

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:)	
)	
Georgia-Pacific West, Inc.)	AGREED ORDER
Mercury Cell Chlor/alkali facility)	
)	No. DE TC99 I035
)	

TO: Georgia-Pacific Corporation
 133 Peachtree street N.E.
 P.O. Box 105605
 Atlanta, Georgia 30348-5605

I.

Jurisdiction

This Agreed Order ("Order") is issued pursuant to the authority of RCW 70.105D.050(1).

II.

Findings of Fact

Ecology makes the following Findings of Fact, without admission of such facts by Georgia-Pacific Corporation.

1. Georgia-Pacific has owned and operated a calcium-based sulphite pulp and paper mill in Bellingham, Washington since the 1960's. The mill is located on the tidal flats of Bellingham Bay adjacent to Whatcom Creek Waterway. The Site is the chlor/alkali plant which is located in the southwest

corner of the facility, 1,500 feet from the pulp and paper facilities.

2. In 1965 Georgia Pacific built the chlor/alkali (chlorine) plant to produce chlorine and sodium hydroxide (caustic) for use in bleaching and pulping at the pulp and paper mill. From 1965 through 1999, Georgia-Pacific has operated the mercury cell chlor/alkali plant on the Site.

3. Studies conducted at the Site have found mercury in groundwater, soils, and process materials in and around the mercury cell chlor/alkali plant.

4. Georgia-Pacific plans to cease operations at the chlor/alkali plant in 1999.

5. Georgia-Pacific, as part of the shut down of the chlor/alkali plant, intends to clean up and remove mercury containing process materials and equipment from the plant.

III.

Ecology Determinations

1. Georgia-Pacific is an "owner or operator" as defined at RCW 70.105D.020(11) of the Site.

2. The site is known as the Georgia-Pacific West, Inc. Chlor/Alkali plant and is located at 300 West Laurel Street, Bellingham, WA 98225.

3. The mercury found at the site as described above is a "hazardous substance" as defined at RCW 70.105D.020(7).

4. Based on the presence of this hazardous substance at the site and all factors known to the Department, there has been a release or threatened release of hazardous substances at the site, as defined at RCW 70.105D.020(19).

5. By letter dated May 4, 1999, Ecology notified Georgia-Pacific of its status as a "potentially liable person" under RCW 70.105D.040 after notice and opportunity for comment.

6. Pursuant to RCW 70.105D.030(1) and 70.105D.050, the Department may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances, whenever it believes such action to be in the public interest.

7. Based on the foregoing facts, the Department believes that clean up and removal of mercury containing process materials and equipment from the site is a remedial action covered by the Model Toxics Control Act, RCW 70.105 et seq.

8. The department believes that the remedial action required by this order is in the public interest.

IV.

Work to be Performed

Based on the foregoing Facts and Determinations, it is hereby ordered that Georgia-Pacific Corporation take the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein. This Order shall

be in effect for a period of three (3) years after signature.

1. Facility Decommissioning. Following plant closure, decommissioning operations will be performed. These decommissioning activities shall consist of routine cleaning, chemical recovery, neutralization and disassembly to prepare systems for reuse, recycling or demolition. All tasks shall be conducted using good engineering practice and procedures for system cleaning and disassembly. Any solid wastes generated during these decommissioning activities shall be characterized, handled and disposed of in accordance with WAC 173-303 and as described in the waste characterization and disposal section # 2 of paragraph 3. Specific production equipment to be decommissioned includes:

- Cell house process equipment (anodes, cell frames, end boxes, side rails, cell bottoms, decomposers, mercury pump tanks, buss work and miscellaneous fasteners);
- Chlorine drying system;
- Chlorine storage tanks;
- Chlorine and sodium hydroxide piping, tanks and equipment;
- Brine system;
- Caustic system;

- Hydrogen system;
- Sulfuric acid system;
- Soft water system;
- Refrigerant systems;
- Hydrochloric acid system;

