Argentina — Breach of procedural obligations — Finding of wrongful conduct and satisfaction — Forms of reparation other than compensation not excluded by the 1975 Statute — Restitution as a form of reparation for injury — Definition — Limits — Form of reparation appropriate to the injury suffered, taking into account the nature of the wrongful act — Restitution in the form of the dismantling of the Orion (Botnia) mill not appropriate where only breaches of procedural obligations have occurred — No breach of substantive obligations and rejection of Argentina's other claims — No special circumstances requiring the ordering of assurances and guarantees of non-repetition.

Uruguay's request for confirmation of its right to continue operating the Orion (Botnia) plant — No practical significance.

*

Obligation of the Parties to co-operate with each other, on the terms set out in the 1975 Statute, to ensure the achievement of its object and purpose — Joint action of the Parties through CARU and establishment of a real community of interests and rights in the management of the River Uruguay and in the protection of its environment.

JUDGMENT

Present: Vice-President Tomka, Acting President; Judges Koroma, Al-Khasawneh, Simma, Abraham, Keith, Sepúlveda-Amor, Bennouna, Skotnikov, Cançado Trindade, Yusuf, Greenwood; Judges ad hoc Torres Bernárdez, Vinuesa; Registrar Couvreur.

In the case concerning pulp mills on the River Uruguay,

between

the Argentine Republic,

represented by

- H.E. Ms Susana Ruiz Cerutti, Ambassador, Legal Adviser to the Ministry of Foreign Affairs, International Trade and Worship,
- as Agent;
- H.E. Mr. Horacio A. Basabe, Ambassador, Director of the Argentine Institute for Foreign Service, former Legal Adviser to the Ministry of Foreign Affairs, International Trade and Worship, Member of the Permanent Court of Arbitration,
- H.E. Mr. Santos Goñi Marenco, Ambassador of the Argentine Republic to the Kingdom of the Netherlands,
- as Co-Agents;
- Mr. Alain Pellet, Professor at the University of Paris Ouest, Nanterre-La Défense, member and former Chairman of the International Law Commission, associate member of the Institut de droit international,
- Mr. Philippe Sands, Q.C., Professor of International Law at University College London, Barrister at Matrix Chambers, London,
- Mr. Marcelo Kohen, Professor of International Law at the Graduate Institute of International and Development Studies, Geneva, associate member of the Institut de droit international,
- Ms Laurence Boisson de Chazournes, Professor of International Law at the University of Geneva,
- Mr. Alan Béraud, Minister at the Embassy of the Argentine Republic to the European Union, former Legal Adviser to the Ministry of Foreign Affairs, International Trade and Worship,
- Mr. Daniel Müller, Researcher at the Centre de droit international de Nanterre (CEDIN), University of Paris Ouest, Nanterre-La Défense,
- as Counsel and Advocates;
- Mr. Homero Bibiloni, Federal Secretary for the Environment and Sustainable Development,
- as Governmental Authority;
- Mr. Esteban Lyons, National Director of Environmental Control, Secretariat of the Environment and Sustainable Development,
- Mr. Howard Wheater, Ph.D. in Hydrology from Bristol University, Professor of Hydrology at Imperial College and Director of the Imperial College Environment Forum.

Mr. Juan Carlos Colombo, Ph.D. in Oceanography from the University of Quebec, Professor at the Faculty of Sciences and Museum of the National University of La Plata, Director of the Laboratory of Environmental Chemistry and Biogeochemistry at the National University of La Plata,

Mr. Neil McIntyre, Ph.D. in Environmental Engineering, Senior Lecturer in Hydrology at Imperial College London.

Ms Inés Camilloni, Ph.D. in Atmospheric Sciences, Professor of Atmospheric Sciences in the Faculty of Sciences of the University of Buenos Aires, Senior Researcher at the National Research Council (CONICET),

Mr. Gabriel Raggio, Doctor in Technical Sciences of the Swiss Federal Institute of Technology Zurich (ETHZ) (Switzerland), Independent Consultant.

as Scientific Advisers and Experts;

Mr. Holger Martinsen, Minister at the Office of the Legal Adviser, Ministry of Foreign Affairs, International Trade and Worship,

Mr. Mario Oyarzábal, Embassy Counsellor, member of the Office of the Legal Adviser, Ministry of Foreign Affairs, International Trade and Worship,

Mr. Fernando Marani, Second Secretary, Embassy of the Argentine Republic in the Kingdom of the Netherlands,

Mr. Gabriel Herrera, Embassy Secretary, member of the Office of the Legal Adviser, Ministry of Foreign Affairs, International Trade and Worship,

Ms Cynthia Mulville, Embassy Secretary, member of the Office of the Legal Adviser, Ministry of Foreign Affairs, International Trade and Worship,

Ms Kate Cook, Barrister at Matrix Chambers, London, specializing in environmental law and law relating to development,

Ms Mara Tignino, Ph.D. in Law, Researcher at the University of Geneva, Mr. Magnus Jesko Langer, teaching and research assistant, Graduate Institute of International and Development Studies, Geneva,

as Legal Advisers,

and

the Eastern Republic of Uruguay,

represented by

H.E. Mr. Carlos Gianelli, Ambassador of the Eastern Republic of Uruguay to the United States of America,

as Agent;

H.E. Mr. Carlos Mora Medero, Ambassador of the Eastern Republic of Uruguay to the Kingdom of the Netherlands,

as Co-Agent;

Mr. Alan Boyle, Professor of International Law at the University of Edinburgh, Member of the English Bar,

Mr. Luigi Condorelli, Professor at the Faculty of Law, University of Florence,

- Mr. Lawrence H. Martin, Foley Hoag LLP, Member of the Bars of the United States Supreme Court, the District of Columbia and the Commonwealth of Massachusetts,
- Mr. Stephen C. McCaffrey, Professor at the McGeorge School of Law, University of the Pacific, California, former Chairman of the International Law Commission and Special Rapporteur for the Commission's work on the law of non-navigational uses of international watercourses,
- Mr. Alberto Pérez Pérez, Professor in the Faculty of Law, University of the Republic, Montevideo,
- Mr. Paul S. Reichler, Foley Hoag LLP, Member of the Bars of the United States Supreme Court and the District of Columbia,

as Counsel and Advocates:

- Mr. Marcelo Cousillas, Legal Counsel at the National Directorate for the Environment, Ministry of Housing, Land Use Planning and Environmental Affairs
- Mr. César Rodriguez Zavalla, Chief of Cabinet, Ministry of Foreign Affairs,
- Mr. Carlos Mata, Deputy Director of Legal Affairs, Ministry of Foreign Affairs.
- Mr. Marcelo Gerona, Counsellor at the Embassy of the Eastern Republic of Uruguay in the Kingdom of the Netherlands,
- Mr. Eduardo Jiménez de Aréchaga, Attorney at Law, admitted to the Bar of the Eastern Republic of Uruguay and Member of the Bar of New York,
- Mr. Adam Kahn, Foley Hoag LLP, Member of the Bar of the Common-wealth of Massachusetts,
- Mr. Andrew Loewenstein, Foley Hoag LLP, Member of the Bar of the Commonwealth of Massachusetts,
- Ms Analia Gonzalez, LL.M., Foley Hoag LLP, admitted to the Bar of the Eastern Republic of Uruguay,
- Ms Clara E. Brillembourg, Foley Hoag LLP, Member of the Bars of the District of Columbia and New York,
- Ms Cicely Parseghian, Foley Hoag LLP, Member of the Bar of the Commonwealth of Massachusetts.
- Mr. Pierre Harcourt, Ph.D. candidate, University of Edinburgh,
- Mr. Paolo Palchetti, Associate Professor at the School of Law, University of Macerata,
- Ms Maria E. Milanes-Murcia, M.A., LL.M., J.S.D. Candidate at the McGeorge School of Law, University of the Pacific, California, Ph.D. Candidate, University of Murcia, admitted to the Bar of Spain,

as Assistant Counsel;

- Ms Alicia Torres, National Director for the Environment at the Ministry of Housing, Land Use Planning and Environmental Affairs,
- Mr. Eugenio Lorenzo, Technical Consultant for the National Directorate for the Environment, Ministry of Housing, Land Use Planning and Environmental Affairs,
- Mr. Cyro Croce, Technical Consultant for the National Directorate for the Environment, Ministry of Housing, Land Use Planning and Environmental Affairs.

Ms Raquel Piaggio, State Agency for Sanitary Works (OSE), Technical Consultant for the National Directorate for the Environment, Ministry of Housing, Land Use Planning and Environmental Affairs,

Mr. Charles A. Menzie, Ph.D., Principal Scientist and Director of the Eco-Sciences Practice at Exponent, Inc., Alexandria, Virginia,

Mr. Neil McCubbin, Eng., B.Sc. (Eng.), 1st Class Honours, Glasgow, Associate of the Royal College of Science and Technology, Glasgow,

as Scientific Advisers and Experts,

THE COURT, composed as above, after deliberation.

delivers the following Judgment:

1. On 4 May 2006, the Argentine Republic (hereinafter "Argentina") filed in the Registry of the Court an Application instituting proceedings against the Eastern Republic of Uruguay (hereinafter "Uruguay") in respect of a dispute concerning the breach, allegedly committed by Uruguay, of obligations under the Statute of the River Uruguay (United Nations, *Treaty Series (UNTS)*, Vol. 1295, No. I-21425, p. 340), a treaty signed by Argentina and Uruguay at Salto (Uruguay) on 26 February 1975 and having entered into force on 18 September 1976 (hereinafter the "1975 Statute"); in the Application, Argentina stated that this breach arose out of "the authorization, construction and future commissioning of two pulp mills on the River Uruguay", with reference in particular to "the effects of such activities on the quality of the waters of the River Uruguay and on the areas affected by the river".

In its Application, Argentina, referring to Article 36, paragraph 1, of the Statute of the Court, seeks to found the jurisdiction of the Court on Article 60, paragraph 1, of the 1975 Statute.

2. Pursuant to Article 40, paragraph 2, of the Statute of the Court, the Registrar communicated the Application forthwith to the Government of Uruguay. In accordance with paragraph 3 of that Article, the Secretary-General of the United Nations was notified of the filing of the Application.

- 3. On 4 May 2006, immediately after the filing of the Application, Argentina also submitted a request for the indication of provisional measures based on Article 41 of the Statute and Article 73 of the Rules of Court. In accordance with Article 73, paragraph 2, of the Rules of Court, the Registrar transmitted a certified copy of this request forthwith to the Government of Uruguay.
- 4. On 2 June 2006, Uruguay transmitted to the Court a CD-ROM containing the electronic version of two volumes of documents relating to the Argentine request for the indication of provisional measures, entitled "Observations of Uruguay" (of which paper copies were subsequently received); a copy of these documents was immediately sent to Argentina.
- 5. On 2 June 2006, Argentina transmitted to the Court various documents, including a video recording, and, on 6 June 2006, it transmitted further documents; copies of each series of documents were immediately sent to Uruguay.
 - 6. On 6 and 7 June 2006, various communications were received from the

Parties, whereby each Party presented the Court with certain observations on the documents submitted by the other Party. Uruguay objected to the production of the video recording submitted by Argentina. The Court decided not to authorize the production of that recording at the hearings.

- 7. Since the Court included upon the Bench no judge of the nationality of the Parties, each of them exercised its right under Article 31, paragraph 3, of the Statute to choose a judge *ad hoc* to sit in the case. Argentina chose Mr. Raúl Emilio Vinuesa, and Uruguay chose Mr. Santiago Torres Bernárdez.
- 8. By an Order of 13 July 2006, the Court, having heard the Parties, found "that the circumstances, as they [then] present[ed] themselves to [it], [we]re not such as to require the exercise of its power under Article 41 of the Statute to indicate provisional measures".
- 9. By another Order of the same date, the Court, taking account of the views of the Parties, fixed 15 January 2007 and 20 July 2007, respectively, as the timelimits for the filing of a Memorial by Argentina and a Counter-Memorial by Uruguay; those pleadings were duly filed within the time-limits so prescribed.
- 10. On 29 November 2006, Uruguay, invoking Article 41 of the Statute and Article 73 of the Rules of Court, in turn submitted a request for the indication of provisional measures. In accordance with Article 73, paragraph 2, of the Rules of Court, the Registrar transmitted a certified copy of this request forthwith to the Argentine Government.
- 11. On 14 December 2006, Uruguay transmitted to the Court a volume of documents concerning the request for the indication of provisional measures, entitled "Observations of Uruguay"; a copy of these documents was immediately sent to Argentina.
- 12. On 18 December 2006, before the opening of the oral proceedings, Argentina transmitted to the Court a volume of documents concerning Uruguay's request for the indication of provisional measures; the Registrar immediately sent a copy of these documents to the Government of Uruguay.
- 13. By an Order of 23 January 2007, the Court, having heard the Parties, found "that the circumstances, as they [then] present[ed] themselves to [it], [we]re not such as to require the exercise of its power under Article 41 of the Statute to indicate provisional measures".
- 14. By an Order of 14 September 2007, the Court, taking account of the agreement of the Parties and of the circumstances of the case, authorized the submission of a Reply by Argentina and a Rejoinder by Uruguay, and fixed 29 January 2008 and 29 July 2008 as the respective time-limits for the filing of those pleadings. The Reply of Argentina and the Rejoinder of Uruguay were duly filed within the time-limits so prescribed.
- 15. By letters dated 16 June 2009 and 17 June 2009 respectively, the Governments of Uruguay and Argentina notified the Court that they had come to an agreement for the purpose of producing new documents pursuant to Article 56 of the Rules of Court. By letters of 23 June 2009, the Registrar informed the Parties that the Court had decided to authorize them to proceed as they had agreed. The new documents were duly filed within the agreed time-limit.
- 16. On 15 July 2009, each of the Parties, as provided for in the agreement between them and with the authorization of the Court, submitted comments on the new documents produced by the other Party. Each Party also filed documents in support of these comments.

17. In accordance with Article 53, paragraph 2, of the Rules of Court, the Court decided, after ascertaining the views of the Parties, that copies of the pleadings and documents annexed would be made available to the public as from the opening of the oral proceedings.

18. By letter of 15 September 2009, Uruguay, referring to Article 56, paragraph 4, of the Rules of Court and to Practice Direction IXbis, communicated documents to the Court, forming part of publications readily available, on which it intended to rely during the oral proceedings. Argentina made no objec-

tion with regard to these documents.

19. By letter of 25 September 2009, the Argentine Government, referring to Article 56 of the Rules of Court and to Practice Direction IX, paragraph 2, sent new documents to the Registry which it wished to produce. By letter of 28 September 2009, the Government of Uruguay informed the Court that it was opposed to the production of these documents. It further indicated that if, nevertheless, the Court decided to admit the documents in question into the record of the case, it would present comments on them and submit documents in support of those comments. By letters dated 28 September 2009, the Registrar informed the Parties that the Court did not consider the production of the new documents submitted by the Argentine Government to be necessary within the meaning of Article 56, paragraph 2, of the Rules of Court, and that it had not moreover identified any exceptional circumstance (Practice Direction IX, paragraph 3) which justified their production at that stage of the proceedings.

20. Public hearings were held between 14 September 2009 and 2 October 2009, at which the Court heard the oral arguments and replies of:

For Argentina: H.E. Ms Susana Ruiz Cerutti,

Mr. Alain Pellet, Mr. Philippe Sands, Mr. Howard Wheater,

Ms Laurence Boisson de Chazournes,

Mr. Marcelo Kohen, Mr. Alan Béraud,

Mr. Juan Carlos Colombo,

Mr. Daniel Müller.

For Uruguay: H.E. Mr. Carlos Gianelli,

Mr. Alan Boyle, Mr. Paul S. Reichler, Mr. Neil McCubbin, Mr. Stephen C. McCaffrey, Mr. Lawrence H. Martin,

Mr. Luigi Condorelli.

21. At the hearings, Members of the Court put questions to the Parties, to which replies were given orally and in writing, in accordance with Article 61, paragraph 4, of the Rules of Court. Pursuant to Article 72 of the Rules of Court, one of the Parties submitted written comments on a written reply provided by the other and received after the closure of the oral proceedings.

*

22. In its Application, the following claims were made by Argentina:

"On the basis of the foregoing statement of facts and law, Argentina, while reserving the right to supplement, amend or modify the present Application in the course of the subsequent procedure, requests the Court to adjudge and declare:

- 1. that Uruguay has breached the obligations incumbent upon it under the 1975 Statute and the other rules of international law to which that instrument refers, including but not limited to:
 - (a) the obligation to take all necessary measures for the optimum and rational utilization of the River Uruguay;
 - (b) the obligation of prior notification to CARU and to Argentina;
 - (c) the obligation to comply with the procedures prescribed in Chapter II of the 1975 Statute;
 - (d) the obligation to take all necessary measures to preserve the aquatic environment and prevent pollution and the obligation to protect biodiversity and fisheries, including the obligation to prepare a full and objective environmental impact study;
 - (e) the obligation to co-operate in the prevention of pollution and the protection of biodiversity and of fisheries; and
- 2. that, by its conduct, Uruguay has engaged its international responsibility to Argentina;
- 3. that Uruguay shall cease its wrongful conduct and comply scrupulously in future with the obligations incumbent upon it; and
- 4. that Uruguay shall make full reparation for the injury caused by its breach of the obligations incumbent upon it.

Argentina reserves the right to amplify or amend these requests at a subsequent stage of the proceedings."

23. In the written proceedings, the following submissions were presented by the Parties:

On behalf of the Government of Argentina, in the Memorial:

requests the International Court of Justice:

"For all the reasons described in this Memorial, the Argentine Republic

- to find that by unilaterally authorizing the construction of the CMB and Orion pulp mills and the facilities associated with the latter on the left bank of the River Uruguay, in breach of the obligations resulting from the Statute of 26 February 1975, the Eastern Republic of Uruguay has committed the internationally wrongful acts set out in Chapters IV and V of this Memorial, which entail its international responsibility;
- 2. to adjudge and declare that, as a result, the Eastern Republic of Uruguay must
 - (i) cease immediately the internationally wrongful acts referred to above:
 - (ii) resume strict compliance with its obligations under the Statute of the River Uruguay of 1975;

- (iii) re-establish on the ground and in legal terms the situation that existed before the internationally wrongful acts referred to above were committed;
- (iv) pay compensation to the Argentine Republic for the damage caused by these internationally wrongful acts that would not be remedied by that situation being restored, of an amount to be determined by the Court at a subsequent stage of these proceedings;
- (v) provide adequate guarantees that it will refrain in future from preventing the Statute of the River Uruguay of 1975 from being applied, in particular the consultation procedure established by Chapter II of that Treaty.

The Argentine Republic reserves the right to supplement or amend these submissions should the need arise, in the light of the development of the situation. This would in particular apply if Uruguay were to aggravate the dispute¹, for example if the Orion mill were to be commissioned before the end of these proceedings.

in the Reply:

"For all the reasons described in its Memorial, which it fully stands by, and in the present Reply, the Argentine Republic requests the International Court of Justice:

- 1. to find that by authorizing
 - the construction of the CMB mill:
 - the construction and commissioning of the Orion mill and its associated facilities on the left bank of the River Uruguay,

the Eastern Republic of Uruguay has violated the obligations incumbent on it under the Statute of the River Uruguay of 26 February 1975 and has engaged its international responsibility;

- 2. to adjudge and declare that, as a result, the Eastern Republic of Uruguay must:
 - (i) resume strict compliance with its obligations under the Statute of the River Uruguay of 1975;
 - (ii) cease immediately the internationally wrongful acts by which it has engaged its responsibility;
 - (iii) re-establish on the ground and in legal terms the situation that existed before these internationally wrongful acts were committed;
 - (iv) pay compensation to the Argentine Republic for the damage caused by these internationally wrongful acts that would not be remedied by that situation being restored, of an amount to be determined by the Court at a subsequent stage of these proceedings;
 - (v) provide adequate guarantees that it will refrain in future from preventing the Statute of the River Uruguay of 1975 from being applied, in particular the consultation procedure established by Chapter II of that Treaty.

¹ See the Order of the Court of 13 July 2006 on Argentina's request for the indication of provisional measures, para. 82."

The Argentine Republic reserves the right to supplement or amend these submissions should the need arise, in the light of subsequent developments in the case."

On behalf of the Government of Uruguay,

in the Counter-Memorial:

"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."

In the Rejoinder:

"Based on all the above, it can be concluded that:

- (a) Argentina has not demonstrated any harm, or risk of harm, to the river or its ecosystem resulting from Uruguay's alleged violations of its substantive obligations under the 1975 Statute that would be sufficient to warrant the dismantling of the Botnia plant;
- (b) the harm to the Uruguayan economy in terms of lost jobs and revenue would be substantial;
- (c) in light of points (a) and (b), the remedy of tearing the plant down would therefore be disproportionately onerous, and should not be granted;
- (d) if the Court finds, notwithstanding all the evidence to the contrary, that Uruguay has violated its procedural obligations to Argentina, it can issue a declaratory judgment to that effect, which would constitute an adequate form of satisfaction;
- (e) if the Court finds, notwithstanding all the evidence to the contrary, that the plant is not in complete compliance with Uruguay's obligation to protect the river or its aquatic environment, the Court can order Uruguay to take whatever additional protective measures are necessary to ensure that the plant conforms to the Statute's substantive requirements;
- (f) if the Court finds, notwithstanding all the evidence to the contrary, that Uruguay has actually caused damage to the river or to Argentina, it can order Uruguay to pay Argentina monetary compensation under Articles 42 and 43 of the Statute; and
- (g) the Court should issue a declaration making clear the Parties are obligated to ensure full respect for all the rights in dispute in this case, including Uruguay's right to continue operating the Botnia plant in conformity with the provisions of the 1975 Statute.

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, and Uruguay's right to continue operating the Botnia plant in conformity with the provisions of the 1975 Statute is affirmed."

24. At the oral proceedings, the following final submissions were presented by the Parties:

On behalf of the Government of Argentina, at the hearing of 29 September 2009:

"For all the reasons described in its Memorial, in its Reply and in the oral proceedings, which it fully stands by, the Argentine Republic requests the International Court of Justice:

- 1. to find that by authorizing
 - the construction of the ENCE mill;
 - the construction and commissioning of the Botnia mill and its associated facilities on the left bank of the River Uruguay,

the Eastern Republic of Uruguay has violated the obligations incumbent on it under the Statute of the River Uruguay of 26 February 1975 and has engaged its international responsibility;

- 2. to adjudge and declare that, as a result, the Eastern Republic of Uruguay must:
 - (i) resume strict compliance with its obligations under the Statute of the River Uruguay of 1975;
 - (ii) cease immediately the internationally wrongful acts by which it has engaged its responsibility;
 - (iii) re-establish on the ground and in legal terms the situation that existed before these internationally wrongful acts were committed;
 - (iv) pay compensation to the Argentine Republic for the damage caused by these internationally wrongful acts that would not be remedied by that situation being restored, of an amount to be determined by the Court at a subsequent stage of these proceedings;
 - (v) provide adequate guarantees that it will refrain in future from preventing the Statute of the River Uruguay of 1975 from being applied, in particular the consultation procedure established by Chapter II of that Treaty."

