# **Response to Submission SEM-02-003**

**Prepared by the Government of Canada** 

Submitted to the Secretariat of the Commission for Environmental Cooperation

**August 6<sup>th</sup>, 2002** 

# **Table of Content**

	Pages
1. The Submission	1
2. Clarifying Information	2
2.1) Criteria for Responses to Alleged Violations	3
2.2) Methodologies for Determining Compliance	4
3. Enforcement Decisions	5
3.1) Atlantic Provinces	5
3.1.1) Alleged Violations by the Irving Pulp and Paper Ltd. at St. John, New Brunswick, from January 1 <sup>st</sup> 1996 through 1999 3.1.1.1) Mill Record During 1996 3.1.1.2) Mill Record During 1997 3.1.1.3) Mill Record During 1998 3.1.1.4) Mill Record During 1999	5 6 6 7 8
3.1.2) Data for all Four Mills in the Atlantic Provinces for the Year 2000 3.1.2.1) Irving Pulp and Paper Ltd. at St. John 3.1.2.1.1) Acute Lethality – Failure of the Rainbow Trout Test 3.1.2.1.2) Total Suspended Solids (TSS) – Failure of Test 3.1.2.1.3) Biochemical Oxygen Demand (BOD) – Failure of Tests 3.1.2.2) AV Cell Inc. at Atholville 3.1.2.2.1) Acute Lethality – Failure of the Rainbow Trout Test 3.1.2.2.2) Total Suspended Solids (TSS) – Failure of Tests 3.1.2.3) Biochemical Oxygen Demand (BOD) – Failure of Tests 3.1.2.3) Abitibi-Consolidated Inc. at Grand Falls 3.1.2.3.1) Acute Lethality – Failure of the Rainbow Trout Test 3.1.2.4.1) Bowater Mersey Paper Company Ltd. at Brooklyn 3.1.2.4.1) Acute Lethality – Failure of the Rainbow Trout Test	9 9 10 10 11 11 12 12 13 14 14 16

3.2) Quebec	16
3.2.1) Alleged Violations by the Tembec Inc. at Témiscaming,	
from January 1 <sup>st</sup> 1996 through 1999	17
3.2.1.1) Mill Record for 1996	18
3.2.1.2) Mill Record for 1997	19
3.2.1.3) Mill Record for 1998	20
3.2.1.4) Mill Record for 1999	22
3.2.2) Data for All Six Mills in Québec for the Year 2000	23
3.2.2.1) Tembec Inc. at Témiscaming	23
3.2.2.2) Fjordcell Inc. at Jonquière	24
3.2.2.3) Tembec Inc. at St-Raymond	24
3.2.2.4) Uniforêt-Pâte Port Cartier Inc. at Port-Cartier	25
3.2.2.5) F.F. Soucy Inc. at Rivière-du-Loup	26
3.2.2.6) La Compagnie J. Ford Ltd. at Portneuf	26
3.3 Ontario	27
3.3.1) Alleged Violations by Abitibi-Consolidated Inc.	
at Iroquois Falls for 2000	27
3.3.2) Alleged Violations by Interlake Papers	
at St. Catherines for 2000	27

# **List of Tables**

Page 9: Table 1

Irving Pulp and Paper Ltd. at St. John, New Brunswick – Summary of Alleged Violations for the Year 2000

Page 11: Table 2

AV Cell Inc. at Atholville, New Brunswick – Summary of Alleged Violations for the Year 2000

Page 13: Table 3

Abitibi-Consolidated Inc. at Grand Falls, Newfoundland -- Summary of alleged violations for the year 2000

Page 14: Table 4

Bowater Mersey Paper Company Ltd. at Brooklyn, Nova Scotia – Summary of Alleged Violations for the Year 2000

Page 18: Table 5

Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1996

Page 19: Table 6

Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1997

Page 20: Table 7

Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1998

Page 22: Table 8

Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1999

Page 23: Table 9

Tembec Inc. at Témiscaming – Summary of Alleged Violations for the Year 2000

Page 24: Table 10

Fjordcell Inc. at Jonquière – Summary of Alleged Violations for the Year 2000

Page24: Table 11

Tembec Inc. at St-Raymond – Summary of Alleged Violations for the Year 2000

Page 25: Table 12

Uniforêt-Pâte Port Cartier Inc. at Port-Cartier -- Summary of alleged violations for the year 2000

Page 26: Table 13

F.F. Soucy Inc. at Rivière-du-Loup -- Summary of alleged violations for the year 2000

Page 26: Table 14

La Compagnie J. Ford Ltd. at Portneuf -- Summary of alleged violations for the Year 2000

On May 8<sup>th</sup> 2002, Friends of the Earth, the Union Saint-Laurent Grands Lacs, the Conservation Council of New Brunswick, the Ecology Action Centre, and Environment North, represented by the Sierra Legal Defence Fund, filed a submission (SEM-02-003) before the Secretariat of the Commission for Environmental Co-operation (CEC) pursuant to article 14 of the *North American Agreement for Environmental Co-operation* (NAAEC). The Submitters assert that, from 1995 through 2000, the Government of Canada failed to effectively enforce section 36(3) of the *Fisheries Act* in respect of pulp and paper mills in Ontario, Quebec and the Atlantic provinces which allegedly had not met the provisions of the *Pulp and Paper Effluent Regulations* (*PPER*) relative to the deposit of deleterious substances.

On June 7<sup>th</sup> 2002, the CEC Secretariat determined that the submission met the criteria of Article 14(1) and requested a response from the Government of Canada in accordance with Article 14(2). The Government of Canada is therefore submitting its response.

The response will first summarise the specific assertions provided in the submission and provide clarifying information on the basis of enforcement decisions that have been made in respect of the mills identified in the submission as of particular concern to the Submitters. The response will then shift to its main focus: a description of enforcement decisions regarding specific cases provided by the Submitters.

# 1. The Submission

The Submitters provide specific information to support their assertion that Canada failed to effectively enforce the *Fisheries Act* and the *PPER* in regard to pulp and paper mills in Ontario, Québec and the Atlantic provinces. The two categories of violations for which they contend enforcement is deficient are (1) failure to meet a "deleterious substances" test and (2) failure to conduct follow-up testing when there is an effluent test failure.

The Submitters obtained only partial data for mills in the Atlantic provinces for the years 1995 through 2000 and claim, therefore, that they understate the number of violations in those provinces. According to the Submitters, the data they obtained show that 19 mills reported 1,081 acute lethality, Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) violations from 1995 through 2000. The Submitters did not calculate follow-up test procedure violations for the Atlantic provinces. They claim that, despite the number of test failure violations, they found only "two prosecutions of mills in the Atlantic Region under the federal laws since the *PPER* came into force." Based on 2000 data, the Submitters are particularly concerned about the apparent lack of enforcement regarding four mills in the Atlantic provinces. According to the Submitters, the Irving Saint John mill (the mill in the Atlantic provinces allegedly with the most violations from 1995 through 2000) was prosecuted under the federal laws in 1998, but still had 22 test failure violations and an unknown number of follow-up test violations in 2000.