2. Waste Characterization and Disposal. G-P shall employ the following strategy to characterize decommissioning and demolition solid wastes, including the cell house building materials and physical plant infrastructure, as a dangerous waste (DW), extremely hazardous waste (EHW) or a non-hazardous solid waste in accordance with WAC 173-303-070:

- 1) For the purposes of determining if a solid waste is a dangerous waste as defined in sections 2) through 5) below, the procedures of WAC 173-303-070(3) will be employed;
- 2) All solid wastes that are discarded chemical products will be designated per WAC 173-303-081;
- 3) All solid wastes generated from sources listed in WAC 173-303-9904 will be designated as a dangerous waste per WAC 173-303-082, to include K106 residues from the wastewater treatment process;

4) All solid wastes not designated as a DW or EHW above will be evaluated using the characteristic criteria of WAC 173-303-090. Where sampling of wastes is required for determining designation characteristics, representative sampling techniques and test methods shall be employed per WAC 173-303-110(2) and 110(3);

5) All solid wastes not designated as a DW or EHW above will be evaluated using the toxicity criteria of WAC 173-303-100. Where sampling of wastes are required for determining toxicity characteristics, representative sampling techniques and test methods shall be employed per WAC 173-303-110(2) and 110(3);

All nonhazardous wastes destined for disposal will be sent to RCRA subtitle "C" or subtitle "D" permitted facilities. All dangerous waste shall meet applicable requirements of WAC 173-303-140 and 40 CFR 268 (Land Disposal Restrictions) and if land disposal is deemed appropriate be sent to a RCRA subtitle "C" permitted facility. Possible disposal facilities include Columbia Ridge Landfill (Subtitle D), Arlington, OR and ChemWaste Management Arlington Landfill (Subtitle C), Arlington, OR.

3. Wastewater Treatment System Operations. Georgia-Pacific West, Inc. shall continue to operate the chlor/alkali plant wastewater treatment plant (mercury recovery unit (MRU) and REMERC) using existing standard operating procedures. The treatment system will be operated as required during de-commissioning and demolition activities to treat all storm water and wastewater generated at the chlor/alkali facility site. The wastewater treatment system shall be operated for up to three years following the signature of this Order. Thirty days after the signature of this Order, the following limits and requirements apply to the operation of the mercury recovery unit:

- A mass loading limit and concentration limit for total mercury of: 1) Monthly average - 0.03 lbs/day; 2) Daily Maximum - concentration of 25 ug/l. The monthly average is defined as the average of daily measured values obtained over a calendar month's time. The daily maximum is defined as the highest daily average concentration for any one day during the same monthly period. The point of compliance for these limits shall be at the effluent of the MRU, prior to entering the pulp mill wastewater collection system.

- Mercury shall be monitored on the effluent from the mercury recovery unit on a continuous basis using the existing mercury monitors.
- Monthly mercury monitoring shall be reported in both the facility's DMR report submitted under the existing NPDES permit and a separate MTCA Agreed Order water report. Copies of monthly DMRs and the MTCA Agreed Order water report shall be submitted to Ecology's Industrial Section Cleanup Program.
- In the event that Georgia-Pacific is unable to comply with the monitoring terms and conditions due to any cause, Georgia Pacific shall:
 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, correct the problem and, if applicable, repeat sampling and analysis of any violation immediately and submit the results to the Department within 90 days after becoming aware of the violation;
 2. Immediately notify the Department of the failure to comply; and
 3. Submit detailed written report to the Department within thirty days, unless requested earlier by the Department. The report should describe the nature of

the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of resampling, and any other pertinent information.

In the event that Georgia-Pacific violates the terms and conditions of this section, Georgia-Pacific is liable for a civil penalty as described in section VII of this Order for every such violation. Each and every such violation shall be a separate and distinct offense and in the case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

4. Health and Safety Plan. G-P shall submit a health and safety plan with implementation schedule to Ecology for review (approval not required). This plan shall be prepared and submitted to Ecology before any decommissioning or demolition work begins at the facility.

