



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
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May 02, 2006

CERTIFIED MAIL

7005 1820 0003 7289 2545

Barry Oliver
Chinook Ventures
4029 Industrial Way
Longview, WA 98632

Dear Mr. Oliver,

Enclosed is Order No. AQ05-2728 issued on May 02, 2006 allowing Chinook Ventures to retrofit existing Buildings 51 and 52 with equipment and air emission controls that will accommodate the sizing of anodes and spent potliner (SPL) as needed with a jaw crusher (inside Building 51), the crushing of anodes, and SPL with an impact crusher (inside Building 51), the transfer and storage of the crushed anodes and SPL (inside Buildings 51 and 52), and loading and off-site shipment of the crushed anodes and SPL. Some SPL is being stored in Building 34 before it is transported to Building 51 to be sized (fugitive emissions will be controlled by using dust suppression methods and keeping the doors and windows closed). Crushed anode will be transferred off site where it will be used as a fuel and SPL will be sent to a permitted treatment, storage, and disposal facility.

If you have any questions concerning the content of this document, please call or write Judy Schwieters at telephone/address (360) 407-6942, Department of Ecology, PO Box 47706, Olympia, WA 98504-7706.

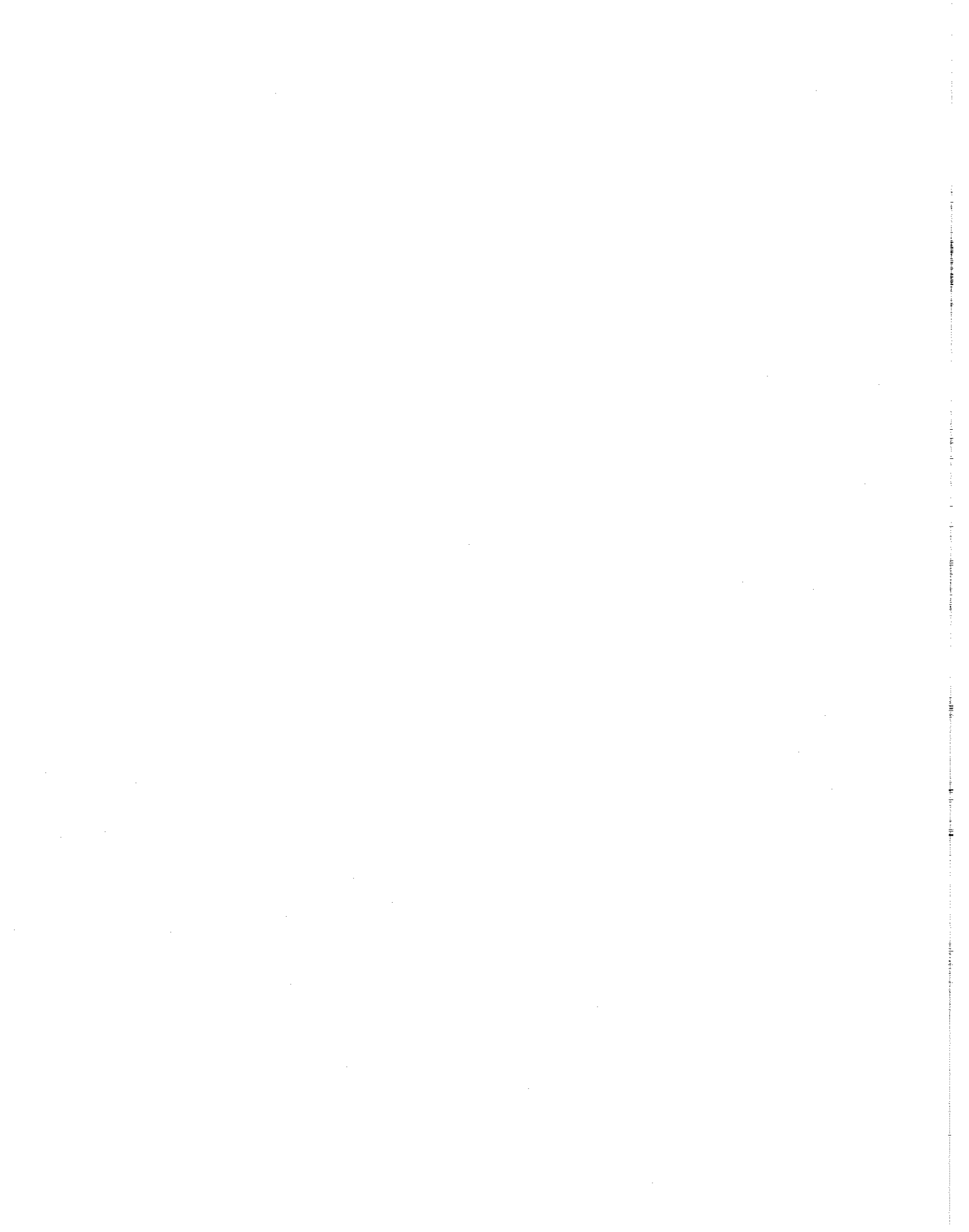
Sincerely,

Merley F. McCall
Industrial Section

enclosure

cc: Judy Schwieters
Tim Mace,
Thomas Nadermann, Sterling Technologies, LLC





DEPARTMENT OF ECOLOGY

NOTICE OF CONSTRUCTION)
APPROVAL ORDER FOR)
CHINOOK VENTURES IN)
LONGVIEW, WASHINGTON)

NOC ORDER
No. 2728 AQ05

To: Chinook Ventures
4029 Industrial Way
P.O. Box 293
Longview, Washington 98632

This is a Notice of Construction (NOC) Approval Order issued in accordance with RCW 70.94.152, WAC 173-400-035, and WAC 173-303. The Chinook Ventures NOC application was received on June 28, 2005, a revised application was received on August 24, 2005, and additional information was received on January 30, 2006, March 06, 2006, March 15, 2006, March 30, 2006, April 5, 2006, April 19, 2006, and on May 01, 2006. The application was determined to be complete on May 01, 2006.