In regard to the Province of Québec, the Submitters claim that there are 960 acute lethality, BOD and TSS violations from 1995 to 2000 at nine mills. They claim that in 2000, 26 mills in Québec had 171 violations (presumably acute lethality, BOD and TSS violations), and that 24 mills failed the trout acute lethality test. The Submitters claim that of those 24, 33.3% also violated follow-up test procedures; and 28 mills, after failing the *Daphnia magna* acute lethality test, violated the acute lethality follow-up procedures.

In all, the Submitters claim that there were at least 250 reported potential offences of the *PPER* follow-up test procedures throughout Québec in 2000. The Submitters claim that despite these violations, they could find no *Fisheries Act* prosecutions or convictions of any Québec mills. The Submitters state that they are particularly concerned about apparent lack of effective enforcement at six mills, based on data from 2000. Of these, they highlight the Tembec Inc. mill in Témiscaming, for which they claim no prosecution was brought under either federal or provincial effluent regulations despite a total of 275 reported violations from 1995 through 2000.

For the Province of Ontario, the Submitters contend that 13 mills had over 225 acute lethality, BOD and TSS test failures between 1996 and 2000. In 2000 alone, they claim that 7 mills were responsible for 18 such test failures. Six of those 18 mills failed the trout acute lethality test, and two also failed the trout lethality test follow-up procedures. They also claim that nine mills violated the *Daphnia magna* follow-up procedures. In all, the Submitters claim there were at least 94 follow-up test procedure violations at Ontario mills in 2000. The Submitters assert that from 1995 to 2000, six Ontario mills were prosecuted under the *PPER*, which they believe explains the lower number of violations in Ontario as compared to Québec and the Atlantic provinces, where the Submitters claim there have been fewer prosecutions. Nonetheless, on the basis of 2000 data, the Submitters identify two Ontario mills for which they "have concerns about the apparent lack of effective enforcement of federal laws".

# 2. Clarifying Information

The government of Canada would like to offer the following information regarding the approach taken to enforce the *PPER* and the *Fisheries Act*. The purpose of this information is to assist the reader in understanding the facts pertaining to the specific cases identified in the submission as of particular concern to the Submitters.

# 2.1) Criteria for Responses to Alleged Violations

An Environment Canada employee designated as an inspector under the *Fisheries Act* carries out two categories of activity to verify compliance with the law: (1) inspection and (2) investigation. He or she may review the monthly effluent report or other reports submitted by a pulp and paper mill in accordance with the *PPER*; and/or take sample of a mill effluent during an on-site inspection or investigation.

After verification, if the inspector has reasonable grounds to believe that an offence has been committed, he or she will take action consistent with the *Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the Fisheries Act*, and choose the appropriate response such as a warning, inspector's direction, prosecution, etc...

The response to a violation will be chosen taking into account the nature of the violation, the likelihood of achieving the desired result (i.e., compliance with the *Fisheries Act* in the shortest possible time and no further occurrence of violations), and consistency in enforcement.

Factors considered in assessing the nature of an alleged violation will include:

- the seriousness of the damage or potential damage to fish habitat, the fishery resource, or the risks associated with the human use of fish;
- the intent of the alleged violator;
- whether it is a repeated occurrence; and
- whether there were attempts by the alleged violator to conceal information or otherwise circumvent the objectives and requirements of the habitat protection and pollution prevention provisions.

Factors to be considered in assessing the likelihood of achieving the desired result will include:

- the alleged violator's history of compliance with the habitat protection and/or pollution prevention provisions of the Fisheries Act;
- the alleged violator's willingness to co-operate with enforcement personnel;
- the evidence and extent of corrective action already taken; and
- the existence of enforcement actions by other federal or provincial/territorial authorities.

As for consistency in enforcement, enforcement personnel aim to achieve consistency in their responses to alleged violations. Accordingly, they will consider how similar situations in Canada are being or have been handled when deciding what enforcement action to take.

Prosecutions will be considered in accordance with the criteria set out in the *Fisheries Act Compliance and Enforcement Policy*. The ultimate decision on whether to proceed with a prosecution of the charges rest with the Attorney General of Canada.

# 2.2) Methodologies for Determining Compliance

The methods to determine compliance with the daily BOD and the monthly BOD limits are stipulated in the *PPER*. These consist of the 5-day BOD tests set out in:

- the Standard Methods For the Examination of Water and Wastewater, 17<sup>th</sup> edition, 1989, sub-part 5210, jointly published by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation pages 5-2 to 5-10; or
- the Determination of Biochemical Oxygen Demand Method H-2, published by the Technical Section of the Canadian Pulp and Paper Association. The first method has a precision of plus or minus 15%. If the result of BOD transmitted by a mill is within the interior superior precision range limit of the norm, Environment Canada considers this fact in its evaluation of the Fisheries Act Compliance and Enforcement Policy's criteria for choosing an enforcement response in the case of a violation.

The methods to determine compliance with the daily TSS and the monthly TSS limits are stipulated in the *PPER*. They consist of the tests set out in:

- the Standard Methods For the Examination of Water and Wastewater, 17<sup>th</sup> edition, 1989, sub-part 2540 sections A to E, jointly published by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation pages 2-71 to 2-79; or
- the *Determination of Solids Content of Pulp and Paper Effluents*, Method H-1 published by the Technical Section of the Canadian Pulp and Paper Association.

The first method has a range of precision, depending on the concentration of TSS found in effluent to be measured. Based on Environment Canada experience, the concentration of TSS in mill effluent is such that the precision of the first method is approximately plus or minus 20%. If the result of TSS transmitted by a mill is within the interior superior precision range limit of the norm, Environment Canada considers this fact in its evaluation of the *Fisheries Act Compliance and Enforcement Policy's* criteria for choosing an enforcement response in the case of a violation (the standard of proof required for conviction of an alleged violation of the *PPER* is guilt beyond a reasonable doubt).

It should be noted, however, that in the tables provided below on the number of alleged violations, all alleged violations have been included, even those within the interior superior precision range limit of the norm for TSS and BOD.

## 3. Enforcement Decisions

# 3.1) Atlantic Provinces

The Submitters state that four pulp and paper mills in the Atlantic provinces are of particular concern. Those mills are:

- Irving Pulp and Paper Ltd./Irving Tissue, Saint John, New Brunswick;
- AV Cell at Atholville Inc., New Brunswick;
- Abitibi-Consolidated Inc., Grand Falls, Newfoundland; and
- Bowater Mersey Paper Company Ltd., Brooklyn, Nova Scotia.

When these four mills submitted their monthly effluent reports, an Environment Canada *Fisheries Act* inspector carried out an off-site inspection or reviewed the data contained in each monthly report.

That off-site inspection would reveal whether or not there were violations of TSS limits, BOD limits and the requirement that mill effluent not be acutely lethal to fish.

In the years 1995 to 2000 inclusively, it was normal practice for Environment Canada *Fisheries Act* inspectors in the Atlantic provinces to discuss any alleged violation of the *PPER* shown in a monthly effluent report with a departmental specialist who has detailed technical knowledge of how pulp and paper mills work and how they manufacture their product.

