Appendix G. Response to Comments

Contents

| Appendix G. Response to Comments1 | | | | |
|--------------------------------------|---|----|--|--|
| Public comments and response summary | | | | |
| Response to comments | | | | |
| Comment 1: | In support of the proposal | | | |
| Comment 2: | Verifying records and emissions | 4 | | |
| Comment 3: | Ecology's authority to control Intalco's emissions | | | |
| Comment 4: | Stringency of the proposed emission limits | 5 | | |
| Comment 5: | Enforcement of the attainment plan | 5 | | |
| Comment 6: | Insufficient to protect air quality on or near the Lummi Indian Reservation | 6 | | |
| Comment 7: | Request to disallow Intalco to restart its operations before 2025 | 8 | | |
| Comment 8: | Request to not facilitate reopening of the smelter | | | |
| Comment 9: | SO2 emissions during curtailment | | | |
| Comment 10: | Timing of EPA review | 11 | | |
| Comment 11: | Intalco's work to support attainment plan | 11 | | |
| Comment 12: | Request to add information about curtailment earlier in the document | 12 | | |
| Comment 13: | Historic details about Intalco Primary Metals Works Aluminum Smelter | 12 | | |
| Comment 14: | Request to remove information about non-SO2 regulatory actions | 13 | | |
| Comment 15: | Control strategy: required level of control/RACM | 13 | | |
| Comment 16: | Contingency measures | 14 | | |
| | | | | |
| Copies of public comments | | | | |

Public comments and response summary

Ecology accepted public comments on the proposal, the Intalco SO₂ Attainment Plan and Agreed Order #21310, from September 7, 2022, through October 15, 2022. Ecology held an online hearing on October 11, 2022 at 6 p.m. There were 10 public attendees. No one provided oral testimony. Ecology received written comments from four individuals, the Lummi Nation, and the Intalco facility.

The comments included an expression of support for the proposal, a request to make certain changes, and a request to ensure strict oversight of the implementation of the proposed controls. Several commenters expressed concerns with the required timeline for installation of controls, by April 2025, if the facility restarts its operations earlier. There were no comments against the proposal to control SO₂ emissions at the facility or against the specific type of controls required by the Agreed Order. We include copies of the comments received and a hearing memo after the Response to Comments below.

Ecology very much appreciates the time and participation of the members and representatives of the public, the Lummi Nation, and the Intalco facility in this public review process. Your comments allowed us an opportunity to revisit the write up and provide clarifications and improvements in response to the questions and concerns. Ecology carefully considered the feedback received during the public comment period and consulted with NWCAA. Ecology made no substantive changes to the proposal as the result of public comments. Non-substantive changes made to the Attainment Plan include clarifying language and grammar corrections. Specifically, we made the following non-substantive changes to the Attainment Plan:

- 1. We revised the historical background information included in the Intalco Primary Metals Works Aluminum Smelter section to better describe the historical ownership of the Intalco facility. See Ecology's response to Comment 13 for the specific changes.
- 2. The Executive Summary was updated to include information on Intalco's curtailment; the timelines associated with different controls, and the results of the public comment review. See Ecology's response to Comment 12 for the specific changes about the curtailment and its effect on air quality.
- 3. The Introduction section was updated to include information on EPA's approval of Ecology's authority to control emissions of SO₂ from the Intalco facility. See Ecology's response to Comment 3 for additional reference.

Response to comments

Our detailed responses to comments are below. We received 7 separate comment letters and organized them into 16 topics. Given the limited number of comments received, we chose to cite original comments instead of summarizing or paraphrasing them. The quotations below might include minor typographic corrections for readability. **Table 1: Comment Index** below summarizes comment numbers and topics in response to each commenter.