The proposed project is to retrofit existing Buildings 51 and 52 with equipment and air emission controls that will accommodate the sizing of anodes and spent potliner (SPL) as needed with a jaw crusher (inside Building 51), the crushing of anodes and SPL with an impact crusher (inside Building 51), the transfer and storage of the crushed anodes and SPL (inside Buildings 51 and 52), and loading and off-site shipment of the crushed anodes and SPL. Some SPL is being stored in Building 34 before it is transported to Building 51 to be sized (fugitive emissions will be controlled by using dust suppression methods and keeping the doors and windows closed). Crushed anode will be transferred off site where it will be used as a fuel and SPL will be sent to a permitted treatment, storage, and disposal facility (TSDF).

BACKGROUND INFORMATION

Chinook purchased the Longview Aluminum, LLC (formerly Reynolds Aluminum) assets from Alcoa, Inc. in November 2004 and leases the land at the site from them. Chinook has dismantled the 876 pots that were used by the Longview Aluminum Smelter to produce molten aluminum (under the authority of air order No. 2174 AQ-05 issued on April 27, 2005). Each pot consisted of a steel shell lined with a carbon material known as potliner, electrical bus bar conductors, and an anode/ore storage superstructure. The pots were removed from their respective potlines and moved to Building #33 where they were dismantled. The dismantling involved removing the recoverable materials, the potliner, and the anodes from the pot structure. The removed potliner (because it is no longer serviceable) is known as spent potliner (SPL). SPL is a listed dangerous waste (K088) and subject to the State Dangerous Waste Regulations, Chapter 173-303. SPL will be shipped to a permitted TSDF under hazardous waste manifests. In order to ship and dispose of the SPL at a reasonable cost, the SPL must be reduced to a smaller size. Chinook has purchased used crushing equipment to crush the SPL to a size that can be transported and

disposed at a reasonable cost. The anode material will also be crushed to a size that will make it most valuable for resale as a fuel.