On behalf of the Government of Uruguay, at the hearing of 2 October 2009:

"On the basis of the facts and arguments set out in Uruguay's Counter-Memorial, Rejoinder and during the oral proceedings, Uruguay requests that the Court adjudge and declare that the claims of Argentina are rejected, and Uruguay's right to continue operating the Botnia plant in conformity with the provisions of the 1975 Statute is affirmed."

* *

I. LEGAL FRAMEWORK AND FACTS OF THE CASE

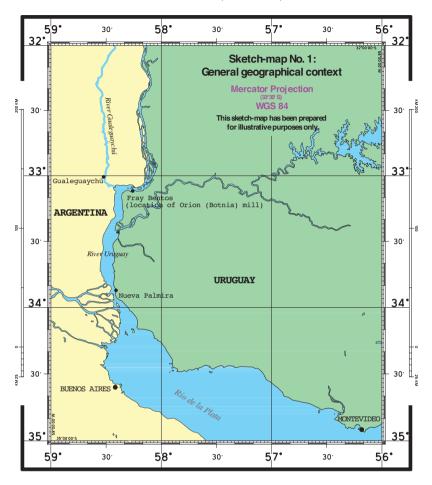
25. The dispute before the Court has arisen in connection with the planned construction authorized by Uruguay of one pulp mill and the construction and commissioning of another, also authorized by Uruguay,

on the River Uruguay (see sketch-map No. 1 on p. 33 for the general geographical context). After identifying the legal instruments concerning the River Uruguay by which the Parties are bound, the Court will set out the main facts of the case

A. Legal Framework

26. The boundary between Argentina and Uruguay in the River Uruguay is defined by the bilateral Treaty entered into for that purpose at Montevideo on 7 April 1961 (UNTS, Vol. 635, No. 9074, p. 98). Articles 1 to 4 of the Treaty delimit the boundary between the Contracting States in the river and attribute certain islands and islets in it to them. Articles 5 and 6 concern the régime for navigation on the river. Article 7 provides for the establishment by the parties of a "régime for the use of the river" covering various subjects, including the conservation of living resources and the prevention of water pollution of the river. Articles 8 to 10 lay down certain obligations concerning the islands and islets and their inhabitants.

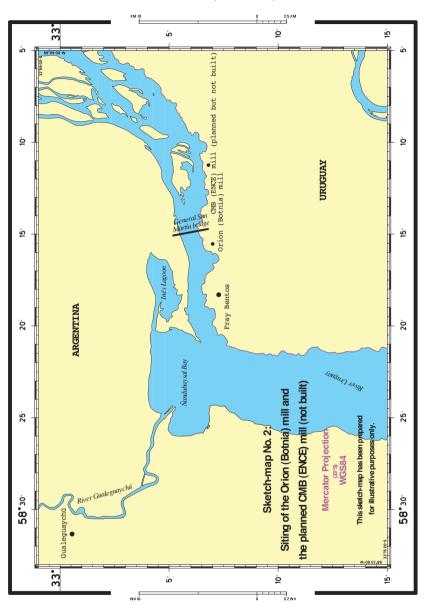
27. The "régime for the use of the river" contemplated in Article 7 of the 1961 Treaty was established through the 1975 Statute (see paragraph 1 above). Article 1 of the 1975 Statute states that the parties adopted it "in order to establish the joint machinery necessary for the optimum and rational utilization of the River Uruguay, in strict observance of the rights and obligations arising from treaties and other international agreements in force for each of the parties". After having thus defined its purpose (Article 1) and having also made clear the meaning of certain terms used therein (Article 2), the 1975 Statute lays down rules governing navigation and works on the river (Chapter II, Articles 3 to 13), pilotage (Chapter III, Articles 14 to 16), port facilities, unloading and additional loading (Chapter IV, Articles 17 to 18), the safeguarding of human life (Chapter V, Articles 19 to 23) and the salvaging of property (Chapter VI, Articles 24 to 26), use of the waters of the river (Chapter VII, Articles 27 to 29), resources of the bed and subsoil (Chapter VIII, Articles 30 to 34), the conservation, utilization and development of other natural resources (Chapter IX, Articles 35 to 39), pollution (Chapter X, Articles 40 to 43), scientific research (Chapter XI, Articles 44 to 45), and various powers of the parties over the river and vessels sailing on it (Chapter XII, Articles 46 to 48). The 1975 Statute sets up the Administrative Commission of the River Uruguay (hereinafter "CARU", from the Spanish acronym for "Comisión Administradora del Río Uruguay") (Chapter XIII, Articles 49 to 57), and then establishes procedures for conciliation (Chapter XIV, Articles 58 to 59) and judicial settlement of disputes (Chapter XV, Article 60). Lastly, the 1975 Statute contains transitional (Chapter XVI, Articles 61 to 62) and final (Chapter XVII, Article 63) provisions.



B. CMB (ENCE) Project

- 28. The first pulp mill at the root of the dispute was planned by "Celulosas de M'Bopicuá S.A." (hereinafter "CMB"), a company formed by the Spanish company ENCE (from the Spanish acronym for "Empresa Nacional de Celulosas de España", hereinafter "ENCE"). This mill, hereinafter referred to as the "CMB (ENCE)" mill, was to have been built on the left bank of the River Uruguay in the Uruguayan department of Río Negro opposite the Argentine region of Gualeguaychú, more specifically to the east of the city of Fray Bentos, near the "General San Martín" international bridge (see sketch-map No. 2 on p. 35).
- 29. On 22 July 2002, the promoters of this industrial project approached the Uruguayan authorities and submitted an environmental impact assessment ("EIA" according to the abbreviation used by the Parties) of the plan to Uruguay's National Directorate for the Environment (hereinafter "DINAMA", from the Spanish acronym for "Dirección Nacional de Medio Ambiente"). During the same period, representatives of CMB, which had been specially formed to build the CMB (ENCE) mill, informed the President of CARU of the project. The President of CARU wrote to the Uruguayan Minister of the Environment on 17 October 2002 seeking a copy of the environmental impact assessment of the CMB (ENCE) project submitted by the promoters of this industrial project. This request was reiterated on 21 April 2003. On 14 May 2003, Uruguay submitted to CARU a document entitled "Environmental Impact Study, Celulosas de M'Bopicuá. Summary for public release". One month later, the CARU Subcommittee on Water Quality and Pollution Control took notice of the document transmitted by Uruguay and suggested that a copy thereof be sent to its technical advisers for their opinions. Copies were also provided to the Parties' delegations.
- 30. A public hearing, attended by CARU's Legal Adviser and its technical secretary, was held on 21 July 2003 in the city of Fray Bentos concerning CMB's application for an environmental authorization. On 15 August 2003, CARU asked Uruguay for further information on various points concerning the planned CMB (ENCE) mill. This request was reiterated on 12 September 2003. On 2 October 2003, DINAMA submitted its assessment report to the Uruguayan Ministry of Housing, Land Use Planning and Environmental Affairs (hereinafter "MVOTMA", from the Spanish abbreviation for "Ministerio de Vivienda Ordenamiento Territorial y Medio Ambiente"), recommending that CMB be granted an initial environmental authorization ("AAP" according to the Spanish abbreviation for "Autorización Ambiental Previa") subject to certain conditions. On 8 October 2003, CARU was informed by the Uruguayan delegation that DINAMA would very shortly send CARU a report on the CMB (ENCE) project.





- 31. On 9 October 2003, MVOTMA issued an initial environmental authorization to CMB for the construction of the CMB (ENCE) mill. On the same date the Presidents of Argentina and Uruguay met at Anchorena (Colonia, Uruguay). Argentina maintains that the President of Uruguay, Jorge Battle, then promised his Argentine counterpart, Néstor Kirchner, that no authorization would be issued before Argentina's environmental concerns had been addressed. Uruguay challenges this version of the facts and contends that the Parties agreed at that meeting to deal with the CMB (ENCE) project otherwise than through the procedure under Articles 7 to 12 of the 1975 Statute and that Argentina let it be known that it was not opposed to the project per se. Argentina disputes these assertions.
- 32. The day after the meeting between the Heads of State of Argentina and Uruguay, CARU declared its willingness to resume the technical analyses of the CMB (ENCE) project as soon as Uruguay transmitted the awaited documents. On 17 October 2003, CARU held an extraordinary plenary meeting at the request of Argentina, at which Argentina complained of Uruguay's granting on 9 October 2003 of the initial environmental authorization. Following the extraordinary meeting CARU suspended work for more than six months, as the Parties could not agree on how to implement the consultation mechanism established by the 1975 Statute.
- 33. On 27 October 2003, Uruguay transmitted to Argentina copies of the environmental impact assessment submitted by ENCE on 22 July 2002, of DINAMA's final assessment report dated 2 October 2003 and of the initial environmental authorization of 9 October 2003. Argentina reacted by expressing its view that Article 7 of the 1975 Statute had not been observed and that the transmitted documents did not appear adequate to allow for a technical opinion to be expressed on the environmental impact of the project. On 7 November 2003, further to a request from the Ministry of Foreign Affairs of Argentina, Uruguay provided Argentina with a copy of the Uruguayan Ministry of the Environment's entire file on the CMB (ENCE) project. On 23 February 2004, Argentina forwarded all of this documentation received from Uruguay to CARU.
- 34. On 2 March 2004, the Parties' Ministers for Foreign Affairs met in Buenos Aires. On 15 May 2004, CARU resumed its work at an extraordinary plenary meeting during which it took note of the ministerial "understanding" which was reached on 2 March 2004. The Parties are at odds over the content of this "understanding". The Court will return to this when it considers Argentina's claims as to Uruguay's breach of its procedural obligations under the 1975 Statute (see paragraphs 67 to 158).
- 35. Following up on CARU's extraordinary meeting of 15 May 2004, the CARU Subcommittee on Water Quality and Pollution Control pre-

pared a plan for monitoring water quality in the area of the pulp mills (hereinafter the "PROCEL" plan from the Spanish acronym for "Plan de Monitoreo de la Calidad Ambiental del Río Uruguay en Areas de Plantas Celulósicas"). CARU approved the plan on 12 November 2004.

36. On 28 November 2005, Uruguay authorized preparatory work to begin for the construction of the CMB (ENCE) mill (ground clearing). On 28 March 2006, the project's promoters decided to halt the work for 90 days. On 21 September 2006, they announced their intention not to build the mill at the planned site on the bank of the River Uruguay.

C. Orion (Botnia) Mill

- 37. The second industrial project at the root of the dispute before the Court was undertaken by "Botnia S.A." and "Botnia Fray Bentos S.A." (hereinafter "Botnia"), companies formed under Uruguayan law in 2003 specially for the purpose by Oy Metsä-Botnia AB, a Finnish company. This second pulp mill, called "Orion" (hereinafter the "Orion (Botnia)" mill), has been built on the left bank of the River Uruguay, a few kilometres downstream of the site planned for the CMB (ENCE) mill, and also near the city of Fray Bentos (see sketch-map No. 2 on p. 35). It has been operational and functioning since 9 November 2007.
- 38. After informing the Uruguayan authorities of this industrial project in late 2003, the project promoters submitted an application to them for an initial environmental authorization on 31 March 2004 and supplemented it on 7 April 2004. Several weeks later, on 29 and 30 April 2004, CARU members and Botnia representatives met informally. Following that meeting, CARU's Subcommittee on Water Quality and Pollution Control suggested on 18 June 2004 that Botnia expand on the information provided at the meeting. On October 2004, CARU held another meeting with Botnia representatives and again expressed the need for further information on Botnia's application to DINAMA for an initial environmental authorization. On 12 November 2004, when approving the water quality monitoring plan put forward by the CARU Subcommittee on Water Quality and Pollution Control (see paragraph 35 above), CARU decided, on the proposal of that subcommittee, to ask Uruguay to provide further information on the application for an initial environmental authorization, CARU transmitted this request for further information to Uruguay by note dated 16 November 2004.
 - 39. On 21 December 2004 DINAMA held a public hearing, attended

by a CARU adviser, on the Orion (Botnia) project in Fray Bentos. DINAMA adopted its environmental impact study of the planned Orion (Botnia) mill on 11 February 2005 and recommended that the initial environmental authorization be granted, subject to certain conditions. MVOTMA issued the initial authorization to Botnia on 14 February 2005 for the construction of the Orion (Botnia) mill and an adjacent port terminal. At a CARU meeting on 11 March 2005, Argentina questioned whether the granting of the initial environmental authorization was well-founded in view of the procedural obligations laid down in the 1975 Statute. Argentina reiterated this position at the CARU meeting on 6 May 2005. On 12 April 2005, Uruguay had in the meantime authorized the clearance of the future mill site and the associated groundworks.

- 40. On 31 May 2005, in pursuance of an agreement made on 5 May 2005 by the Presidents of the two Parties, their Ministers for Foreign Affairs created a High-Level Technical Group (hereinafter the "GTAN", from the Spanish abbreviation for "Grupo Técnico de Alto Nivel"), which was given responsibility for resolving the disputes over the CMB (ENCE) and Orion (Botnia) mills within 180 days. The GTAN held twelve meetings between 3 August 2005 and 30 January 2006, with the Parties exchanging various documents in the context of this bilateral process. On 31 January 2006, Uruguay determined that the negotiations undertaken within the GTAN had failed; Argentina did likewise on 3 February 2006. The Court will return later to the significance of this process agreed on by the Parties (see paragraphs 132 to 149).
- 41. On 26 June 2005, Argentina wrote to the President of the International Bank for Reconstruction and Development to express its concern at the possibility of the International Finance Corporation (hereinafter the "IFC") contributing to the financing of the planned pulp mills. The IFC nevertheless decided to provide financial support for the Orion (Botnia) mill, but did commission EcoMetrix, a consultancy specializing in environmental and industrial matters, to prepare various technical reports on the planned mill and an environmental impact assessment of it. EcoMetrix was also engaged by the IFC to carry out environmental monitoring on the IFC's behalf of the plant once it had been placed in service
- 42. On 5 July 2005, Uruguay authorized Botnia to build a port adjacent to the Orion (Botnia) mill. This authorization was transmitted to CARU on 15 August 2005. On 22 August 2005, Uruguay authorized the construction of a chimney and concrete foundations for the Orion (Botnia) mill. Further authorizations were granted as the construction of this mill proceeded, for example in respect of the waste treatment installations. On 13 October 2005, Uruguay transmitted additional documentation to CARU concerning the port terminal adjacent to the Orion (Botnia) mill.

Argentina repeatedly asked, including at CARU meetings, that the initial work connected with the Orion (Botnia) mill and the CMB (ENCE) mill should be suspended. At a meeting between the Heads of State of the Parties at Santiago de Chile on 11 March 2006, Uruguay's President asked ENCE and Botnia to suspend construction of the mills. ENCE suspended work for 90 days (see paragraph 36 above), Botnia for ten.

43. Argentina referred the present dispute to the Court by Application dated 4 May 2006. On 24 August 2006, Uruguay authorized the commissioning of the port terminal adjacent to the Orion (Botnia) mill and gave CARU notice of this on 4 September 2006. On 12 September 2006, Uruguay authorized Botnia to extract and use water from the river for industrial purposes and formally notified CARU of its authorization on 17 October 2006. At the summit of Heads of State and Government of the Ibero-American countries held in Montevideo in November 2006, the King of Spain was asked to endeavour to reconcile the positions of the Parties; a negotiated resolution of the dispute did not however result. On 8 November 2007, Uruguay authorized the commissioning of the Orion (Botnia) mill and it began operating the next day. In December 2009, Oy Metsä-Botnia AB transferred its interest in the Orion (Botnia) mill to UPM, another Finnish company.

*

- 44. In addition, Uruguay authorized Ontur International S.A. to build and operate a port terminal at Nueva Palmira. The terminal was inaugurated in August 2007 and, on 16 November 2007, Uruguay transmitted to CARU a copy of the authorization for its commissioning.
- 45. In their written pleadings the Parties have debated whether, in light of the procedural obligations laid down in the 1975 Statute, the authorizations for the port terminal were properly issued by Uruguay. The Court deems it unnecessary to review the detailed facts leading up to the construction of the Nueva Palmira terminal, being of the view that these port facilities do not fall within the scope of the subject of the dispute before it. Indeed, nowhere in the claims asserted in its Application or in the submissions in its Memorial or Reply (see paragraphs 22 and 23 above) did Argentina explicitly refer to the port terminal at Nueva Palmira. In its final submissions presented at the hearing on 29 September 2009, Argentina again limited the subject-matter of its claims to the authorization of the construction of the CMB (ENCE) mill and the authorization of the construction and commissioning of "the Botnia mill and its associated facilities on the left bank of the River Uruguay". The Court does not consider the port terminal at Nueva Palmira, which lies some 100 km south of Fray Bentos, downstream of the Orion (Botnia)

mill (see sketch-map No. 1 on p. 33), and is used by other economic operators as well, to be a facility "associated" with the mill.

46. The dispute submitted to the Court concerns the interpretation and application of the 1975 Statute, namely, on the one hand whether Uruguay complied with its procedural obligations under the 1975 Statute in issuing authorizations for the construction of the CMB (ENCE) mill as well as for the construction and the commissioning of the Orion (Botnia) mill and its adjacent port; and on the other hand whether Uruguay has complied with its substantive obligations under the 1975 Statute since the commissioning of the Orion (Botnia) mill in November 2007.

* *

47. Having thus related the circumstances surrounding the dispute between the Parties, the Court will consider the basis and scope of its jurisdiction, including questions relating to the law applicable to the present dispute (see paragraphs 48 to 66). It will then examine Argentina's allegations of breaches by Uruguay of procedural obligations (see paragraphs 67 to 158) and substantive obligations (see paragraphs 159 to 266) laid down in the 1975 Statute. Lastly, the Court will respond to the claims presented by the Parties in their final submissions (see paragraphs 267 to 280).

* *

II. Scope of the Court's Jurisdiction

- 48. The Parties are in agreement that the Court's jurisdiction is based on Article 36, paragraph 1, of the Statute of the Court and Article 60, paragraph 1, of the 1975 Statute. The latter reads: "Any dispute concerning the interpretation or application of the Treaty¹ and the Statute which cannot be settled by direct negotiations may be submitted by either party to the International Court of Justice." The Parties differ as to whether all the claims advanced by Argentina fall within the ambit of the compromissory clause.
- 49. Uruguay acknowledges that the Court's jurisdiction under the compromissory clause extends to claims concerning any pollution or type of harm caused to the River Uruguay, or to organisms living there, in violation of the 1975 Statute. Uruguay also acknowledges that claims concerning the alleged impact of the operation of the pulp mill on the

¹ The Montevideo Treaty of 7 April 1961, concerning the boundary constituted by the River Uruguay (*UNTS*, Vol. 635, No. 9074, p. 98; footnote added).

quality of the waters of the river fall within the compromissory clause. On the other hand, Uruguay takes the position that Argentina cannot rely on the compromissory clause to submit claims regarding every type of environmental damage. Uruguay further argues that Argentina's contentions concerning air pollution, noise, visual and general nuisance, as well as the specific impact on the tourism sector, allegedly caused by the Orion (Botnia) mill, do not concern the interpretation or the application of the 1975 Statute, and the Court therefore lacks jurisdiction over them.

Uruguay nevertheless does concede that air pollution which has harmful effects on the quality of the waters of the river or on the aquatic environment would fall within the jurisdiction of the Court.

- 50. Argentina maintains that Uruguay's position on the scope of the Court's jurisdiction is too narrow. It contends that the 1975 Statute was entered into with a view to protect not only the quality of the waters of the river but more generally its "régime" and the areas affected by it. Relying on Article 36 of the 1975 Statute, which lays out the obligation of the parties to co-ordinate measures to avoid any change in the ecological balance and to control harmful factors in the river and the areas affected by it, Argentina asserts that the Court has jurisdiction also with respect to claims concerning air pollution and even noise and "visual" pollution. Moreover, Argentina contends that bad odours caused by the Orion (Botnia) mill negatively affect the use of the river for recreational purposes, particularly in the Gualeguaychú resort on its bank of the river. This claim, according to Argentina, also falls within the Court's jurisdiction.
- 51. The Court, when addressing various allegations or claims advanced by Argentina, will have to determine whether they concern "the interpretation or application" of the 1975 Statute, as its jurisdiction under Article 60 thereof covers "[a]ny dispute concerning the interpretation or application of the [1961] Treaty and the [1975] Statute". Argentina has made no claim to the effect that Uruguay violated obligations under the 1961 Treaty.
- 52. In order to determine whether Uruguay has breached its obligations under the 1975 Statute, as alleged by Argentina, the Court will have to interpret its provisions and to determine their scope *ratione materiae*.

Only those claims advanced by Argentina which are based on the provisions of the 1975 Statute fall within the Court's jurisdiction *ratione materiae* under the compromissory clause contained in Article 60. Although Argentina, when making claims concerning noise and "visual" pollution allegedly caused by the pulp mill, invokes the provision of Article 36 of the 1975 Statute, the Court sees no basis in it for such claims. The plain language of Article 36, which provides that "[t]he parties shall co-ordinate, through the Commission, the necessary measures to avoid any change in the ecological balance and to control pests and other harmful factors in the river and the areas affected by it", leaves no doubt

that it does not address the alleged noise and visual pollution as claimed by Argentina. Nor does the Court see any other basis in the 1975 Statute for such claims; therefore, the claims relating to noise and visual pollution are manifestly outside the jurisdiction of the Court conferred upon it under Article 60.

Similarly, no provision of the 1975 Statute addresses the issue of "bad odours" complained of by Argentina. Consequently, for the same reason, the claim regarding the impact of bad odours on tourism in Argentina also falls outside the Court's jurisdiction. Even if bad odours were to be subsumed under the issue of air pollution, which will be addressed in paragraphs 263 and 264 below, the Court notes that Argentina has submitted no evidence as to any relationship between the alleged bad odours and the aquatic environment of the river.