| Commenter | Comment number and topic | | |
|-------------------|---|--|--|
| Patricia Davis | Comment 1: In support of the proposal | | |
| | Comment 2: Verifying records and emissions | | |
| Laya Shriaberg | Comment 2: Verifying records and emissions | | |
| Larry McCarter | Comment 3: Ecology's authority to control Intalco's emissions | | |
| | Comment 4: Stringency of the proposed emission limits | | |
| | Comment 7: Request to disallow Intalco to restart its operations before 2025 | | |
| Randall Potts | Comment 5: Enforcement of the attainment plan | | |
| | Comment 7: Request to disallow Intalco to restart its operations before 2025 | | |
| | Comment 8: Request to not facilitate reopening of the smelter | | |
| | Comment 9: SO ₂ emissions during curtailment | | |
| Lummi Nation | Comment 6: Insufficient to protect air quality on or near the Lummi Indian Reservation | | |
| | Comment 7: Request to disallow Intalco to restart its operations before 2025 | | |
| Intalco Aluminum, | Comment 10: Timing of EPA review | | |
| LLC | Comment 11: Intalco's work to support attainment plan | | |
| | Comment 12: Request to add information about curtailment earlier in the document | | |
| | Comment 13: Historic details about Intalco Primary Metals Works Aluminum Smelter | | |
| | Comment 14: Request to remove information about non-SO ₂ regulatory actions | | |
| | Comment 15: Control strategy: required level of control/RACM | | |
| | Comment 16: Contingency measures | | |

Table 1: Comment Index

Comment 1: In support of the proposal

"I fully support this action by Dept. of Ecology. ... I support ECY and EPA efforts to get Intalco to take our health, air and planet seriously!"

Response:

Thank you for your comment and your support for this plan.

Comment 2: Verifying records and emissions

"In addition to the proposed time lines, I would also like to request that Intalco be verifiably supervised, and I would also like to additionally suggest that 'spontaneous/unexpected' inspections be made to ensure accurate and timely record keeping; and also emission verifications beyond those negotiated. VERIFY what they present."

"Please be REALLY STRICT with Intalco on their future sulphur dioxide emissions! As an elder citizen of Bellingham and with an already over-taxed personal respiratory system, please take care of me and my health! Put me first! Don't have a hand in contributing to overloading my and others' respiratory systems with corporately funded respiratory toxins. People come first not corporate aluminum smelters! I don't believe their "green" approach one bit! Please SCRUTINIZE them CLOSELY on their full accountability of their sulphur dioxide emissions!"

Response:

Ecology conducts inspections at the Intalco facility regularly to determine if the facility is in compliance with applicable air quality regulations. These inspections include a review of records the facility uses to quantify emissions from its operations. Ecology will continue to conduct regular inspections at the facility in the future. Inspections include both announced inspections (pre-notification to the facility) and unannounced inspections (little or no advanced notification to the facility). Ecology has continued to conduct inspections at Intalco during curtailment. Additionally, Ecology will conduct an inspection to confirm the required facility modifications (merged and raised stacks) and the new wet scrubber meet all requirements.

Intalco is required to submit information on their air emissions to Ecology at least monthly, in accordance with state regulations and the facility's air operating permit. In addition to these standard reporting requirements, Agreed Order #21310 includes additional monitoring, recordkeeping, and reporting requirements related to the facility's SO₂ emissions. The facility is required to certify that the information submitted to Ecology is complete and accurate. Ecology reviews the information submitted to confirm whether the facility is in compliance with all applicable requirements. This review includes an evaluation of the information submitted to ensure it is accurate and complete. When Ecology discovers violations at the facility, we work to ensure that appropriate corrective actions are taken and the facility returns to compliance as quickly as possible, and to reduce the potential for future violations.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 3: Ecology's authority to control Intalco's emissions

"Where is the paperwork showing EPA designated Ecology to manage these emissions?"

Response:

The Federal Clean Air Act (CAA) and its implementing rules in the Code of Federal Regulations (CFR) authorize and govern the respective roles and responsibilities of the federal government and the states in addressing nonattainment in designated areas. Ecology's proposed attainment plan relies on existing laws and regulations and does not propose any changes to them. However, as the question of a state agency's authority to regulate a certain pollution source or situation is a cornerstone of environmental law, we will add a detailed explanation of the history and current regulatory structure to the Plan, as an edit, to ensure clarity, as well as to demonstrate that EPA has authorized Ecology to regulate emissions from the Intalco facility.