Ecology received an application (on June 28, 2005) requesting that Chinook be allowed to retrofit existing Building #51 with equipment and air emission controls that would accommodate the crushing of anodes and spent potliner (SPL), storage of the crushed anodes and SPL, and loading and off-site shipment of the crushed anode and SPL. Chinook proposed to transport crushed anode to a recycling facility where it would be used as a fuel and SPL to a permitted TSDF. Ecology received a Notice of Construction (NOC) application on August 24, 2005 requesting that Chinook be allowed to break down the anodes in an approved outdoor location on the Chinook plant site. Ecology received a report from Chinook (via e-mail on August 25, 2005) titled "Anode Block Waste Designation Investigation Results" which summarized the results of a study conducted on representative samples of anode material. The investigation analyzed whether the anode material designates as a hazardous material, whether it is toxic to fish, its heating value as a fuel, and its potential for other uses. The report indicated that the representative samples did not designate as hazardous waste nor were they toxic to fish.

The drafting of Order No. AQ05-2728 was put on hold from June 2005 through January 2006. During that time Chinook Ventures was negotiating use restrictions regarding the management of the anodes with Alcoa. Chinook Ventures decided, as a result of those negotiations, to manage all of the anode processing inside of buildings equipped with emission control devices. The final drafting of Order No. AQ05-2728 was further delayed when Chinook Ventures requested (via e-mail on March 02, 2006) that they be allowed to use a portable jaw crusher (inside buildings equipped with emission controls) to break down the anodes to a size that can be fed into the crusher. Another delay occurred when the final draft of the order was reviewed by Chinook Ventures because they proposed additional staging and storage areas (including Building 52) to be used for staging and storage of SPL and anodes. Ecology conducted a site visit to evaluate the additional proposed staging and storage areas. Ecology determined that the additional staging and storage areas when managed in accordance with the terms and conditions of this order will not create a significant environmental impact.

Chinook intends to size and crush the anode material and SPL removed from the reduction cells on site. Chinook will also size and crush anodes that were removed from the reduction cells at the former Kaiser Aluminum Company smelter in Tacoma Washington (currently owned by the Port of Tacoma). The anodes from the Tacoma plant were sealed in heavy plastic and transported by truck to the Chinook site where they are being stored in Building 52 and outside until they can be sized for crushing. The stored anodes will not impact the environment (stormwater or soil) because they are sealed in plastic.

The SPL will be stored in Buildings 34 and 51 prior to crushing in Building 51. Building 34 is not equipped with air emission controls. Chinook will use dust suppression measures and keep the doors of the building closed during loading of SPL for transfer to Building 51 to prevent the release of fugitive emissions. Any rough sizing of the SPL that is required will be conducted with the jaw crusher in Building 51. The jaw crusher is a mobile trailer-mounted unit which will feed the SPL material after processing through the impact crusher for final crushing. Chinook intends to convey the crushed SPL through a 'soaker section' near the exit of the crusher using a

screw auger to soak the SPL in water/bleach solution to provide further dust suppression and reduction of cyanide levels. After crushing, the crushed SPL will be stored in Buildings 51 and 52 where it will be loaded for shipment via truck or rail to a TSDF.

Chinook Ventures will also crush the anodes. The anodes, which are carbon, have high fuel value and will be transported to a facility where the crushed material will be used as fuel. It was found during trials to crush the anodes with the impact crusher that the chunks of metal in the anodes were detrimental to the crusher and caused considerable breakdowns. In order to allow removal of metal from the anode material, a jaw crusher will be used in Building 51. The jaw crusher will feed the anode material after processing through the impact crusher for final crushing. After final crushing, the anode material will be stored in Building 51. The anode material is inherently non-dusty and after misting it with water during crushing (by the spray misters installed on the impact crusher), any potential dust emissions are further reduced.

Chinook proposes to crush up to 14,000 tons of SPL and a total of 34,500 tons of anode material (27,000 tons of anodes from the Chinook Ventures reduction cells and 7,500 tons of anodes from the former Kaiser Aluminum Company reduction cells). The particulate (PM) emissions will be controlled with one or two existing electrostatic precipitators (ESPs) depending on the need. Chinook proposes to operate the crusher for a total of 1,372 hours and estimates that the maximum PM emissions controlled with the two ESPs will be 42.8 pounds per day (3.0 tons per year).

The installation and operation of temporary equipment and operations is regulated under WAC 173-400-035. The purchase and installation of aggregate crushing equipment installed in Building 51 at Chinook to crush SPL and anodes is considered installation of a stationary source of emissions. If this equipment is installed and operated for less than one year at Chinook, this equipment is considered a temporary source and can be permitted under WAC 173-400-035.