- 53. Characterizing the provisions of Articles 1 and 41 of the 1975 Statute as "referral clauses", Argentina ascribes to them the effect of incorporating into the Statute the obligations of the Parties under general international law and a number of multilateral conventions pertaining to the protection of the environment. Consequently, in the view of Argentina, the Court has jurisdiction to determine whether Uruguay has complied with its obligations under certain international conventions.
- 54. The Court now therefore turns its attention to the issue whether its jurisdiction under Article 60 of the 1975 Statute also encompasses obligations of the Parties under international agreements and general international law invoked by Argentina and to the role of such agreements and general international law in the context of the present case.
- 55. Argentina asserts that the 1975 Statute constitutes the law applicable to the dispute before the Court, as supplemented so far as its application and interpretation are concerned, by various customary principles and treaties in force between the Parties and referred to in the Statute. Relying on the rule of treaty interpretation set out in Article 31, paragraph 3 (c) of the Vienna Convention on the Law of Treaties, Argentina contends notably that the 1975 Statute must be interpreted in the light of principles governing the law of international watercourses and principles of international law ensuring protection of the environment. It asserts that the 1975 Statute must be interpreted so as to take account of all "relevant rules" of international law applicable in the relations between the Parties, so that the Statute's interpretation remains current and evolves in accordance with changes in environmental standards. In this connection Argentina refers to the principles of equitable, reasonable and noninjurious use of international watercourses, the principles of sustainable development, prevention, precaution and the need to carry out an environmental impact assessment. It contends that these rules and principles

are applicable in giving the 1975 Statute a dynamic interpretation, although they neither replace it nor restrict its scope.

- 56. Argentina further considers that the Court must require compliance with the Parties' treaty obligations referred to in Articles 1 and 41 (a) of the 1975 Statute. Argentina maintains that the "referral clauses" contained in these articles make it possible to incorporate and apply obligations arising from other treaties and international agreements binding on the Parties. To this end, Argentina refers to the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (hereinafter the "CITES Convention"), the 1971 Ramsar Convention on Wetlands of International Importance (hereinafter the "Ramsar Convention"), the 1992 United Nations Convention on Biological Diversity (hereinafter the "Biodiversity Convention"), and the 2001 Stockholm Convention on Persistent Organic Pollutants (hereinafter the "POPs Convention"). It asserts that these conventional obligations are in addition to the obligations arising under the 1975 Statute, and observance of them should be ensured when application of the Statute is being considered. Argentina maintains that it is only where "more specific rules of the [1975] Statute (lex specialis)" derogate from them that the instruments to which the Statute refers should not be applied.
- 57. Uruguay likewise considers that the 1975 Statute must be interpreted in the light of general international law and it observes that the Parties concur on this point. It maintains however that its interpretation of the 1975 Statute accords with the various general principles of the law of international watercourses and of international environmental law, even if its understanding of these principles does not entirely correspond to that of Argentina. Uruguay considers that whether Articles 1 and 41 (a) of the 1975 Statute can be read as a referral to other treaties in force between the Parties has no bearing in the present case, because conventions relied on by Argentina are either irrelevant, or Uruguay cannot be found to have violated any other conventional obligations. In any event, the Court would lack jurisdiction to rule on alleged breaches of international obligations which are not contained in the 1975 Statute.
- 58. The Court will first address the issue whether Articles 1 and 41 (a) can be read as incorporating into the 1975 Statute the obligations of the Parties under the various multilateral conventions relied upon by Argentina.
 - 59. Article 1 of the 1975 Statute reads as follows:

"The parties agree on this Statute, in implementation of the provisions of Article 7 of the Treaty concerning the Boundary Constituted by the River Uruguay of 7 April 1961, in order to establish the joint machinery necessary for the optimum and rational utilization

of the River Uruguay, in strict observance of the rights and obligations arising from treaties and other international agreements in force for each of the parties." (*UNTS*, Vol. 1295, No. I-21425, p. 340; footnote omitted.)

Article 1 sets out the purpose of the 1975 Statute. The Parties concluded it in order to establish the joint machinery necessary for the rational and optimum utilization of the River Uruguay. It is true that this article contains a reference to "the rights and obligations arising from treaties and other international agreements in force for each of the parties". This reference, however, does not suggest that the Parties sought to make compliance with their obligations under other treaties one of their duties under the 1975 Statute; rather, the reference to other treaties emphasizes that the agreement of the Parties on the Statute is reached in implementation of the provisions of Article 7 of the 1961 Treaty and "in strict observance of the rights and obligations arising from treaties and other international agreements in force for each of the parties" (emphasis added). While the conjunction "and" is missing from the English and French translations of the 1975 Statute, as published in the *United Nations Treaty Series* (ibid., p. 340 and p. 348), it is contained in the Spanish text of the Statute, which is the authentic text and reads as follows:

"Las partes acuerdan el presente Estatuto, en cumplimiento de lo dispuesto en el Artículo 7 del Tratado de Límites en el Río Uruguay, de 7 de Abril de 1961 con el fin de establecer los mecanismos comunes necesarios para el óptimo y racional aprovechamiento del Río Uruguay, y en estricta observancia de los derechos y obligaciones emergentes de los tratados y demás compromisos internacionales vigentes para cualquiera de las partes." (*Ibid.*, p. 332; emphasis added.)

The presence of the conjunction in the Spanish text suggests that the clause "in strict observance of the rights and obligations arising from treaties and other international agreements in force for each of the parties" is linked to and is to be read with the first part of Article 1, i.e., "[t]he parties agree on this Statute, in implementation of the provisions of Article 7 of the Treaty concerning the Boundary Constituted by the River Uruguay".

60. There is one additional element in the language of Article 1 of the 1975 Statute which should be noted. It mentions "treaties and other international agreements in force for *each* of the parties" (in Spanish original "tratados y demás compromisos internacionales vigentes para *cualquiera* de las partes"; emphasis added). In the French translation, this part of Article 1 reads "traités et autres engagements internationaux en vigueur à l'égard de *l'une ou l'autre* des parties" (emphasis added).

The fact that Article 1 does not require that the "treaties and other

international agreements" should be in force between the *two* parties thus clearly indicates that the 1975 Statute takes account of the prior commitments of each of the parties which have a bearing on it.

61. Article 41 of the 1975 Statute, paragraph (a) of which Argentina considers as constituting another "referral clause" incorporating the obligations under international agreements into the Statute, reads as follows:

"Without prejudice to the functions assigned to the Commission in this respect, the parties undertake:

- (a) to protect and preserve the aquatic environment and, in particular, to prevent its pollution, by prescribing appropriate rules and [adopting appropriate] measures in accordance with applicable international agreements and in keeping, where relevant, with the guidelines and recommendations of international technical bodies;
- (b) not to reduce in their respective legal systems:
 - the technical requirements in force for preventing water pollution, and
 - 2) the severity of the penalties established for violations;
- (c) to inform one another of any rules which they plan to prescribe with regard to water pollution in order to establish equivalent rules in their respective legal systems." (Emphasis added.)
- 62. The Court observes that the words "adopting appropriate" do not appear in the English translation while they appear in the original Spanish text ("dictando las normas y adoptando las medidas apropiadas"). Basing itself on the original Spanish text, it is difficult for the Court to see how this provision could be construed as a "referral clause" having the effect of incorporating the obligations of the parties under international agreements and other norms envisaged within the ambit of the 1975 Statute.

The purpose of the provision in Article 41 (a) is to protect and preserve the aquatic environment by requiring each of the parties to enact rules and to adopt appropriate measures. Article 41 (a) distinguishes between applicable international agreements and the guidelines and recommendations of international technical bodies. While the former are legally binding and therefore the domestic rules and regulations enacted and the measures adopted by the State have to comply with them, the latter, not being formally binding, are, to the extent they are relevant, to be taken into account by the State so that the domestic rules and regulations and the measures it adopts are compatible ("con adecuación") with those guidelines and recommendations. However, Article 41 does not incorporate international agreements as such into the 1975 Statute but rather sets obligations for the parties to exercise their regulatory powers, in conformity with applicable international agreements, for the protection and

preservation of the aquatic environment of the River Uruguay. Under Article 41 (b) the existing requirements for preventing water pollution and the severity of the penalties are not to be reduced. Finally, paragraph (c) of Article 41 concerns the obligation to inform the other party of plans to prescribe rules on water pollution.

- 63. The Court concludes that there is no basis in the text of Article 41 of the 1975 Statute for the contention that it constitutes a "referral clause". Consequently, the various multilateral conventions relied on by Argentina are not, as such, incorporated in the 1975 Statute. For that reason, they do not fall within the scope of the compromissory clause and therefore the Court has no jurisdiction to rule whether Uruguay has complied with its obligations thereunder.
- 64. The Court next briefly turns to the issue of how the 1975 Statute is to be interpreted. The Parties concur as to the 1975 Statute's origin and historical context, although they differ as to the nature and general tenor of the Statute and the procedural and substantive obligations therein.

The Parties nevertheless are in agreement that the 1975 Statute is to be interpreted in accordance with rules of customary international law on treaty interpretation, as codified in Article 31 of the Vienna Convention on the Law of Treaties.

65. The Court has had recourse to these rules when it has had to interpret the provisions of treaties and international agreements concluded before the entry into force of the Vienna Convention on the Law of Treaties in 1980 (see, e.g., *Territorial Dispute (Libyan Arab Jamahiriyal Chad)*, *Judgment, I.C.J. Reports 1994*, p. 21, para. 41; *Kasikili/Sedudu Island (Botswana/Namibia)*, *Judgment, I.C.J. Reports 1999 (II)*, p. 1059, para. 18).

The 1975 Statute is also a treaty which predates the entry into force of the Vienna Convention on the Law of Treaties. In interpreting the terms of the 1975 Statute, the Court will have recourse to the customary rules on treaty interpretation as reflected in Article 31 of the Vienna Convention. Accordingly the 1975 Statute is to be "interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the [Statute] in their context and in light of its object and purpose". That interpretation will also take into account, together with the context, "any relevant rules of international law applicable in the relations between the parties".

66. In the interpretation of the 1975 Statute, taking account of relevant rules of international law applicable in the relations between the Parties, whether these are rules of general international law or contained in multilateral conventions to which the two States are parties, nevertheless has no bearing on the scope of the jurisdiction conferred on the

Court under Article 60 of the 1975 Statute, which remains confined to disputes concerning the interpretation or application of the Statute.

* *

III. THE ALLEGED BREACH OF PROCEDURAL OBLIGATIONS

- 67. The Application filed by Argentina on 4 May 2006 concerns the alleged breach by Uruguay of both procedural and substantive obligations laid down in the 1975 Statute. The Court will start by considering the alleged breach of procedural obligations under Articles 7 to 12 of the 1975 Statute, in relation to the (CMB) ENCE and Orion (Botnia) mill projects and the facilities associated with the latter, on the left bank of the River Uruguay near the city of Fray Bentos.
- 68. Argentina takes the view that the procedural obligations were intrinsically linked to the substantive obligations laid down by the 1975 Statute, and that a breach of the former entailed a breach of the latter.

With regard to the procedural obligations, these are said by Argentina to constitute an integrated and indivisible whole in which CARU, as an organization, plays an essential role.

Consequently, according to Argentina, Uruguay could not invoke other procedural arrangements so as to derogate from the procedural obligations laid down by the 1975 Statute, except by mutual consent.

- 69. Argentina argues that, at the end of the procedural mechanism provided for by the 1975 Statute, and in the absence of agreement between the Parties, the latter have no choice but to submit the matter to the Court under the terms of Articles 12 and 60 of the Statute, with Uruguay being unable to proceed with the construction of the planned mills until the Court has delivered its Judgment.
- 70. Following the lines of the argument put forward by the Applicant, the Court will examine in turn the following four points: the links between the procedural obligations and the substantive obligations (A); the procedural obligations and their interrelation with each other (B); whether the Parties agreed to derogate from the procedural obligations set out in the 1975 Statute (C); and Uruguay's obligations at the end of the negotiation period (D).

A. The Links between the Procedural Obligations and the Substantive Obligations

71. Argentina maintains that the procedural provisions laid down in Articles 7 to 12 of the 1975 Statute are aimed at ensuring "the optimum

and rational utilization of the [r]iver" (Article 1), just as are the provisions concerning use of water, the conservation, utilization and development of other natural resources, pollution and research. The aim is also said to be to prevent the Parties from acting unilaterally and without regard for earlier or current uses of the river. According to Argentina, any disregarding of this machinery would therefore undermine the object and purpose of the 1975 Statute; indeed the "optimum and rational utilization of the [r]iver" would not be ensured, as this could only be achieved in accordance with the procedures laid down under the Statute.

- 72. It follows, according to Argentina, that a breach of the procedural obligations automatically entails a breach of the substantive obligations, since the two categories of obligations are indivisible. Such a position is said to be supported by the Order of the Court of 13 July 2006, according to which the 1975 Statute created "a comprehensive régime".
- 73. Uruguay similarly takes the view that the procedural obligations are intended to facilitate the performance of the substantive obligations, the former being a means rather than an end. It too points out that Article 1 of the 1975 Statute defines its object and purpose.
- 74. However, Uruguay rejects Argentina's argument as artificial, since it appears to mix procedural and substantive questions with the aim of creating the belief that the breach of procedural obligations necessarily entails the breach of substantive ones. According to Uruguay, it is for the Court to determine the breach, in itself, of each of these categories of obligations, and to draw the necessary conclusions in each case in terms of responsibility and reparation.
- 75. The Court notes that the object and purpose of the 1975 Statute, set forth in Article 1, is for the Parties to achieve "the optimum and rational utilization of the River Uruguay" by means of the "joint machinery" for co-operation, which consists of both CARU and the procedural provisions contained in Articles 7 to 12 of the Statute.

The Court has observed in this respect, in its Order of 13 July 2006, that such use should allow for sustainable development which takes account of "the need to safeguard the continued conservation of the river environment and the rights of economic development of the riparian States" (Pulp Mills on the River Uruguay (Argentina v. Uruguay), Provisional Measures, Order of 13 July 2006, I.C.J. Reports 2006, p. 133, para. 80).

76. In the *Gabčikovo-Nagymaros* case, the Court, after recalling that "[t]his need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development", added that "[i]t is for the Parties themselves to find an agreed solution that takes account of the objectives of the Treaty" (*Gabčikovo-*

Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997, p. 78, paras. 140-141).

77. The Court observes that it is by co-operating that the States concerned can jointly manage the risks of damage to the environment that might be created by the plans initiated by one or other of them, so as to prevent the damage in question, through the performance of both the procedural and the substantive obligations laid down by the 1975 Statute. However, whereas the substantive obligations are frequently worded in broad terms, the procedural obligations are narrower and more specific, so as to facilitate the implementation of the 1975 Statute through a process of continuous consultation between the parties concerned. The Court has described the régime put in place by the 1975 Statute as a "comprehensive and progressive régime" (Pulp Mills on the River Uruguay (Argentina v. Uruguay), Provisional Measures, Order of 13 July 2006, I.C.J. Reports 2006, p. 133, para. 81), since the two categories of obligations mentioned above complement one another perfectly, enabling the parties to achieve the object of the Statute which they set themselves in Article 1.

78. The Court notes that the 1975 Statute created CARU and established procedures in connection with that institution, so as to enable the parties to fulfil their substantive obligations. However, nowhere does the 1975 Statute indicate that a party may fulfil its substantive obligations by complying solely with its procedural obligations, nor that a breach of procedural obligations automatically entails the breach of substantive ones.

Likewise, the fact that the parties have complied with their substantive obligations does not mean that they are deemed to have complied *ipso facto* with their procedural obligations, or are excused from doing so. Moreover, the link between these two categories of obligations can also be broken, in fact, when a party which has not complied with its procedural obligations subsequently abandons the implementation of its planned activity.

79. The Court considers, as a result of the above, that there is indeed a functional link, in regard to prevention, between the two categories of obligations laid down by the 1975 Statute, but that link does not prevent the States parties from being required to answer for those obligations separately, according to their specific content, and to assume, if necessary, the responsibility resulting from the breach of them, according to the circumstances.

B. The Procedural Obligations and Their Interrelation

80. The 1975 Statute imposes on a party which is planning certain activities, set out in Article 7, first paragraph, procedural obligations whose content, interrelation and time-limits are specified as follows in Articles 7 to 12:

"Article 7

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, which shall determine on a preliminary basis and within a maximum period of 30 days whether the plan might cause significant damage to the other party.

If the Commission finds this to be the case 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.

Such notification shall describe the main aspects of the work and, where appropriate, how it is to be carried out and shall include any other technical data 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.

Article 8

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.

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.

The period of 180 days mentioned above shall begin on the date on which the delegation of the notified party receives the full documentation.

This period may be extended at the discretion of the Commission if the complexity of the plan so requires.

Article 9

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.

Article 10

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.

Article 11

Should the notified party come to the conclusion that the execution of the work or the programme of operations might significantly impair navigation, the régime 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 régime of the river or the quality of its waters, the technical reasons on which this conclusion is based and the changes suggested to the plan or programme of operations.

Article 12

Should the parties fail to reach agreement within 180 days following the notification referred to in Article 11, the procedure indicated in Chapter XV shall be followed."

81. The original Spanish text of Article 7 of the 1975 Statute reads as follows:

"La parte que proyecte la construcción de nuevos canales, la modificación o alteración significativa de los ya existentes o la realización de cualesquiera otras obras de entidad suficiente para afectar la navegación, el régimen del Río o la calidad de sus aguas, deberá comunicarlo a la Comisión, la cual determinará sumariamente, y en un plazo máximo de treinta días, si el proyecto puede producir perjuicio sensible a la otra parte.

Si así se resolviere o no se llegare a una decisión al respecto, la parte interesada deberá notificar el proyecto a la otra parte a través de la misma Comisión.

En la notificación deberán figurar los aspectos esenciales de la obra y, si fuere el caso, el modo de su operación y los demás datos técnicos que permitan a la parte notificada hacer una evaluación del efecto probable que la obra ocasionará a la navegación, al régimen del Río o a la calidad de sus aguas."

The Court notes that, just as the original Spanish text, the French translation of this Article (see paragraph 80 above) distinguishes between the obligation to inform ("comunicar") CARU of any plan falling within its purview (first paragraph) and the obligation to notify ("notificar") the other party (second paragraph). By contrast, the English translation uses the same verb "notify" in respect of both obligations. In order to conform to the original Spanish text, the Court will use in both linguistic versions of this Judgment the verb "inform" for the obligation set out in the first paragraph of Article 7 and the verb "notify" for the obligation set out in the second and third paragraphs.

The Court considers that the procedural obligations of informing, notifying and negotiating constitute an appropriate means, accepted by the Parties, of achieving the objective which they set themselves in Article 1 of the 1975 Statute. These obligations are all the more vital when a shared resource is at issue, as in the case of the River Uruguay, which can only be protected through close and continuous co-operation between the riparian States.

82. According to Argentina, by failing to comply with the initial obligation (Article 7, first paragraph, of the 1975 Statute) to refer the matter

to CARU, Uruguay frustrated all the procedures laid down in Articles 7 to 12 of the Statute. In addition, by failing to notify Argentina of the plans for the CMB (ENCE) and Orion (Botnia) mills, through CARU, with all the necessary documentation, Uruguay is said not to have complied with Article 7, second and third paragraphs. Argentina adds that informal contacts which it or CARU may have had with the companies in question cannot serve as a substitute for Uruguay referring the matter to CARU and notifying Argentina of the projects through the Commission. Argentina concludes that Uruguay has breached all of its procedural obligations under the terms of Articles 7 to 12 of the 1975 Statute.

Uruguay, for its part, considers that referring the matter to CARU does not impose so great a constraint as Argentina contends and that the parties may agree, by mutual consent, to use different channels by employing other procedural arrangements in order to engage in cooperation. It concludes from this that it has not breached the procedural obligations laid down by the 1975 Statute, even if it has performed them without following to the letter the formal process set out therein.

83. The Court will first examine the nature and role of CARU, and then consider whether Uruguay has complied with its obligations to inform CARU and to notify Argentina of its plans.

1. The nature and role of CARU

- 84. Uruguay takes the view that CARU, like other river commissions, is not a body with autonomous powers, but rather a mechanism established to facilitate co-operation between the Parties. It adds that the States which have created these river commissions are free to go outside the joint mechanism when it suits their purposes, and that they often do so. According to Uruguay, since CARU is not empowered to act outside the will of the Parties, the latter are free to do directly what they have decided to do through the Commission, and in particular may agree not to inform it in the manner provided for in Article 7 of the 1975 Statute. Uruguay maintains that that is precisely what happened in the present case: the two States agreed to dispense with the preliminary review by CARU and to proceed immediately to direct negotiations.
- 85. For Argentina, on the other hand, the 1975 Statute is not merely a bilateral treaty imposing reciprocal obligations on the parties; it establishes an institutional framework for close and ongoing co-operation, the core and essence of which is CARU. For Argentina, CARU is the key body for co-ordination between the Parties in virtually all areas covered by the 1975 Statute. By failing to fulfil its obligations in this respect, Uruguay is said to be calling the 1975 Statute fundamentally into question.
 - 86. The Court recalls that it has already described CARU as

- "a joint mechanism with regulatory, executive, administrative, technical and conciliatory functions, entrusted with the proper implementation of the rules contained in the 1975 Statute governing the management of the shared river resource; . . . [a] mechanism [which] constitutes a very important part of that treaty régime" (*Pulp Mills on the River Uruguay (Argentina v. Uruguay), Provisional Measures, Order of 13 July 2006, I.C.J. Reports 2006*, pp. 133-134, para. 81).
- 87. The Court notes, first, that CARU, in accordance with Article 50 of the 1975 Statute, was endowed with legal personality "in order to perform its functions" and that the parties to the 1975 Statute undertook to provide it with "the necessary resources and all the information and facilities essential to its operations". Consequently, far from being merely a transmission mechanism between the parties, CARU has a permanent existence of its own; it exercises rights and also bears duties in carrying out the functions attributed to it by the 1975 Statute.
- 88. While the decisions of the Commission must be adopted by common accord between the riparian States (Article 55), these are prepared and implemented by a secretariat whose staff enjoy privileges and immunities. Moreover, CARU is able to decentralize its various functions by setting up whatever subsidiary bodies it deems necessary (Article 52).
- 89. The Court observes that, like any international organization with legal personality, CARU is entitled to exercise the powers assigned to it by the 1975 Statute and which are necessary to achieve the object and purpose of the latter, namely, "the optimum and rational utilization of the River Uruguay" (Article 1). As the Court has pointed out,

"[i]nternational organizations are governed by the 'principle of speciality', that is to say, they are invested by the States which create them with powers, the limits of which are a function of the common interests whose promotion those States entrust to them" (Legality of the Use by a State of Nuclear Weapons in Armed Conflict, Advisory Opinion, I.C.J. Reports 1996 (I), p. 78, para. 25).

This also applies of course to organizations, which like CARU, only have two member States.

