

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF AIR EMISSIONS FROM:

Intalco Aluminum LLC)	NOC ORDER No. 15449)
4050 Mountain View Road))
Ferndale, WA 98248 USA))

INTRODUCTION

The Department of Ecology (Ecology) received a Notice of Construction (NOC) application including a State Environmental Policy Act (SEPA) checklist for a proposed point feed conversion project from Intalco Aluminum LLC (Intalco) dated August 15, 2017. Ecology reviewed the application and found it complete on September 13, 2017. Ecology requested additional information in a letter dated October 18, 2017. Intalco submitted the additional information in an updated application on December 13, 2017.

Intalco is proposing to convert up to 720 of their Side Work Prebake reduction pots (SWPB) to a point feed configuration known as Centerwork Prebake (CWPB). The conversion will eliminate the manual feeding procedures associated with the current SWPB technology and allow the pot doors to remain closed during the feeding operation. The anticipated benefits of the conversion include higher current efficiency, better pot stability, and reduced emissions. The proposed project will not increase the current permitted production capacity of 307,000 tons. Pots will be converted to CWPB as they exceed their life and are replaced. The conversion process is projected to begin within 18 months of issuance of this order and continue through its duration. If the project is not completed within 3 years of the conversion of the first pot, Intalco must request an extension of this Order.

A 64% reduction in Greenhouse Gas (GHG) emissions is anticipated through a reduction in anode effects in the potlines. Anode effects produce large amounts of perfluorocarbons (PFCs) which have large global warming potential. Reductions in PFC emissions have a significant climate change benefit. Reduction of anode effects is attributed to better pot stability because the point feed control algorithms automate alumina feeding and maintain the alumina in the cryolite solution at optimal concentrations. The SWPB pots are open during the feeding process. Increased fume capture efficiency is expected with the change to CWPB because the pot hoods will be closed while alumina is added. The reduced time that pots are open will create a safer environment for the potline employees through reduced exposure to molten metal, heat, and other potroom emissions.

The Point Feed technology provides better capture of all emissions due to the pot hood remaining closed during the alumina feeding process. Intalco anticipates significant reductions of particulate matter (PM₁₀), total fluoride (TF), and carbon monoxide (CO) in the potlines. The air pollutants expected to increase from the proposed project include nitrogen oxide by 38 tons/year and nitrogen dioxide by 27 tons/year. The increases will not exceed air quality standards.

FINDINGS

Pursuant to New Source Review (NSR) regulations in the Washington Administrative Code (WAC) 173-400-111 and -113, WAC-173-400-030(48), Section 7411, Title 42, and 40 CFR 60.14(b), and based upon the complete Notice of Construction application submitted by Intalco and the technical analysis performed by the Department of Ecology, Ecology makes the following findings:

1. Intalco's Title V Air Operating Permit (AOP) No. 000290-0 was issued on December 02, 2013 and became effective on January 01, 2014. The permit expires on December 31, 2018. Intalco must submit their AOP renewal application by July 01, 2018.
2. Intalco's production is limited to 307,000 tons/year by terms of the federally enforceable air operating permit (AOP). Intalco's production rate will continue to be limited to 307,000 tons/year once the new CWPB technology is installed by terms of the federally enforceable AOP.
3. Intalco proposes to replace their SWPB pot hoods and superstructures with CWPB hoods and superstructures. The SWPB to CWPB conversion will also incorporate new alumina feed bins, point feeders, a proprietary computer program to control alumina additions, and fume collection ductwork inside the pots.
4. Prior to the conversion to CWPB, Intalco must comply with the emission standards and requirements for the pollutants emitted from the operating SWPB pots contained in Intalco's AOP and provided in Table 1 in the conditions below.
5. The facility-wide emission limits and emission factors that apply to operating SWPB pots and converted CWPB pots during the point feed conversion project and until the entire Facility has been converted to CWPB technology are provided in Table 2 in the conditions below.
6. The facility-wide emission limits and emission factors that would apply when the entire Facility has been converted to CWPB technology are provided in Table 3 in the conditions below.
7. Intalco plans to petition EPA about the results of the POM source testing that were used by EPA to derive the POM MACT limit.
8. The estimated pollutant emissions that will be generated during the conversion of each SWPB to a CWPB pot and the potential annual emissions associated with the proposed conversion are provided in the NOC application dated August 15, 2017 and the updated application submitted on December 13, 2017.
9. Intalco has the potential to emit greater than 100 tons per year (T/yr) for at least one Prevention of Significant Deterioration (PSD) pollutant. Intalco is therefore classified as a major stationary source under the PSD permitting program and is subject to PSD permitting consideration under Washington Administrative Code (WAC) 173-400-720 and 40 CFR 52.21.