Building 51 was the previous enclosure for half of the reduction cells contained in potline A of the North Potrooms. Building 51 was not equipped with emission control equipment, but the reduction cells in the building were ducted directly to wet scrubber/wet electrostatic precipitators (ESPs). Chinook is proposing to alter the ducting system so that it will collect the emissions generated by crushing and material handling/storage/loading/unloading operations and duct those emissions into the existing wet scrubber/ESPs for treatment.

Chinook proposes to close the wall vents and cover any floor openings at the west end of the building to provide containment and seal the roof vents and door openings as necessary to provide negative pressure. Temporary walls will be built within the building to effectively seal off that portion of the building from the rest of the building as necessary.

Chinook used the design criteria in 40 CFR 265.1100 for containment buildings as guidance in designing the building modification and crusher addition. Chinook is not intending for the building to be classified as a Generator Accumulation Building (i.e., the requirements of 40 CFR 265.1100 would not be applicable).

The Department of Ecology made a determination of no significance (on April 21, 2006), in accordance with the State Environmental Policy Act Rules (Chapter 197-11 WAC).

In accordance with WAC 173-400-171, public involvement was not deemed necessary and public notice was not made.

In relation to the above, the Department of Ecology, State of Washington, pursuant to RCW 70.94.152 and WAC 173-400-035, makes the following determinations:

1. The proposed project, if constructed and operated as herein required, will be in accordance with applicable rules and regulations, as set forth in Chapter 173-400 WAC and Chapter 173-460 WAC.
2. The proposed project, if constructed and operated as herein required, will employ BACT for all pollutants not previously emitted or whose emissions would increase as a result of the new source or modification.
3. Allowable emissions from the proposed new source or modification will not contribute to a violation of any ambient air quality standard.

THEREFORE, IT IS ORDERED that the temporary sources as described in the applications dated June 28, 2005 and August 24, 2005 submitted to Ecology by Chinook and more specifically detailed in plans, specifications, and other information submitted to the Department of Ecology in reference thereto, is approved for construction, installation, and operation provided that the following conditions are met:

1. Chinook shall equip Building 51 with a negative pressure ventilation system that is operated continuously during crushing operations. The operator shall stop the crushing operation anytime the negative pressure is lost.
2. Chinook shall vent the building exhaust to the atmosphere through the existing wet scrubber/ESP control system to control particulate material (PM) emissions to a level of 0.005 grains/dry standard cubic foot of exhaust gas.
3. Chinook shall conduct continuous negative pressure monitoring using telltales installed at the building air inlets. Chinook shall maintain the monitoring records on site.
4. Chinook shall notify Ecology of the start-up date of the crushing operation.
5. Chinook shall comply with the following allowable emission limits and conditions:
 - a. No visible emissions shall be emitted from the stack of the wet scrubber/ESP control system required in condition 2 above or from Buildings 51 and 52.
 - b. Chinook shall take reasonable precautions to prevent the release of fugitive emissions from any of the activities that are conducted outside of Buildings 34, 51, and 52 that are associated with the SPL and anode crushing activities conducted inside those buildings (e.g. loading/unloading operations, sizing operations, transfer operations, hauling operations).
6. Chinook shall determine and demonstrate compliance with Condition 5 by:
 - a. Conducting daily visible emission tests using EPA Reference Method 22 during the operations inside the buildings.
 - b. Conducting a weekly visible emission test using EPA RM 9 per 40 CFR Part 60 by a certified opacity reader contracted by Chinook Ventures. Ecology may request that more frequent Method 9 tests be conducted.
 - c. Taking corrective action to eliminate the visible emissions any time visible emissions are observed.