90. Since CARU serves as a framework for consultation between the parties, particularly in the case of the planned works contemplated in Article 7, first paragraph, of the 1975 Statute, neither of them may depart from that framework unilaterally, as they see fit, and put other channels of communication in its place. By creating CARU and investing it with all the resources necessary for its operation, the parties have sought to provide the best possible guarantees of stability, continuity and effective-

ness for their desire to co-operate in ensuring "the optimum and rational utilization of the River Uruguay".

- 91. That is why CARU plays a central role in the 1975 Statute and cannot be reduced to merely an optional mechanism available to the parties which each may use or not, as it pleases. CARU operates at all levels of utilization of the river, whether concerning the prevention of transboundary harm that may result from planned activities; the use of water, on which it receives reports from the parties and verifies whether the developments taken together are liable to cause significant damage (Articles 27 and 28); the avoidance of any change in the ecological balance (Article 36); scientific studies and research carried out by one party within the jurisdiction of the other (Article 44); the exercise of the right of law enforcement (Article 46); or the right of navigation (Article 48).
- 92. Furthermore, CARU has been given the function of drawing up rules in many areas associated with the joint management of the river and listed in Article 56 of the 1975 Statute. Lastly, at the proposal of either party, the Commission can act as a conciliation body in any dispute which may arise between the parties (Article 58).
- 93. Consequently, the Court considers that, because of the scale and diversity of the functions they have assigned to CARU, the Parties intended to make that international organization a central component in the fulfilment of their obligations to co-operate as laid down by the 1975 Statute.

2. Uruguay's obligation to inform CARU

- 94. The Court notes that the obligation of the State initiating the planned activity to inform CARU constitutes the first stage in the procedural mechanism as a whole which allows the two parties to achieve the object of the 1975 Statute, namely, the optimum and rational utilization of the River Uruguay". This stage, provided for in Article 7, first paragraph, involves the State which is initiating the planned activity informing CARU thereof, so that the latter can determine "on a preliminary basis" and within a maximum period of 30 days whether the plan might cause significant damage to the other party.
- 95. To enable the remainder of the procedure to take its course, the parties have included alternative conditions in the 1975 Statute: either that the activity planned by one party should be liable, in CARU's opinion, to cause significant damage to the other, creating an obligation of prevention for the first party to eliminate or minimize the risk, in consultation with the other party; or that CARU, having been duly informed, should not have reached a decision in that regard within the prescribed period.
- 96. The Court notes that the Parties are agreed in considering that the two planned mills were works of sufficient importance to fall within the scope of Article 7 of the 1975 Statute, and thus for CARU to have been

informed of them. The same applies to the plan to construct a port terminal at Fray Bentos for the exclusive use of the Orion (Botnia) mill, which included dredging work and use of the river bed.

- 97. However, the Court observes that the Parties disagree on whether there is an obligation to inform CARU in respect of the extraction and use of water from the river for industrial purposes by the Orion (Botnia) mill. Argentina takes the view that the authorization granted by the Uruguayan Ministry of Transport and Public Works on 12 September 2006 concerns an activity of sufficient importance ("entidad suficiente") to affect the régime of the river or the quality of its waters and that, in this matter, Uruguay should have followed the procedure laid down in Articles 7 to 12 of the 1975 Statute. For its part, Uruguay maintains that this activity forms an integral part of the Orion (Botnia) mill project as a whole, and that the 1975 Statute does not require CARU to be informed of each step in furtherance of the planned works.
- 98. The Court points out that while the Parties are agreed in recognizing that CARU should have been informed of the two planned mills and the plan to construct the port terminal at Fray Bentos, they nonetheless differ as regards the content of the information which should be provided to CARU and as to when this should take place.
- 99. Argentina has argued that the content of the obligation to inform must be determined in the light of its objective, which is to prevent threats to navigation, the régime of the river or the quality of the waters. According to Argentina, the plan which CARU must be informed of may be at a very early stage, since it is simply a matter of allowing the Commission to "determine on a preliminary basis", within a very short period of 30 days, whether the plan "might cause significant damage to the other party". It is only in the following phase of the procedure that the substance of the obligation to inform is said to become more extensive. In Argentina's view, however, CARU must be informed prior to the authorization or implementation of a project on the River Uruguay.
- 100. Citing the terms of Article 7, first paragraph, of the 1975 Statute, Uruguay gives a different interpretation of it, taking the view that the requirement to inform CARU specified by this provision cannot occur in the very early stages of planning, because there could not be sufficient information available to the Commission for it to determine whether or not the plan might cause significant damage to the other State. For that, according to Uruguay, the project would have to have reached a stage where all the technical data on it are available. As the Court will consider further below, Uruguay seeks to link the content of the information to the time when it should be provided, which may even be after the State concerned has granted an initial environmental authorization.
- 101. The Court points out that the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory. It is "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States" (*Corfu*

Channel (United Kingdom v. Albania), Merits, Judgment, I.C.J. Reports 1949, p. 22). A State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State. This Court has established that this obligation "is now part of the corpus of international law relating to the environment" (Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I), p. 242, para. 29).

102. In the view of the Court, the obligation to inform CARU allows for the initiation of co-operation between the Parties which is necessary in order to fulfil the obligation of prevention. This first procedural stage results in the 1975 Statute not being applied to activities which would appear to cause damage only to the State in whose territory they are carried out.

103. The Court observes that with regard to the River Uruguay, which constitutes a shared resource, "significant damage to the other party" (Article 7, first paragraph, of the 1975 Statute) may result from impairment of navigation, the régime of the river or the quality of its waters. Moreover, Article 27 of the 1975 Statute stipulates that:

"[t]he right of each party to use the waters of the river, within its jurisdiction, for domestic, sanitary, industrial and agricultural 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 régime of the river or the quality of its waters".

104. The Court notes that, in accordance with the terms of Article 7, first paragraph, the information which must be provided to CARU, at this initial stage of the procedure, has to enable it to determine swiftly and on a preliminary basis whether the plan might cause significant damage to the other party. For CARU, at this stage, it is a question of deciding whether or not the plan falls under the co-operation procedure laid down by the 1975 Statute, and not of pronouncing on its actual impact on the river and the quality of its waters. This explains, in the opinion of the Court, the difference between the terminology of the first paragraph of Article 7, concerning the requirement to inform CARU, and that of the third paragraph, concerning the content of the notification to be addressed to the other party at a later stage, enabling it "to assess the probable impact of such works on navigation, the régime of the river or the quality of its waters".

105. The Court considers that the State planning activities referred to in Article 7 of the Statute is required to inform CARU as soon as it is in possession of a plan which is sufficiently developed to enable CARU to make the preliminary assessment (required by paragraph 1 of that provision) of whether the proposed works might cause significant damage to the other party. At that stage, the information provided will not neces-

sarily consist of a full assessment of the environmental impact of the project, which will often require further time and resources, although, where more complete information is available, this should, of course, be transmitted to CARU to give it the best possible basis on which to make its preliminary assessment. In any event, the duty to inform CARU will become applicable at the stage when the relevant authority has had the project referred to it with the aim of obtaining initial environmental authorization and before the granting of that authorization.

106. The Court observes that, in the present case, Uruguay did not transmit to CARU the information required by Article 7, first paragraph. in respect of the CMB (ENCE) and Orion (Botnia) mills, despite the requests made to it by the Commission to that effect on several occasions, in particular on 17 October 2002 and 21 April 2003 with regard to the CMB (ENCE) mill, and on 16 November 2004 with regard to the Orion (Botnia) mill. Uruguay merely sent CARU, on 14 May 2003, a summary for public release of the environmental impact assessment for the CMB (ENCE) mill. CARU considered this document to be inadequate and again requested further information from Uruguay on 15 August 2003 and 12 September 2003. Moreover, Uruguay did not transmit any document to CARU regarding the Orion (Botnia) mill. Consequently, Uruguay issued the initial environmental authorizations to CMB on 9 October 2003 and to Botnia on 14 February 2005 without complying with the procedure laid down in Article 7, first paragraph. Uruguay therefore came to a decision on the environmental impact of the projects without involving CARU, thereby simply giving effect to Article 17, third paragraph, of Uruguayan Decree No. 435/994 of 21 September 1994, Environmental Impact Assessment Regulation, according to which the Ministry of Housing, Land Use Planning and Environmental Affairs may grant the initial environmental authorization provided that the adverse environmental impacts of the project remain within acceptable limits.

107. The Court further notes that on 12 April 2005 Uruguay granted an authorization to Botnia for the first phase of the construction of the Orion (Botnia) mill and, on 5 July 2005, an authorization to construct a port terminal for its exclusive use and to utilize the river bed for industrial purposes, without informing CARU of these projects in advance.

108. With regard to the extraction and use of water from the river, of which CARU should have first been informed, according to Argentina, the Court takes the view that this is an activity which forms an integral part of the commissioning of the Orion (Botnia) mill and therefore did not require a separate referral to CARU.

109. However, Uruguay maintains that CARU was made aware of the plans for the mills by representatives of ENCE on 8 July 2002, and no later than 29 April 2004 by representatives of Botnia, before the initial environmental authorizations were issued. Argentina, for its part, considers that these so-called private dealings, whatever form they may have

taken, do not constitute performance of the obligation imposed on the Parties by Article 7, first paragraph.

110. The Court considers that the information on the plans for the mills which reached CARU via the companies concerned or from other non-governmental sources cannot substitute for the obligation to inform laid down in Article 7, first paragraph, of the 1975 Statute, which is borne by the party planning to construct the works referred to in that provision. Similarly, in the case concerning *Certain Questions of Mutual Assistance in Criminal Matters (Djibouti v. France)*, the Court observed that

"[i]f the information eventually came to Djibouti through the press, the information disseminated in this way could not be taken into account for the purposes of the application of Article 17 [of the Convention on Mutual Assistance in Criminal Matters between the two countries, providing that '[r]easons shall be given for any refusal of mutual assistance']" (Judgment, I.C.J. Reports 2008, p. 231, para. 150).

111. Consequently, the Court concludes from the above that Uruguay, by not informing CARU of the planned works before the issuing of the initial environmental authorizations for each of the mills and for the port terminal adjacent to the Orion (Botnia) mill, has failed to comply with the obligation imposed on it by Article 7, first paragraph, of the 1975 Statute.

3. Uruguay's obligation to notify the plans to the other party

112. The Court notes that, under the terms of Article 7, second paragraph, of the 1975 Statute, if CARU decides that the plan might cause significant damage to the other party or if a decision cannot be reached in that regard, "the party concerned shall notify the other party of this plan through the said Commission".

Article 7, third paragraph, of the 1975 Statute sets out in detail the content of this notification, which

"shall describe the main aspects of the work and . . . any other technical data 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".

- 113. In the opinion of the Court, the obligation to notify is intended to create the conditions for successful co-operation between the parties, enabling them to assess the plan's impact on the river on the basis of the fullest possible information and, if necessary, to negotiate the adjustments needed to avoid the potential damage that it might cause.
- 114. Article 8 stipulates a period of 180 days, which may be extended by the Commission, for the notified party to respond in connection with

the plan, subject to it requesting the other party, through the Commission, to supplement as necessary the documentation it has provided.

If the notified party raises no objections, the other party may carry out or authorize the work (Article 9). Otherwise, the former must notify the latter of those aspects of the work which may cause it damage and of the suggested changes (Article 11), thereby opening a further 180-day period of negotiation in which to reach an agreement (Article 12).

- 115. The obligation to notify is therefore an essential part of the process leading the parties to consult in order to assess the risks of the plan and to negotiate possible changes which may eliminate those risks or minimize their effects.
- 116. The Parties agree on the need for a full environmental impact assessment in order to assess any significant damage which might be caused by a plan.
- 117. Uruguay takes the view that such assessments were carried out in accordance with its legislation (Decree No. 435/994 of 21 September 1994, Environmental Impact Assessment Regulation), submitted to DINAMA for consideration and transmitted to Argentina on 7 November 2003 in the case of the CMB (ENCE) project and on 19 August 2005 for the Orion (Botnia) project. According to Uruguay, DINAMA asked the companies concerned for all the additional information that was required to supplement the original environmental impact assessments submitted to it, and only when it was satisfied did it propose to the Ministry of the Environment that the initial environmental authorizations requested should be issued, which they were to CMB on 9 October 2003 and to Botnia on 14 February 2005.

Uruguay maintains that it was not required to transmit the environmental impact assessments to Argentina before issuing the initial environmental authorizations to the companies, these authorizations having been adopted on the basis of its legislation on the subject.

118. Argentina, for its part, first points out that the environmental impact assessments transmitted to it by Uruguay were incomplete, particularly in that they made no provision for alternative sites for the mills and failed to include any consultation of the affected populations. The Court will return later in the Judgment to the substantive conditions which must be met by environmental impact assessments (see paragraphs 203 to 219).

Furthermore, in procedural terms, Argentina considers that the initial environmental authorizations should not have been granted to the companies before it had received the complete environmental impact assessments, and that it was unable to exercise its rights in this context under Articles 7 to 11 of the 1975 Statute.

119. The Court notes that the environmental impact assessments which are necessary to reach a decision on any plan that is liable to cause sig-

nificant transboundary harm to another State must be notified by the party concerned to the other party, through CARU, pursuant to Article 7, second and third paragraphs, of the 1975 Statute. This notification is intended to enable the notified party to participate in the process of ensuring that the assessment is complete, so that it can then consider the plan and its effects with a full knowledge of the facts (Article 8 of the 1975 Statute).

- 120. The Court observes that this notification must take place before the State concerned decides on the environmental viability of the plan, taking due account of the environmental impact assessment submitted to it.
- 121. In the present case, the Court observes that the notification to Argentina of the environmental impact assessments for the CMB (ENCE) and Orion (Botnia) mills did not take place through CARU, and that Uruguay only transmitted those assessments to Argentina after having issued the initial environmental authorizations for the two mills in question. Thus in the case of CMB (ENCE), the matter was notified to Argentina on 27 October and 7 November 2003, whereas the initial environmental authorization had already been issued on 9 October 2003. In the case of Orion (Botnia), the file was transmitted to Argentina between August 2005 and January 2006, whereas the initial environmental authorization had been granted on 14 February 2005. Uruguay ought not, prior to notification, to have issued the initial environmental authorizations and the authorizations for construction on the basis of the environmental impact assessments submitted to DINAMA. Indeed by doing so, Uruguay gave priority to its own legislation over its procedural obligations under the 1975 Statute and disregarded the well-established customary rule reflected in Article 27 of the Vienna Convention on the Law of Treaties, according to which "[a] party may not invoke the provisions of its internal law as justification for its failure to perform a treaty".
- 122. The Court concludes from the above that Uruguay failed to comply with its obligation to notify the plans to Argentina through CARU under Article 7, second and third paragraphs, of the 1975 Statute.

C. Whether the Parties Agreed to Derogate from the Procedural Obligations Set Out in the 1975 Statute

- 123. Having thus examined the procedural obligations laid down by the 1975 Statute, the Court now turns to the question of whether the Parties agreed, by mutual consent, to derogate from them, as alleged by Uruguay.
- 124. In this respect the Parties refer to two "agreements" reached on 2 March 2004 and 5 May 2005; however, they hold divergent views regarding their scope and content.

- 1. The "understanding" of 2 March 2004 between Argentina and Uruguay
- 125. The Court recalls that, after the issuing of the initial environmental authorization to CMB by Uruguay, without CARU having been able to carry out the functions assigned to it in this context by the 1975 Statute, the Foreign Ministers of the Parties agreed on 2 March 2004 on the procedure to be followed, as described in the minutes of the extraordinary meeting of CARU of 15 May 2004. The relevant extract from those minutes reads as follows in Spanish:
 - "II) En fecha 2 de marzo de 2004 los Cancilleres de Argentina y Uruguay llegaron a un entendimiento con relación al curso de acción que se dará al tema, esto es, facilitar por parte del gobierno uruguayo, la información relativa a la construcción de la planta y, en relación a la fase operativa, proceder a realizar el monitoreo, por parte de CARU, de la calidad de las aguas conforme a su Estatuto.

I) Ambas delegaciones reafirmaron el compromiso de los Ministros de Relaciones Exteriores de la República Argentina y de la República Oriental del Uruguay de fecha 2 de marzo de 2004 por el cual el Uruguay comunicará la información relativa a la construcción de la planta incluyendo el Plan de Gestión Ambiental. En tal sentido, *la CARU recibirá* los Planes de Gestión Ambiental para la construcción y operación de la planta que presente la empresa al gobierno uruguayo una vez que le sean remitidos por la delegación uruguaya." (Emphasis in the original.)

Argentina and Uruguay have provided the Court, respectively, with French and English translations of these minutes. In view of the discrepancies between those two translations, the Court will use the following translation:

"(II) On 2 March 2004, the Foreign Ministers of Argentina and Uruguay reached an understanding on how to proceed in the matter, namely, that the Uruguayan Government would provide information on the construction of the mill and that, in terms of the operational phase, CARU would carry out monitoring of water quality in accordance with its Statute.

(I) Both delegations reaffirmed the arrangement which had been come to by the Foreign Ministers of the Republic of Argentina and the Eastern Republic of Uruguay on 2 March 2004, whereby Uruguay would communicate information on the construction of the mill, including the environmental management plan. As a result, *CARU would receive* the environmental management plans for the

construction and operation of the mill provided by the company to the Uruguayan Government, when these were forwarded to it by the Uruguayan delegation." (Emphasis in the original.) [Translation by the Court.]

126. Uruguay considers that, under the terms of this "understanding", the Parties agreed on the approach to be followed in respect of the CMB (ENCE) project, outside CARU, and that there was no reason in law or logic to prevent them derogating from the procedures outlined in the 1975 Statute pursuant to an appropriate bilateral agreement.

The said "understanding", according to Uruguay, only covered the transmission to CARU of the Environmental Management Plans for the construction and operation of the (CMB) ENCE mill. It supposedly thereby puts an end to any dispute with Argentina regarding the procedure laid down in Article 7 of the 1975 Statute. Lastly, Uruguay maintains that the "understanding" of 2 March 2004 on the (CMB) ENCE project was later extended to include the Orion (Botnia) project, since the PROCEL water quality monitoring plan put in place by CARU's Subcommittee on Water Quality to implement that "understanding" related to the activity of "both plants", the CMB (ENCE) and Orion (Botnia) mills, the plural having been used in the title and text of the Subcommittee's report.

127. Argentina, for its part, maintains that the "understanding" between the two Ministers of 2 March 2004 was intended to ensure compliance with the procedure laid down by the 1975 Statute and thus to reintroduce the CMB (ENCE) project within CARU, ending the dispute on CARU's jurisdiction to deal with the project. Argentina claims that it reiterated to the organs within CARU that it had not given up its rights under Article 7, although it accepted that the dispute between itself and Uruguay in this respect could have been resolved if the procedure contemplated in the "understanding" of 2 March 2004 had been brought to a conclusion.

According to Argentina, however, Uruguay never transmitted the required information to CARU as it undertook to do in the "understanding" of 2 March 2004. Argentina also denies that the "understanding" of 2 March 2004 was extended to the Orion (Botnia) mill; the reference to both future plants in the PROCEL plan does not in any way signify, in its view, the renunciation of the procedure laid down by the 1975 Statute.

128. The Court first notes that while the existence of the "understanding" of 2 March 2004, as minuted by CARU, has not been contested by the Parties, they differ as to its content and scope. Whatever its specific designation and in whatever instrument it may have been recorded (the CARU minutes), this "understanding" is binding on the Parties, to the extent that they have consented to it and must be observed by them in good faith. They are entitled to depart from the procedures laid down by the 1975 Statute, in respect of a given project pursuant to an appropriate bilateral agreement. The Court recalls that the Parties disagree on whether

the procedure for communicating information provided for by the "understanding" would, if applied, replace that provided for by the 1975 Statute. Be that as it may, such replacement was dependent on Uruguay complying with the procedure laid down in the "understanding".

- 129. The Court finds that the information which Uruguay agreed to transmit to CARU in the "understanding" of 2 March 2004 was never transmitted. Consequently, the Court cannot accept Uruguay's contention that the "understanding" put an end to its dispute with Argentina in respect of the CMB (ENCE) mill, concerning implementation of the procedure laid down by Article 7 of the 1975 Statute.
- 130. Further, the Court observes that, when this "understanding" was reached, only the CMB (ENCE) project was in question, and that it therefore cannot be extended to the Orion (Botnia) project, as Uruguay claims. The reference to both mills is made only as from July 2004, in the context of the PROCEL plan. However, this plan only concerns the measures to monitor and control the environmental quality of the river waters in the areas of the pulp mills, and not the procedures under Article 7 of the 1975 Statute.
- 131. The Court concludes that the "understanding" of 2 March 2004 would have had the effect of relieving Uruguay of its obligations under Article 7 of the 1975 Statute, if that was the purpose of the "understanding", only if Uruguay had complied with the terms of the "understanding". In the view of the Court, it did not do so. Therefore the "understanding" cannot be regarded as having had the effect of exempting Uruguay from compliance with the procedural obligations laid down by the 1975 Statute.
- 2. The agreement setting up the High-Level Technical Group (the GTAN)
- 132. The Court notes that, in furtherance of the agreement reached on 5 May 2005 between the Presidents of Argentina and Uruguay (see paragraph 40 above), the Foreign Ministries of the two States issued a press release on 31 May 2005 announcing the creation of the High-Level Technical Group, referred to by the Parties as the GTAN. According to this communiqué:

"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 analysis, 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.

This Group . . . is to produce an initial report within a period of 180 days."

133. Uruguay regards this press release as an agreement that binds the two States, whereby they decided to make the GTAN the body within which the direct negotiations between the Parties provided for by Article 12 of the 1975 Statute would take place, since its purpose was to analyse the effects on the environment of the "operation of the cellulose plants that are being constructed in the Eastern Republic of Uruguay". Uruguay infers from this that the Parties were agreed on the construction of the mills and that they had limited the extent of the dispute between them to the environmental risks caused by their operation. Uruguay sees proof of this in the referral to the Court on the basis of Article 12 of the 1975 Statute, which allows either Party to apply to the Court in the event of the negotiations failing to produce an agreement within the period of 180 days.

According to Uruguay, therefore, the agreement contained in the press release of 31 May 2005, by paving the way for the direct negotiations provided for in Article 12, covered any possible procedural irregularities in relation to Articles 7 *et seq.* of the 1975 Statute. Uruguay points out that it communicated all the necessary information to Argentina during the 12 meetings held by the GTAN and that it transmitted the Orion (Botnia) port project to CARU, as agreed by the Parties at the first meeting of the GTAN.