5. Demolition Plan. Georgia-Pacific shall submit a demolition plan to Ecology for approval at least 90 days prior to commencing demolition of chlorine plant structures. The plan shall identify procedures to be used during demolition for site containment and material decontamination. The plan shall also describe waste loading

and transportation schedules and plans, waste manifesting, and proposed onsite and offsite disposal areas. The demolition plan shall include an environmental monitoring plan to assure worker and community safety. The plan shall describe the methods used to control the potential environmental impacts from hazardous materials during plant demolition. The plan shall describe the controls used to limit exposure to mercury and asbestos emissions from: dust, vapors and/or elemental mercury from removal of contaminated structural elements found throughout the cell room and control room, and from the foundation and underlying areas. The plan shall include air and surface water monitoring with established stop work contamination levels. This plan shall be approved and available for public review at least thirty days before the start of any demolition activities.

6. Remedial Investigation and Feasibility Study Work Plan. Georgia-Pacific West, Inc. shall prepare, within 1 year of the date of this Agreed Order, a proposed work plan for a subsequent site remedial investigation and feasibility study (RI/FS). The proposed RI/FS work plan will be the basis for work to be performed under a separate Agreed Order.

7. Schedule. The work identified above shall be complete within three (3) years of the signature of this order.

V.

Terms and Conditions of Order

1. Definitions. Unless otherwise specified, the definitions set forth in ch. 70.105D RCW and ch. 173-340 WAC shall control the meanings of the terms used in this Order.

2. Public Notices. WAC 173-340-600(10)(c) requires public notice for Agreed Orders. Ecology has determined that a 30 day public comment period shall be completed for this agreed order before it becomes effective. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that the Order is inadequate or improper in any respect.

3. Remedial Action Costs. Georgia-Pacific shall pay to Ecology costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or its contractors for investigations, remedial actions, and Order preparation, oversight and administration. Ecology costs

shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). Georgia-Pacific shall pay the required amount within 90 days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within 90 days of receipt of the itemized statement of costs will result in interest charges.

4. Designated Project Coordinators. The project coordinator for Ecology is:

Name Paul Skyllingstad
Address Industrial Section
Post Office Box 47706
Olympia, WA 98504-7706

The project coordinator for Georgia-Pacific is:

Name: Roger J. Hilarides
Address Georgia-Pacific West Inc.
PO Box 1236,
Bellingham, WA 98227-1236

The project coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and Georgia-Pacific, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the project coordinator(s). Should Ecology or Georgia-Pacific change project coordinator(s), written notification shall be provided to Ecology or Georgia-Pacific at least ten (10) calendar days prior to the change.

5. Performance. All work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience and expertise in hazardous waste site investigation and cleanup. Georgia-Pacific shall notify Ecology as to the identity of such engineer(s) or hydrogeologist(s), and of any contractors and subcontractors to be used in carrying out the terms of this Order, in advance of their involvement at the Site. Georgia-Pacific shall provide a copy of this Order to all agents, contractors and subcontractors retained to perform work required by this Order and shall ensure that

all work undertaken by such agents, contractors and subcontractors will be in compliance with this Order.

Except where necessary to abate an emergency situation, Georgia-Pacific shall not perform any remedial actions at the chlor/alkali facility site outside that required by this Order unless Ecology concurs, in writing, with such additional remedial actions. WAC 173-340-400(7)(b)(i) requires that "construction" performed on the Site must be under the supervision of a professional engineer registered in Washington.

6. Access. Ecology or any Ecology authorized representative shall have the authority to enter and freely move about the Site at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the progress in carrying out the terms of this Order; conducting such tests or collecting samples as Ecology or the project coordinator may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by Georgia-Pacific. By signing this Agreed Order, Georgia-Pacific agrees that this Order constitutes reasonable notice of access, and

agrees to allow access to the Site at all reasonable times for purposes of overseeing work performed under this Order. Ecology shall allow split or replicate samples to be taken by Georgia-Pacific during an inspection unless doing so interferes with Ecology's sampling. Georgia-Pacific shall allow split or replicate samples to be taken by Ecology and shall provide seven (7) days notice before soil or groundwater sampling activity.