- d. Recording the date and time of each corrective action taken to eliminate visible emissions and the actions taken to prevent future occurrences.
 - e. Conducting a PM source test using EPA Reference Method 5 or 17 upon Ecology's request.
 - f. Conducting a weekly functional integrity inspection of the SPL and anode crushing operations that, at a minimum, includes a visual check for visible emissions and a negative pressure check. Chinook shall record the observations of the parameters assessed in the inspection log. Any time visible emissions are present, Chinook shall take corrective action as soon as practical but within 24 hours. Chinook shall record the results of corrective actions taken in the inspection log.
 - g. Submitting a monthly air monitoring report to Ecology. The report shall include: 1) The tons of anode material crushed that originated from the Chinook potlines and the tons of anode material crushed that originated from the Port of Tacoma potlines, 2) The tons of SPL crushed, 3) A summary of all observations of visible emissions and the corrective actions taken to eliminate the visible emissions from Buildings 34, 51, and 52, 4) A summary of problems encountered with the negative pressure ventilation systems in Buildings 51 and 52 and the corrective actions taken to correct those problems, 5) A summary of the total hours that the crusher was operated during the month.
7. The operator shall shut down the crushing operation if there is any reason to believe that the operation is not in compliance with any of the conditions of this order. The operator shall resolve and record the problem(s) before restarting the operation. If the problem can not be repaired, Chinook shall notify Ecology.
 8. Chinook shall develop an operation and maintenance (O&M) manual for the crushing operation by May 31, 2006 for all associated equipment and work practices that may affect emissions of pollutants to the atmosphere. Copies of the manual shall be available for review by Ecology. The O&M manual shall ensure that, at all times, including periods of abnormal operation and upset, Chinook personnel, to the extent practicable, maintain the crushing equipment, and operate and maintain air pollution control equipment associated with the crushing operation in a manner consistent with good air pollution control practice. The manual shall identify the sources of fugitive emissions and the measures that will be taken to prevent the release of fugitive emissions from any of the associated SPL and anode crushing activities (per condition 5.b above). Emissions that result from a failure to follow the requirements of the manual may be considered proof that the equipment was not properly operated and maintained.
 9. Chinook shall follow the O&M manual and update the manual as necessary to include any changes in operation of the crusher or air pollution control equipment and activities related to their operation.
 10. Chinook is allowed to operate the above described equipment between the dates May 03, 2006 and May 02, 2007.
 11. Chinook Ventures shall either remove the equipment from the site or cease the crushing operation on or before May 02, 2007.

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

Nothing in this Order shall be construed to relieve Chinook of its obligations under any applicable state, local, or federal laws or regulations.

This authorization may be modified, suspended or revoked in whole or part for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this authorization;
2. Misrepresentation or failure to disclose fully all relevant facts in the documents and correspondence submitted to Ecology.

The provisions of this authorization are severable and, if any provision of this authorization, or application of any provision of this authorization to any circumstance, is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.

Appeal Process

This Order may be appealed. Your appeal must be filed with the Washington Pollution Control Hearings Board (PCHB) within 30 days of receipt of this Order.

The notice of appeal, to the PCHB, shall include, as attachments, a copy of this Approval order, a copy of any information submitted to Ecology in support of the application. At the same time, a copy of the notice of appeal, without attachments, must be sent to the Department of Ecology. The addresses are listed below.

The Pollution Control Hearings Board
P.O. Box 40903
Olympia, Washington 98504-0903

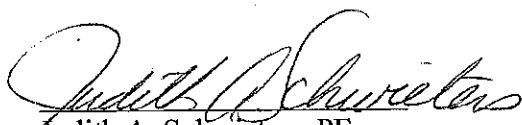
Merley F. McCall
Department of Ecology
Industrial Section Manager
P.O. Box 47706
Olympia, Washington 98504-7706

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with the provisions of Chapter 43.21B RCW.

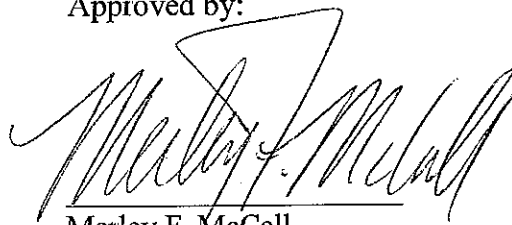
DATED this 2nd day of May, 2006 at Olympia, Washington

Prepared and Reviewed by:

Approved by:



Judith A. Schwieters, PE
Industrial Section



Merley F. McCall
Section Supervisor,
Industrial Section