- 134. Uruguay further notes that the 1975 Statute is silent as to whether the notifying State may or may not implement a project while negotiations are ongoing. It acknowledges that, under international law, the initiating State must refrain from doing so during the period of negotiation, but takes the view that this does not apply to all work and, in particular, that preparatory work is permitted. Uruguay acknowledges that it carried out such work, for example construction of the foundations for the Orion (Botnia) mill, but in its view this did not involve faits accomplis which prevented the negotiations from reaching a conclusion. Uruguay also considers that it had no legal obligation to suspend any and all work on the port.
- 135. Argentina considers that no acceptance on its part of the construction of the disputed mills can be inferred from the terms of the press release of 31 May 2005. It submits that in creating the GTAN, the Parties did not decide to substitute it for CARU, but regarded it as a means of negotiation that would co-exist with the latter.

Contrary to Uruguay, Argentina takes the view that this matter has been submitted to the Court on the basis of Article 60 of the 1975 Statute and not of Article 12, since Uruguay, by its conduct, has prevented the latter from being used as a basis, having allegedly disregarded the entire procedure laid down in Chapter II of the Statute. Argentina therefore

sees it as for the Court to pronounce on all the breaches of the 1975 Statute, including and not limited to the authorization for the construction of the disputed mills.

136. Argentina submits that Uruguay, by its conduct, frustrated the procedures laid down in Articles 7 to 9 of the 1975 Statute and that, during the period of negotiation within the GTAN, Uruguay continued the construction work on the Orion (Botnia) mill and began building the port terminal. During that same period, Argentina reiterated, within CARU, the need for Uruguay to comply with its procedural obligations under Articles 7 to 12 of the 1975 Statute and to suspend the works.

Lastly, Argentina rejects Uruguay's claim that the work on the foundations of the Orion (Botnia) mill, its chimney and the port was merely preliminary in nature and cannot be regarded as the beginning of construction work as such. For Argentina, such a distinction is groundless and cannot be justified by the nature of the work carried out.

137. The Court first points out that there is no reason to distinguish, as Uruguay and Argentina have both done for the purpose of their respective cases, between referral on the basis of Article 12 and of Article 60 of the 1975 Statute. While it is true that Article 12 provides for recourse to the procedure indicated in Chapter XV, should the negotiations fail to produce an agreement within the 180-day period, its purpose ends there. Article 60 then takes over, in particular its first paragraph, which enables either Party to submit to the Court any dispute concerning the interpretation or application of the Statute which cannot be settled by direct negotiations. This wording also covers a dispute relating to the interpretation or application of Article 12, like any other provision of the 1975 Statute.

138. The Court notes that the press release of 31 May 2005 sets out an agreement between the two States to create a negotiating framework, the GTAN, in order to study, analyse and exchange information on the effects that the operation of the cellulose plants that were being constructed in the Eastern Republic of Uruguay could have on the ecosystem of the shared Uruguay River, with "the group [having] to produce an initial report within a period of 180 days".

139. The Court recognizes that the GTAN was created with the aim of enabling the negotiations provided for in Article 12 of the 1975 Statute, also for a 180-day period, to take place. Under Article 11, these negotiations between the parties with a view to reaching an agreement are to be held once the notified party has sent a communication to the other party, through the Commission, specifying

"which aspects of the work or the programme of operations might significantly impair navigation, the régime of the river or the quality of its waters, the technical reasons on which this conclusion is based and the changes suggested to the plan or programme of operations".

The Court is aware that the negotiation provided for in Article 12 of the 1975 Statute forms part of the overall procedure laid down in Articles 7 to 12, which is structured in such a way that the parties, in association with CARU, are able, at the end of the process, to fulfil their obligation to prevent any significant transboundary harm which might be caused by potentially harmful activities planned by either one of them.

140. The Court therefore considers that the agreement to set up the GTAN, while indeed creating a negotiating body capable of enabling the Parties to pursue the same objective as that laid down in Article 12 of the 1975 Statute, cannot be interpreted as expressing the agreement of the Parties to derogate from other procedural obligations laid down by the Statute.

141. Consequently, the Court finds that Argentina, in accepting the creation of the GTAN, did not give up, as Uruguay claims, the other procedural rights belonging to it by virtue of the 1975 Statute, nor the possibility of invoking Uruguay's responsibility for any breach of those rights. Argentina did not, in the agreement to set up the GTAN, "effect a clear and unequivocal waiver" of its rights under the 1975 Statute (Certain Phosphate Lands in Nauru (Nauru v. Australia), Preliminary Objections, Judgment, I.C.J. Reports 1992, p. 247, para. 13). Nor did it consent to suspending the operation of the procedural provisions of the 1975 Statute. Indeed, under Article 57 of the Vienna Convention on the Law of Treaties of 23 May 1969, concerning "[s]uspension of the operation of a treaty", including, according to the International Law Commission's commentary, suspension of "the operation of . . . some of its provisions" (Yearbook of the International Law Commission, 1966, Vol. II, p. 251), suspension is only possible "in conformity with the provisions of the treaty" or "by consent of all the parties".

142. The Court further observes that the agreement to set up the GTAN, in referring to "the cellulose plants that are being constructed in the Eastern Republic of Uruguay", is stating a simple fact and cannot be interpreted, as Uruguay claims, as an acceptance of their construction by Argentina.

143. The Court finds that Uruguay was not entitled, for the duration of the period of consultation and negotiation provided for in Articles 7 to 12 of the 1975 Statute, either to construct or to authorize the construction of the planned mills and the port terminal. It would be contrary to the object and purpose of the 1975 Statute to embark on disputed activities before having applied the procedures laid down by the "joint machinery necessary for the optimum and rational utilization of the [r]iver" (Article 1). However, Article 9 provides that: "[i]f the notified party raises no objections or does not respond within the period established in Arti-

- cle 8 [180 days], the other party may carry out or authorize the work planned".
- 144. Consequently, in the opinion of the Court, as long as the procedural mechanism for co-operation between the parties to prevent significant damage to one of them is taking its course, the State initiating the planned activity is obliged not to authorize such work and, *a fortiori*, not to carry it out.
- 145. The Court notes, moreover, that the 1975 Statute is perfectly in keeping with the requirements of international law on the subject, since the mechanism for co-operation between States is governed by the principle of good faith. Indeed, according to customary international law, as reflected in Article 26 of the 1969 Vienna Convention on the Law of Treaties, "[e]very treaty in force is binding upon the parties to it and must be performed by them in good faith". That applies to all obligations established by a treaty, including procedural obligations which are essential to co-operation between States. The Court recalled in the cases concerning *Nuclear Tests (Australia v. France) (New Zealand v. France)*:

"One of the basic principles governing the creation and performance of legal obligations, whatever their source, is the principle of good faith. Trust and confidence are inherent in international co-operation . . ." (Judgments, I.C.J. Reports 1974, p. 268, para. 46, and p. 473, para. 49; see also Border and Transborder Armed Actions (Nicaragua v. Honduras), Jurisdiction and Admissibility, Judgment, I.C.J. Reports 1988, p. 105, para. 94.)

- 146. The Court has also had occasion to draw attention to the characteristics of the obligation to negotiate and to the conduct which this imposes on the States concerned: "[the Parties] are under an obligation so to conduct themselves that the negotiations are meaningful" (North Sea Continental Shelf (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands), Judgment, I.C.J. Reports 1969, p. 47, para. 85).
- 147. In the view of the Court, there would be no point to the co-operation mechanism provided for by Articles 7 to 12 of the 1975 Statute if the party initiating the planned activity were to authorize or implement it without waiting for that mechanism to be brought to a conclusion. Indeed, if that were the case, the negotiations between the parties would no longer have any purpose.
- 148. In this respect, contrary to what Uruguay claims, the preliminary work on the pulp mills on sites approved by Uruguay alone does not constitute an exception. This work does in fact form an integral part of the construction of the planned mills (see paragraphs 39 and 42 above).
- 149. The Court concludes from the above that the agreement to set up the GTAN did not permit Uruguay to derogate from its obligations of information and notification under Article 7 of the 1975 Statute, and that by authorizing the construction of the mills and the port terminal at

Fray Bentos before the expiration of the period of negotiation, Uruguay failed to comply with the obligation to negotiate laid down by Article 12 of the Statute. Consequently, Uruguay disregarded the whole of the co-operation mechanism provided for in Articles 7 to 12 of the 1975 Statute.

150. Given that "an obligation to negotiate does not imply an obligation to reach an agreement" (*Railway Traffic between Lithuania and Poland, Advisory Opinion, 1931, P.C.I.J., Series A/B, No. 42*, p. 116), it remains for the Court to examine whether the State initiating the plan is under certain obligations following the end of the negotiation period provided for in Article 12.

D. Uruguay's Obligations Following the End of the Negotiation Period

151. Article 12 refers the Parties, should they fail to reach an agreement within 180 days, to the procedure indicated in Chapter XV.

Chapter XV contains a single article, Article 60, according to which:

"Any 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.

In the cases referred to in Articles 58 and 59, either party may submit any dispute concerning the interpretation or application of the Treaty and the Statute to the International Court of Justice, when it has not been possible to settle the dispute within 180 days following the notification referred to in Article 59."

152. According to Uruguay, the 1975 Statute does not give one party a "right of veto" over the projects initiated by the other. It does not consider there to be a "no construction obligation" borne by the State initiating the projects until such time as the Court has ruled on the dispute. Uruguay points out that the existence of such an obligation would enable one party to block a project that was essential for the sustainable development of the other, something that would be incompatible with the "optimum and rational utilization of the [r]iver". On the contrary, for Uruguay, in the absence of any specific provision in the 1975 Statute, reference should be made to general international law, as reflected in the 2001 draft Articles of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities (Yearbook of the International Law Commission, 2001, Vol. II, Part Two); in particular, draft Article 9, paragraph 3, concerning "Consultations on preventive measures", states that "[i]f the consultations . . . 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 . . . ".

153. Argentina, on the other hand, maintains that Article 12 of the 1975 Statute makes the Court the final decision-maker where the parties have failed to reach agreement within 180 days following the notification referred to in Article 11. It is said to follow from Article 9 of the Statute, interpreted in the light of Articles 11 and 12 and taking account of its object and purpose, that if the notified party raises an objection, the other party may neither carry out nor authorize the work in question until the procedure laid down in Articles 7 to 12 has been completed and the Court has ruled on the project. Argentina therefore considers that, during the dispute settlement proceedings before the Court, the State which is envisaging carrying out the work cannot confront the other Party with the fait accompli of having carried it out.

Argentina argues that the question of the "veto" raised by Uruguay is inappropriate, since neither of the parties can impose its position in respect of the construction works and it will ultimately be for the Court to settle the dispute, if the parties disagree, by a decision that will have the force of *res judicata*. It could be said, according to Argentina, that Uruguay has no choice but to come to an agreement with it or to await the settlement of the dispute. Argentina contends that, by pursuing the construction and commissioning of the Orion (Botnia) mill and port, Uruguay has committed a continuing violation of the procedural obligations under Chapter II of the 1975 Statute.

154. The Court observes that the "no construction obligation", said to be borne by Uruguay between the end of the negotiation period and the decision of the Court, is not expressly laid down by the 1975 Statute and does not follow from its provisions. Article 9 only provides for such an obligation during the performance of the procedure laid down in Articles 7 to 12 of the Statute.

Furthermore, in the event of disagreement between the parties on the planned activity persisting at the end of the negotiation period, the Statute does not provide for the Court, to which the matter would be submitted by the State concerned, according to Argentina, to decide whether or not to authorize the activity in question. The Court points out that, while the 1975 Statute gives it jurisdiction to settle any dispute concerning its interpretation or application, it does not however confer on it the role of deciding in the last resort whether or not to authorize the planned activities. Consequently, the State initiating the plan may, at the end of the negotiation period, proceed with construction at its own risk.

The Court cannot uphold the interpretation of Article 9 according to which any construction is prohibited until the Court has given its ruling pursuant to Articles 12 and 60.

155. Article 12 does not impose an obligation on the parties to submit a matter to the Court, but gives them the possibility of doing so, following the end of the negotiation period. Consequently, Article 12 can do nothing to alter the rights and obligations of the party concerned as long as the Court has not ruled finally on them. The Court considers that

those rights include that of implementing the project, on the sole responsibility of that party, since the period for negotiation has expired.

- 156. In its Order of 13 July 2006, the Court took the view that the "construction [of the mills] at the current site cannot be deemed to create a fait accompli" (Pulp Mills on the River Uruguay (Argentina v. Uruguay), Provisional Measures, Order of 13 July 2006, I.C.J. Reports 2006, p. 133, para. 78). Thus, in pronouncing on the merits in the dispute between the Parties, the Court is the ultimate guarantor of their compliance with the 1975 Statute.
- 157. The Court concludes from the above that Uruguay did not bear any "no construction obligation" after the negotiation period provided for in Article 12 expired on 3 February 2006, the Parties having determined at that date that the negotiations undertaken within the GTAN had failed (see paragraph 40). Consequently the wrongful conduct of Uruguay (established in paragraph 149 above) could not extend beyond that period.
- 158. Having established that Uruguay breached its procedural obligations to inform, notify and negotiate to the extent and for the reasons given above, the Court will now turn to the question of the compliance of that State with the substantive obligations laid down by the 1975 Statute.

IV. SUBSTANTIVE OBLIGATIONS

159. Before taking up the examination of the alleged violations of substantive obligations under the 1975 Statute, the Court will address two preliminary issues, namely, the burden of proof and expert evidence.

A. Burden of Proof and Expert Evidence

- 160. Argentina contends that the 1975 Statute adopts an approach in terms of precaution whereby "the burden of proof will be placed on Uruguay for it to establish that the Orion (Botnia) mill will not cause significant damage to the environment". It also argues that the burden of proof should not be placed on Argentina alone as the Applicant, because, in its view, the 1975 Statute imposes an equal onus to persuade — for the one that the plant is innocuous and for the other that it is harmful.
- 161. Uruguay, on the other hand, asserts that the burden of proof is on Argentina, as the Applicant, in accordance with the Court's longstanding case law, although it considers that, even if the Argentine position about transferring the burden of proof to Uruguay were correct, it would make no difference given the manifest weakness of Argentina's

case and the extensive independent evidence put before the Court by Uruguay. Uruguay also strongly contests Argentina's argument that the precautionary approach of the 1975 Statute would imply a reversal of the burden of proof, in the absence of an explicit treaty provision prescribing it as well as Argentina's proposition that the Statute places the burden of proof equally on both Parties.

- 162. To begin with, the Court considers that, in accordance with the well-established principle of onus probandi incumbit actori, it is the duty of the party which asserts certain facts to establish the existence of such facts. This principle which has been consistently upheld by the Court (Maritime Delimitation in the Black Sea (Romania v. Ukraine), Judgment, I.C.J. Reports 2009, p. 86, para. 68; Sovereignty over Pedra BrancalPulau Batu Puteh, Middle Rocks and South Ledge (Malaysial Singapore), Judgment, I.C.J. Reports 2008, p. 31, para. 45; 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 (I), p. 128, para. 204; Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Jurisdiction and Admissibility, Judgment, I.C.J. Reports 1984, p. 437, para. 101) applies to the assertions of fact both by the Applicant and the Respondent.
- 163. It is of course to be expected that the Applicant should, in the first instance, submit the relevant evidence to substantiate its claims. This does not, however, mean that the Respondent should not co-operate in the provision of such evidence as may be in its possession that could assist the Court in resolving the dispute submitted to it.
- 164. Regarding the arguments put forward by Argentina on the reversal of the burden of proof and on the existence, vis-à-vis each Party, of an equal onus to prove under the 1975 Statute, the Court considers that while a precautionary approach may be relevant in the interpretation and application of the provisions of the Statute, it does not follow that it operates as a reversal of the burden of proof. The Court is also of the view that there is nothing in the 1975 Statute itself to indicate that it places the burden of proof equally on both Parties.

~

165. The Court now turns to the issue of expert evidence. Both Argentina and Uruguay have placed before the Court a vast amount of factual and scientific material in support of their respective claims. They have also submitted reports and studies prepared by the experts and consultants commissioned by each of them, as well as others commissioned by the International Finance Corporation in its quality as lender to the project. Some of these experts have also appeared

before the Court as counsel for one or the other of the Parties to provide evidence.

166. The Parties, however, disagree on the authority and reliability of the studies and reports submitted as part of the record and prepared, on the one hand, by their respective experts and consultants, and on the other, by the experts of the IFC, which contain, in many instances, conflicting claims and conclusions. In reply to a question put by a judge, Argentina stated that the weight to be given to such documents should be determined by reference not only to the "independence" of the author, who must have no personal interest in the outcome of the dispute and must not be an employee of the government, but also by reference to the characteristics of the report itself, in particular the care with which its analysis was conducted, its completeness, the accuracy of the data used, and the clarity and coherence of the conclusions drawn from such data. In its reply to the same question, Uruguay suggested that reports prepared by retained experts for the purposes of the proceedings and submitted as part of the record should not be regarded as independent and should be treated with caution; while expert statements and evaluations issued by a competent international organization, such as the IFC, or those issued by the consultants engaged by that organization should be regarded as independent and given "special weight".

167. The Court has given most careful attention to the material submitted to it by the Parties, as will be shown in its consideration of the evidence below with respect to alleged violations of substantive obligations. Regarding those experts who appeared before it as counsel at the hearings, the Court would have found it more useful had they been presented by the Parties as expert witnesses under Articles 57 and 64 of the Rules of Court, instead of being included as counsel in their respective delegations. The Court indeed considers that those persons who provide evidence before the Court based on their scientific or technical knowledge and on their personal experience should testify before the Court as experts, witnesses or in some cases in both capacities, rather than counsel, so that they may be submitted to questioning by the other party as well as by the Court.

168. As for the independence of such experts, the Court does not find it necessary in order to adjudicate the present case to enter into a general discussion on the relative merits, reliability and authority of the documents and studies prepared by the experts and consultants of the Parties. It needs only to be mindful of the fact that, despite the volume and complexity of the factual information submitted to it, it is the responsibility of the Court, after having given careful consideration to all the evidence placed before it by the Parties, to determine which facts must be considered relevant, to assess their probative value, and to draw conclusions from them as appropriate. Thus, in keeping with its practice, the Court will make its own determination of the facts, on the basis of the evidence

presented to it, and then it will apply the relevant rules of international law to those facts which it has found to have existed.

B. Alleged Violations of Substantive Obligations

169. The Court now turns to the examination of the alleged violations by Uruguay of its substantive obligations under the 1975 Statute by authorizing the construction and operation of the Orion (Botnia) mill. In particular, Argentina contends that Uruguay has breached its obligations under Articles 1, 27, 35, 36 and 41 (a) of the 1975 Statute and "other obligations deriving from . . . general, conventional and customary international law which are necessary for the application of the 1975 Statute". Uruguay rejects these allegations. Uruguay considers furthermore that Article 27 of the 1975 Statute allows the parties to use the waters of the river for domestic, sanitary, industrial and agricultural purposes.

1. The obligation to contribute to the optimum and rational utilization of the river (Article 1)

170. According to Argentina, Uruguay has breached its obligation to contribute to the "optimum and rational utilization of the river" by failing to co-ordinate with Argentina on measures necessary to avoid ecological change, and by failing to take the measures necessary to prevent pollution. Argentina also maintains that, in interpreting the 1975 Statute (in particular Articles 27, 35, and 36 thereof) according to the principle of equitable and reasonable use, account must be taken of all pre-existing legitimate uses of the river, including in particular its use for recreational and tourist purposes.

171. For Uruguay, the object and purpose of the 1975 Statute is to establish a structure for co-operation between the Parties through CARU in pursuit of the shared goal of equitable and sustainable use of the water and biological resources of the river. Uruguay contends that it has in no way breached the principle of equitable and reasonable use of the river and that this principle provides no basis for favouring pre-existing uses of the river, such as tourism or fishing, over other, new uses.

172. The Parties also disagree on the scope and implications of Article 27 of the 1975 Statute on the right of each Party to use the waters of the river, within its jurisdiction, for domestic, sanitary, industrial and agricultural purposes.

173. The Court observes that Article 1, as stated in the title to Chapter I of the 1975 Statute, sets out the purpose of the Statute. As such, it informs the interpretation of the substantive obligations, but does not by itself lay down specific rights and obligations for the parties. Optimum and rational utilization is to be achieved through compliance with the obligations prescribed by the 1975 Statute for the protection of the envi-

ronment and the joint management of this shared resource. This objective must also be ensured through CARU, which constitutes "the joint machinery" necessary for its achievement, and through the regulations adopted by it as well as the regulations and measures adopted by the Parties.

174. The Court recalls that the Parties concluded the treaty embodying the 1975 Statute, in implementation of Article 7 of the 1961 Treaty, requiring the Parties jointly to establish a régime for the use of the river covering, *inter alia*, provisions for preventing pollution and protecting and preserving the aquatic environment. Thus, optimum and rational utilization may be viewed as the cornerstone of the system of co-operation established in the 1975 Statute and the joint machinery set up to implement this co-operation.

175. The Court considers that the attainment of optimum and rational utilization requires a balance between the Parties' rights and needs to use the river for economic and commercial activities on the one hand, and the obligation to protect it from any damage to the environment that may be caused by such activities, on the other. The need for this balance is reflected in various provisions of the 1975 Statute establishing rights and obligations for the Parties, such as Articles 27, 36, and 41. The Court will therefore assess the conduct of Uruguay in authorizing the construction and operation of the Orion (Botnia) mill in the light of those provisions of the 1975 Statute, and the rights and obligations prescribed therein.

176. The Court has already addressed in paragraphs 84 to 93 above the role of CARU with respect to the procedural obligations laid down in the 1975 Statute. In addition to its role in that context, the functions of CARU relate to almost all aspects of the implementation of the substantive provisions of the 1975 Statute. Of particular relevance in the present case are its functions relating to rule-making in respect of conservation and preservation of living resources, the prevention of pollution and its monitoring, and the co-ordination of actions of the Parties. These functions will be examined by the Court in its analysis of the positions of the Parties with respect to the interpretation and application of Articles 36 and 41 of the 1975 Statute.

177. Regarding Article 27, it is the view of the Court that its formulation reflects not only the need to reconcile the varied interests of riparian States in a transboundary context and in particular in the use of a shared natural resource, but also the need to strike a balance between the use of the waters and the protection of the river consistent with the objective of sustainable development. The Court has already dealt with the obligations arising from Articles 7 to 12 of the 1975 Statute which have to be observed, according to Article 27, by any party wishing to exercise its right to use the waters of the river for any of the purposes mentioned therein insofar as such use may be liable to affect the régime of the river

or the quality of its waters. The Court wishes to add that such utilization could not be considered to be equitable and reasonable if the interests of the other riparian State in the shared resource and the environmental protection of the latter were not taken into account. Consequently, it is the opinion of the Court that Article 27 embodies this interconnectedness between equitable and reasonable utilization of a shared resource and the balance between economic development and environmental protection that is the essence of sustainable development.

