SEPARATE OPINION OF JUDGE KEITH

1. In this opinion

(a) I address certain aspects of the fact-finding process in which the Court engaged in reaching its conclusion that Uruguay was not in breach of its substantive obligations under the Statute (para. (2) of the *dispositif*); I do that in support of the Court's reasoning and conclusion.

(b) I provide my understanding of the extent of the breaches by Uruguay of its procedural obligations under the Statute (para. (1) of the *dispositif*); I do that to indicate that, while I agree with the Court's conclusion in the *dispositif*, I disagree with part of its reasoning and with one finding within that reasoning.

The Fact-Finding Process

2. A central function of courts is to decide those disputes of facts which the court must decide as it determines whether a party before it is in breach of its legal obligations. The disputes of fact may be about technical or scientific matters, as in this case. In terms of basic principle and this Court's long-established procedure and practice, each party will have full opportunity to present documentary and oral evidence and submissions in support of its positions on the matters of fact which it sees as being in dispute.

3. In this case, in addition to the evidence presented in the two rounds of written pleadings and that presented in 2006 in the course of the two requests for provisional measures, the Parties, with the authorization of the Court, submitted further scientific and technical and other information on 30 June 2009; two weeks later they filed comments, with documents in support, on the information provided by the other Party; and they submitted further scientific and technical data during the hearings in September 2009. The initiative the Parties took to provide that new material was a commendable one: Argentina had filed its Reply less than three months after the Botnia plant began operating and understandably, at that stage, could do little more than make suggestions about the possible impact of the plant on the River Uruguay. When Uruguay came to file its Rejoinder on 29 July 2008, it was in a better position, and it provided monitoring results on the first six months of operation of the plant (pp. 231-265 and extensive annexes)

but, by the time of the hearings, the plant had been operating for almost two years.

4. The Scientific and Technical Report filed by Argentina on 30 June 2009 summarized in over 400 pages the results of the research of the scientific team from the National University of La Plata and the National University of Buenos Aires. The Research Program was an interdisciplinary, multi-laboratory effort intended to characterize the natural functioning of the Uruguay River ecosystem and the impact of the Botnia mill on it. It involved a significant number of scientific and technical personnel. (The CVs of ten of the scientists are included in the report; 11 names are listed as comprising one of the groups: that monitoring the river.) The Report covered the first 18 months operation of the plant. It sets out the details of the monitoring, particularly of water quality, along a 26-km stretch of the river. That Report, with its information about the impact of the plant on the river, once it became operational, was central to Argentina's case on substantive breach. Uruguay, in its 30 June 2009 new documents, also provided detailed reports, by DINAMA, on the first year of operation of the plant and the environmental quality of the area of influence, and by EcoMetrix in its Independent Performance Monitoring as required by the IFC, for 2008. In the course of the hearings, on 15 September 2009, Uruguay, citing Article 56 (4) of the Rules of Court and Practice Direction IX *bis*, submitted further documents which it said were recent and readily available. Argentina did not object to their submission. They included another five DINAMA Reports covering periods up to 30 June 2009. As appears from paragraphs 228 to 262 of the Judgment, the documents submitted in June and September are central to the conclusions the Court reaches.

5. It is not only the timeliness of the information which is critical. It is also its quantity, quality and consistency. In terms of quantity, Argentina (10), DINAMA (16) and Botnia (4) between them had 30 monitoring sites, up and downstream from the Botnia plant, measuring water quality. Botnia had another at the plant, testing the effluent. The monitoring stations extended from more than 30 kilometres upstream of the plant to 20 kilometres downstream. Three of the Argentine stations were in Nandubaysal Bay and Inés Lagoon, the data from which, according to the Argentine scientific team, provided a comparator since the bay "acts as an ecosystem that is relatively detached from the Uruguay river" (Scientific and Technical Report of 30 June 2009, Chap. III, appendix Background Biogeochemical Studies, para. 4.1.2; see also para. 4.3.1.2; see also sketch-map No. 2 on page 35). Uruguay through DINAMA, has been carrying out its monitoring since March 2006 (Counter-Memorial of Uruguay, para. 7.10). The monitoring, under a plan adopted in May

2007 and amended in October 2007, based on pre-operational monitoring, and again in June 2008, based on the first six months of operations, includes, with one exception, all the substances considered in the Judgment and many others (Counter-Memorial of Uruguay, Vol. II, Annex 39; Rejoinder of Uruguay, Vol. IV, Annexes R86 and R89). The exception was nonylphenols discussed by the Court in paragraphs 255-257. While the plant is operating, DINAMA has undertaken to carry out periodic monitoring for the various substances and other matters, and every six months to carry out an inspection of environmental management and performance (Counter-Memorial of Uruguay, paras. 7.20-7.27; Rejoinder of Uruguay, para. 4.63). Its most recent data before the Court cover the period up to 30 June 2009.