In response to this comment, we added an overview of Ecology's authority to the Introduction chapter in the Attainment Plan, under "Regulatory authority" section title. This is an explanatory change to the document and does not change the Attainment Plan.

Comment 4: Stringency of the proposed emission limits

"I assume the limits proposed are the most current, stringent limits of all pollutants and the order does not somehow permit the 'grandfathering' of any older, less stringent emission limit."

Response:

The unit-specific and facility-wide emission limits in Agreed Order #21310 are new, more stringent emission limits. These new emission limits will apply in addition to all existing emission limits. Agreed Order #21310 includes emission limits for all sources of SO₂ emissions, including a facility wide SO₂ limit of 5,000 tons per year. The unit-specific emission limits were developed based on the modeling completed to show that the area surrounding Intalco would meet the SO₂ standard. These unit-specific emission limits did not come from an existing rule or regulation. The facility-wide limit was developed based on a federal regulation that allows for merging and raising of stacks if the facility-wide emissions of SO₂ are not above 5,000 tons per year. The basis for the limit is an existing federal regulation, but Intalco was not subject to the rule because they had merged and raised stacks historically. Because Agreed Order #21310 requires Intalco to merge and raise stacks, Intalco's facility-wide emissions of SO₂ must be less than 5,000 tons per year.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 5: Enforcement of the attainment plan

"Based on the lax regulatory oversight of Cherry Point, I am not confident that the county or any other public agency will enforce these "plans." And even if they did, we are still left with a dirty not "green" industrial plant."

Response:

Ecology and NWCAA prepared this attainment plan in good faith and are committed to its successful implementation. If EPA finds that the plan is not being implemented effectively, or if the area is found to be in violation of the SO₂ NAAQS, there will be significant mandatory sanctions against the state. These sanctions may include withdrawal of federal highway funding from the area until the air quality issue is resolved.

In addition, this SIP review process and submitting this Plan to EPA for SIP approval achieves two goals related to oversight and enforcement:

- 1) Provide for an additional layer of public and federal oversight of the Plan details. EPA must make sure the Plan does not relax or backslide on the existing regulatory controls.
- 2) Provide for federal enforceability under U.S. Code 42 (2010), § 7604 "Citizen suits." When approved into the SIP, the Plan and Agreed Order will become federallyenforceable. This means that should EPA or the public feel that existing laws and regulations are not being properly enforced, either EPA or citizens can bring an action to enforce the provisions of this plan and Agreed Order in federal court.

Attainment planning is designed to resolve a specific ambient air quality issue, usually for one pollutant. The plan requires the facility to reduce its SO₂ emissions to a level that does not result in violation of the 2010 SO₂ NAAQS in the ambient air outside the facility boundaries.

Refer to Ecology's response to Comment 2 for information on Ecology's oversight and enforcement at the Intalco facility.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 6: Insufficient to protect air quality on or near the Lummi Indian Reservation

"The Lummi Natural Resources Department finds that the proposed Intalco Sulfur Dioxide Attainment Plan (Attainment Plan) is insufficient to ensure protection of air quality on and near the Lummi Indian Reservation, located less than 0.5 miles south of the currently designated sulfur dioxide non-attainment zone."

Response:

This comment touches on an important area of the state and federal air quality protection program: whether the air quality at the Lummi Indian Reservation is adversely affected by the elevated levels of SO₂ during the facility's operations, and the scope of the attainment plan.

EPA, Ecology, and NWCAA assess air quality based on EPA standards. We carefully reviewed all available monitoring, modeling, and meteorological data in the area of the Lummi Indian Reservation as we shared the same concern. While we do not have direct monitoring results for the Lummi Indian Reservation, we have modeled pre-curtailment SO₂ concentrations there. SO₂ modeling is considered to be highly reliable, and EPA gives monitoring and modeling results equal weight during the designation process. EPA conducted a thorough analysis of monitoring

and modeling air quality data and found the Lummi Indian Reservation to be in attainment of the 2010 1-hour SO_2 NAAQS during the facility's operation without the controls.¹

Specifically, our modeling indicated that the maximum SO₂ Design Value (a calculated number at a given location that is used to compare against the standard) at the Lummi Indian Reservation was about 32 parts per billion (ppb) of SO₂. EPA considers the levels of SO₂ to pose a health risk when the Design Value number is above 75 ppb. This SO₂ standard is set at the level that is protective of vulnerable populations such as children and people who are elderly, pregnant, or have respiratory or cardiovascular conditions.