- 2. The obligation to ensure that the management of the soil and woodland does not impair the régime of the river or the quality of its waters (Article 35)
 - 178. Article 35 of the 1975 Statute provides that the 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 régime of the river or the quality of its waters?"

179. Argentina contends that Uruguay's decision to carry out major eucalyptus planting operations to supply the raw material for the Orion (Botnia) mill has an impact on management of the soil and Uruguayan woodland, but also on the quality of the waters of the river. For its part, Uruguay states that Argentina does not make any arguments that are based on Uruguay's management of soil or woodland — "nor has it made any allegations concerning the waters of tributaries".

180. The Court observes that Argentina has not provided any evidence to support its contention. Moreover, Article 35 concerns the management of the soil and woodland as well as the use of groundwater and the water of tributaries, and there is nothing to suggest, in the evidentiary material submitted by Argentina, a direct relationship between Uruguay's management of the soil and woodland, or its use of ground water and water of tributaries and the alleged changes in the quality of the waters of the River Uruguay which had been attributed by Argentina to the Orion (Botnia) mill. Indeed, while Argentina made lengthy arguments about the effects of the pulp mill discharges on the quality of the waters of the river, no similar arguments have been presented to the Court regarding a deleterious relationship between the quality of the waters of the river and the eucalyptus-planting operations by Uruguay. The Court concludes that Argentina has not established its contention on this matter.

- 3. The obligation to co-ordinate measures to avoid changes in the ecological balance (Article 36)
 - 181. Argentina contends that Uruguay has breached Article 36 of the

1975 Statute, which places the Parties under an obligation to co-ordinate through CARU the necessary measures to avoid changing the ecological balance of the river. Argentina asserts that the discharges from the Orion (Botnia) mill altered the ecological balance of the river, and cites as examples the 4 February 2009 algal bloom, which, according to it, provides graphic evidence of a change in the ecological balance, as well as the discharge of toxins, which gave rise, in its view, to the malformed rotifers whose pictures were shown to the Court.

182. Uruguay considers that any assessment of the Parties' conduct in relation to Article 36 of the 1975 Statute must take account of the rules adopted by CARU, because this Article, creating an obligation of co-operation, refers to such rules and does not by itself prohibit any specific conduct. Uruguay takes the position that the mill fully meets CARU requirements concerning the ecological balance of the river, and concludes that it has not acted in breach of Article 36 of the 1975 Statute.

183. It is recalled that Article 36 provides that "[t]he parties shall coordinate, through the Commission, the necessary measures to avoid any change in the ecological balance and to control pests and other harmful factors in the river and the areas affected by it".

184. It is the opinion of the Court that compliance with this obligation cannot be expected to come through the individual action of either Party, acting on its own. Its implementation requires co-ordination through the Commission. It reflects the common interest dimension of the 1975 Statute and expresses one of the purposes for the establishment of the joint machinery which is to co-ordinate the actions and measures taken by the Parties for the sustainable management and environmental protection of the river. The Parties have indeed adopted such measures through the promulgation of standards by CARU. These standards are to be found in Sections E3 and E4 of the CARU Digest. One of the purposes of Section E3 is "[t]o protect and preserve the water and its ecological balance". Similarly, it is stated in Section E4 that the section was developed "in accordance with . . . Articles 36, 37, 38, and 39".

185. In the view of the Court, the purpose of Article 36 of the 1975 Statute is to prevent any transboundary pollution liable to change the ecological balance of the river by co-ordinating, through CARU, the adoption of the necessary measures. It thus imposes an obligation on both States to take positive steps to avoid changes in the ecological balance. These steps consist not only in the adoption of a regulatory framework, as has been done by the Parties through CARU, but also in the observance as well as enforcement by both Parties of the measures adopted. As the Court emphasized in the *Gabčikovo-Nagymaros* case:

"in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage" (*Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, *Judgment, I.C.J. Reports* 1997, p. 78, para. 140).

186. The Parties also disagree with respect to the nature of the obligation laid down in Article 36, and in particular whether it is an obligation of conduct or of result. Argentina submits that, on a plain meaning, both Articles 36 and 41 of the 1975 Statute establish an obligation of result.

187. The Court considers that the obligation laid down in Article 36 is addressed to both Parties and prescribes the specific conduct of co-ordinating the necessary measures through the Commission to avoid changes to the ecological balance. An obligation to adopt regulatory or administrative measures either individually or jointly and to enforce them is an obligation of conduct. Both Parties are therefore called upon, under Article 36, to exercise due diligence in acting through the Commission for the necessary measures to preserve the ecological balance of the river.

188. This vigilance and prevention is all the more important in the preservation of the ecological balance, since the negative impact of human activities on the waters of the river may affect other components of the ecosystem of the watercourse such as its flora, fauna, and soil. The obligation to co-ordinate, through the Commission, the adoption of the necessary measures, as well as their enforcement and observance, assumes, in this context, a central role in the overall system of protection of the River Uruguay established by the 1975 Statute. It is therefore of crucial importance that the Parties respect this obligation.

189. In light of the above, the Court is of the view that Argentina has not convincingly demonstrated that Uruguay has refused to engage in such co-ordination as envisaged by Article 36, in breach of that provision.

- 4. The obligation to prevent pollution and preserve the aquatic environment (Article 41)
 - 190. Article 41 provides that:
 - "Without prejudice to the functions assigned to the Commission in this respect, the parties undertake:
 - (a) to protect and preserve the aquatic environment and, in particular, to prevent its pollution, by prescribing appropriate rules and [adopting appropriate] measures in accordance with applicable international agreements and in keeping, where rele-

- vant, with the guidelines and recommendations of international technical bodies:
- (b) not to reduce in their respective legal systems:
 - the technical requirements in force for preventing water pollution, and
 - 2. the severity of the penalties established for violations;
- (c) to inform one another of any rules which they plan to prescribe with regard to water pollution in order to establish equivalent rules in their respective legal systems."
- 191. Argentina claims that by allowing the discharge of additional nutrients into a river that is eutrophic and suffers from reverse flow and stagnation, Uruguay violated the obligation to prevent pollution, as it failed to prescribe appropriate measures in relation to the Orion (Botnia) mill, and failed to meet applicable international environmental agreements, including the Biodiversity Convention and the Ramsar Convention. It maintains that the 1975 Statute prohibits any pollution which is prejudicial to the protection and preservation of the aquatic environment or which alters the ecological balance of the river. Argentina further argues that the obligation to prevent pollution of the river is an obligation of result and extends not only to protecting the aquatic environment proper, but also to any reasonable and legitimate use of the river, including tourism and other recreational uses.
- 192. Uruguay contends that the obligation laid down in Article 41 (a) of the 1975 Statute to "prevent . . . pollution" does not involve a prohibition on all discharges into the river. It is only those that exceed the standards jointly agreed by the Parties within CARU in accordance with their international obligations, and that therefore have harmful effects, which can be characterized as "pollution" under Article 40 of the 1975 Statute. Uruguay also maintains that Article 41 creates an obligation of conduct, and not of result, but that it actually matters little since Uruguay has complied with its duty to prevent pollution by requiring the plant to meet best available technology ("BAT") standards.
- 193. Before turning to the analysis of Article 41, the Court recalls that:

"The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment." (Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I), pp. 241-242, para. 29.)

194. The Court moreover had occasion to stress, in the *Gabčíkovo-Nagymaros Project* case, that "the Parties together should look afresh at

the effects on the environment of the operation of the Gabčíkovo power plant" (*Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997*, p. 78, para. 140). The Court is mindful of these statements in taking up now the examination of Article 41 of the 1975 Statute.

195. In view of the central role of this provision in the dispute between the Parties in the present case and their profound differences as to its interpretation and application, the Court will make a few remarks of a general character on the normative content of Article 41 before addressing the specific arguments of the Parties. First, in the view of the Court, Article 41 makes a clear distinction between regulatory functions entrusted to CARU under the 1975 Statute, which are dealt with in Article 56 of the Statute, and the obligation it imposes on the Parties to adopt rules and measures individually to "protect and preserve the aquatic environment and, in particular, to prevent its pollution". Thus, the obligation assumed by the Parties under Article 41, which is distinct from those under Articles 36 and 56 of the 1975 Statute, is to adopt appropriate rules and measures within the framework of their respective domestic legal systems to protect and preserve the aquatic environment and to prevent pollution. This conclusion is supported by the wording of paragraphs (b) and (c) of Article 41, which refer to the need not to reduce the technical requirements and severity of the penalties already in force in the respective legislation of the Parties as well as the need to inform each other of the rules to be promulgated so as to establish equivalent rules in their legal systems.

196. Secondly, it is the opinion of the Court that a simple reading of the text of Article 41 indicates that it is the rules and measures that are to be prescribed by the Parties in their respective legal systems which must be "in accordance with applicable international agreements" and "in keeping, where relevant, with the guidelines and recommendations of international technical bodies".

197. Thirdly, the obligation to "preserve the aquatic environment, and in particular to prevent pollution by prescribing appropriate rules and measures" is an obligation to act with due diligence in respect of all activities which take place under the jurisdiction and control of each party. It is an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators, to safeguard the rights of the other party. The responsibility of a party to the 1975 Statute would therefore be engaged if it was shown that it had failed to act diligently and thus take all appropriate measures to enforce its relevant regulations on a public or private operator under its jurisdiction. The obligation of due diligence under Article 41 (a) in the adoption and enforcement of appropriate

rules and measures is further reinforced by the requirement that such rules and measures must be "in accordance with applicable international agreements" and "in keeping, where relevant, with the guidelines and recommendations of international technical bodies". This requirement has the advantage of ensuring that the rules and measures adopted by the parties both have to conform to applicable international agreements and to take account of internationally agreed technical standards.

198. Finally, the scope of the obligation to prevent pollution must be determined in light of the definition of pollution given in Article 40 of the 1975 Statute. Article 40 provides that: "For the purposes of this Statute, pollution shall mean the direct or indirect introduction by man into the aquatic environment of substances or energy which have harmful effects." The term "harmful effects" is defined in the CARU Digest as:

"any alteration of the water quality that prevents or hinders any legitimate use of the water, that causes deleterious effects or harm to living resources, risks to human health, or a threat to water activities including fishing or reduction of recreational activities" (Title I, Chapter 1, Section 2, Article 1 (c) of the Digest (E3)).

199. The Digest expresses the will of the Parties and their interpretation of the provisions of the 1975 Statute. Article 41, not unlike many other provisions of the 1975 Statute, lays down broad obligations agreed to by the Parties to regulate and limit their use of the river and to protect its environment. These broad obligations are given more specific content through the co-ordinated rule-making action of CARU as established under Article 56 of the 1975 Statute or through the regulatory action of each of the parties, or by both means. The two regulatory actions are meant to complement each other. As discussed below (see paragraphs 201 to 202, and 214), CARU standards concern mainly water quality. The CARU Digest sets only general limits on certain discharges or effluents from industrial plants such as: "hydrocarbons", "sedimentable solids", and "oils and greases". As the Digest makes explicit, those matters are left to each party to regulate. The Digest provides that, as regards effluents within its jurisdiction, each party shall take the appropriate "corrective measures" in order to assure compliance with water quality standards (CARU Digest, Sec. E3: Pollution, Title 2, Chapter 5, Section 1, Article 3). Uruguay has taken that action in its Regulation on Water Quality (Decree No. 253/79) and in relation to the Orion (Botnia) mill in the conditions stipulated in the authorization issued by MVOTMA. In Argentina, the Entre Ríos Province, which borders the river opposite the plant, has regulated industrial discharges in a decree that also recognizes the binding effect of the CARU Digest (Regulatory Decree No. 5837, Government of Entre Ríos, 26 December 1991, and Regulatory Decree No. 5394, Government of Entre Ríos, 7 April 1997).

- 200. The Court considers it appropriate to now address the question of the rules by which any allegations of breach are to be measured and, more specifically, by which the existence of "harmful effects" is to be determined. It is the view of the Court that these rules are to be found in the 1975 Statute, in the co-ordinated position of the Parties established through CARU (as the introductory phrases to Article 41 and Article 56 of the Statute contemplate) and in the regulations adopted by each Party within the limits prescribed by the 1975 Statute (as paragraphs (a), (b) and (c) of Article 41 contemplate).
- 201. The functions of CARU under Article 56 (a) include making rules governing the prevention of pollution and the conservation and preservation of living resources. In the exercise of its rule-making power, the Commission adopted in 1984 the Digest on the uses of the waters of the River Uruguay and has amended it since. In 1990, when Section E3 of the Digest was adopted, the Parties recognized that it was drawn up under Article 7 (f) of the 1961 Treaty and Articles 35, 36, 41 to 45 and 56 (a) (4) of the 1975 Statute. As stated in the Digest, the "basic purposes" of Section E3 of the Digest are to be as follows:
 - "(a) to protect and preserve the water and its ecological balance;
 - (b) to ensure any legitimate use of the water considering long term needs and particularly human consumption needs;
 - (c) to prevent all new forms of pollution and to achieve its reduction in case the standard values adopted for the different legitimate uses of the River's water are exceeded;
 - (d) to promote scientific research on pollution." (Title I, Chapter 2, Section 1, Article 1.)
- 202. The standards laid down in the Digest are not, however, exhaustive. As pointed out earlier, they are to be complemented by the rules and measures to be adopted by each of the Parties within their domestic laws.

The Court will apply, in addition to the 1975 Statute, these two sets of rules to determine whether the obligations undertaken by the Parties have been breached in terms of the discharge of effluent by the mill as well as in respect of the impact of those discharges on the quality of the waters of the river, on its ecological balance and on its biodiversity.

(a) Environmental Impact Assessment

203. The Court will now turn to the relationship between the need for an environmental impact assessment, where the planned activity is liable to cause harm to a shared resource and transboundary harm, and the obligations of the Parties under Article 41 (a) and (b) of the 1975 Statute. The Parties agree on the necessity of conducting an environmental impact assessment. Argentina maintains that the obligations under the 1975 Statute viewed together impose an obligation to conduct an environmental impact assessment prior to authorizing Botnia to construct the plant. Uruguay also accepts that it is under such an obligation. The Parties disagree, however, with regard to the scope and content of the environmental impact assessment that Uruguay should have carried out with respect to the Orion (Botnia) mill project. Argentina maintains in the first place that Uruguay failed to ensure that "full environmental assessments [had been] produced, prior to its decision to authorize the construction . . . "; and in the second place that "Uruguay's decisions [were] . . . based on unsatisfactory environmental assessments", in particular because Uruguay failed to take account of all potential impacts from the mill, even though international law and practice require it, and refers in this context to the 1991 Convention on Environmental Impact Assessment in a Transboundary Context of the United Nations Economic Commission for Europe (hereinafter the "Espoo Convention") (UNTS, Vol. 1989, p. 309), and the 1987 Goals and Principles of Environmental Impact Assessment of the United Nations Environment Programme (hereinafter the "UNEP Goals and Principles") (UNEP/ WG.152/4 Annex (1987), document adopted by UNEP Governing Council at its 14th Session (Dec. 14/25 (1987)). Uruguay accepts that, in accordance with international practice, an environmental impact assessment of the Orion (Botnia) mill was necessary, but argues that international law does not impose any conditions upon the content of such an assessment, the preparation of which being a national, not international, procedure, at least where the project in question is not one common to several States. According to Uruguay, the only requirements international law imposes on it are that there must be assessments of the project's potential harmful transboundary effects on people, property and the environment of other States, as required by State practice and the International Law Commission 2001 draft Articles on Prevention of Transboundary Harm from Hazardous Activities, without there being any need to assess remote or purely speculative risks.

204. It is the opinion of the Court that in order for the Parties properly to comply with their obligations under Article 41 (a) and (b) of the 1975 Statute, they must, for the purposes of protecting and preserving the

aquatic environment with respect to activities which may be liable to cause transboundary harm, carry out an environmental impact assessment. As the Court has observed in the case concerning the *Dispute Regarding Navigational and Related Rights*,

"there are situations in which the parties' intent upon conclusion of the treaty was, or may be presumed to have been, to give the terms used — or some of them — a meaning or content capable of evolving, not one fixed once and for all, so as to make allowance for, among other things, developments in international law" (Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua), Judgment, I.C.J. Reports 2009, p. 242, para. 64).

In this sense, the obligation to protect and preserve, under Article 41 (a) of the Statute, has to be interpreted in accordance with a practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource. Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works

205. The Court observes that neither the 1975 Statute nor general international law specify the scope and content of an environmental impact assessment. It points out moreover that Argentina and Uruguay are not parties to the Espoo Convention. Finally, the Court notes that the other instrument to which Argentina refers in support of its arguments, namely, the UNEP Goals and Principles, is not binding on the Parties, but, as guidelines issued by an international technical body, has to be taken into account by each Party in accordance with Article 41 (a) in adopting measures within its domestic regulatory framework. Moreover, this instrument provides only that the "environmental effects in an EIA should be assessed with a degree of detail commensurate with their likely environmental significance" (Principle 5) without giving any indication of minimum core components of the assessment. Consequently, it is the view of the Court that it is for each State to determine in its domestic legislation or in the authorization process for the project, the specific content of the environmental impact assessment required in each case. having regard to the nature and magnitude of the proposed development and its likely adverse impact on the environment as well as to the need to exercise due diligence in conducting such an assessment. The Court also considers that an environmental impact assessment must be conducted prior to the implementation of a project. Moreover, once operations have started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken.

206. The Court has already considered the role of the environmental impact assessment in the context of the procedural obligations of the Parties under the 1975 Statute (paragraphs 119 and 120). It will now deal with the specific points in dispute with regard to the role of this type of assessment in the fulfilment of the substantive obligations of the Parties, that is to say, first, whether such an assessment should have, as a matter of method, necessarily considered possible alternative sites, taking into account the receiving capacity of the river in the area where the plant was to be built and, secondly, whether the populations likely to be affected, in this case both the Uruguayan and Argentine riparian populations, should have, or have in fact, been consulted in the context of the environmental impact assessment.

(i) The siting of the Orion (Botnia) mill at Fray Bentos

207. According to Argentina, one reason why Uruguay's environmental impact assessment is inadequate is that it contains no analysis of alternatives for the choice of the mill site, whereas the study of alternative sites is required under international law (UNEP Goals and Principles, Espoo Convention, IFC Operational Policy 4.01). Argentina contends that the chosen site is particularly sensitive from an ecological point of view and unconducive to the dispersion of pollutants "[b]ecause of the nature of the waters which will receive the pollution, the propensity of the site to sedimentation and eutrophication, the phenomenon of reverse flow and the proximity of the largest settlement on the River Uruguay".

208. Uruguay counters that the Fray Bentos site was initially chosen because of the particularly large volume of water in the river at that location, which would serve to promote effluent dilution. Uruguay adds that the site is moreover easily accessible for river navigation, which facilitates delivery of raw materials, and local manpower is available there. Uruguay considers that, if there is an obligation to consider alternative sites, the instruments invoked for that purpose by Argentina do not require alternative locations to be considered as part of an environmental impact assessment unless it is necessary in the circumstances to do so. Finally, Uruguay affirms that in any case it did so and that the suitability of the Orion (Botnia) site was comprehensively assessed.

209. The Court will now consider, first, whether Uruguay failed to exercise due diligence in conducting the environmental impact assessment, particularly with respect to the choice of the location of the plant

and, secondly, whether the particular location chosen for the siting of the plant, in this case Fray Bentos, was unsuitable for the construction of a plant discharging industrial effluent of this nature and on this scale, or could have a harmful impact on the river.

- 210. Regarding the first point, the Court has already indicated that the Espoo Convention is not applicable to the present case (see paragraph 205 above); while with respect to the UNEP Goals and Principles to which Argentina has referred, whose legal character has been described in paragraph 205 above, the Court recalls that Principle 4 (c) simply provides that an environmental impact assessment should include, at a minimum, "[a] description of practical alternatives, as appropriate". It is also to be recalled that Uruguay has repeatedly indicated that the suitability of the Fray Bentos location was comprehensively assessed and that other possible sites were considered. The Court further notes that the IFC's Final Cumulative Impact Study of September 2006 (hereinafter "CIS") shows that in 2003 Botnia evaluated four locations in total at La Paloma, at Paso de los Toros, at Nueva Palmira, and at Fray Bentos, before choosing Fray Bentos. The evaluations concluded that the limited amount of fresh water in La Paloma and its importance as a habitat for birds rendered it unsuitable, while for Nueva Palmira its consideration was discouraged by its proximity to residential, recreational, and culturally important areas, and with respect to Paso de los Toros insufficient flow of water during the dry season and potential conflict with competing water uses, as well as a lack of infrastructure, led to its exclusion. Consequently, the Court is not convinced by Argentina's argument that an assessment of possible sites was not carried out prior to the determination of the final site
- 211. Regarding the second point, the Court cannot fail to note that any decision on the actual location of such a plant along the River Uruguay should take into account the capacity of the waters of the river to receive, dilute and disperse discharges of effluent from a plant of this nature and scale.
- 212. The Court notes, with regard to the receiving capacity of the river at the location of the mill, that the Parties disagree on the geomorphological and hydrodynamic characteristics of the river in the relevant area, particularly as they relate to river flow, and how the flow of the river, including its direction and its velocity, in turn determines the dispersal and dilution of pollutants. The differing views put forward by the Parties with regard to the river flow may be due to the different modelling systems which each has employed to analyse the hydrodynamic features of the River Uruguay at the Fray Bentos location. Argentina implemented a three-dimensional modelling that measured speed and direction at ten different depths of the river and used a sonar an Acoustic Doppler Current Profiler (hereafter

- "ADCP") to record water flow velocities for a range of depths for about a year. The three-dimensional system generated a large number of data later introduced in a numerical hydrodynamic model. On the other hand, Botnia based its environmental impact assessment on a bidimensional modelling the RMA2. The EcoMetrix CIS implemented both three-dimensional and bi-dimensional models. However, it is not mentioned whether an ADCP sonar was used at different depths.
- 213. The Court sees no need to go into a detailed examination of the scientific and technical validity of the different kinds of modelling, calibration and validation undertaken by the Parties to characterize the rate and direction of flow of the waters of the river in the relevant area. The Court notes however that both Parties agree that reverse flows occur frequently and that phenomena of low flow and stagnation may be observed in the concerned area, but that they disagree on the implications of this for the discharges from the Orion (Botnia) mill into this area of the river.
- 214. The Court considers that in establishing its water quality standards in accordance with Articles 36 and 56 of the 1975 Statute, CARU must have taken into account the receiving capacity and sensitivity of the waters of the river, including in the areas of the river adjacent to Fray Bentos. Consequently, in so far as it is not established that the discharges of effluent of the Orion (Botnia) mill have exceeded the limits set by those standards, in terms of the level of concentrations, the Court finds itself unable to conclude that Uruguay has violated its obligations under the 1975 Statute. Moreover, neither of the Parties has argued before the Court that the water quality standards established by CARU have not adequately taken into consideration the geomorphological and hydrological characteristics of the river and the capacity of its waters to disperse and dilute different types of discharges. The Court is of the opinion that, should such inadequacy be detected, particularly with respect to certain areas of the river such as at Fray Bentos, the Parties should initiate a review of the water quality standards set by CARU and ensure that such standards clearly reflect the characteristics of the river and are capable of protecting its waters and its ecosystem.