The Submitters raise issues related to Irving Pulp and Paper Ltd. at Saint John for the period from 1995 through 1999, as well as for the year 2000. Matters raised by the Submitters in relation to three other mills in the Atlantic provinces referred to the year 2000 only. Therefore, in order to follow a chronological sequence, this response will deal first with the Irving Pulp and Paper Ltd. mill, for the years 1995 through 1999, and then with data related to all four mills for the year 2000.

# 3.1.1) Alleged Violations by the Irving Pulp and Paper Ltd. at Saint John, New Brunswick, from January 1<sup>st</sup> 1996 through 1999

Under the *Fisheries Act* and the *PPER*, the Irving mill at Saint John was required to be in compliance at the expiry of its transitional authorization, that is, as of December 31<sup>st</sup> 1995. By that date, the mill reported that it had not yet completed construction of the facilities necessary to achieve this.

According to Irving Pulp and Paper, part of the reason was that they had not received a decision on the environmental impact assessment that they had submitted in 1992 to the New Brunswick Department of the Environment, for the construction of a conventional treatment system. In addition, they had not received approved rezoning for the property they had acquired for the project.

In 1994, still without a decision on its environmental impact assessment, Irving stated that the company had decided to use internal mill process changes to meet the *PPER*. By the end of 1994, the company had reportedly purchased equipment, detailed engineering was underway, and some construction had commenced. In 1995, the mill reported that serious scheduling problems, labour shortages, and material delays, resulted in a failure to complete construction. Therefore, compliance with the *PPER* was not achieved by the Irving mill at Saint John by December 31<sup>st</sup> 1995 as required.

#### 3.1.1.1) Mill Record During 1996

During 1996, the mill reported a total of 481 violations – namely, 157 failures of the Rainbow trout acute lethality test, 312 exceedances of the daily BOD limit, and 12 exceedances of the monthly BOD limit. In January 1996, an Environment Canada *Fisheries Act* inspector began an investigation of the alleged violations of the *PPER* by the Irving Saint John mill. Shortly thereafter, the mill indicated to Environment Canada that modifications to the mill to achieve compliance with the *PPER* would be complete by September of that year. The inspector consequently closed the investigation.

At the beginning of May, 1996, Environment Canada *Fisheries Act* inspectors conducted an on-site inspection and collected effluent samples from the three different outfalls, in order to determine whether or not they showed acute lethality to fish. Two of the three were acutely lethal to Rainbow trout. In addition, some of the effluent outfalls were not being monitored in accordance with the regulations. In July, an Environment Canada *Fisheries Act* inspector sent a written warning to Irving Pulp and Paper Ltd. for exceedances of the limit of BOD and for acute lethality of the effluent. There was a follow-up on-site inspection in late November 1996. However, inspectors could take no effluent samples, as there was an unscheduled shutdown of the Saint John mill. Inspectors collected an effluent sample in December 1996, and that sample likewise failed the acute lethality Rainbow trout test. By the end of 1996, Irving reduced the number of effluent outfalls at the Saint John mill from 13 to three.

#### 3.1.1.2) Mill Record During 1997

In 1997, the Irving Pulp and Paper mill at Saint John reported a total of 127 violations – namely, 51 failures of the trout acute lethality test, 64 exceedances of the daily BOD limit, and 12 exceedances of the monthly BOD limit.

In April 1997, representatives from Environment Canada and the New Brunswick Department of the Environment met with mill officials. The mill presented a plan to eliminate effluent that was acutely lethal to fish and to achieve BOD reductions in order to meet *PPER* requirements.

Irving Pulp and Paper Ltd. provided Environment Canada with frequent updates on its progress under the plan and meetings were held in May 1997. In June 1997, Environment Canada sent a letter to the mill requesting a tighter schedule for achieving the required compliance. After project delays in August and September, Environment Canada began to examine enforcement options.

#### 3.1.1.3) Mill Record During 1998

In 1998, the Saint John mill reported a total of 80 violations -- namely, 24 failures of the trout acute lethality test, 44 exceedances of the daily BOD limit, and 12 exceedances of the monthly BOD limit.

In March 1998, Environment Canada *Fisheries Act* inspectors collected an effluent sample under a search warrant. The sample failed the Rainbow trout acute lethality test, and, on April 2<sup>nd</sup> 1998, Irving Pulp and Paper Ltd. was charged, in Provincial Court, at Saint John, New Brunswick, with violation of the *Fisheries Act*.

Also in March 1998, the mill allegedly released deleterious substances (green liquor) to the Saint John River. Following an investigation by the Environment Canada *Fisheries Act* inspector, the mill was charged under section36(3) of the *Fisheries Act* on August 26<sup>th</sup> 1998. On November 24<sup>th</sup> 1999, Irving Pulp and Paper Ltd. pled guilty to the August 1998 charge for the release of deleterious substance and was fined \$50,000.

By May 1998, the Saint John mill had fine-tuned the operation of the internal treatment systems it had installed in order to meet the regulatory limits. From January to May 1998, the mill had reported 20 failures of the trout acute lethality test. Once the new system was operating in a stable manner, the mill reported only four more failures of the Rainbow trout acute lethality test for the remainder of 1998. The Saint John mill reported that the new effluent treatment equipment unit reduced the BOD load, but did not achieve compliance with the *PPER* requirements for BOD. The mill began work to achieve the necessary BOD reductions.

For June 1998, the mill reported that its effluent was non-acutely lethal to trout. In July 1998, Environment Canada *Fisheries Act* inspectors carried out a follow up on-site inspection and collected an effluent sample. The sample passed the Rainbow trout acute lethality test. That test was further confirmation of the June report by the Irving mill that non-acutely lethal effluent had finally been achieved.

On October 7<sup>th</sup> 1998, based on the information provided by DOE and following discussions with DOE officials, the Attorney General advised that a prosecution was not warranted given the particular facts of this case.

#### 3.1.1.4) Mill Record During 1999

In 1999, the Saint John mill reported a total of 11 violations -- namely, one failure of the trout acute lethality test and 10 exceedances of the monthly BOD limit.

By mid-1998, the internal pollution prevention measures that the mill had installed in order to meet the regulatory limits were sufficient to provide non-acutely lethal effluents, to meet the daily and monthly TSS limits, and the daily BOD limits. However, the measures were insufficient to meet the lower monthly BOD limit that applied. In 1999, the mill failed the monthly BOD limit in the months of January, February, March, April, June, July, August, September, October and December. Irving Pulp and Paper Ltd. prepared to install additional equipment to eliminate the monthly BOD exceedances.

Before making a decision on whether or not to conduct an on-site inspection, an Environment Canada *Fisheries Act*'s fishery inspector consulted with a specialist in the regional office on the mill's operation, technologies, and procedures. The information gathered indicated that the mill was making progress toward installing further improvements to its processing equipment and was taking corrective action which, if successful, would eliminate monthly BOD exceedances.