We understand the concern about the proximity to the nonattainment area. SO_2 behaves differently than other ubiquitous air quality pollutants, such as ozone and $PM_{2.5}$, which can travel long distances. SO_2 levels are the highest right next to the emission source and drop very fast every hundred yards away from the source, even in the direction of prevailing winds. In our technical paper "Analysis of Sulfur Dioxide Monitoring Data in Whatcom County: Air Quality Technical Report,"² we describe a similar situation where a populated area – the edge of the City of Ferndale – is located a short distance from the location we identified as having the highest concentrations of SO_2 .

To confirm that the SO₂ levels decrease quickly, in 2019, NWCAA monitored SO₂ at a temporary, non-regulatory, monitoring site downwind from Intalco's Ferndale-Mountain View monitoring site, which was the site with the highest SO₂ readings. In Table 11 of that technical report (copied below) we showed that the temporary monitoring site was in full compliance with the standard. The table lists SO₂ levels, as Design Values, recorded at different monitoring sites and calculated via modeling. Despite proximity to the area with elevated SO₂ levels, the levels at the edge of the City of Ferndale never exceeded 60% of the standard even on days when the regulatory monitor recorded the highest levels of SO₂. This gave us additional assurances that the area impacted by the high concentrations is, indeed, very small.

| SO₂ Design Value, ppb | BP | Phillips 66 | Ferndale- Kickerville | Ferndale- Mountain View | Ferndale School (temporary) |
|--------------------------|----|-------------|--------------------------|-------------------------------|-----------------------------------|
| Monitored | 11 | 23 | 71 | 106 | 31 |
| Modeled | 25 | 36 | 69 | 97 | 32 |

| Table 2. A copy of data from an earlier air quality analysis report showing monitored and | | | |
|---|--|--|--|
| modeled design values at several monitoring sites. | | | |

This combination of monitoring and modeling data led EPA to designate only a small, 4.5 square-mile area surrounding Intalco as not meeting the 1-hour SO₂ standard. The

¹ https://www.epa.gov/sites/default/files/2020-08/documents/10-wa-rd4_intended_so2_designations_tsd.pdf ² https://apps.ecology.wa.gov/publications/SummaryPages/2002015.html

nonattainment boundary designated by EPA includes all areas around the Intalco smelter that exceeded the SO₂ standard during the 3-year review period. The areas outside this boundary are below the 1-hour SO₂ standard, and thus were not included in the attainment plan.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 7: Request to disallow Intalco to restart its operations before 2025

"The Lummi Natural Resources Department finds that the proposed Intalco Sulfur Dioxide Attainment Plan (Attainment Plan) is insufficient to ensure protection of air quality on and near the Lummi Indian Reservation, located less than 0.5 miles south of the currently designated sulfur dioxide non-attainment zone. While we agree with the provisions of the Attainment Plan and Agreed Order requiring (1) installation operation of a new sulfur dioxide scrubber, (2) merging of existing stacks and increasing the height of the merged stacks, and (3) limiting facility-wide and until-specific sulfur dioxide emissions, we feel that a more rigorous implementation plan is needed. Specifically, the Attainment Plan allows the facility to restart on or before April 30, 2025 without the aforementioned controls installed. We find it unfathomable that the State would permit polluting operations to resume prior to the installation of controls that the State deems (and Lummi Nation agrees) are absolutely necessary to reduce sulfur dioxide emissions from facility operations."

"Permitting the operation to simply start up and operate for another three years after this TOTAL SHUTDOWN and abandonment, before installing pollution controls is not fair to the children that live here; the best technology should be installed before any start up is allowed."

"These proposed plans are not clearly tied to deadlines and monitoring results that must be met before the plant can open, they are simply requirements for continued operation."