Under the PSD regulations, the emissions increase associated with a modification to an existing source is calculated as the difference between "baseline actual emissions" and "projected actual emissions" (potential to emit). Baseline actual emissions under the PSD program are the representative emissions based on any consecutive 24-month period in the ten years prior to the modification. The baseline years may differ for each PSD regulated pollutant. The baseline period selected for all the pollutants that have emission rate changes resulting from this project is 2014-2015.

The PSD regulations allow a source to exclude any emissions that the existing source could have previously accommodated during the baseline period and that are unrelated to the proposed project. The excluded emissions may include any increased utilization due to product demand growth. In calculating projected emissions, Intalco excluded emissions due to product demand growth. The emission increases of the pollutants subject to new source review for this project are less than the respective PSD significance thresholds that trigger a PSD permit. Therefore, the conversion project is not subject to the PSD requirements.

10. Intalco is subject to additional emission standards and requirements that are not included in this order. Intalco must comply with these emission standards and requirements even though they are not specifically referenced or included in the approval order. All emission standards that apply to Intalco, including those for the CWPB pots in this order, will be incorporated into Intalco's AOP during the renewal process. These additional requirements are:
 - a. General Standards for Maximum Emissions in WAC 173-400
 - b. Emission Standards for Primary Aluminum Plants in WAC 173-415
 - c. National Emission Standards for Hazardous Air Pollutants from Primary Aluminum Reduction Plants (40 CFR Part 63, Subpart LL)
11. The Toxic Air Pollutant (TAP) requirements for the State of Washington are found in WAC 173-460. The emission increases for each TAP were compared to the de minimis levels and Small Quantity Emission Rates (SQER). TAPs with an emission increase below the corresponding de minimis levels do not require further analysis. The only TAP with a proposed emission increase is NO₂.

Intalco conducted a T-BACT analysis of NO_x/NO₂. The T-BACT analysis satisfies the requirements for both NO_x and NO₂. Projected NO₂ emissions are above the NO₂ SQER after application of T-BACT. Intalco compared the predicted NO₂ ambient air impacts to the NO₂ ASIL as required. The concentrations emitted from Intalco's potline exhaust stacks were found to be below the ASIL for NO₂. Therefore, dispersion modeling is not required to demonstrate that ambient air impacts will be below the ASIL for NO₂. As the potline stack's exhaust plume moves away from the stack, the plume disperses and the ambient air concentration of NO₂ continues to decrease.

The concentration of NO_x in the potroom exhaust is very low (less than 1 ppm) because there is no external fuel or combustion zone and there are no significant sources of nitrogen in the raw materials. Intalco reviewed two potential NO_x control options for the potlines (Selective and Non-Selective Catalytic Reduction).

Both of these options were found to be technically infeasible for control of NO_x from the potlines because both the temperature and the NO_x concentrations of the potroom exhaust were too low.

Intalco reviewed U.S. EPA RACT/BACT/LAER Clearinghouse (RBLC) information to determine potential NO_x control options and emission limits that have been achieved in practice by other primary aluminum facilities. None of these facilities has a NO_x emission limit determination listed for potline NO_x emissions. Intalco is not aware of any primary aluminum facilities that use add-on controls for potline NO_x emissions. Based on testing performed at other Alcoa CWPB facilities, Intalco proposed a NO_x limit of 0.50 lbs/ton. This limit is proposed as BACT for NO_x emissions since it has been achieved in common practice for CWPB pots.