In July 1999, the Saint John mill reported failure of the monthly Rainbow trout acute lethality test. According to the mill, they could not determine the cause of the failure. The mill reported that the follow-up testing resulted in three consecutive passes of the test.

In August 1999, Environment Canada *Fisheries Act* inspectors collected effluent samples from the three effluent outfalls of the Saint John mill. Results of the Rainbow trout acute lethality tests on samples from two of the effluent outfalls showed a pass, and one showed failure. The mill reportedly collected a sample at the same time and had it analysed for acute lethality to Rainbow trout by a laboratory of its choice. The mill's sample passed that test. The mill disputed Environment Canada's results. In response, the inspector took further samples at the three effluent outfalls in October 1999. All samples passed the acute lethality test.

# 3.1.2) Data for all Four Mills in the Atlantic Provinces for the Year 2000

#### 3.1.2.1) Irving Pulp and Paper Ltd. at Saint John

Irving Pulp and Paper Ltd. at Saint John, New Brunswick Summary of Alleged Violations for the Year 2000

Table 1

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Trout Acute		2		2		1						1
Lethality												
BOD Monthly	1	1	1		1	1	1	1	1	1		
Amount												
Daily BOD			1				5	2		1		
TSS Monthly												
Amount												
Daily TSS			1									

#### 3.1.2.1.1) Acute Lethality – Failure of the Rainbow Trout Test

As is shown in Table 1 above, the Irving Pulp and Paper mill at Saint John reported two failures of the Rainbow trout acute lethality test at the beginning of February, 2000. In April 2000, the Saint John mill reported two further failures of the trout acute lethality test. According to the mill, the first failure occurred after the mill had been shut down for 14 days. The failure of the trout acute lethality test might have been due to start up problems. The mill reported that the second failure was due to a leak in the membrane of the reverse osmosis unit where contaminates are treated. They informed Environment Canada that these had been repaired. In a manner consistent with the factors to consider before taking action with respect to an alleged violation, Environment Canada decided that the mill had reported corrective action and that no action on the inspector's part was required.

In June, the Irving Saint John mill reported a failure of the Rainbow trout acute lethality test. According to the mill, part of its treatment system -- the reverse osmosis unit -- had been dismantled the day before the trout test, in order to replace 16 defective membranes. The mill claimed that it had put a plan in place to mitigate the negative effects. At the time of this incident, Environment Canada *Fisheries Act* inspectors conducted an on-site inspection of the Irving mill. The inspectors collected samples to carry out the Rainbow trout acute lethality test, and all samples passed.

After a later failure of the trout acute lethality test, reported by the mill in December 2000, the required follow-up trout tests conducted by the mill on a weekly basis showed a pass for three consecutive weeks as required by the *PPER*. Hence, Environment Canada took no action, based on the results of the weekly follow-up trout acute lethality tests.

#### 3.1.2.1.2) Total Suspended Solids (TSS) – Failure of Test

The Irving Pulp and Paper mill at Saint John reported only one failure to meet required TSS limits in the year 2000. This was in March and was accompanied also by a failure of the BOD test (please see section 3.1.2.1.3). The mill reported the TSS failure was the result of plant maintenance activities and that subsequent samples met the TSS limit.

The samples taken at the time of the inspection in June, referred to under section 3.1.2.1.1, were also subjected to testing for their TSS level. The test results showed that the effluent was in compliance with the regulatory TSS limits.

For the remainder of 2000, there were no violations of the TSS limits reported by the Irving mill at Saint John.

#### 3.1.2.1.3) Biochemical Oxygen Demand (BOD) – Failure of Tests

During the year 2000, the mill reported nine violations of the daily limit for BOD. In March, the exceedance of the daily BOD limit was less than 1% over the allowed daily level. This result was within the margin of precision for the BOD test method, and, therefore, Environment Canada took no action. In June 2000, following the on-site inspection mentioned earlier in this document, the analysis of the samples taken by the inspectors showed compliance with the daily BOD limit.

Similar to the results of previous months, the five exceedances of the BOD daily limit reported by the Saint John mill for July 2000 were all within the margin of precision for the test method. The mill indicated that July production levels were higher than usual, and that the quantity of solids discharged was elevated. According to the mill, its investigation could not identify the exact cause of the five exceedances. However, the facility made changes to the operation of certain equipment and was able to reduce BOD levels. Again, as the BOD exceedances reported by the Saint John mill fell within the margin of precision of the test method, and as the mill was reportedly carrying out corrective measures, there was no action by Environment Canada.

August 2000 led to two more reports of exceedances of the BOD limits. The mill reported that it had corrected the problem, and test results for the daily BOD limit returned to within regulated limits in September. A further exceedance of the daily BOD limit reported by the mill for October was in a similar vein. Environment Canada keeps the monthly reports in cases such as these and uses them as indicators of due diligence on the part of mill operators.

In addition, in 2000, the Saint John mill reported failure to meet the monthly BOD limit. This occurred nine times during that year according to the mill's own reports. To correct this problem, the mill installed a moving bed bioreactor. The mill reported that the engineering work for the bioreactor was completed in February 2000, with the

construction being completed in September of that year. According to the mill, the month of October was required to stabilize operations of the moving bed bioreactor in order to achieve consistent results. Data reported in November by the Irving mill showed compliance with the monthly BOD limit.

Environment Canada determined that reports of corrective action by the Saint John mill were sufficient for a decision not to proceed with any response to the exceedances of the monthly BOD limit.

#### 3.1.2.2) AV Cell Inc. at Atholville

Table 2

AV Cell Inc. at Atholville, New Brunswick
Summary of Alleged Violations for the Year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Trout Acute Lethality	1							2	1	3	3	
BOD Monthly Amount		1	1				1					
Daily BOD			1				1					
TSS Monthly Amount	1	1	1	1	1							
Daily TSS	1		3	9	2							

#### 3.1.2.2.1) Acute Lethality – Failure of the Rainbow Trout Test

As is shown in Table 2 above, AV Cell Inc. failed the monthly trout test in January 2000. The mill proceeded to perform the required Rainbow trout test on a weekly basis, and passed the required follow-up tests.

In March 2000, Environment Canada *Fisheries Act* inspectors carried out an on-site inspection and took effluent samples, which, when subjected to the Rainbow trout test, showed non-acutely lethal effluent.

Later in August 2000, AV Cell Inc. failed the monthly Rainbow trout test. In response to the monthly test failure in August, the mill commenced weekly testing in September. When these weekly tests indicated acute lethality, the mill set up a "trouble-shooting" team to find the source of the problem.

AV Cell's effluent did not pass the Rainbow trout acute lethality test until December 2000. In the meantime, the New Brunswick Department of the Environment took samples of the mill's effluent and, upon finding that the samples showed acutely lethal effluent, decided to proceed with a prosecution. As indicated above, although aware of

continued tests showing effluent that was acutely lethal following the Rainbow trout test, Environment Canada took no enforcement measures, as New Brunswick was already prosecuting for this alleged offence. In January 2002, AV Cell Inc. pleaded guilty to the charges and was fined \$30,000.