(ii) Consultation of the affected populations

215. The Parties disagree on the extent to which the populations likely to be affected by the construction of the Orion (Botnia) mill, particularly on the Argentine side of the river, were consulted in the course of the environmental impact assessment. While both Parties agree that consultation of the affected populations should form part of an environmental impact assessment, Argentina asserts that international law imposes specific obligations on States in this regard. In support of this argument, Argentina points to Articles 2.6 and 3.8 of

the Espoo Convention, Article 13 of the 2001 International Law Commission draft Articles on Prevention of Transboundary Harm from Hazardous Activities, and Principles 7 and 8 of the UNEP Goals and Principles. Uruguay considers that the provisions invoked by Argentina cannot serve as a legal basis for an obligation to consult the affected populations and adds that in any event the affected populations had indeed been consulted.

- 216. The Court is of the view that no legal obligation to consult the affected populations arises for the Parties from the instruments invoked by Argentina.
- 217. Regarding the facts, the Court notes that both before and after the granting of the initial environmental authorization, Uruguay did undertake activities aimed at consulting the affected populations, both on the Argentine and the Uruguayan sides of the river. These activities included meetings on 2 December 2003 in Río Negro, and on 26 May 2004 in Fray Bentos, with participation of Argentine non-governmental organizations. In addition, on 21 December 2004, a public hearing was convened in Fray Bentos which, according to Uruguay, addressed among other subjects, the

"handling of chemical products in the plant and in the port; the appearance of acid rain, dioxins, furans and other polychlorates of high toxicity that could affect the environment; compliance with the Stockholm Convention; atmospheric emissions of the plant; electromagnetic and electrostatic emissions; [and] liquid discharges into the river".

Inhabitants of Fray Bentos and nearby regions of Uruguay and Argentina participated in the meeting and submitted 138 documents containing questions or concerns.

218. Further, the Court notes that between June and November 2005 more than 80 interviews were conducted by the Consensus Building Institute, a non-profit organization specializing in facilitated dialogues, mediation, and negotiation, contracted by the IFC. Such interviews were conducted *inter alia* in Fray Bentos, Gualeguaychú, Montevideo, and Buenos Aires, with interviewees including civil society groups, non-governmental organizations, business associations, public officials, tourism operators, local business owners, fishermen, farmers and plantation owners on both sides of the river. In December 2005, the draft CIS and the report prepared by the Consensus Building Institute were released, and the IFC opened a period of consultation to receive additional feedback from stakeholders in Argentina and Uruguay.

219. In the light of the above, the Court finds that consultation by Uruguay of the affected populations did indeed take place.

- (b) Question of the production technology used in the Orion (Botnia) mill
- 220. Argentina maintains that Uruguay has failed to take all measures to prevent pollution by not requiring the mill to employ the "best available techniques", even though this is required under Article 5 (d) of the POPs Convention, the provisions of which are incorporated by virtue of the "referral clause" in Article 41 (a) of the 1975 Statute. According to Argentina, the experts' reports it cites establish that the mill does not use best available techniques and that its performance is not up to international standards, in the light of the various techniques available for producing pulp. Uruguay contests these claims. Relying on the CIS, the second Hatfield report and the audit conducted by AMEC at the IFC's request, Uruguay asserts that the Orion (Botnia) mill is, by virtue of the technology employed there, one of the best pulp mills in the world, applying best available techniques and complying with European Union standards, among others, in the area.
- 221. Argentina, however, specifically criticizes the absence of any "tertiary treatment of effluent" (i.e., a third round of processing production waste before discharge into the natural environment), which is necessary to reduce the quantity of nutrients, including phosphorus, since the effluent is discharged into a highly sensitive environment. The mill also lacks, according to Argentina, an empty emergency basin, designed to contain effluent spills. Answering a question asked by a judge, Argentina considers that a tertiary treatment would be possible, but that Uruguay failed to conduct an adequate assessment of tertiary treatment options for the Orion (Botnia) mill.
- 222. Uruguay observes that "the experts did not consider it necessary to equip the mill with a tertiary treatment phase". Answering the same question, Uruguay argued that, though feasible, the addition of a tertiary treatment facility would not be environmentally advantageous overall, as it would significantly increase the energy consumption of the plant, its carbon emissions, together with sludge generation and chemical use. Uruguay has consistently maintained that the bleaching technology used is acceptable, that the emergency basins in place are adequate, that the mill's production of synthetic chemical compounds meets technological requirements and that the potential risk from this production was indeed assessed.
- 223. To begin with, the Court observes that the obligation to prevent pollution and protect and preserve the aquatic environment of the River Uruguay, laid down in Article 41 (a), and the exercise of due diligence implied in it, entail a careful consideration of the technology to be used

by the industrial plant to be established, particularly in a sector such as pulp manufacturing, which often involves the use or production of substances which have an impact on the environment. This is all the more important in view of the fact that Article $41\ (a)$ provides that the regulatory framework to be adopted by the Parties has to be in keeping with the guidelines and recommendations of international technical bodies.

- 224. The Court notes that the Orion (Botnia) mill uses the bleached Kraft pulping process. According to the December 2001 Integrated Pollution Prevention and Control Reference Document on Best Available Techniques in the Pulp and Paper Industry of the European Commission (hereinafter "IPPC-BAT"), which the Parties referred to as the industry standard in this sector, the Kraft process already accounted at that time for about 80 per cent of the world's pulp production and is therefore the most applied production method of chemical pulping processes. The plant employs an ECF-light (Elemental chlorine-free) bleaching process and a primary and secondary wastewater treatment involving activated sludge treatment.
- 225. The Court finds that, from the point of view of the technology employed, and based on the documents submitted to it by the Parties, particularly the IPPC-BAT, there is no evidence to support the claim of Argentina that the Orion (Botnia) mill is not BAT-compliant in terms of the discharges of effluent for each tonne of pulp produced. This finding is supported by the fact that, as shown below, no clear evidence has been presented by Argentina establishing that the Orion (Botnia) mill is not in compliance with the 1975 Statute, the CARU Digest and applicable regulations of the Parties in terms of the concentration of effluents per litre of wastewater discharged from the plant and the absolute amount of effluents that can be discharged in a day.
- 226. The Court recalls that Uruguay has submitted extensive data regarding the monitoring of effluent from the Orion (Botnia) mill, as contained in the various reports by EcoMetrix and DINAMA (EcoMetrix, Independent Performance Monitoring as required by the IFC Phase 2: Six Month Environmental Performance Review (July 2008); EcoMetrix, Independent Performance Monitoring as required by the IFC, Phase 3: Environmental Performance Review (2008) Monitoring Year) (hereinafter "EcoMetrix Third Monitoring Report"); DINAMA, Performance Report for the First Year of Operation of the Botnia Plant and the Environmental Quality of the Area of Influence, May 2009; DINAMA, Six Month Report on the Botnia Emission Control and Environmental Performance Plan), and that Argentina expressed the view, in this regard, that Uruguay had on this matter, much greater, if not exclusive, access to the factual evidence. However, the Court notes that Argentina has itself generated much factual information and that the materials which Uruguay produced have

been available to Argentina at various stages of the proceedings or have been available in the public domain. Therefore the Court does not consider that Argentina has been at a disadvantage with regard to the production of evidence relating to the discharges of effluent of the mill.

227. To determine whether the concentrations of pollutants discharged by the Orion (Botnia) mill are within the regulatory limits, the Court will have to assess them against the effluent discharge limits — both in terms of the concentration of effluents in each litre of wastewater discharged and the absolute amount of effluents that can be discharged in a day — prescribed by the applicable regulatory standards of the Parties, as characterized by the Court in paragraph 200 above, and the permits issued for the plant by the Uruguayan authorities, since the Digest only sets general limits on "hydrocarbons", "sedimentable solids", and "oils and greases", but does not establish specific ones for the substances in contention between the Parties. Argentina did not allege any non-compliance of the Orion (Botnia) mill with CARU's effluent standards (CARU Digest, Sec. E3 (1984, as amended)).

228. Taking into account the data collected after the start-up of the mill as contained in the various reports by DINAMA and EcoMetrix, it does not appear that the discharges from the Orion (Botnia) mill have exceeded the limits set by the effluent standards prescribed by the relevant Uruguayan regulation as characterized by the Court in paragraph 200 above, or the initial environmental authorization issued by MVOTMA (MVOTMA, Initial Environmental Authorization for the Botnia Plant (14 February 2005)), except for a few instances in which the concentrations have exceeded the limits. The only parameters for which a recorded measurement exceeded the standards set by Decree No. 253/79 or the initial environmental authorization by MVOTMA are: nitrogen, nitrates, and AOX (Adsorbable Organic Halogens). In those cases, measurements taken on one day exceeded the threshold. However, the initial environmental authorization of 14 February 2005 specifically allows yearly averaging for the parameters. The most notable of these cases in which the limits were exceeded is the one relating to AOX, which is the parameter used internationally to monitor pulp mill effluent, sometimes including persistent organic pollutants (POPs). According to the IPPC-BAT reference document submitted by the Parties, and considered by them as the industry standard in this sector, "the environmental control authorities in many countries have set severe restrictions on the discharges of chlorinated organics measured as AOX into the aquatic environment". Concentrations of AOX reached at one point on 9 January 2008, after the mill began operations, as high a level as 13 mg/L, whereas the maximum limit used in the environmental impact assessment and subsequently prescribed by MVOTMA was 6 mg/L. However, in the absence of convincing evidence that this is not an isolated episode but rather a more enduring problem, the Court is not in a position to conclude that Uruguay has breached the provisions of the 1975 Statute.

- (c) Impact of the discharges on the quality of the waters of the river
- 229. As pointed out earlier (see paragraph 165), the Parties have over the last three years presented to the Court a vast amount of factual and scientific material containing data and analysis of the baseline levels of contaminants already present in the river prior to the commissioning of the plant and the results of measurements of its water and air emissions after the plant started its production activities and, in some cases, until mid-2009.
- 230. Regarding the baseline data, the studies and reports submitted by the Parties contained data and analysis relating, *inter alia*, to water quality, air quality, phytoplankton and zooplankton of the river, health indicators and biomarkers of pollution in fish from the river, monitoring of fish fauna in the area around the Orion (Botnia) mill, fish community and species diversity in the river, concentrations of resin acids, chlorinated phenols and plant sterols in fish from the river, survey of species belonging to the genus Tillandsia, the Orion (Botnia) mill pre-start-up audit, and analysis of mercury and lead in fish muscle.
- 231. Argentina contends that Uruguay's baseline data were both inadequate and incomplete in many aspects. Uruguay rejects this allegation, and argues that Argentina has actually relied on Uruguay's baseline data to give its own assessment of water quality. According to Uruguay, contrary to Argentina's assertions, collection of baseline data by Uruguay started in August 2006, when DINAMA started to conduct for a period of 15 months pre-operational water quality monitoring prior to the commissioning of the plant in November 2007, which served to complement almost 15 years of more general monitoring that had been carried out within CARU under the PROCON programme (River Uruguay Water Quality and Pollution Control Programme, from the Spanish acronym for "Programa de Calidad de Aguas y Control de la Contaminación del Río Uruguay"). Argentina did not challenge counsel for Uruguay's statement during the oral proceedings that it used Uruguay's baseline data for the assessment of water quality.
 - 232. The data presented by the Parties on the post-operation monitor-

ing of the actual performance of the plant in terms of the impact of its emissions on the river includes data obtained through different testing programmes conducted, *inter alia*, by an Argentine scientific team from two national universities, contracted by the National Secretariat of Environment and Sustainable Development of Argentina (ten sites), the OSE (Uruguay's State Agency for Sanitary Works, from the Spanish acronym for "Obras Sanitarias del Estado"), DINAMA, independently of Botnia (16 sites), and Botnia, reporting to DINAMA and the IFC (four sites; and testing the effluent).

- 233. The monitoring sites maintained by Argentina are located on the Argentine side of the river; with the most upstream position located 10 km from the plant and the furthest downstream one at about 16 km from the plant. Nevertheless, three of the sites (U0, U2 and U3) are near the plant; while another three are in Nandubaysal Bay and Inés Lagoon, the data from which, according to Argentina's counsel, "enabled the scientists to clearly set the bay apart, as it acts as an ecosystem that is relatively detached from the Uruguay river" (Scientific and Technical Report, Chapter 3, appendix: "Background Biogeochemical Studies", para. 4.1.2; see also *ibid.*, para. 4.3.1.2).
- 234. The monitoring sites maintained by Uruguay (DINAMA) and by Botnia are located on the Uruguayan side. The OSE monitoring point is located at the drinking water supply intake pipe for Fray Bentos, at or near DINAMA station 11.
- 235. Argentina's team gathered data from November 2007 until April 2009 with many of the results being obtained from October 2008. Uruguay, through DINAMA, has been carrying out its monitoring of the site since March 2006. Its most recent data cover the period up to June 2009. The OSE, in terms of its overall responsibility for Uruguayan water quality, has been gathering relevant data which has been used in the periodic reports on the operation of the plant.
- 236. The Court also has before it interpretations of the data provided by experts appointed by the Parties, and provided by the Parties themselves and their counsel. However, in assessing the probative value of the evidence placed before it, the Court will principally weigh and evaluate the data, rather than the conflicting interpretations given to it by the Parties or their experts and consultants, in order to determine whether Uruguay breached its obligations under Articles 36 and 41 of the 1975 Statute in authorizing the construction and operation of the Orion (Botnia) mill.
- 237. The particular parameters and substances that are subject to controversy between the Parties in terms of the impact of the discharges of effluent from the Orion (Botnia) mill on the quality of the waters of the

river are: dissolved oxygen; total phosphorus (and the related matter of eutrophication due to phosphate); phenolic substances; nonylphenols and nonylphenolethoxylates; and dioxins and furans. The Court now turns to the assessment of the evidence presented to it by the Parties with respect to these parameters and substances.

(i) Dissolved oxygen

238. Argentina raised for the first time during the oral proceedings the alleged negative impact of the Orion (Botnia) mill on dissolved oxygen in the river referring to data contained in the report of the Uruguayan OSE. According to Argentina, since dissolved oxygen is environmentally beneficial and there is a CARU standard which sets a minimum level of dissolved oxygen for the river waters (5.6 mg/L), the introduction by the Orion (Botnia) mill into the aquatic environment of substances or energy which caused the dissolved oxygen level to fall below that minimum constitutes a breach of the obligation to prevent pollution and to preserve the aquatic environment. Uruguay argues that Argentina's figures taken from the measurements of the OSE were for "oxidabilidad", which refers to the "demand for oxygen" and not for "oxigeno disuelto" — i.e., dissolved oxygen. Uruguay also claims that a drop in the level of demand for oxygen shows an improvement in the quality of the water, since the level of demand should be kept as low as possible.

239. The Court observes that a post-operational average value of 3.8 mg/L for dissolved oxygen would indeed, if proven, constitute a violation of CARU standards, since it is below the minimum value of 5.6 mg of dissolved oxygen per litre required according to the CARU Digest (E3. Title 2, Chapter 4, Section 2). However, the Court finds that the allegation made by Argentina remains unproven. First, the figures on which Argentina bases itself do not correspond to the ones for dissolved oxygen that appear in the EcoMetrix Third Monitoring Report, where the samples taken between February and October 2008 were all above the CARU minimum standard for dissolved oxygen. Secondly, DINAMA's Surface Water and Sediment Quality Data Report of July 2009 (Six Month Report: January-June) (hereinafter "DINAMA's Water Quality Report") (see p. 7, fig. 4.5: average of 9.4 mg/L) displays concentrations of dissolved oxygen that are well above the minimum level required under the CARU Digest. Thirdly, Argentina's 30 June 2009 report says in its summary that the records of water quality parameters over the period were "normal for the river with typical seasonal patterns of temperature and associated dissolved oxygen". The hundreds of measurements presented in the figures in that chapter of the "Colombo Report" support that conclusion even taking account of some slightly lower figures. Fourthly, the figures relating to dissolved oxygen contained in DINAMA's Water Quality Report have essentially the same characteristics as those gathered by Argentina — they are above the CARU minimum and are the same upstream and downstream. Thus, the Court concludes that there appears to be no significant difference between the sets of data over time and that there is no evidence to support the contention that the reference to "oxidabilidad" in the OSE report referred to by Argentina should be interpreted to mean "dissolved oxygen".

(ii) Phosphorus

240. There is agreement between the Parties that total phosphorus levels in the River Uruguay are high. According to Uruguay, the total amount of (natural and anthropogenic) phosphorus emitted into the river per year is approximately 19,000 tonnes, of which the Orion (Botnia) mill has a share of some 15 tonnes (in 2008) or even less, as was expected for 2009. These figures have not been disputed by Argentina during the proceedings. Uruguay contends further that no violation of the provisions of the 1975 Statute can be alleged since the high concentration cannot be clearly attributed to the Orion (Botnia) mill as the source, and since no standard is set by CARU for phosphorus. Uruguay maintains also that based on data provided by DINAMA as compared to baseline data also compiled by DINAMA, it can be demonstrated that "[t]otal phosphorus levels were generally lower post-start-up as compared to the 2005-2006 baseline" (EcoMetrix Third Monitoring Report, March 2009).

241. A major disagreement between the Parties relates to the relationship between the higher concentration of phosphorus in the waters of the river and the algal bloom of February 2009 and whether operation of the Orion (Botnia) mill has caused the eutrophication of the river. Argentina claims that the Orion (Botnia) mill is the cause of the eutrophication and higher concentration of phosphates, while Uruguay denies the attributability of these concentrations as well as the eutrophication to the operation of the plant in Fray Bentos.

242. The Court notes that CARU has not adopted a water quality standard relating to levels of total phosphorus and phosphates in the river. Similarly, Argentina has no water quality standards for total phosphorus. The Court will therefore have to use the water quality and effluent limits for total phosphorus enacted by Uruguay under its domestic legislation, as characterized by the Court in paragraph 200 above, to assess whether the concentration levels of total phosphorus have exceeded the limits laid down in the regulations of the Parties adopted in accordance with Article 41 (a) of the 1975 Statute. The water quality standard for total phosphorus under the Uruguayan Regulation is 0.025 mg/L for certain purposes such as drinking water, irrigation of crops for human consumption and water used for recreational purposes which involve direct human contact with the water (Decree No. 253/79, Regulation of

Water Quality). The Uruguayan Decree also establishes a total phosphorus discharge standard of 5 mg/L (Decree No. 253/79 Regulation of Water Quality, Art. 11 (2)). The Orion (Botnia) mill must comply with both standards

243. The Court finds that based on the evidence before it, the Orion (Botnia) mill has so far complied with the standard for total phosphorus in effluent discharge. In this context, the Court notes that, for 2008 according to the EcoMetrix Third Monitoring Report, the Uruguayan data recorded an average of 0.59 mg/L total phosphorus in effluent discharge from the plant. Moreover, according to the DINAMA 2009 Emissions Report, the effluent figures for November 2008 to May 2009 were between 0.053 mg/L and 0.41 mg/L (e.g., DINAMA, "Six Month Report on the Botnia Emission Control and Environmental Performance Plan November 11, 2008 to May 31, 2009" (22 July 2009) p. 5; see also pp. 25 and 26). Argentina does not contest these figures which clearly show values much below the standard established under the Uruguayan Decree.

244. The Court observes in this connection that as early as 11 February 2005, DINAMA, in its environmental impact assessment for the Orion (Botnia) mill, noted the heavy load of nutrients (phosphorus and nitrogen) in the river and stated that:

"This situation has generated the frequent proliferation of algae, in some cases with an important degree of toxicity as a result of the proliferation of cyanobacteria. These proliferations, which in recent years have shown an increase in both frequency and intensity, constitute a health risk and result in important economic losses since they interfere with some uses of water, such as recreational activities and the public supply of drinking water. To this already existing situation it must be added that, in the future, the effluent in the plant will emit a total of 200 t/a of N[itrogen] and 20 t/a of P[hosphorus], values that are the approximate equivalent of the emission of the untreated sewage of a city of 65,000 people." (P. 20, para. 6.1.)

245. The DINAMA Report then continues as follows:

"It is also understood that it is not appropriate to authorize any waste disposal that would increase any of the parameters that present critical values, even in cases in which the increase is considered insignificant by the company. Nevertheless, considering that the parameters in which the quality of water is compromised are not specific to the effluents of this project, but rather would be affected by the waste disposal of any industrial or domestic effluent under consideration, it is understood that the waste disposal proposed in the project may be accepted, as long as there is compensation for any

increase over and above the standard value for any of the critical parameters." (DINAMA Report, p. 21.)

246. The Court further notes that the initial environmental authorization, granted on 15 February 2005, required compliance by Botnia with those conditions, with CARU standards and with best available techniques as included in the December 2001 IPPC-BAT of the European Commission. It also required the completion of an implementation plan for mitigation and compensation measures. That plan was completed by the end of 2007 and the authorization to operate was granted on 8 November 2007. On 29 April 2008, Botnia and the OSE concluded an Agreement Regarding Treatment of the Municipal Wastewater of Fray Bentos, aimed at reducing total phosphorus and other contaminants.

247. The Court considers that the amount of total phosphorus discharge into the river that may be attributed to the Orion (Botnia) mill is insignificant in proportionate terms as compared to the overall total phosphorus in the river from other sources. Consequently, the Court concludes that the fact that the level of concentration of total phosphorus in the river exceeds the limits established in Uruguayan legislation in respect of water quality standards cannot be considered as a violation of Article 41 (a) of the 1975 Statute in view of the river's relatively high total phosphorus content prior to the commissioning of the plant, and taking into account the action being taken by Uruguay by way of compensation.