Response:

When EPA designates an area as being in nonattainment of a standard, this designation does not authorize state or local agencies to curtail or shut down the facilities located within the nonattainment area, nor does EPA curtail or shut down industrial facilities on the basis of being located in nonattainment areas. Instead, the Clean Air Act requires that the state and local regulatory agencies begin the process of bringing the area back into attainment using permitting and regulatory processes. States are required to develop and enforce a timeline for installation of controls as needed to bring the area back into attainment as expeditiously as practicable, but no later than 5 years from the date of the nonattainment designation. We determined that April 30, 2025 is the earliest practicable date for finishing the implementation of all planned controls due to logistical and administrative timelines, which are discussed in more detail below.

Ecology considered numerous factors in evaluating the practicability of various timelines for installation and operation of the proposed control strategy at Intalco. These factors include design, purchasing, procurement, construction, installation, and permitting requirements for

the proposed emissions controls. In considering the timelines associated with these necessary actions, Ecology determined that April 30, 2025, is the soonest practicable date that the proposed emissions controls can be installed and operational in the event that Intalco restarts any potline operations. After April 30, 2025, which is about two and a half years from the time of writing this document, the facility is prohibited from restarting any potline operations without first installing all of the controls required in the Agreed Order.

Because implementation of the facility-wide SO₂ emissions limit does not require facility modifications or installation of new control equipment, Ecology determined that it is practicable to implement that emissions limit more expeditiously than the other control strategies. Accordingly, the Agreed Order requires compliance with the facility-wide SO₂ emissions limit immediately upon restart of any potline operations at the Intalco facility, regardless of when such operations begin. As discussed in the "Intalco Primary Metals Works Aluminum Smelter, Pollution Controls and SO₂ Attainment Strategy" and "Attainment Demonstration" sections of the Attainment Plan, the majority of the SO₂ emissions from Intalco come from the potline operations.

For information on Ecology's enforcement and compliance oversight at the Intalco facility please refer to Ecology's response to Comments 2-5.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 8: Request to not facilitate reopening of the smelter

"As a resident of Whatcom County, I strongly and resolutely oppose any effort to reopen the Intalco aluminum smelter. Claims that the smelter can be a "green" industrial complex are nonsense."

"Whatcom county has become a dirty industry safe zone with open coal trains passing through Bellingham and other cities in the region to reach Cherry Point and the broken promises and outright lies of the fossil fuel companies located there. The Intalco project will significantly degrade an already dangerous health situation for residents. As well, the project demands a sweetheart deal to get cheap energy to make the plant profitable. Again, public health is being put at risk by subsidising a dirty industrial project with energy that could be used to support non-polluting, truly green industries.

We need good paying jobs and affordable housing in Whatcom County, but not by creating further pollution. The level of corruption of local political officials in terms of controlling dirty industries is well documented and should not be ignored. Even our elected officials are more interested in donor money and union jobs connected to dirty energy than the health of their constituents."

"The bottom line is that Whatcom county needs to be encourage to attract real green companies and build an economy based on improving the health and well being of its residents, the environment, our tribal obligations and our imperiled wildlife. I am counting on you to make that happen by blocking the return of Intalco's dangerously polluting plant."

Response:

The majority of this comment is outside the scope of this action or Ecology's regulatory authority. With this action, we are complying with the existing environmental requirements to permanently reduce emissions during the facility's ongoing operations. To effect changes at the local, state, and federal levels, consider reaching out and working with the elected officials and community members.