7. Public Participation: Georgia-Pacific and Ecology shall prepare and/or update a public participation plan for the site. Ecology shall maintain the responsibility for public participation at the site. Georgia-Pacific shall help coordinate and implement public participation for the site.

8. Retention of Records. Georgia-Pacific shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of the work performed pursuant to this Order, all records, reports, documents, and underlying data in its possession relevant to this Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of Georgia-Pacific, then Georgia-Pacific agrees to include in their contract with such

contractors or agents a record retention requirement meeting the terms of this paragraph.

9. Dispute Resolution. Georgia-Pacific may request Ecology to resolve disputes that may arise during the implementation of this Order. Such request shall be in writing and directed to the signatory, or his/her successor(s), to this Order. Ecology resolution of the dispute shall be binding and final. Georgia-Pacific is not relieved of any requirement of this Order during the pendency of the dispute and remains responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing.

10. Reservation of Rights/No Settlement. This Agreed Order is not a settlement under ch. 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against Georgia-Pacific to recover remedial action costs paid to and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against Georgia-Pacific to require those remedial actions required by this Agreed Order, provided Georgia-Pacific complies with this Agreed Order.

Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of hazardous substances from the Georgia-Pacific chlor/alkali plant.

In the event Ecology determines that conditions at the Site are creating or have the potential to create a danger to the health or welfare of the people on the Site or in the surrounding area or to the environment, Ecology may order Georgia-Pacific to stop further implementation of this Order for such period of time as needed to abate the danger.

11. Transference of Property. No voluntary or involuntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by Georgia-Pacific without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to transfer of any legal or equitable interest Georgia-Pacific may have in the site or any portions thereof; Georgia-Pacific shall serve a copy of this Order

upon any prospective purchaser, lessee, transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, Georgia-Pacific shall notify Ecology of the contemplated transfer.

12. Compliance with Other Applicable Laws.

A. All actions carried out by Georgia-Pacific pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in paragraph B of this section.

B. Pursuant to RCW 70.105D.090(1), the substantive requirements of chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals for the remedial action under this Order that are known to be applicable at the time of issuance of the Order have been included in Section IV the Work to be Performed section and are binding and enforceable requirements of the Order.

Georgia-Pacific has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event Georgia-

Pacific determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or Georgia-Pacific shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Georgia-Pacific shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by Georgia-Pacific and on how Georgia-Pacific must meet those requirements. Ecology shall inform Georgia-Pacific in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. Georgia-Pacific shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

Ecology shall ensure that notice and opportunity for comment is provided to the public and appropriate agencies

prior to establishing the substantive requirements under this section.

C. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency which is necessary for the State to administer any federal law, the exemption shall not apply and Georgia-Pacific shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

VI.

Satisfaction of this Order

The provisions of this Order shall be deemed satisfied upon Georgia-Pacific's receipt of written notification from Ecology that Georgia-Pacific has completed the remedial activity required by this Order, as amended by any modifications, and that all other provisions of this Agreed Order have been complied with.

VII.

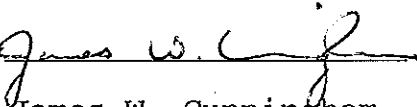
Enforcement

1. Pursuant to RCW 70.105D.050, this Order may be enforced as follows:
 - A. The Attorney General may bring an action to enforce this Order in a state or federal court.
 - B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.
 - C. In the event Georgia-Pacific refuses, without sufficient cause, to comply with any term of this Order, Georgia-Pacific will be liable for:
 - (1) up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and
 - (2) civil penalties of up to \$25,000 per day for each day it refuses to comply.
 - D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under Section 6 of ch. 70.105D RCW.

Effective date of this Order: July 6, 1999

Georgia-Pacific West, Inc.
300 W. Laurel Street
Bellingham, WA 98225

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
SOLID WASTE AND FINANCIAL
ASSISTANCE PROGRAM

By 
James W. Cunningham

General Manager

By 
Carol Kraege

Industrial Section