Ecology also reviewed the U.S. EPA RACT/BACT/LAER Clearinghouse (RBLC) information to determine potential NO_x control options and emission limits that have been achieved in practice by other primary aluminum facilities. Ecology agrees with the proposed NO_x limit determination for the CWPB pots.

Ecology will review the NO_x monitoring data collected during the conversion project to determine if the proposed 0.50 lbs/ton NO_x limit is appropriate. Ecology will use recognized statistical methods to evaluate whether the NO_x limit should be changed when the conditions and limits in the NOC approval order are incorporated into the AOP during the renewal process.

12. Ecology will review the PM, TF and CO monitoring data collected during the conversion project to determine if the current limits are appropriate. Ecology will use recognized statistical methods to evaluate whether the PM, TF and CO limits should be changed when the conditions and limits in the NOC approval order are incorporated into the AOP during the renewal process.
13. Intalco included a SEPA checklist in the NOC application. Ecology made a determination of non-significance on June 12, 2018, in accordance with the State Environmental Policy Act rules (Chapter 197-11 WAC).
14. Ecology published notice of a 30-day public comment period for the draft order and SEPA determination in the Ferndale Record on June 13, 2018. The comment period ran from June 13, 2018 until July 13, 2018.
15. Ecology received ___ comments on the draft order and SEPA determination and ___ requests for a public hearing.
16. Terms and conditions of this Order are considered "federally enforceable" for Title V Air Operating Permit (AOP) purposes unless specifically identified as a "state only" term or condition.

It is ordered that the project, as described in said Notice of Construction Application dated August 15, 2017 and more specifically detailed in additional information submitted to Ecology, is approved for construction, modification, and operation, provided the following conditions are met:

CONDITIONS

1. The emission limits in Table 1 below apply to the operating SWPB pots before the conversion process begins. Intalco must comply with the production cap and the emission limits in Table 1 before the conversion process begins.

Table 1: Emission Limits that Apply to Operating SWPB Pots Prior to Point Feed Conversion Project

Condition/Pollutant	Emission Limit	Emission Factor	AOP Condition
i. Aluminum Production	$\leq 307,000$ tons of aluminum/calendar year	NA	D1
ii(a). Operational Limits: Operating pots	≤ 720 pots/day	NA	D2
ii(b). Operational Limits: Sulfur in pitch	$\leq 0.6\%$	NA	D2
ii(c). Operational Limits: Sulfur in coke	$\leq 3.0\%$ (monthly average)	NA	D2
ii(d). Operational Limits: Amperes of current	$\leq 150,000$ (monthly average)	NA	D2
ii(e). Operational Limits: Carbon consumption Ratio	≤ 0.4250 (quarterly average)	NA	D2
iii. Particulate Matter (PM)	15 lbs PM/ton of aluminum produced per day	NA	D3
iv. PM	5050 lbs PM/day (monthly average)	NA	D4
v. PM	6.0 lbs PM/ ton of aluminum produced (3-month average from potlines and bake ovens)	NA	D5
vi. PM [MACT]	4.9 lbs PM/ ton of aluminum produced (potlines only)	NA	TBD
vii. Visible Emission (VE) [MACT]	Daily check for VE	NA	TBD

Condition/Pollutant	Emission Limit	Emission Factor	AOP Condition
viii. Opacity	20% (average for more than 6 consecutive minutes in any 60-minute period)	NA	D6
ix. Total Fluoride (TF)	1350 lbs/day (monthly average)	NA	D7
x. TF	1.6 lbs TF/ton of aluminum produced (3-month average) from potlines and bake ovens	NA	D8
xi. Carbonyl sulfide (COS)	1866 lbs COS/day (monthly average)	0.05 lbs S _{COS} /lb S	D9
xii. COS	3.9 lb COS/ton Al produced/potline	0.05 lbs S _{COS} /lb S	TBD
xiii. Sulfur dioxide (SO ₂)	37,780 lbs/day (monthly average)	0.95 lbs S _{SO₂} /lb S	D10
xiv. SO ₂	44.8 lbs SO ₂ /ton of aluminum produced (3-month rolling average)	0.95 lbs S _{SO₂} /lb S	D11
xv. Carbon Monoxide (CO)	236,150 lbs/day (monthly average)	NA	D12
xvi. CO	280 lbs CO/ton of aluminum produced (3-month average)	NA	D13
xvii. Nitrogen Oxide (NO _x)	219 lbs NO _x /day (monthly average)	0.26 lbs NO _x /ton of aluminum produced	D14
xviii. Potroom Operation and Maintenance	Intalco shall, to the extent practicable, maintain the facility, and operate and maintain air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions at all times, including periods of abnormal operation and	NA	D15