6. Botnia's Waterworks Treatment System Approval of 4 July 2007 requires it to report to DINAMA every two months on its effluent treatment performance (Counter-Memorial of Uruguay, Vol. X, Ann. 225). The plan includes continuous monitoring available in DINAMA offices, transmitted every ten minutes and the provision of the results of sampling analysis (new documents submitted by Uruguay, 30 June 2009, Annex S2, Appendix IV, p. 2/33). The IFC required reviews of the environmental performance of the plant. The independent experts appointed by the IFC undertook those reviews on the basis of the data collected by OSE, DINAMA and Botnia, as well as certain independent laboratories (new documents submitted by Uruguay, 30 June 2009, Annex S7, p. ES.ii). Three such reports have been prepared for the IFC and are before the Court, the first completed before the mill was commissioned to ensure compliance with the Environmental and Social Action Plan which had been established, the second following the first six months of operation, and the third on the first year of operation. The fourth and last was to be prepared following the 2009 monitoring year and the second year of operation. OSE, Uruguay's State Water Works, in terms of its overall responsibility for Uruguayan water quality, has been gathering relevant information throughout the relevant period at the Fray Bentos water intake. And CARU had gathered data from 13 points along the river from the mid-1980s until February 2006.

7. So far as the quality of the information provided by the two Parties is concerned, neither Party challenged any of the details of the data, many thousands of items, gathered by the monitoring stations, up and down the river and at the effluent point at the plant, and recorded in the many tables included in the documents before the Court. Rather, they disagreed about how those data were to be interpreted. I return to that issue later. The accuracy of the data collected is supported as well by their consistency over time and throughout the whole stretch of river in

issue. As appears from the Judgment, that consistency is in general also to be found in the data collected before and after the plant began operating, and by the Argentinian as well as the Uruguayan monitoring. Some differences do appear, for instance, as a result of temperature variations but, as the Judgment shows, they are not significant in terms of the assessment of the impact of the operation of the plant on the water quality in the river (e.g., paras. 228, 239, 240, 247 and 252).

8. The task of the Court, to repeat, is to decide disputes of fact which have to be resolved in determining whether a party to the proceeding has breached its legal obligations. The dispute in this case is about the interpretation or evaluation of the raw data, not about the quality of the data nor, for the most part, their content. Like the Court (Judgment, para. 236), I see the task in this case as assessing, by reference to the raw data, the impact of the operation of the plant on the water quality. As the Judgment shows, Argentina has failed to demonstrate by reference to that wealth of information that the operation of the plant to the present time has led to changes in water quality which breach Uruguay's substantive obligations in respect of those components.

9. I do of course appreciate that the Court, under Article 50 of the Statute, has powers to set up an enquiry and to seek an expert opinion, and that it could have exercised those powers in this case. The powers are to be exercised in accordance with the processes, designed to ensure the independence and quality of the resulting reports and to protect the rights of the parties, laid down in Articles 67 and 68 of the Rules. As is well known, the Court and its predecessor have made Orders under Article 50 in four cases:

— Two concerned the calculation of compensation (*Factory at Chorzów, Merits, Judgment No. 13, 1928, P.C.I.J., Series A, No. 17*, p. 99 and *Corfu Channel (United Kingdom* v. *Albania), Assessment of Amount of Compensation, Order of 19 November 1949, I.C.J. Reports 1949*, p. 237); in the second, a factor in the Court making the Order was that the respondent was not participating in that phase of the proceeding and the Court accordingly invoked Article 53 as well as Article 50.
— In the third, the Court appears to have identified as early as the end of the first round of written argument that the resolution of critical issues of fact might require the assistance of naval experts; their reports on precisely formulated naval and technical issues, ordered in the course of the oral proceedings, and including a site visit, were subject to submissions by the Parties (which had had the opportunity to suggest issues to be enquired into) and to questions from judges before the end of the proceedings (*Corfu Channel (United Kingdom* v. *Albania), Merits, Judgment, I.C.J. Reports 1949*, pp. 142-169; for the Court's use of the reports see pp. 13, 14, 16 and 20-22).