#### 3.1.2.2.2) Total Suspended Solids (TSS) – Failure of Tests

In January and March 2000, the AV Cell Inc. mill reported production of effluent that, on two occasions, contained total suspended solids in excess of the allowed limit. In January, according to AV Cell Inc., the excess TSS were due to temporary shut-off of aerators in the bioreactor to allow for an inspection of impeller blades. The mill claimed that the situation was corrected, and the results of the next daily TSS test showed that TSS were below the regulated limit. In March, the mill reported exceeding the daily TSS limit. The cause was identified as a seal that required repair. The mill reported that the repair was made and that TSS levels were below regulated limits about 12 hours after the occurrence. Environment Canada decided that, in these two cases, there was evidence of corrective action already taken by the mill, and that the extent of the action was satisfactory since the mill reported a passing result on the next daily TSS tests.

The AV Cell Inc. mill failed to meet the TSS daily limits on three occasions in March, nine occasions in April, and twice in May. According to the mill, these failures were all due to changes to the mill production process so as to produce dissolving pulp instead of paper grade pulp. The production of dissolving pulp increases the biochemical oxygen demand and the production of suspended solids. The PPER authorise eligible dissolving sulphite mills to be provided with an authorization allowing for additional deposit of BOD and TSS. The mill was granted an authorization in May 2000.

#### 3.1.2.2.3) Biochemical Oxygen Demand (BOD) – Failure of Tests

The exceedance of the BOD limit by the mill in March 2000 was due to the same cause as was reported for the failure of the daily TSS limit – namely, a seal that required repair. Once the repair was made by the mill, AV Cell Inc. reported that operations were back to normal 12 hours after the exceedance. As with the TSS exceedance that occurred at the same time, Environment Canada was satisfied that there was evidence of corrective action, and that no measures on Environment Canada's part were required.

As explained earlier in relation to excess TSS in the mill effluent as a result of AV Cell Inc.'s adoption of a process to allow for the production of dissolving pulp to be used in the manufacture of rayon, this process also added BOD matter to effluent in excess of regulated limits.

Apart from one daily BOD exceedance in July 2000 due to high levels of foam in the pure oxygen reactor which is part of the mill's processing equipment, BOD deposits were within the limits and the mill reported compliance with the limits set under its authorization for the remainder of 2000.

#### 3.1.2.3) Abitibi-Consolidated Inc. at Grand Falls

Abitibi-Consolidated Inc. at Grand Falls, Newfoundland Summary of alleged violations for the year 2000

Table 3

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Trout Acute				1	1	2					1	4
Lethality												
BOD Monthly												
Amount												
Daily BOD												
TSS Monthly												
Amount												
Daily TSS												

# 3.1.2.3.1) Acute Lethality – Failure of the Rainbow Trout Test

As is shown in Table 3 above, Abitibi-Consolidated Inc. reported a total of nine failures of the Rainbow trout acute lethality test.

After continued failures of the required weekly Rainbow trout test reported by the Mill for May and June, an Environment Canada *Fisheries Act* inspector conducted an on-site inspection in June 2000. The inspector took samples of the effluent, and the mill also took samples on that same day. The sample taken by the mill did not pass the acute lethality test, but the sample taken by the inspector during his June inspection, when tested, showed that the Grand Falls mill effluent met the acute lethality requirements of the *PPER*.

In July, 2000, an Environment Canada *Fisheries Act* inspector returned to the Abitibi-Consolidated mill at Grand Falls to conduct an additional inspection under the *PPER*. Again, the inspector took samples of mill effluent, and again those samples passed the Rainbow trout acute lethality test. When the mill submitted its monthly effluent report for July 2000, the report showed no violations of the Rainbow trout acute lethality test.

In November 2000, the mill's monthly effluent sample was shown to be acutely lethal to Rainbow trout. The mill began the follow-up trout test on the required weekly basis. The mill reported that the weekly trout tests conducted through December 2000 failed tests, indicating acutely lethal effluent. The mill reported that it had begun additional

chemical analyses to determine the cause of the acute lethality and to define a solution. According to Abitibi-Consolidated Inc., an action plan which included increasing the retention time of the effluent in the treatment plant was put in place. The mill also believed that a new polymer that was introduced into the process might have been the cause of the failure of the Rainbow trout acute lethality test. As a precaution the mill discontinued the use of the new polymer and reverted to using the original one.

As the mill reported a further failure of the acute lethality test in December 2000, the mill's actions did not appear to have corrected the acute lethality problem. In the face of continued trout test failures, Environment Canada *Fisheries Act* inspectors working on the case obtained a search warrant and executed it at the mill site in Grand Falls. Effluent samples were taken and the Rainbow trout test was conducted three times. The effluent samples were found to be non-acutely lethal – hence, in compliance with the acute lethality prohibition in the *PPER*.

#### 3.1.2.4) Bowater Mersey Paper Company Ltd. at Brooklyn

Table 4

Bowater Mersey Paper Company Ltd. at Brooklyn, Nova Scotia
Summary of Alleged Violations for the Year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Trout Acute	2					1		5	4	1		
Lethality												
BOD Monthly												
Amount												
Daily BOD												
TSS Monthly												
Amount												
Daily TSS	1			2								

#### 3.1.2.4.1) Acute Lethality – Failure of the Rainbow Trout Test

An effluent sample composed of equipment cooling water from Bowater Mersey's mill at Brooklyn, Nova Scotia, failed an acute lethality test for Rainbow trout in January 2000. This cooling water does not come into contact with processed pulp and is only used to control the temperature of the processing equipment. The cooling water is discharged separately from the mill process effluent. As a consequence of the monthly failure, the mill commenced weekly Rainbow trout acute lethality testing.

The cooling water effluent passed the first two weekly follow-up tests, but failed the third. Weekly testing was maintained as required by the regulations until three consecutive tests were passed allowing monthly testing to be resumed.

In response to these failures, the mill reported that it was investigating and would undertake an evaluation to determine what substances in the effluent might have caused the failure of the Rainbow trout tests. The mill also indicated that the cooling system was being checked for potential contaminant sources. In addition, as a precaution, the cooling water specifically used to control the temperature of pumps was being re-routed to the effluent treatment plant.

Environment Canada determined that, in the case of the incident in January, the Brooklyn mill had had an adequate compliance history up to this point with respect to the obligation for its effluent to be non-acutely lethal. Environment Canada also considered the fact that the mill reported on-going corrective actions. Therefore, no action was taken at that time and it was decided to wait to review results in the next monthly effluent report. The February monthly effluent report showed that the mill was in compliance with all requirements.

In June 2000, the Bowater Mersey mill's effluent failed the Rainbow trout acute lethality test. In that same month, Environment Canada *Fisheries Act* inspectors conducted an on-site inspection. The inspectors took samples of the cooling water to subject those samples to the Rainbow trout acute lethality test, and also took samples of the final effluent to be tested for TSS, BOD and acute lethality. All samples taken by the inspectors passed.