Condition/Pollutant	Emission Limit	Emission Factor	AOP Condition
	upset. Intalco shall demonstrate compliance by complying with Conditions D15.a through D15.h in their AOP.		
xix. TF [MACT]	1.6 lbs TF/ton of aluminum produced for each potline (monthly average)	NA	D16
xx. POM [MACT]	17 lbs POM /ton Al		TBD

Footnotes:

TBD = To be determined during the AOP renewal process

S_{COS} = % sulfur that is converted to COS

S_{SO2} = % sulfur that is converted to SO₂

2. The emission limits and emission factors in Table 2 below apply to the operating SWPB and converted CWPB pots during the conversion project until the entire Facility has been converted to CWPB technology. Intalco must comply with the production cap, emission limits, and emission factors in Table 2 during the point feed conversion project until the entire Facility has been converted to CWPB technology.

Table 2: Facility-wide Emission Limits and Emission Factors that Apply to Operating SWPB Pots and Converted CWPB Pots During Point Feed Conversion Project

Condition/Pollutant	Emission Limit	Emission Factor
i. Aluminum Production	≤ 307,000 tons of aluminum/calendar year	<u>NA</u>
ii(a). Operational Limits: Operating pots	≤ 720 pots/day	<u>NA</u>
ii(b). Operational Limits: Sulfur in pitch	≤ 0.6%	<u>NA</u>
ii(c). Operational Limits: Sulfur in coke	≤ 3.0% (monthly average)	<u>NA</u>
ii(d). Operational Limits: Amperes of current	≤ 150,000 (monthly average)	<u>NA</u>
ii(e). Operational Limits: Carbon consumption ratio	≤ 0.4250 (quarterly average)	<u>NA</u>

Condition/Pollutant	Emission Limit	Emission Factor
iii. Particulate Matter (PM)	15 lbs PM/ton of aluminum produced per day	<u>NA</u>
iv. PM	5050 lbs PM/day (monthly average)	NA
v. PM	6.0 lbs PM/ ton of Al (3-month average from potlines and bake ovens)	NA
vi. PM [MACT]	4.9 lbs PM/ ton of Al (potlines only)	NA
viii. Visible Emissions (VE) [MACT]	Daily check for VE	NA
vii. Opacity	20% (average for more than 6 consecutive minutes in any 60-minute period)	NA
ix. Total Fluoride (TF)	1350 lbs/day (monthly average)	NA
x. TF	1.6 lbs TF/ton of Al (3-month average) from potlines and bake ovens	NA
xi. TF [MACT]	1.6 lbs TF/ton of aluminum produced for each potline (monthly average)	NA
xii. Carbonyl sulfide (COS)	$\text{COS (lbs COS/day)} = (1866 \text{ lbs COS/day} \times \# \text{ of operating SWPB pots/total operating pots})$ $+ (3280 \text{ lbs COS/day} \times \# \text{ of operating CWPB pots/total operating pots})$ (monthly average)	$\text{lb } S_{\text{COS}}/\text{lb S} = (0.05 \text{ lb } S_{\text{COS}}/\text{lb S} \times \# \text{ of operating SWPB pots/total operating pots})$ $+ (0.10 \text{ lbs } S_{\text{COS}}/\text{lb S} \times \# \text{ of operating CWPB pots/total operating pots})$ (monthly average)
xiii. COS	3.9 lb COS/ton Al produced/potline	$\text{lb } S_{\text{COS}}/\text{lb S} = (0.05 \text{ lb } S_{\text{COS}}/\text{lb S} \times \# \text{ of operating SWPB pots/total operating pots})$ $+$