— In the fourth, the Parties in the Special Agreement submitting a maritime boundary dispute to the Court undertook to request the Chamber which was to decide the case to appoint a technical expert, nominated jointly by the Parties, to assist it in respect of technical matters and, in particular, in preparing the description of the maritime boundary and the charts referred to in the Special Agreement. The expert was to be present at the oral proceedings and to be available for such consultations with the Chamber as it might deem necessary (*Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/United States of America), Appointment of Expert, Order of 30 March 1984, I.C.J. Reports 1984*, p. 165).

(See also the Order appointing experts in another boundary dispute, again made at the request of both Parties, in *Frontier Dispute (Burkina Faso/Republic of Mali), Nomination of Experts, Order of 9 April 1987, I.C.J. Reports 1987*, p. 7, but under Article 48, not Article 50.)

10. In a number of other cases proposals by a party to make such orders have not been accepted: *Free Zones of Upper Savoy and the District of Gex, Judgment, 1932, P.C.I.J., Series A/B, No. 46*, pp. 162-163; *Oscar Chinn, Judgment, 1934, P.C.I.J., Series A/B, No.* 63, p. 88, a request by one not opposed by the other; and *Application for Revision and Interpretation of the Judgment of 24 February 1982 in the Case concerning the* Continental Shelf (Tunisia *v.* Libyan Arab Jamahiriya) *(Tunisia* v. *Libyan Arab Jamahiriya), Judgment, I.C.J. Reports 1985*, pp. 192, 227-229, paras. 64-67). In at least two other cases, proposals from within the Court to set up an inquiry were not acted on: *Temple of Preah Vihear (Cambodia* v. *Thailand), Merits, Judgment, I.C.J. Reports 1962*, p. 100; *Military and Paramilitary Activities in and against Nicaragua (Nicaragua* v. *United States of America), Merits, Judgment, I.C.J. Reports 1986*, p. 40, para. 61, and dissenting opinion of Judge Schwebel, *ibid.*, pp. 321-323, paras. 132-134).

11. In the context of the present case, I am unable to see that the Court could have obtained any real assistance from employing those procedures of enquiry or expert opinion, a course which the Parties, moreover, did not propose. Any enquiry could not have begun to add in any significant way to the many thousands of items of data already before the Court; for one thing, some of that information was being collected and recorded years before the case was launched. And any expert opinion would have covered exactly the same issues of evaluation as were already being argued before the Court by the Parties, assisted by their experts. In the end those issues are for the Members of the Court to decide, in this case essentially on the basis of the data put before the Court by the Parties. I would stress that that responsibility of making decisions on the matters of scientific dispute arises only if the matters require decision in the course of the Court determining whether or not Argentina had made

out its claim. A number of the issues debated before the Court, such as the river flow and the best ways of measuring it, did not have to be decided in the course of making that determination. For my part, I think that the resolution of those matters which the Court did have to decide, based on the raw data, is relatively straightforward.

12. I do however draw on one important general interpretation given by Argentina to the data and four of its more specific evaluations. That interpretation and those evaluations may be seen, in part at least, as declarations against interest. They were given by the Party which was obliged to establish the facts it asserted in support of its claim that its rights had been breached.

13. According to the Executive Summary of Argentina's Scientific and Technical Report provided to the Court on 30 June 2009, a report based on almost two years of continuous study of the river:

> "The main outcome of this study is the detection of changes associated to the pulp mill activities that could act as an *early warning framework* to anticipate future major and more irreversible ecosystem damages." (Original emphasis.)

On more specific matters, Argentina in that Report states that the records of water quality parameters during the sampling campaigns were "normal for the river with typical seasonal patterns of temperature and associated dissolved oxygen concentrations" (Chap. III, p. 2). Through its counsel, it says that the dioxin and furan levels were low in the study area, below environmental quality guidelines, with some increasing trend. In the 30 June 2009 report, it comments that "the observed sodium levels do not imply any risk" and were lower than those in the Argentine Bay; and that although the AOX levels were higher than the baseline figures reported by Uruguay, they were lower than the German standard (there being no CARU or Uruguay standard) (Chap. III, p. 22, Figure 7, p. 23; p. 27; Figures 11 and 12, pp. 27 and 29).