Meanwhile, the mill reported that its internal investigation of the June acute lethality failure was continuing, and provided Environment Canada with five updates on the investigation's progress. The mill's internal investigation concluded that a contributing factor was the characteristics of the water that the mill took in from a nearby lake to use in its the cooling process. The water, when used in one part of the cooling system, resulted in a chemical reaction, elevating metal concentrations in the cooling water.

In order to avoid this situation in the future, the mill diverted this stream of water away from their cooling water discharge stream and into their treatment plant. As an added precaution, the mill took steps to ensure that there was no chlorine in their cooling water and installed a dechlorination system that went on line in October 2000.

At the beginning of August 2000, the mill reported failure of the Rainbow trout acute lethality test on its final process effluent. The mill undertook the required follow-up trout tests on a weekly basis. The effluent continued to fail the tests. Also, as the mill had apparently set aside a second sample taken at the beginning of August, it was able to have that reserved sample analysed for metals, resins, fatty acids, and phenols to determine a potential cause of the acutely lethal nature of the effluent. The mill reported that it had assembled a team of experts to study the problem, had added additional aeration to their effluent treatment system, and had commenced a review of operational data.

The failures of the weekly acute lethality Rainbow trout test continued through September without the mill being able to identify the cause. The Bowater Mersey

Company's mill provided Environment Canada with reports on the actions taken at the mill and progress achieved. Environment Canada decided that, in view of the mill's continuing with the reported corrective action, it would take no action.

In October, the mill reported that it shut off three chemicals that it had been using for operation and maintenance in order to reduce the chemical loading in its treatment plant. The mill reported no further failures of the acute lethality Rainbow trout test after October 2000.

In January 2001, Environment Canada *Fisheries Act* inspectors conducted another on-site inspection and took samples of non-contact cooling water and effluent. Those samples all passed the trout test.

#### 3.1.2.4.2) Total Suspended Solids (TSS) – Failure of Tests

The mill reported failure of the TSS test in January. Due to this failure, the mill commenced a project entailing the design and installation of an improved system for the removal of solids. The mill provided status reports on this project in April, September and December 2000. The full installation was completed in December 2000.

Environment Canada' *Fisheries Act* inspectors conducted an on-site inspection in March 2000, following the reported failure of the TSS test in January. At that time, the inspector also took a sample of effluent to subject to the Rainbow trout acute lethality test. The effluent passed the Rainbow trout acute lethality test.

The mill reported two more failures of the daily TSS test in April and explained that these were a result of dredging part of its treatment system. Dredging gave rise to the bulking together of fibres and, along with the presence of high winds over the treatment plant, caused the exceedances. It was expected that the TSS levels would normalize once the dredging was completed. The Brooklyn, Nova Scotia mill reported no further failures of TSS tests for the remainder of the year 2000.

# 3.2) Québec

The Submitters state that six pulp and paper mills in Québec are of particular concern. Those mills are:

- Tembec Inc., Témiscaming;
- Fjordcell, Inc., Jonquière;
- Tembec Inc., (formerly Malette Québec Inc.) St-Raymond;
- Uniforêt-Pâte Port Cartier Inc., Port-Cartier;
- F.F. Soucy Inc., Rivière-du-Loup; and
- La compagnie J. Ford Ltd., at Portneuf.

When these mills submitted their monthly effluent report, they did so to the province of Québec which served as the "single window" entry point for information that Québec pulp and paper mills were required to submit under provincial regulations and under the *PPER*. The provincial government would subsequently transmit the monthly reports to Environment Canada's Québec Environmental Protection Branch in Montréal.

This administrative arrangement was created under the federal-provincial agreement respecting regulations applying to the pulp and paper sector, signed by Canada and Québec in 1994 for a three-year term and renewed again in 1997 for a further three-year term. The agreements provided for the "single window" approach regarding the submission of information, referred to above, and thus avoided duplication.

While the Canada-Québec agreement expired on March 31<sup>st</sup> 2000, both the federal and provincial governments agreed to continue to work in the spirit of the expired agreement while awaiting completion of negotiations for a new Canada-Québec accord. The 1994 and 1997 Canada-Québec agreements respecting regulations applying to the pulp and paper sector both contained a clause stating the following:

"Canada and Québec acknowledge that they each retain their authority to intervene in the case of alleged violations of their respective regulations".

The Submitters raised issues related to the Tembec mill at Témiscaming, for the period from 1995 through 1999, as well for the year 2000. Matters raised by the Submitters in relation to five other mills in Québec referred to the year 2000 only. Therefore, in order to follow a chronological sequence, this response will deal first with the Tembec mill at Témiscaming, for the years 1995 through 1999, and then with data related to all six mills for the year 2000.

# 3.2.1) Alleged Violations by the Tembec Inc. Mill at Témiscaming, from January 1<sup>st</sup> 1996 through 1999

It is important to note that Tembec had a transitional authorization that ended on December 31<sup>st</sup> 1995. This type of authorization was issued in accordance with *PPER* and intended to provide the required time for mills that began operating before November 2<sup>nd</sup> 1971 to comply with the regulations. During the transitional authorization period, Tembec was in compliance with the conditions of the transitional authorization.

## 3.2.1.1) Mill Record for 1996

Table 5

## Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1996

Test Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout	2	1	3	2	3	2	3	3	2	1	2	1
Acute Lethality												
Weekly Trout	6	4	4	7	8	9	11	9	11	7	3	4
Acute Lethality												
BOD Monthly												
Amount												
Daily BOD												
TSS Monthly												
Amount												
Daily TSS												

The Tembec mill at Témiscaming reported compliance with the daily limit for TSS and for BOD, as well as with the monthly amount limit for TSS and BOD for the entire year of 1996 (the Tembec mill at Témiscaming has more than one effluent outfall, and samples from each must pass the Rainbow trout acute lethality test). As is shown in Table 5 above, however, the effluent of the Tembec mill failed the acute lethality test for Rainbow trout in all 12 months of 1996. These failures led to the mill's carrying out required follow-up acute lethality testing on a weekly basis.

An Environment Canada *Fisheries Act* inspector carried out off-site inspections in reviewing the monthly effluent reports. In the face of the reported violations of acutely lethal effluent, the inspector consulted the Québec Ministry of the Environment (QME) to determine whether or not actions were being undertaken. The information provided indicated that for the reported failures during the period of January 1996 to December 1996, the QME gave the mill notices of violation for offences under its provincial regulations in May and September of 1996, and in January and February of 1997 (in the case of failure by a mill of the Rainbow trout test, both the federal *PPER* and the provincial pulp and paper regulations contain prohibitions against acutely lethal effluent). In addition, the QME conducted an on-site inspection of the mill, in September 1996, which showed that the effluent was toxic. A corrective action plan was requested by the QME. On April 11<sup>th</sup> 1996, this plan was submitted by Tembec. Following comments made by the QME, the Plan was finalised on July 9<sup>th</sup> 1996.

As stipulated in the *Fisheries Act Compliance and Enforcement Policy*, the actions posed by the QME were taken into consideration by the Environment Canada *Fisheries Act* inspector.

