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Appendix A

Water Quality Certification for the Riley-Jay-Livermore Project, (FERC No. 2375) and Otis Project (FERC No. 8277) Issued By the Maine Department of Environmental Protection on May 5, 1998.

1. STANDARD CONDITIONS OF APPROVAL

The approved expansion of generating capacity at the Livermore Development is subject to the Standard Conditions of Approval for projects under the Maine Waterway Development and Conservation Act, 06-096 CMR Chapter 450.9 (C).

2. WATER LEVELS

A. Except as temporarily modified by (1) approved maintenance activities, (2) inflows to the project area, (3) operating emergencies beyond the applicants control, as defined below, and (4) agreement between the applicant and appropriate state and/or federal agencies, water levels in the project impoundments shall be maintained within 1 foot of full pond elevation when flashboards are in place, and within 1 foot of spillway crest elevation when flashboards are not in place.

B. Operating emergencies beyond the applicants control include, but may not be limited to, equipment failure or other temporary abnormal operating condition, generating unit operation or interruption under power supply emergencies, and order from local, state, or federal law enforcement or public safety authorities.

C. The applicant shall, in accordance with the schedule established in the new FERC licenses for the projects, submit plans for providing and monitoring the impoundment water levels required by Part A of this condition. These plans shall be reviewed by and must receive the approval of

the DEP Bureau of Land and Water Quality.

3. MINIMUM FLOWS

A. Except as temporarily modified by (1) approved maintenance activities, (2) inflows to the project area, (3) operating emergencies beyond the applicants control, as defined below, (4) impoundment refilling after flashboard failure, and (5) agreement between the applicant and appropriate state and/or federal agencies, the following minimum flows shall be released:

a) Outflows approximately equal to inflows shall be maintained from the project developments at all times;

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b) A minimum flow of 5 cfs shall be maintained from the southern spillway of the Jay Dam between June 15 and September 15 annually;

c) A minimum flow of 150 cfs during the months of May, June and October and 100 cfs during the remainder of the year shall be maintained from the Livermore Dam into the upper bypass reach at the Livermore Development; and

d) A minimum flow of 550 cfs (consisting of upper bypass flows plus minimum flow turbine releases) shall be maintained from the Livermore Dam and powerhouse into the lower bypass reach at the Livermore Development.

B. During impoundment refilling after flashboard failure and replacement, a minimum flow of 1,245 cfs or inflow, minus process and cooling water withdrawals, whichever is less, shall be maintained from the project developments.

C. Operating emergencies beyond the applicants control include, but may not be limited to, equipment failure or other temporary abnormal operating condition, generating unit operation or interruption under power supply emergencies, and order from local, state, or federal law enforcement or public safety authorities.

D. The applicants shall, in accordance with the schedule established in the new FERC licenses for the projects,

submit plans for providing and monitoring the minimum flows required by Part A of this condition. These plans shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water Quality.

4. DISSOLVED OXYGEN MONITORING

A. International Paper shall monitor dissolved oxygen and temperature in the Jay impoundment from June 1 through September 30 annually.

B. International Paper shall, in accordance with the schedule established in a new FERC license for the Riley-Jay-Livermore Project, submit plans for monitoring dissolved oxygen and temperature as required by Part A of this condition. These plans shall include provisions for monitoring dissolved oxygen and temperature at an appropriate location in the Jay powerhouse intake area, and determining compliance with applicable dissolved oxygen standards (an instantaneous minimum of 5.0 ppm or 60% of saturation, whichever is higher, and a 30-day average of 6.5 ppm). These plans shall be reviewed by and must receive the

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approval of the DEP Bureau of Land and Water Quality.

C. International Paper shall submit an annual report detailing the results of dissolved oxygen and temperature monitoring and the occurrence of any violations of applicable dissolved oxygen standards during the June 1 through September 30 period each year. The Department reserves the right, based on a review of each annual report, and after notice to IP and the opportunity for a public hearing, to require such additional mitigation measures, including but not limited to hydro project modifications or reduced BOD discharges from IP's Androscoggin Paper Mill, as may be deemed necessary to meet applicable dissolved oxygen standards in the Jay impoundment.

5. JAY DAM FLASHBOARDS

Flashboards shall be reinstalled on the Jay Dam before June 1 each year or, failing this, shall not be reinstalled until after July 15.

6. FISH PASSAGE FACILITIES

Based on a written request from the Atlantic Salmon Authority that fish passage facilities be installed on the main stem Androscoggin River above Lewiston Falls to facilitate the restoration of Atlantic salmon, the applicants shall install such fish passage facilities as may be required by the Department, after notice to the applicants and the opportunity for a public hearing, to allow the migration of salmon into and out of the river in and above the project area.

7. BROWN TROUT FISHERY

The applicants shall cooperate with the Department of Inland Fisheries and Wildlife in evaluating the success of efforts to establish a brown trout fishery in the river below the Livermore Development. During each of the first five years following issuance of new FERC licenses for the projects, the applicants shall assist the Department of Inland Fisheries and Wildlife in the annual stocking of up to 250 brown trout in the river, and at the end of the 5-year period shall submit a report to DIFW and the DEP assessing the stocking effort and its success.

8. DISCHARGE OF TOTAL SUSPENDED SOLIDS

International Paper shall, no later than December 31, 1998, submit an application to the DEP to amend and renew Waste Discharge License #W-000623 for the discharge of treated

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industrial process waste water from IP s Androscoggin paper mill to incorporate the following reduced effluent limits for the discharge of total suspended solids:

Effluent/Period	Monthly Average	Daily Maximum
TSS-May 1 to Sept 30	12,000 lb/day	22,300 lb/day
TSS-Oct 1 to Apr 30, Starting Oct 1, 1999	31,330 lb/day	44,600 lb/day
TSS-Oct 1 to Apr 30, Starting Oct 1, 2002	25,000 lb/day	44,600 lb/day

Following approval by the DEP in a renewed Waste Discharge License, and except where otherwise specifically noted,

these limits shall go into effect concurrent with the October 1, 1999 effective date of the new FERC licenses for the Riley-Jay-Livermore Project and the Otis Project.