Condition/Pollutant	Emission Limit	Emission Factor
		$(0.10 \text{ lbs } S_{COs}/\text{lb } S \times \text{\# of operating CWPB pots}/\text{total operating pots})$ (monthly average)
xiv. Sulfur dioxide (SO ₂)	37,780 lbs/day (monthly average)	$\text{lbs } S_{SO_2}/\text{lb } S =$ $(0.95 \text{ lbs } S_{SO_2}/\text{lb } S \times \text{\# of operating SWPB pots}/\text{total operating pots})$ + $(0.90 \text{ lbs } S_{SO_2}/\text{lb } S \times \text{\# of operating CWPB pots}/\text{total operating pots})$ (monthly average)
xv. SO ₂	44.8 lbs SO ₂ /ton of aluminum produced (3-month rolling average)	$\text{lbs } S_{SO_2}/\text{lb } S =$ $(0.95 \text{ lbs } S_{SO_2}/\text{lb } S \times \text{\# of operating SWPB pots}/\text{total operating pots})$ + $(0.90 \text{ lbs } S_{SO_2}/\text{lb } S \times \text{\# of operating CWPB pots}/\text{total operating pots})$ (monthly average)
xvi. Carbon Monoxide (CO)	236,150 lbs/day (monthly average)	NA
xvii. CO	280 lbs CO/ton of aluminum produced (3-month average)	NA
xviii. Nitrogen Oxide (NO _x)	$\text{NO}_x \text{ (lbs NO}_x \text{ /day) = (219 lbs NO}_x \text{ /day} \times \text{\# of operating SWPB pots}/\text{total operating pots)}$ $(421 \text{ lbs NO}_x \text{ /day} \times \text{\# of operating CWPB pots}/\text{total operating pots})$ (monthly average)	$\text{lbs NO}_x \text{ /ton of aluminum produced} =$ $(0.26 \text{ lbs NO}_x \text{ /ton aluminum produced} \times \text{\# of operating SWPB pots}/\text{total operating pots})$ +

Condition/Pollutant	Emission Limit	Emission Factor
		(0.50 lbs NO _x / ton of aluminum produced x # of operating CWPB pots / total operating pots) (monthly average)
xxi. POM [MACT]	POM (lbs POM /ton Al) = (17 lbs POM /ton Al x # of operating SWPB pots/total operating pots) + (CWPB limit ¹ lbs POM /ton Al x # of operating CWPB pots/total operating pots) (monthly average)	NA

Footnotes:

S_{COS} = % sulfur that is converted to COS

S_{SO2} = % sulfur that is converted to SO₂

¹ Pending final CWPB category determination

3. The emission limits and emission factors in Table 3 below apply to the operating CWPB pots after the conversion process is completed. Intalco must comply with the production cap, emission limits, and emission factors in Table 3 after the conversion process is completed.

Table 3: Emission Limits and Emission Factors That Apply to Operating CWPB Pots After Completion of the Point Feed Conversion Project

Condition/Pollutant	Emission Limit	Emission Factor
i. Aluminum Production	≤ 307,000 tons of aluminum/calendar year	NA
ii(a). Operational Limits: Operating pots	≤ 720 pots/day	NA
ii(b). Operational Limits: Sulfur in pitch	≤ 0.6%	NA
ii(c). Operational Limits: Sulfur in coke	≤ 3.0% (monthly average)	NA
ii(d). Operational Limits: Amperes of current	≤ 150,000 (monthly average)	NA