## 3.2.1.2) Mill Record for 1997

Table 6

# Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1997

Test Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout Acute Lethality	2	1	2	2	2	2	1	1	1	1		1
Weekly Trout Acute Lethality	4	3	5	7	6	4	4	3	3	4	2	5
BOD Monthly Amount												
Daily BOD												3
TSS Monthly Amount												1
Daily TSS	1						_					

Table 6 above shows the failures of monthly trout tests performed and the number of followup weekly trout acute lethality tests for which there were failures.

An Environment Canada *Fisheries Act* inspector carried out off-site inspections or reviews of the monthly effluent reports. In the face of the reported violations of acutely lethal effluent, the inspector verified with the QME to determine whether or not the QME was taking action. The information provided by the QME showed that for reported failures of the Rainbow trout acute lethality test during the period of January 1997 to December 1997, the QME sent notices of violation to the mills in April, July, September, October, November and December of 1997, and in January and February 1998.

As stipulated in the *Fisheries Act Compliance and Enforcement Policy*, the actions posed by the QME were taken into consideration by the Environment Canada *Fisheries Act* inspector.

#### Table 7

# Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1998

Test Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout Acute Lethality								1				
Weekly Trout Acute Lethality	6	6	7	9	8	8	4	5	8	7	6	5
BOD Monthly Amount												
Daily BOD												
TSS Monthly Amount												
Daily TSS	1		5	1	1					3		5

As is shown in Table 6 and 7 above, the reports provided by the Tembec mill at Témiscaming showed failures of the monthly trout acute lethality test since December 1997. Hence, the Témiscaming mill was required by PPER to conduct the trout test on a weekly basis following the monthly test when this test was not in compliance.

The mill's data shows that, for every month of 1998 except August, it was not eligible to resume conduct of the Rainbow trout acute lethality test on a monthly basis. The mill carried out with weekly tests whose results continued to show acutely lethal effluent. The weekly trout test results are consistent with the mill testing from more than one effluent outfall.

With respect to the results of August 1998, samples taken from at least one outfall achieved three consecutive passes. Therefore, the Témiscaming mill was able to resume acute lethality testing for trout using samples from that outfall. However, the monthly trout acute lethality test showed a failure again. Therefore, trout testing on a weekly basis resumed for samples from that outfall and continued for effluent samples from the other outfalls.

According to the mill's monthly effluent reports for 1998, there was compliance with the daily limit for BOD, as well as with the monthly limit for TSS and BOD for the entire year

of 1998. In January, March, April, May, October and December, the Témiscaming mill exceeded the daily limit for TSS on the number of days indicated in Table 7 above.

Each month, an Environment Canada *Fisheries Act* inspector conducted an off-site inspection of the monthly effluent reports of the Tembec mill. While the inspector noted violations, he was also aware that, in February 1998, the QME had requested a corrective plan from Tembec.

In the face of the reported violations of acutely lethal effluent, the inspector verified with the QME to determine whether or not actions were being undertaken. The information provided indicated that the QME had issued notices of violation to Tembec. The reported violations of provincial regulations (which were simultaneously violations of the federal *PPER*) where addressed in the notices sent to the Tembec Témiscaming mill by the QME. For the reported failures of the Rainbow trout acute lethality test during the period of January 1998 to December 1998, the QME sent notices of infraction in March, April, May, June, August, September and October of 1998, and in February 1999. In addition, on May 27<sup>th</sup> 1998, the QME approved the corrective plan. Monthly reports on the progress of the corrective plan were given by Tembec to the QME between July 1998 and December 1998.

Nevertheless, the continued failure of the weekly Rainbow trout acute lethality test was an aggravating factor. Accordingly, the Environment Canada *Fisheries Act* inspector initiated an investigation of the Témiscaming mill in April 1998. At that time, Environment Canada also advised the mill of its obligation to comply with the federal *PPER*.

## 3.2.1.4) Mill Record for 1999

Table 8

# Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 1999

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly	1	1	1	2	1	1				1		
Trout												
Acute												
Lethality												
Weekly	2	3	2	2	3							
Trout												
Acute												
Lethality												
BOD												
Monthly												
Amount												
Daily												
BOD												
TSS												
Monthly												
Amount												
Daily	4	3										2
TSS		_										

As is shown in Table 8, the monthly effluent reports for 1999 indicated that there was compliance with the daily limit for BOD, as well as with the monthly amount limit for TSS and BOD for the entire year of 1999. In January, February, April and December, the Témiscaming mill exceeded the daily limit for TSS on the number of days indicated in the table above.

During 1999, the mill reportedly continued to work to achieve the requirements of the corrective plan approved in May 1998 by the QME. For the reported failures of the Rainbow trout acute lethality test during the period of January 1999 to July 1999, the QME sent notices of infraction in March, April, May, June, July, August and September of 1999.

An Environment Canada *Fisheries Act* inspector continued off-site inspections of the mill's monthly effluent reports. Nevertheless, in view of continued failures to pass trout acute lethality tests, Environment Canada's investigation continued.

# 3.2.2) Data for All Six Québec Mills for the Year 2000

#### 3.2.2.1) Tembec Inc. at Témiscaming

#### Table 9

# Tembec Inc. at Témiscaming Summary of Alleged Violations for the Year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly		1			1		1					
Trout												
Acute												
Lethality												
Weekly					2							
Trout												
Acute												
Lethality												
BOD												
Monthly												
Amount												
Daily												
BOD												
TSS												
Monthly												
Amount												
Daily	1					1						1
TSS												

Table 9 above shows that there was compliance with the daily limit of BOD, as well as with the monthly limit for TSS and BOD for the entire year of 2000. In January, June and December, the Témiscaming mill exceeded the daily limit for TSS.

For the reported failures of the Rainbow trout acute lethality test in February, May, and July, the QME sent notices of infraction in April and July 2000.

As stated earlier, since April 28<sup>th</sup> 1998, Environment Canada had maintained an active investigation file on Tembec's mill at Témiscaming. In October 2000, based on information provided by DOE covering the period starting from April 28<sup>th</sup> 1998 and the previous years, and following discussions with DOE officials, the Attorney General advised that a prosecution was not warranted given the particular facts of this case.

Following numerous notices of violation emitted by the QME, the Tembec mill put in place corrective measures that significantly improved its rate of conformity from 1997 to 2000. In effect, the rate of conformity to the acutely lethal effluent norm, during the same period, increased from 21% to 87%, while the rate of conformity to the TSS average effluent norm increased from 15% to 83%.