9. MACROINVERTBRATE MONITORING--IMPOUNDMENTS

A. As a condition of its renewed Waste Discharge License for the Androscoggin paper mill, and after the reduced limits for the discharge of total suspended solids required by Condition 8 above have become effective, International Paper shall, in consultation with the DEP and the Town of Jay, monitor the macroinvertebrate communities in the lower Jay, Otis and Livermore impoundments annually to determine whether these communities are meeting applicable water quality standards for aquatic life.

B. International Paper shall, in accordance with the schedule established in the renewed Waste Discharge License for the Androscoggin paper mill, submit plans for monitoring macroinvertebrate communities as required by Part A of this condition. This monitoring shall be conducted in accordance with established biological assessment criteria. These plans shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water Quality.

C. International Paper shall submit an annual report detailing the results of macroinvertebrate monitoring in the project impoundments and an analysis of the classification standards met by the monitored macroinvertebrate communities. The Department reserves the right, based on a review of each annual report, and after notice to IP and the opportunity for a public hearing, to require such additional mitigation measures, including but not limited to a further reduction in the discharge of total suspended solids, as may be deemed necessary to meet applicable aquatic life standards in the project impoundments.

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10. MACROINVERTEBRATE STUDY--LIVERMORE BYPASS

A. International Paper shall, in consultation with the DEP, conduct a study to determine whether the macroinvertebrate community in the bypass reach at the Livermore Development is meeting applicable water quality standards for aquatic life following implementation of the minimum bypass flow requirements of this certification. IP shall submit the

details of a study plan no later than the October 1, 1999 effective date of a new FERC license for the Riley-Jay-Livermore Project. This study shall be conducted in accordance with established biological assessment criteria. The study plan shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water Quality.

B. The results of the macroinvertebrate study shall be submitted to the Department in accordance with the schedule established in the study plan. After reviewing the study results and comments from IP, and after notice to IP and the opportunity to request a public hearing, the Department may order such modification of the minimum bypass flow established in this certification as may be deemed necessary to meet applicable aquatic life standards in the Livermore bypass reach.

11. FISH TISSUE SAMPLING

A. The applicants shall, in cooperation with the DEP, collect and analyze tissue samples from white suckers and smallmouth bass from the Otis impoundment and the river below the Livermore Dam for levels of PCBs and mercury, respectively.

B. Based on the results of this and other available fish tissue analysis, the Department reserves the right, after notice to the applicants and the opportunity for a public hearing, to require such additional fish tissue collection and analysis as may be deemed necessary to determine whether the presence of the dams is contributing to the issuance of fish consumption advisories on the river.

12. RECREATIONAL ACCESS AND USE FACILITIES

A. The applicants shall construct, improve and maintain new and existing public recreational access and use facilities as described in Section 7 of this order.

B. The applicants shall, in accordance with the schedule established in the new FERC licenses for the projects, submit plans for constructing, improving and maintaining the recreational access and use facilities required by Part A of

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this condition. These plans shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water

Quality.

13. EROSION AND SEDIMENTATION CONTROL

A. In addition to any specific erosion and sedimentation control measures proposed by the applicants, International Paper and its agents shall take all necessary measures to ensure that their activities do not result in measurable erosion or sedimentation during or after the approved expansion of the Livermore Development.

B. Cofferdam fill placed in the waterway shall consist of clean granular material free from vegetative matter, lumps or balls of clay and other deleterious substances. That portion passing a 3-inch (No. 200) sieve shall not exceed 10 % fines, by weight.

C. International Paper shall, no less than one month prior to construction mobilization, prepare and submit a detailed erosion and sedimentation control plan for the approved expansion of the Livermore Development. This plan must be reviewed and approved by the DEP Bureau of Land and Water Quality prior to the start of construction.

14. CONCRETE CURING

With the exception of limited amounts of concrete used where necessary to seal the interface between steel cofferdams and the underlying bedrock, uncured concrete shall not be placed in direct contact with surface waters. Concrete shall be precast and cured at least three weeks before placing in the water, or where necessary, shall be placed in forms and shall cure at least one week prior to contact with surface water. No washing of tools, forms, etc. shall occur in or adjacent to the waterway.

15. DEMOLITION/EXCAVATION SPOILS DISPOSAL

All solid waste generated by the approved expansion of the Livermore Development, including used cofferdam fill, excavated forebay sediments, excavated rock and demolition debris, shall be disposed of at suitable upland sites in accordance with the Maine Solid Waste Management Rules.

16. PERMITS FOR RECREATIONAL FACILITIES

The applicants shall obtain permits as may be required under the Natural Resources Protection Act to authorize the construction of new recreational access facilities or the improvement of existing recreational access facilities.

17. LIMITS OF APPROVAL

This approval is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicants. All variances from the plans and proposals contained in said documents are subject to the review and approval of the Board or Department prior to implementation.

18. COMPLIANCE WITH ALL APPLICABLE LAWS

The applicants shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements and orders required for the operation of the projects.

19. EFFECTIVE DATE

This water quality certification shall be effective concurrent with the October 1, 1999 effective date of the new hydropower licenses issued for the Riley-Jay-Livermore Project and the Otis Project by the Federal Energy Regulatory Commission.