248. The Court will now turn to the consideration of the issue of the algal bloom of 4 February 2009. Argentina claims that the algal bloom of 4 February 2009 was caused by the Orion (Botnia) mill's emissions of nutrients into the river. To substantiate this claim Argentina points to the presence of effluent products in the blue-green algal bloom and to various satellite images showing the concentration of chlorophyll in the water. Such blooms, according to Argentina, are produced during the warm season by the explosive growth of algae, particularly cyanobacteria, responding to nutrient enrichment, mainly phosphate, among other compounds present in detergents and fertilizers.

249. Uruguay contends that the algal bloom of February 2009, and the high concentration of chlorophyll, was not caused by the Orion (Botnia) mill but could have originated far upstream and may have most likely been caused by the increase of people present in Gualeyguaychú during the yearly carnival held in that town, and the resulting increase in sewage, and not by the mill's effluents. Uruguay maintains that Argentine data actually prove that the Orion (Botnia) mill has not added to the concentration of phosphorus in the river at any time since it began operating.

250. The Parties are in agreement on several points regarding the algal bloom of 4 February 2009, including the fact that the concentrations of

nutrients in the River Uruguay have been at high levels both before and after the bloom episode, and the fact that the bloom disappeared shortly after it had begun. The Parties also appear to agree on the interdependence between algae growth, higher temperatures, low and reverse flows, and presence of high levels of nutrients such as nitrogen and phosphorus in the river. It has not, however, been established to the satisfaction of the Court that the algal bloom episode of 4 February 2009 was caused by the nutrient discharges from the Orion (Botnia) mill.

(iii) Phenolic substances

- 251. With regard to phenolic substances, Argentina contends that the Orion (Botnia) mill's emission of pollutants have resulted in violations of the CARU standard for phenolic substances once the plant started operating, while, according to Argentina, pre-operational baseline data did not show that standard to have been exceeded. Uruguay on the other hand argues that there have been numerous violations of the standard, throughout the river, long before the plant went into operation. Uruguay substantiates its arguments by pointing to several studies including the EcoMetrix final Cumulative Impact Study, which had concluded that phenolic substances were found to have frequently exceeded the water quality standard of 0.001 mg/L fixed by CARU.
- 252. The Court also notes that Uruguayan data indicate that the water quality standard was being exceeded from long before the plant began operating. The Cumulative Impact Study prepared in September 2006 by EcoMetrix for the IFC states that phenolics were found frequently to exceed the standard, with the highest values on the Argentine side of the river. The standard is still exceeded in some of the measurements in the most recent report before the Court but most are below it (DINAMA July 2009 Water Quality Report, p. 21, para. 4.1.11.2 and App. 1, showing measurements from 0.0005 to 0.012 mg/L).
- 253. During the oral proceedings, counsel for Argentina claimed that the standard had not previously been exceeded and that the plant has caused the limit to be exceeded. The concentrations, he said, had increased on average by three times and the highest figure was 20 times higher. Uruguay contends that the data contained in the DINAMA 2009 Report shows that the post-operational levels of phenolic substances were lower than the baseline levels throughout the river including at the OSE water intake.
- 254. Based on the record, and the data presented by the Parties, the Court concludes that there is insufficient evidence to attribute the alleged

increase in the level of concentrations of phenolic substances in the river to the operations of the Orion (Botnia) mill.

(iv) Presence of nonylphenols in the river environment

255. Argentina claims that the Orion (Botnia) mill emits, or has emitted, nonylphenols and thus has caused damage to, or at least has substantially put at risk, the river environment. According to Argentina, the most likely source of these emissions are surfactants (detergents), nonylphenolethoxylates used to clean the wood pulp as well as the installations of the plant itself. Argentina also contends that from 46 measurements performed in water samples the highest concentrations, in particular those exceeding the European Union relevant standards, were determined in front-downstream the mill and in the bloom sample collected on 4 February 2009, with lower levels upstream and downstream, indicating that the Orion (Botnia) mill effluent is the most probable source of these residues. In addition, according to Argentina, bottom sediments collected in front-downstream the mill showed a rapid increase of nonylphenols from September 2006 to February 2009, corroborating the increasing trend of these compounds in the River Uruguay. For Argentina, the spatial distribution of sub-lethal effects detected in rotifers (absence of spines), transplanted Asiatic clams (reduction of lipid reserves) and fish (estrogenic effects) coincided with the distribution area of nonylphenols suggesting that these compounds may be a significant stress factor.

256. Uruguay rejects Argentina's claim relating to nonylphenols and nonylphenolethoxylates, and categorically denies the use of nonylphenols and nonylphenolethoxylates by the Orion (Botnia) mill. In particular, it provides affidavits from Botnia officials to the effect that the mill does not use and has never used nonylphenols or nonylphenolethoxylate derivatives in any of its processes for the production of pulp, including in the pulp washing and cleaning stages, and that no cleaning agents containing nonylphenols are or have been used for cleaning the plant's equipment (Affidavit of Mr. González, 2 October 2009).

257. The Court recalls that the issue of nonylphenols was included in the record of the case before the Court only by the Report submitted by Argentina on 30 June 2009. Although testing for nonylphenols had been carried out since November 2008, Argentina has not however, in the view of the Court, adduced clear evidence which establishes a link between the nonylphenols found in the waters of the river and the Orion (Botnia) mill. Uruguay has also categorically denied before the Court the use of nonylphenolethoxylates for production or cleaning by the Orion (Botnia) mill. The Court therefore concludes that the evidence in

the record does not substantiate the claims made by Argentina on this matter.

(v) Dioxins and furans

258. Argentina has alleged that while the concentration of dioxins and furans in surface sediments is generally very low, data from its studies demonstrated an increasing trend compared to data compiled before the Orion (Botnia) mill commenced operations. Argentina does not claim a violation of standards, but relies on a sample of sábalo fish tested by its monitoring team, which showed that one fish presented elevated levels of dioxins and furans which, according to Argentina, pointed to a rise in the incidence of dioxins and furans in the river after the commissioning of the Orion (Botnia) mill. Uruguay contests this claim, arguing that such elevated levels cannot be linked to the operation of the Orion (Botnia) mill, given the presence of so many other industries operating along the River Uruguay and in neighbouring Nandubaysal Bay, and the highly migratory nature of the sábalo species which was tested. In addition, Uruguay advances that its testing of the effluent coming from the Orion (Botnia) mill demonstrate that no dioxins and furans could have been introduced into the mill effluent, as the levels detected in the effluent were not measurably higher than the baseline levels in the River Uruguay.

259. The Court considers that there is no clear evidence to link the increase in the presence of dioxins and furans in the river to the operation of the Orion (Botnia) mill.

(d) Effects on biodiversity

260. Argentina asserts that Uruguay "has failed to take all measures to protect and preserve the biological diversity of the River Uruguay and the areas affected by it". According to Argentina, the treaty obligation "to protect and preserve the aquatic environment" comprises an obligation to protect the biological diversity including "habitats as well as species of flora and fauna". By virtue of the "referral clause" in Article 41 (a), Argentina argues that the 1975 Statute requires Uruguay, in respect of activities undertaken in the river and areas affected by it, to comply with the obligations deriving from the CITES Convention, the Biodiversity Convention and the Ramsar Convention. Argentina maintains that through its monitoring programme abnormal effects were detected in aquatic organisms — such as malformation of rotifers and loss of fat by clams — and the biomagnification of persistent pollutants such as dioxins and furans was detected in detritus feeding fish (such as the sábalo fish). Argentina also contends that the operation of the mill poses a threat, under conditions of reverse flow, to the Esteros de Farrapos site, situated "in the lower section of the River . . . downstream from

the Salto Grande dam and on the frontier with Argentina", a few kilometres upstream from the Orion (Botnia) mill.

261. Uruguay states that Argentina has failed to demonstrate any breach by Uruguay of the Biodiversity Convention, while the Ramsar Convention has no bearing in the present case because Esteros de Farrapos was not included in the list of Ramsar sites whose ecological character is threatened. With regard to the possibility of the effluent plume from the mill reaching Esteros de Farrapos. Uruguay in the oral proceedings acknowledged that under certain conditions that might occur. However, Uruguay added that it would be expected that the dilution of the effluent from the mill of 1:1000 would render the effluent quite harmless and below any concentration capable of constituting pollution. Uruguay contends that Argentina's claims regarding the harmful effects on fish and rotifers as a result of the effluents from the Orion (Botnia) mill are not credible. It points out that a recent comprehensive report of DINAMA on ichthyofauna concludes that compared to 2008 and 2009 there has been no change in species biodiversity. Uruguay adds that the July 2009 report of DINAMA, with results of its February 2009 monitoring of the sediments in the river where some fish species feed. stated that "the quality of the sediments at the bottom of the Uruguay River has not been altered as a consequence of the industrial activity of the Botnia plant".

262. The Court is of the opinion that as part of their obligation to preserve the aquatic environment, the Parties have a duty to protect the fauna and flora of the river. The rules and measures which they have to adopt under Article 41 should also reflect their international undertakings in respect of biodiversity and habitat protection, in addition to the other standards on water quality and discharges of effluent. The Court has not, however, found sufficient evidence to conclude that Uruguay breached its obligation to preserve the aquatic environment including the protection of its fauna and flora. The record rather shows that a clear relationship has not been established between the discharges from the Orion (Botnia) mill and the malformations of rotifers, or the dioxin found in the sábalo fish or the loss of fat by clams reported in the findings of the Argentine River Uruguay Environmental Surveillance (URES) programme.

(e) Air pollution

263. Argentina claims that the Orion (Botnia) mill has caused air, noise and visual pollution which negatively impact on "the aquatic environment" in violation of Article 41 of the 1975 Statute. Argentina also

argues that the 1975 Statute was concluded not only to protect the quality of the waters, but also, more generally, the "régime" of the river and "the areas affected by it, i.e., all the factors that affect, and are affected by the ecosystem of the river as a whole". Uruguay contends that the Court has no jurisdiction over those matters and that, in any event, the claims are not established on the merits.

264. With respect to noise and visual pollution, the Court has already concluded in paragraph 52 that it has no jurisdiction on such matters under the 1975 Statute. As regards air pollution, the Court is of the view that if emissions from the plant's stacks have deposited into the aquatic environment substances with harmful effects, such indirect pollution of the river would fall under the provisions of the 1975 Statute. Uruguay appears to agree with this conclusion. Nevertheless, in view of the findings of the Court with respect to water quality, it is the opinion of the Court that the record does not show any clear evidence that substances with harmful effects have been introduced into the aquatic environment of the river through the emissions of the Orion (Botnia) mill into the air.

(f) Conclusions on Article 41

265. It follows from the above that there is no conclusive evidence in the record to show that Uruguay has not acted with the requisite degree of due diligence or that the discharges of effluent from the Orion (Botnia) mill have had deleterious effects or caused harm to living resources or to the quality of the water or the ecological balance of the river since it started its operations in November 2007. Consequently, on the basis of the evidence submitted to it, the Court concludes that Uruguay has not breached its obligations under Article 41.

(g) Continuing obligations: monitoring

266. The Court is of the opinion that both Parties have the obligation to enable CARU, as the joint machinery created by the 1975 Statute, to exercise on a continuous basis the powers conferred on it by the 1975 Statute, including its function of monitoring the quality of the waters of the river and of assessing the impact of the operation of the Orion (Botnia) mill on the aquatic environment. Uruguay, for its part, has the obligation to continue monitoring the operation of the plant in accordance with Article 41 of the Statute and to ensure compliance by Botnia with Uruguayan domestic regulations as well as the standards set by CARU. The Parties have a legal obligation under the 1975 Statute to continue their co-operation through CARU and to enable it to devise the necessary means to promote the equitable utilization of the river, while protecting its environment.

~ ~

V. THE CLAIMS MADE BY THE PARTIES IN THEIR FINAL SUBMISSIONS

- 267. Having concluded that Uruguay breached its procedural obligations under the 1975 Statute (see paragraphs 111, 122, 131, 149, 157 and 158 above), it is for the Court to draw the conclusions following from these internationally wrongful acts giving rise to Uruguay's international responsibility and to determine what that responsibility entails.
- 268. Argentina first requests the Court to find that Uruguay has violated the procedural obligations incumbent on it under the 1975 Statute and has thereby engaged its international responsibility. Argentina further requests the Court to order that Uruguay immediately cease these internationally wrongful acts.
- 269. The Court considers that its finding of wrongful conduct by Uruguay in respect of its procedural obligations per se constitutes a measure of satisfaction for Argentina. As Uruguay's breaches of the procedural obligations occurred in the past and have come to an end, there is no cause to order their cessation.
- 270. Argentina nevertheless argues that a finding of wrongfulness would be insufficient as reparation, even if the Court were to find that Uruguay has not breached any substantive obligation under the 1975 Statute but only some of its procedural obligations. Argentina maintains that the procedural obligations and substantive obligations laid down in the 1975 Statute are closely related and cannot be severed from one another for purposes of reparation, since undesirable effects of breaches of the former persist even after the breaches have ceased. Accordingly, Argentina contends that Uruguay is under an obligation to "re-establish on the ground and in legal terms the situation that existed before [the] internationally wrongful acts were committed". To this end, the Orion (Botnia) mill should be dismantled. According to Argentina, restitutio in integrum is the primary form of reparation for internationally wrongful acts. Relying on Article 35 of the International Law Commission's Articles on the Responsibility of States for Internationally Wrongful Acts, Argentina maintains that restitution takes precedence over all other forms of reparation except where it is "materially impossible" or involves "a burden out of all proportion to the benefit deriving from restitution instead of compensation". It asserts that dismantling the mill is not materially impossible and would not create for the Respondent State a burden out of all proportion, since the Respondent has

"maintained that construction of the mills would not amount to a fait accompli liable to prejudice Argentina's rights and that it was for Uruguay alone to decide whether to proceed with construction and thereby assume the risk of having to dismantle the mills in the event of an adverse decision by the Court",

as the Court noted in its Order on Argentina's request for the indication of provisional measures in this case (*Order of 13 July 2006, I.C.J. Reports 2006*, p. 125, para. 47). Argentina adds that whether or not restitution is disproportionate must be determined at the latest as of the filling of the Application instituting proceedings, since as from that time Uruguay, knowing of Argentina's request to have the work halted and the *status quo ante* re-established, could not have been unaware of the risk it ran in proceeding with construction of the disputed mill. Lastly, Argentina considers Articles 42 and 43 of the 1975 Statute to be inapplicable in the present case, since they establish a régime of responsibility in the absence of any wrongful act.

- 271. Taking the view that the procedural obligations are distinct from the substantive obligations laid down in the 1975 Statute, and that account must be taken of the purport of the rule breached in determining the form to be taken by the obligation of reparation deriving from its violation, Uruguay maintains that restitution would not be an appropriate form of reparation if Uruguay is found responsible only for breaches of procedural obligations. Uruguay argues that the dismantling of the Orion (Botnia) mill would at any rate involve a "striking disproportion between the gravity of the consequences of the wrongful act of which it is accused and those of the remedy claimed", and that whether or not a disproportionate burden would result from restitution must be determined as of when the Court rules, not, as Argentina claims, as of the date it was seised. Uruguay adds that the 1975 Statute constitutes a lex specialis in relation to the law of international responsibility, as Articles 42 and 43 establish compensation, not restitution, as the appropriate form of reparation for pollution of the river in contravention of the 1975 Statute.
- 272. The Court, not having before it a claim for reparation based on a régime of responsibility in the absence of any wrongful act, deems it unnecessary to determine whether Articles 42 and 43 of the 1975 Statute establish such a régime. But it cannot be inferred from these Articles, which specifically concern instances of pollution, that their purpose or effect is to preclude all forms of reparation other than compensation for breaches of procedural obligations under the 1975 Statute.
- 273. The Court recalls that customary international law provides for restitution as one form of reparation for injury, restitution being the re-establishment of the situation which existed before occurrence of the wrongful act. The Court further recalls that, where restitution is materially impossible or involves a burden out of all proportion to the benefit deriving from it, reparation takes the form of compensation or satisfaction, or even both (see *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*,

Judgment, I.C.J. Reports 1997, p. 81, para. 152; Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I), p. 198, paras. 152-153; 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 (I), p. 233, para. 460; see also Articles 34 to 37 of the International Law Commission Articles on the Responsibility of States for Internationally Wrongful Acts).

274. Like other forms of reparation, restitution must be appropriate to the injury suffered, taking into account the nature of the wrongful act having caused it. As the Court has made clear,

"[w]hat constitutes 'reparation in an adequate form' clearly varies depending upon the concrete circumstances surrounding each case and the precise nature and scope of the injury, since the question has to be examined from the viewpoint of what is the 'reparation in an adequate form' that corresponds to the injury" (Avena and Other Mexican Nationals (Mexico v. United States of America), Judgment, I.C.J. Reports 2004 (1), p. 59, para. 119).

- 275. As the Court has pointed out (see paragraphs 154 to 157 above), the procedural obligations under the 1975 Statute did not entail any ensuing prohibition on Uruguay's building of the Orion (Botnia) mill, failing consent by Argentina, after the expiration of the period for negotiation. The Court has however observed that construction of that mill began before negotiations had come to an end, in breach of the procedural obligations laid down in the 1975 Statute. Further, as the Court has found, on the evidence submitted to it, the operation of the Orion (Botnia) mill has not resulted in the breach of substantive obligations laid down in the 1975 Statute (paragraphs 180, 189 and 265 above). As Uruguay was not barred from proceeding with the construction and operation of the Orion (Botnia) mill after the expiration of the period for negotiation and as it breached no substantive obligation under the 1975 Statute, ordering the dismantling of the mill would not, in the view of the Court, constitute an appropriate remedy for the breach of procedural obligations.
- 276. As Uruguay has not breached substantive obligations arising under the 1975 Statute, the Court is likewise unable, for the same reasons, to uphold Argentina's claim in respect of compensation for alleged injuries suffered in various economic sectors, specifically tourism and agriculture.
- 277. Argentina further requests the Court to adjudge and declare that Uruguay must "provide adequate guarantees that it will refrain in future from preventing the Statute of the River Uruguay of 1975 from being applied, in particular the consultation procedure established by Chapter II of that Treaty".

278. The Court fails to see any special circumstances in the present case requiring the ordering of a measure such as that sought by Argentina. As the Court has recently observed:

"[W]hile the Court may order, as it has done in the past, a State responsible for internationally wrongful conduct to provide the injured State with assurances and guarantees of non-repetition, it will only do so if the circumstances so warrant, which it is for the Court to assess.

As a general rule, there is no reason to suppose that a State whose act or conduct has been declared wrongful by the Court will repeat that act or conduct in the future, since its good faith must be presumed (see Factory at Chorzów, Merits, Judgment No. 13, 1928, P.C.I.J., Series A, No. 17, p. 63; Nuclear Tests (Australia v. France), Judgment, I.C.J. Reports 1974, p. 272, para. 60; Nuclear Tests (New Zealand v. France), Judgment, I.C.J. Reports 1974, p. 477, para. 63; and Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Jurisdiction and Admissibility, Judgment, I.C.J. Reports 1984, p. 437, para. 101). There is thus no reason, except in special circumstances . . . to order [the provision of assurances and guarantees of non-repetition]." (Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua), Judgment, I.C.J. Reports 2009, p. 267, para. 150.)

279. Uruguay, for its part, requests the Court to confirm its right "to continue operating the Botnia plant in conformity with the provisions of the 1975 Statute". Argentina contends that this claim should be rejected, in particular because it is a counter-claim first put forward in Uruguay's Rejoinder and, as such, is inadmissible by virtue of Article 80 of the Rules of Court.

280. There is no need for the Court to decide the admissibility of this claim; it is sufficient to observe that Uruguay's claim is without any practical significance, since Argentina's claims in relation to breaches by Uruguay of its substantive obligations and to the dismantling of the Orion (Botnia) mill have been rejected.

* *

281. Lastly, the Court points out that the 1975 Statute places the Parties under a duty to co-operate with each other, on the terms therein set out, to ensure the achievement of its object and purpose. This obligation to co-operate encompasses ongoing monitoring of an industrial facility, such as the Orion (Botnia) mill. In that regard the Court notes that the Parties have a long-standing and effective tradition of co-operation and co-ordination through CARU. By acting jointly through CARU, the Parties have established a real community of interests and rights in the management of the River Uruguay and in the protection of its environment. They have also co-ordinated their actions through the joint

mechanism of CARU, in conformity with the provisions of the 1975 Statute, and found appropriate solutions to their differences within its framework without feeling the need to resort to the judicial settlement of disputes provided for in Article 60 of the Statute until the present case was brought before the Court.

* *

282. For these reasons,

THE COURT,

(1) By thirteen votes to one,

Finds that the Eastern Republic of Uruguay has breached its procedural obligations under Articles 7 to 12 of the 1975 Statute of the River Uruguay and that the declaration by the Court of this breach constitutes appropriate satisfaction;

IN FAVOUR: Vice-President Tomka, Acting President; Judges Koroma, Al-Khasawneh, Simma, Abraham, Keith, Sepúlveda-Amor, Bennouna, Skotnikov, Cançado Trindade, Yusuf, Greenwood; Judge ad hoc Vinuesa;

AGAINST: Judge ad hoc Torres Bernárdez;

(2) By eleven votes to three,

Finds that the Eastern Republic of Uruguay has not breached its substantive obligations under Articles 35, 36 and 41 of the 1975 Statute of the River Uruguay;

IN FAVOUR: Vice-President Tomka, Acting President; Judges Koroma, Abraham, Keith, Sepúlveda-Amor, Bennouna, Skotnikov, Cançado Trindade, Yusuf, Greenwood; Judge ad hoc Torres Bernárdez;

AGAINST: Judges Al-Khasawneh, Simma; Judge ad hoc Vinuesa;

(3) Unanimously,

Rejects all other submissions by the Parties.

Done in French and in English, the French text being authoritative, at the Peace Palace, The Hague, this twentieth day of April, two thousand and ten, in three copies, one of which will be placed in the archives of the Court and the others transmitted to the Government of the Argentine Republic and the Government of the Eastern Republic of Uruguay, respectively.

(Signed) Peter Tomka, Vice-President. (Signed) Philippe Couvreur, Registrar. Judges Al-Khasawneh and Simma append a joint dissenting opinion to the Judgment of the Court; Judge Keith appends a separate opinion to the Judgment of the Court; Judge Skotnikov appends a declaration to the Judgment of the Court; Judge Cancado Trindade appends a separate opinion to the Judgment of the Court; Judge Yusuf appends a declaration to the Judgment of the Court; Judge Greenwood appends a separate opinion to the Judgment of the Court; Judge ad hoc Torres Bernárdez appends a separate opinion to the Judgment of the Court; Judge ad hoc Vinuesa appends a dissenting opinion to the Judgment of the Court.

(Initialled) P.T. (Initialled) Ph.C.