Washington State is required to submit an Attainment Plan and SIP revision to EPA that details Washington's plans to reduce the amount of SO₂ emissions in the area and comply with the federal SO₂ standard. Ecology determined what actions are necessary to bring the area into attainment with the standard in the event the Intalco facility restarts operations, as detailed in the Attainment Plan. The facility is required to complete these actions on an enforceable timeline, pursuant to Agreed Order #21310. The Attainment Plan and Agreed Order #21310 will be implemented and enforceable regardless of whether or not the facility is sold, upgraded, or restarted. If the facility is sold, the new owner will assume the facility's environmental compliance obligations, including compliance with Agreed Order #21310 and all other enforcement orders and permits issued to the facility by Ecology. The Agreed Order includes specific requirements for the facility if operations are restarted; however, the Agreed Order is not being issued in response to any potential restart plans. Any construction or facility upgrades at the Intalco facility would require separate approvals from Ecology.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 9: SO₂ emissions during curtailment

"As you know, despite curtailment, Ferndale's Intalco aluminum smelter continues to exceed safe emission levels of sulfur dioxide, a respiratory risk, in the region."

Response:

The area affected by the SO₂ emissions from the Intalco facility has not had elevated levels of SO₂ since curtailment of the facility in August 2020. This comment appears to rely on incorrect information that was published in a local newspaper but was corrected within a day.³ Our documents explain that after the Intalco smelter curtailed its operations for economic reasons in August 2020, it essentially stopped emitting SO₂. Subsequently, the SO₂ concentrations in the ambient air at the two monitoring sites were reduced and have remained at low levels since curtailment. There have been no exceedances of SO₂ emission limits or ambient levels during that time.

However, we are still required to take action in response to the elevated levels of SO₂ that were recorded previously when the facility was operational, which led to the nonattainment designation. In other words, in order to ensure the area returns to attainment regardless of whether or not the facility restarts, we proceeded with planning for stricter SO₂ controls and a reduction in emissions from the facility.

 $^{^{3}\} https://www.cascadiadaily.com/news/2022/sep/07/intalco-aluminum-smelter-releasing-high-levels-of-sulfurdioxide-during-operations/$

As stated in Ecology's response to Comment 12, additional clarifying information was added to the Executive Summary of the Attainment Plan to clearly state that the SO₂ emissions that led to the nonattainment designation were a result of emissions prior to curtailment of the Intalco facility.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 10: Timing of EPA review

"Following the public comment period, we understand that Ecology will submit the SO₂ attainment plan for review by the US Environmental Protection Agency (EPA) and EPA will present its intended action (approval or disapproval), which will then be posted for public comment in 2023."

Response:

It is correct that EPA will solicit public comment prior to finalizing their decision on the SIP submittal. However, states have no control over EPA's review timeline or when EPA will seek public comment on their proposed actions. EPA's approval provides for federal enforceability of the Agreed Order and the attainment plan. Regardless of EPA's timing, Ecology must begin implementation of the attainment strategies to achieve attainment as expeditiously as practicable, including enforcement of Agreed Order #21310.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 11: Intalco's work to support attainment plan

"Intalco has worked with Ecology on some aspects of the SIP. Specifically, we negotiated with Ecology on the SO₂ emissions limits and operational conditions within Agreed Order 21310 (SIP Appendix D) and Intalco, and their consultant AECOM, developed the Intalco SO₂ Attainment Plan Modeling Report (SIP Appendix C). As the Intalco SO₂ Attainment Plan Modeling Report explains, Intalco has curtailed operations at the end of August 2020, thereby reducing SO₂ emissions to zero. Since then, the ambient air monitoring stations in the NAA have been measuring SO₂ concentrations at background levels, well below the 1-hour SO₂ National Ambient Air Quality Standard (NAAQS). Therefore, measures to be taken at the Intalco facility to reduce SO₂ emissions are only necessary should the facility restart operations and within the timeline cited in the Agreed Order."

"Overall, we agree with Ecology's characterization of the SO₂ Attainment Plan Modeling Report prepared by Intalco and AECOM. We appreciate Ecology's recognition that the modeling report used conservative, worst case assumptions in that, as Ecology states, "The modeling presented assumes conservatism in the SO₂ emission control device (modeled at 80% efficiency despite being designed for 90% efficiency), explicitly modeling scenarios if the SO₂ emission control device is non-operational, and including the maximum monthly average emissions of the nearby modeled refineries to assume that the nearby sources emit constantly at the highest monthly emission rate."

Response:

Ecology appreciates Intalco's collaboration with Ecology in negotiating the terms of Agreed Order #21310 and Intalco's assistance in performing the modeling demonstration used to show achievement of the SO₂ NAAQS.