# 3.2.2.2) Fjordcell Inc. at Jonquière

#### Table 10

# Fjordcell Inc. at Jonquière Summary of Alleged Violations for the Year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout				1	1							1
Acute Lethality												
Weekly Trout					2	2						
Acute Lethality												
BOD Monthly	1				1							
Amount												
Daily BOD	7	4	1		13				1			
TSS Monthly										1	1	1
Amount												
Daily TSS	3				1				3	7	4	4

Table 10 above shows the failures of monthly Rainbow trout acute lethality tests and the number of follow-up weekly trout acute lethality tests for which there were failures. The Jonquière mill also reported failures to meet the daily BOD and TSS limits on the number of days shown above. An Environment Canada *Fisheries Act* inspector initiated an investigation in respect of this mill in August 2000. In August 2001, the mill provided a corrective plan at the request of the QME. However, as Environment Canada's investigation is still on-going, the Government of Canada will not provide any further information on the Fjordcell mill at Jonquière.

#### 3.2.2.3) Tembec Inc. at St-Raymond

Table 11

# Tembec Inc. at St-Raymond Summary of Alleged Violations for the Year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout Acute Lethality	1	1									1	
Weekly Trout											1	
Acute Lethality											•	
BOD Monthly												
Amount												
Daily BOD	1	6	2									
TSS Monthly		1										
Amount												
Daily TSS	3	11	4									

Table11 above provides data submitted by the Tembec mill at St-Raymond, formerly known as the Malette Québec mill. The St-Raymond mill also reported failures to meet the daily BOD and TSS limits on the number of days shown above. In March 2000, an Environment Canada *Fisheries Act* inspector sent a written warning to the mill in respect to its January and February 2000 violations of the requirement of the *PPER* for non-acutely lethal effluent and for reported BOD and TSS violations in January, February and March. Notices of infractions were also sent by the QME and corrective measures were put in place by the mill.

The Environment Canada *Fisheries Act* inspector also initiated an investigation on this mill in July 2000. As this investigation is on-going, the Government of Canada will not provide any further information on the Tembec Mill at St-Raymond.

#### 3.2.2.4) Uniforêt-Pâte Port Cartier Inc. at Port-Cartier

Table 12
Uniforêt-Pâte Port Cartier Inc. at Port-Cartier
Summary of alleged violations for the year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout		1					1					
Acute Lethality												
Weekly Trout												
Acute Lethality												
BOD Monthly												
Amount												
Daily BOD									1			
TSS Monthly												
Amount												
Daily TSS		1		1			7	7	4	1		

Table 12 above shows that the Uniforêt mill at Port-Cartier reported failures to meet the daily BOD and TSS limits. In July 2000, an Environment Canada *Fisheries Act* inspector sent a written warning to the mill respecting the failure of the monthly acute lethality test and the failure to meet the daily TSS limit, which were both reported for February. The July warning also gave notice of a further violation involving combined effluents that also allegedly occurred in February. In addition, in July 2000, the Uniforêt mill was advised by Environment Canada that various data (data on acute toxicity, daphnia tests and trout tests) were missing from its reports for the months of March, April and May 2000, and that they had to be supplied. Furthermore, in March 2001, an Environment Canada *Fisheries Act* inspector sent another written warning to the Port-Cartier mill in relation to the reported failure by the mill of the monthly Rainbow trout acute lethality test in July 2000, the failures to meet the daily BOD limit in September, and the failure to meet the daily TSS in July and August 2000 and in September 2000.

This mill ceased to operate in February 2001.

# 3.2.2.5) F.F. Soucy Inc. at Rivière-du-Loup

#### Table 13

# F.F. Soucy Inc. at Rivière-du-Loup Summary of alleged violations for the year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout												
Acute Lethality												
Weekly Trout												
Acute Lethality												
BOD Monthly												
Amount												
Daily BOD												
TSS Monthly												
Amount												
Daily TSS												

Data for 2000 shows that the mill was in conformity for the year 2000 from January 1  $^{\rm st}$  to December 31  $^{\rm th}$  2000.

# 3.2.2.6) La Compagnie J. Ford Ltd. at Portneuf

#### Table 14

# J. Ford Ltd. at Portneuf Summary of alleged violations for the Year 2000

Failures	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Trout												
Acute Lethality												
Weekly Trout					2				2			
Acute Lethality												
BOD Monthly												
Amount												
Daily BOD												
TSS Monthly												
Amount												
Daily TSS												

Table 14 above provides data submitted by La Compagnie J. Ford Ltd.. The data shows the number of follow-up weekly trout acute lethality tests for which there were failures. In 1999, an Environment Canada *Fisheries Act* inspector sent written warnings to the mill in respect to violations of the requirement of *PPER* for non-acutely lethal effluent. Notices of infraction were also sent by the QME in 2000 and corrective measures were undertaken by the mill. The Environment Canada *Fisheries Act* inspector opened an investigation file on this mill in September 2000.

As this investigation is on-going, the Government of Canada will not provide any further information on La Compagnie J. Ford Ltd., at Portneuf.

#### 3.3 Ontario

The Submitters state that two pulp and paper mills in Ontario are of particular concern. Those mills are:

- Abitibi-Consolidated Inc., Iroquois Falls; and
- Interlake Papers, St. Catherines.

When these mills submitted their monthly effluent reports, an Environment Canada *Fisheries Act* inspector carried out an off-site inspection or reviewed the data contained in each monthly report. That off-site inspection would reveal whether or not there were violations of TSS limits, BOD limits and the requirement that mill effluent not be acutely lethal to fish. On the basis of the monthly effluent report and the particular compliance history of a mill, an inspector in the Ontario regional office of Environment Canada would decide whether or not an on-site inspection of the facility was warranted.

# 3.3.1) Alleged Violations by Abitibi-Consolidated Inc. at Iroquois Falls for 2000

For the Iroquois Falls mill of Abitibi-Consolidated Inc., there were 12 off-site inspections during 2000. Based on the reviews of the monthly data, an inspection at the site of the mill was conducted on September 9<sup>th</sup> 2000 and all samples of effluent taken at that time by Environment Canada showed compliance with the *PPER* requirements for TSS, BOD and acute lethality. Nevertheless, in view of the failures to pass Daphnia magna and trout acute lethality tests and the failure to conduct required follow-up monitoring for Daphnia magna, an investigation on this mill began in October 2001. As this investigation is on-going, the Government of Canada will not provide any further information on the Iroquois Falls mill of Abitibi-Consolidated Inc.

#### 3.3.2) Alleged Violations by Interlake Papers at St. Catherines for 2000

For the Interlake Papers mill at St. Catherines, there were 12 off-site inspections of monthly effluent reports. These inspections showed nine failures of the acute lethality

test for trout. Those nine failures are comprised of three failures in February 2000, one in March, two in August, two in September and one in October. The required follow-up trout monitoring subsequent to the nine failures also showed acutely lethal effluent. In view of these failures and failure of Daphnia magna monitoring tests, Environment Canada *Fisheries Act* inspectors in Ontario began an investigation in October 2000. As this investigation is on-going, the Government of Canada will not provide any further information on the Interlake Papers mill at St. Catherines.

\* \* \*

The response of the Canadian Government to submission SEM-02-003 has provided the necessary factual information on the enforcement of the *PPER* in order to facilitate a better understanding of the issues raised by the Submitters. We are confident that Canada's response will enable the Secretariat to exercise its mandate pursuant to Article 15(1) of the NAAEC.