Condition/Pollutant	Emission Limit	Emission Factor
ii(e). Operational Limits: Carbon consumption ratio	< 0.4250 (quarterly average)	NA
iii. Particulate Matter (PM)	15 lbs PM/ton of aluminum produced per day	NA
iv. PM	5050 lbs PM/day (monthly average)	NA
v. PM	6.0 lbs PM/ ton of aluminum produced (3-month average) from potlines and bake ovens.	NA
vi. PM [MACT]	4.9 lbs PM/ ton of Al (potlines only)	NA
vii. Visible Emissions (VE) [MACT]	Daily check for VE	NA
viii. Opacity	20% (average for more than 6 consecutive minutes in any 60- minute period)	NA
ix. Total Fluoride (TF)	1350 lbs/day (monthly average)	NA
x. TF	1.6 lbs TF/ton of aluminum produced (3-month average) from potlines and bake ovens	NA
xi. TF [MACT]	1.6 lbs TF/ton of aluminum produced for each potline (monthly average)	NA
xii. Carbonyl sulfide (COS)	3,280 lbs COS/day (monthly average)	0.10 lbs S _{COS} /lb S
xiii. COS	3.9 lb COS/ton Al produced/potline	0.10 lbs S _{COS} /lb S
xiv. Sulfur dioxide (SO ₂)	37,780 lbs/day (monthly average)	0.90 lbs S _{SO₂} /lb S
xv. SO ₂	44.8 lbs SO ₂ /ton of aluminum produced (3-month rolling average)	0.90 lbs S _{SO₂} /lb S
xvi. Carbon Monoxide (CO)	236,150 lbs/day (monthly average)	NA
xvii. CO	280 lbs CO/ton of aluminum produced (3-month average)	NA
xviii. Nitrogen Oxide (NO _x)	421 lbs NO _x /day (monthly average)	0.50 lbs NO _x /ton of aluminum produced

Condition/Pollutant	Emission Limit	Emission Factor
xix. POM [MACT]	CWPB limit ¹ lbs POM/ton of aluminum produced	NA

¹ Pending final CWPB category determination

4. **Monitoring.** Intalco must:

- a. Comply with all of the current monitoring requirements for the respective pollutants in the AOP for both the SWPB and the converted CWPB pots.
- b. Develop and submit a monitoring plan for Ecology’s review and approval. The monitoring plan must be designed to demonstrate continuous compliance with Conditions 1 through 3 above. Submit the plan to Ecology 30 days before the first pot conversion. The plan must clearly identify the:
 - i. Strategies for demonstrating compliance with Conditions 1 through 3 above.
 - ii. EPA approved source test method(s) that will be used for monitoring.
 - iii. Frequency of source testing.

5. **Reporting.** Intalco must:

- a. Notify Ecology via e-mail at least one week prior to starting the conversion project.
- b. Submit monthly progress reports to Ecology. The reports must be mailed by the 30th day following the end of the month. The reports must include:
 - i. A transmittal letter. The letter must identify and explain any violations of Conditions 1 through 3 above and the actions taken to correct the violations and avoid future violations. Ecology will determine the appropriate enforcement action to take for any violations.
 - ii. An explanation of the sequencing of the pot conversions during the month.
 - iii. The locations and results of any source tests that were conducted in a format that allows Ecology to:
 1. Compare the results to the applicable table;
 2. Compare the results to the results from all previous months.
- c. Continue the monthly progress reporting until Ecology determines that the reporting frequency can be reduced or discontinued.
- d. Maintain all reports related to the CWPB pot conversion and to the conditions above for a minimum of 5 years after the project is completed and make them available to Ecology upon request.

6. **Initiation and Completion of the Project.** Intalco must:

- a. Convert the first pot within 18 months of the issuance date of this order.
- b. Complete the conversion of up to 720 pots from SWPB to CWPB within 3 years of converting the first pot or request an extension of this authorization if not completed within 3 years after the conversion of the first pot.