No changes were made to Agreed Order #21310 or the Attainment Plan in response to this comment.

Comment 12: Request to add information about curtailment earlier in the document

"In the SIP Executive Summary and Introduction sections (p. 12, 13), there is no mention of the Intalco curtailment or that Intalco is currently emitting no SO₂ because of the curtailment. This topic is not discussed until the Intalco Primary Metals Works Aluminum Smelter section (p. 20). As a result of the curtailment, the monitored SO₂ concentrations in the NAA have dropped to very low background levels. In a related matter, there have been some public news articles that vaguely refer to continued SO₂ issues during the curtailment period that are inaccurate.

Comment: We request that Ecology add a clarifying statement to the Executive Summary in which the Intalco curtailment is recognized as well as its effect upon the monitored SO₂ concentrations in the NAA. This simple revision could address potential misunderstandings of the facility's current status. Once Ecology finalizes the SIP, Intalco understands that the SIP will be submitted to EPA. A clarifying statement regarding the curtailment could also benefit EPA's review process during which EPA will review the SIP and present its intended action (approval or disapproval), which will be posted for a public comment period in 2023."

Response:

Ecology acknowledges that the curtailment of the Intalco facility resulted in significant reductions in ambient SO₂ levels in the nonattainment area. All potline operations at the Intalco facility have been curtailed since August 2020; however, the nonattainment area designation was based on ambient SO₂ concentrations recorded between 2017-2019 when the facility was operating. The Executive Summary and Introduction sections of the Attainment Plan are included to provide an overview of the entire Attainment Plan and to describe the topics that will be discussed in more detail within the sections of the Attainment Plan.

See Ecology's response to Comment 7 regarding the inaccurate information published in a local news article.

We updated the Executive Summary to include information regarding the curtailment. This is a clarifying and not a substantive change to the Attainment Plan.

Comment 13: Historic details about Intalco Primary Metals Works Aluminum Smelter

"Ecology states that Alcoa built the Intalco Primary Metals Works aluminum smelter (Intalco) in 1965 in Whatcom County. (p. 20)

Comment: In the SIP Intalco Primary Metals Works Aluminum Smelter section, please note that the Intalco smelter began operations as Intalco Aluminum Corp., under the ownership of Alumax, Pechiney and Howmet. In 1998, Alcoa Inc. and Alumax merged, creating Alcoa Intalco Works. By 2006, Alcoa bought out its remaining partners; however, at all times Intalco has been the owner and operator of the facility."

Response:

The Intalco Primary Metals Works Aluminum Smelter section in the Attainment Plan has been revised to include this information. This is a clarifying and not a substantive change to the Attainment Plan.

Comment 14: Request to remove information about non-SO₂ regulatory actions

""In the SIP Non-SO₂ Regulatory Actions section (p. 29), Ecology lists historical enforcement actions and notices of violation for Intalco related to pollutants other than SO₂."

Comment: We would like to request the removal of the "Ecology's Enforcement Actions" and "EPA Notices of Violation" sections, which are not relevant to the Intalco SO₂ Attainment Plan. Intalco has had no recent enforcement actions or notices of violation for SO₂, the pollutant at issue in the SIP."

Response:

Ecology included the Non-SO₂ Regulatory Actions in the Intalco Primary Metals Works Aluminum Smelter section of the Attainment Plan to provide an overview of the regulatory framework that applies to air emissions from the Intalco facility. As the heading to this portion of the section states, the actions described are not directly related to SO₂ emissions at the facility. However, Ecology felt it was important to reference these other actions related to air emissions at the facility in order to provide context and delineate the scope of the action at hand.

No changes were made to the Attainment Plan based on this comment.