14. I return to the reference to "early warning" in Argentina's report. That may be related to the ongoing obligations of Uruguay under the 1975 Statute in respect of the operation of the plant. Those obligations are both substantive and procedural, and last so long as the plant continues to operate. I conclude this part of my opinion by highlighting Uruguay's obligation to continue to monitor the operation of the plant and, as appropriate, to require remedial action. Under Botnia's authorization, DINAMA will continue to monitor at its 16 stations, on a periodic basis, the identified compounds, elements and other parameters. Under Uruguayan law and its authorization, Botnia remains under the obligation to control and to monitor emissions. Further, it has to apply for the renewal of its authorization to operate every three years. It remains subject to DINAMA's powers. The nature and reality of some of DINAMA's

powers were demonstrated by its response to an operational error which occurred during maintenance work on 26 January 2009. Following an effective response at the plant, DINAMA inspected the plant the next day to check directly on the situation and the measures taken. The incident, said DINAMA, was one within the eventualities of such an industrial operation and the company had complied in all aspects with the emergency responses plan approved by DINAMA (Six Months Emissions Report July 2009, pp. 23-24). On 23 March 2009, in response to this incident, DINAMA enacted a resolution providing for additional monitoring (Annex C6 to Uruguay's Comments of 15 July 2009).

15. Uruguay's obligations, which in practice are primarily to be met through the exercise by DINAMA of its monitoring and related powers, continue as a matter of international legal obligation. That obligation has two sources — (1) its obligation under Article 41 *(a)* of the Statute to prevent pollution as interpreted and applied by the Court (paras. 204-205), and (2) its obligation under Article 41 *(b)* not to reduce in its legal system the technical requirements in force under its law and the conditions in the Botnia authorization, for preventing water pollution. CARU might well, in addition, as was contemplated for instance in 2004, take up its monitoring role in support of the same purpose. Uruguay's continuing obligation is independent of that possibility.

URUGUAY'S BREACHES OF ITS PROCEDURAL OBLIGATIONS

16. I agree with the Court that Uruguay breached its obligation under Article 7 of the Statute to notify in proper time the plans for the two plants. I also agree that, when the negotiating period of 180 days ended on 30 January 2006, Uruguay was not barred from authorizing the completion and operation of the plants. My disagreement relates to the intermediate step in the process and to the Court's finding that the actions taken by Uruguay in respect of each plant in the course of that 180 days breached its procedural obligations.

17. I begin with the undoubted principle that both Parties were obliged to perform their treaty obligation to negotiate in good faith, as Article 26 of the Vienna Convention on the Law of Treaties declares. That obligation includes, as the International Law Commission said in its commentary to what became Article 26, an obligation to abstain from acts calculated to frustrate the object and purpose of the treaty (*Yearbook of the International Law Commission*, 1966, Vol. II, p. 211, para. 4). The procedures laid down in Articles 7 to 12 of the Statute are, in terms of Article 1, a central part of the joint machinery necessary for the optimal and

rational utilization of the river; accordingly, actions calculated to frustrate that machinery would be a breach of the duty of good faith.

18. To determine whether Uruguay did commit such a breach requires an examination both of the course of the negotiations between Argentina and Uruguay during the 180-day period and of Uruguay's actions in relation to the two mills during that period.

19. As the Court recognizes, the negotiations provided for in the Statute were in this case to take place in the GTAN. In terms of Article 11, the negotiations, undertaken with a view to reaching an agreement, are to follow a communication from the notified party specifying the aspect of the project that might be harmful, the reasons for that conclusion and the changes it proposes. The negotiations, in terms of general principle, are to be meaningful but, in terms of the particular context, they are to be undertaken against the background that, if no agreement is reached by their end, the project may continue.

20. While GTAN was set up in May 2005, it did not hold its first meeting until 3 August. It held 12 meetings in all — more than Argentina proposed at the first meeting — but was unable to reach agreement. In the course of the meetings, Uruguay produced a large number of documents in response to Argentina's requests. They included the full copy of the files relating to the environmental authorizations for both mills. The Uruguayan delegation in its report of 31 January 2006 prepared at the end of the process says that it provided all the information requested by the Argentine delegation which was available to it. As to information not available to it, Uruguay had requested each of the companies to provide that information which the companies had, according to the progress of their respective projects. The report of the Argentine delegation of 3 February 2006 reiterated that Uruguay had breached its obligations under the Statute, noted problems with the EIA, and criticized the choices of site, the planned production method, the studies of the impact of effluents, gas emissions and solid waste, the lack of preventive and mitigating measures and the mills' socio-economic impact (Memorial of Argentina, para. 2.69 and Anns., Vol. IV, Ann 1).