7. **Operations and Maintenance (O&M).** Intalco must, to the extent practicable, maintain the facility, and operate and maintain air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions at all times (before, during, and after the conversion) including periods of abnormal operation and upset. Intalco shall demonstrate compliance by:
 - a. Checking the flows on a minimum of 4 baghouse cells each month. During this process, Intalco must readjust the damper position, re-measure the flow, and mark the correct damper position on the stack if the flow from a baghouse cell exceeds the established minimum flow rate for that cell;
 - b. Conducting weekly inspections to ensure that only one hood is open at a time for anode change and tapping operations and that only 2 hoods are open in any 20 pot section during line breaks for all shifts and for all potlines;
 - c. Taking corrective action if the practices in b above are not being followed. Corrective action shall include, at a minimum, closing the extra open hoods immediately;
 - d. Maintaining sufficient flow of recycle water to the wet roof scrubbers. Intalco shall demonstrate compliance by meeting the established parametric monitoring requirements.
 - e. Conducting semi-annual process evaluation and improvement review meetings. These meetings consist of gathering Intalco staff (environmental manager, operator(s) with extensive knowledge of current potroom hood and wet scrubber conditions, potroom source testing staff, and staff who conduct the procedures which generate, manage, review and report emissions data in the monthly air monitoring reports submitted to Ecology) to evaluate trends in the emissions data and to determine measures to minimize emissions
 - f. Conducting a daily functional integrity inspection of the potroom baghouses that, at a minimum, includes a visual check of the following parameters: visible emissions, leaks in ductwork and housing, excess vibration, pressure drop, and sight glass readings;
 - g. Maintaining pot hoods in good condition. If a pot hood is found to be in fair or poor condition Intalco shall initiate corrective actions within 24 hours of discovery; and
 - h. Conducting a daily functional integrity inspection of potroom wet roof scrubbers. This shall include a check for the presence of visible emissions and adequate volumes of water.

8. **Order/Permit Limit Changes.**
 - a. Ecology will review the NO_x monitoring data collected during the conversion project to determine if the proposed 0.50 lbs/ton NO_x limit is appropriate. Ecology will use recognized statistical methods to evaluate whether the NO_x limit should be changed when the conditions and limits in the NOC approval order are incorporated into the AOP during the renewal process.

- b. Ecology will review the PM, TF and CO monitoring data collected during the conversion project to determine if the current limits are appropriate. Ecology will use recognized statistical methods to evaluate whether the PM, TF and CO limits should be changed when the conditions and limits in the NOC approval order are incorporated into the AOP during the renewal process.
9. **Changes to the Order.** In accordance with WAC 173-400-111(8), the owner or operator may request, at any time, a change to the conditions of this Order. The request must include the information necessary to demonstrate compliance with the requirements of WAC 173-400-111(8)(a)(i) through (v).
10. **Access to the Source.** Ecology access to the source must be permitted upon request and after presentation of proper credentials for the purpose of compliance assurance inspections. Failure to allow access is grounds for revocation of this Order.
11. **Construction and Operations.** Construction and operation of this project shall be consistent with the project description in the NOC application dated August 10, 2017 and the additional information submitted on December 11, 2017. Any activity or operation, which is undertaken by Intalco or others, in a manner which is inconsistent with the NOC application, the additional information provided and this Order, shall be subject to Ecology enforcement under applicable regulations.
12. Nothing in this order shall be construed so as to relieve Intalco of its obligations under any state, local, or federal laws or regulations, including any applicable MACT or NSPS requirements.
13. **Voided Approval.** This approval shall become void if construction is not commenced within eighteen (18) months after receipt of this approval, or if construction of the project is stopped for a period of eighteen (18) months or longer.

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 as excusing Intalco from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

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

1. Violation of any terms or conditions of this authorization.
2. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.

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.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must complete the two items below within 30 days of the date of receipt of this Order:

1. File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
2. Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

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

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Road SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

MORE INFORMATION

- **Pollution Control Hearings Board**
www.eluho.wa.gov/Board/PCHB
- **Chapter 43.21B RCW, Environmental Hearings Office – Pollution Control Hearings Board**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice and Procedure**
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>

- **Chapter 34.05 RCW – Administrative Procedure Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>
- **Chapter 70.94 RCW, Washington Clean Air Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=70.94>
- **Air Quality Rules**
<https://ecology.wa.gov/Regulations-Permits?topics=27>

SIGNATURES

Reviewed by:

Signature Authority:

Judy Schwieters, P.E.
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Date

Date