21. Neither Party provided the Court with the minutes of the meetings beyond the first. Uruguay, in its report prepared at the end of the GTAN process, listed the 36 documents it provided to Argentina over the period of the negotiation and provided 26 of them to the Court as part of the bulky volume of annexes relating to GTAN; others, such as the various authorizations relating to the plants, appear elsewhere in the record. Argentina provided no such detail. Its slender volume of annexes relating to GTAN comprises no more than the joint communiqué under which the group was set up, the minutes of the first meeting and the (final) reports of the two delegations. While those minutes and the Argentine

report do indicate, to return to the terms of Article 11, why Argentina considered harm might be caused by the plants, they do not, to turn to the other requirement of Article 11, appear to suggest changes to the projects which might meet the likely harm, apart from the proposal to have the plants moved to other sites.

22. It is against the background of those negotiations that the Uruguayan actions relating to the plants taken during the negotiating period are to be assessed. They are three in total:

ENCE

— 28 November 2005: Environmental Management Plan Approval for the construction stage — land movement.

BOTNIA

— 22 August 2005: Environmental Management Plan Approval for the construction of the concrete plant, foundation and construction of a chimney and foundation for construction works;

— 18 January 2006: Environmental Management Project Approval for the construction of the plant.

On 3 November 2005 an Initial Environmental Authorization was also given in respect of the Port at Nueva Palmira, but, as the Court rules (para. 45), that facility does not fall within the scope of this proceeding.

23. The three approvals are to be seen in context. The ENCE plant had received its initial environmental authorization on 9 October 2003 and received no other authorization. Botnia's initial authorization was on 14 February 2005, and was followed by three further authorizations before the GTAN negotiations began:

— 12 April 2005: environmental management plan — approval of removal of vegetation and earth movement;

— 5 July 2005: resolution relating to a port terminal for the mill granting a riverbed concession;

— 1 August 2005: approval of environmental management plan dated 27 July 2005.

Following the end of the negotiating period, another seven approvals that were required were granted before the plant could begin operating:

— 22 March 2006: land movement approval;

— 10 May 2006: approval of construction of waste water treatment plant;

— 9 April 2007: approval of construction of solid industrial land fills (two approvals);

— 24 September 2007: approval of conservation area;

— 31 October 2007: approval of environmental management plan for operations;
— 8 November 2007: authorization to operate.

24. Did Uruguay by giving the three approvals during the negotiating period breach its obligation to negotiate in good faith? Were those actions such as to frustrate the negotiations? Did they mean that the negotiations were not meaningful?

The answers to the questions depend in part, as I have already indicated, on the course of the negotiations in GTAN, and the contributions the Parties made to those negotiations, so far as they appear in the record before the Court (paras. 19 to 21 above). The answers also depend on the nature of the actions of Uruguay relating to the two projects.

25. I begin with the ENCE project. The relevant approval was for a minor aspect of the whole project. If the project was abandoned, as in fact happened, no doubt any land clearing undertaken in accordance with the authorization could be easily remedied, were that necessary. The Botnia case is not as straightforward, but again I do not see the approvals as frustrating the negotiations or causing them not to be meaningful. It is true that the foundations and emissions stack are a significant part of the plant, but much more remained to be assessed and approved or not by the Uruguayan authorities and to be done on the ground, as appears from the fact that the plant was not complete and did not begin operating until another two years had passed. The approval of the construction of the plant on 18 January 2006, twelve days before the formal period for negotiation came to an end, might have been seen as a different matter, but for two points. The first is that another seven authorizations and almost two years of construction and installation of the plant remained ahead. More significantly, more than a month earlier, on 14 December 2005, the Argentine Foreign Secretary had already written to the Uruguayan Ambassador stating that

> "The Government of the Argentine Republic concludes that, upon the Parties having failed to reach agreement, as specified by Article 12 of the River Uruguay Statute, this paves the way for the procedure provided for in Chapter XV of the said Statute.
>
> Consequently, the Government of the Argentine Republic hereby notifies the Uruguayan Government of the following:
>
> *(a)* a dispute has arisen in connection with the application and interpretation of the Statute of the River Uruguay; and
> *(b)* the direct negotiations between both Governments, referred to by Article 60 of the Statute, have been taking place since 3 August 2005 (the date of the first GTAN meeting) in respect of the dispute arising out of the unilateral authorizations for construction of the said industrial plants . . ."

Any action taken by Uruguay after 14 December 2005 cannot be seen as frustrating the negotiating process. That process was already effectively at an end.

26. Accordingly, I conclude that Uruguay, by granting the three approvals in respect of the projects during the period of negotiation, did not act in breach of its obligation to negotiate in good faith.

(Signed) Kenneth KEITH.