Comment 15: Control strategy: required level of control/RACM

"In the SIP Required Level of Control / RACM section (p. 56), Ecology describes a condition within Agreed Order 21310 that requires Intalco to notify Ecology prior to any planned curtailment to the entire portion of potline A that Center 1's SO₂ wet scrubber system would serve. In the SIP, Ecology writes that if Center 1's pots are curtailed, then Ecology will evaluate the circumstances and take enforcement action as necessary. Ecology further states that, "For example, Ecology may require additional modeling to demonstrate achievement of the NAAQS when the credit for stack adjustments is not included." This section appears to indicate that if the SO₂ control is not operational for a period longer than periodic maintenance/malfunction, then Ecology may view it as a violation of the Agreed Order.

Comment: We ask that the statement of potential enforcement action or additional modeling in the event of Center 1's curtailment be removed from the SIP. Agreed Order 21310 requires

Intalco to notify Ecology if Center 1 pots are curtailed; however, the Agreed Order does not limit the duration of a curtailment. It should be recognized that if Center 1 pots are curtailed, then the resulting emissions are much lower (zero) than they would be when the SO₂ control is operational. In the Intalco SO₂ Attainment Plan Modeling Report, modeling demonstrates compliance when Center 1 pots are operational with and without the SO₂ wet scrubber control. Therefore, one can conclude that zero emissions for Center 1 would also demonstrate compliance."

Response:

As discussed in the Attainment Plan, Washington's rules require the installation and operation of an air pollution control device in order for a source to take credit for dispersion techniques in demonstrating compliance with an ambient air quality standard. Merging of the stacks at each Center constitutes a dispersion technique. Ecology and Intalco agreed to the installation of a SO₂ wet scrubber on Center 1, as detailed in Agreed Order #21310, to satisfy this state rule. As stated in the referenced section of the Attainment Plan, "...Ecology may require additional modeling to demonstrate achievement of the NAAQS when the credit for stack adjustments is not included." Because the SO₂ wet scrubber is required by state rules to allow for merging of all Center stacks, Ecology must evaluate if these dispersion techniques are still permitted if the associated air pollution control device is no longer being operated.

As mentioned in Intalco's comment, Agreed Order #21310 does not include any restrictions on the duration of a curtailment of the portion of Potline A venting to Center 1. Ecology does not believe that this needs to be quantified at this time. Rather, Ecology will review any curtailment to the portion of Potline A routed to Center 1 on a case-by-case basis. If Ecology determines that the requirements for allowed dispersion techniques are not being met due to a curtailment at Center 1, Ecology may require additional modeling without the use of the allowed dispersion techniques.

No changes were made to the Attainment Plan based on this comment.

Comment 16: Contingency measures

"The SIP Contingency Measures section (p. 84) explains that the Clean Air Act requires an attainment SIP to identify specific contingency measures that will be put in place should the SIP fail to make reasonable further progress or fail to bring the NAA into attainment by the applicable attainment date. Ecology identified three Contingency Measure Thresholds that would trigger the implementation of contingency measures. In particular, 'threshold exceedance' #3 would trigger contingency measures if a three-year design value at the Mountain View or Kickerville monitor is greater than 67.5 ppb, which is less than the 1-hour SO₂ NAAQS of 75 ppb. If SO₂ air monitoring stations' data exceeds any of the three thresholds, Ecology states they would require review of Intalco operations for violations of the Agreed Order 21310 and SIP. If the review finds that Intalco to seek one or more operational changes to implement as necessary 'to reasonably prevent any future monitored violation of

the standard.' The operational change would be implemented within at least 18 months of the date that the threshold exceedance was identified by Ecology."

Comment: We request that Ecology rephrase this section to remove the requirement of further operational changes in the event of "threshold exceedances" and instead focus on using the exceedances to review ambient air monitoring data, determine the cause of the "threshold exceedance", and, if needed, begin a conversation between Intalco and Ecology to review operational practices. Contingency measures are applicable if a NAA fails to make reasonable further progress or fails to meet the NAAQS by the applicable attainment date. Through this proposed provision, Ecology is seeking to implement contingency measures before the NAA would fail to meet the NAAQS. The potential to require further operational changes at Intalco if a lower-than-NAAQS threshold is exceeded (threshold #3's 67.5 ppb design value vs. the 75 ppb NAAQS) is unsupported because it is not a violation of the standard. Ecology fails to explain why they have selected a threshold that is below the NAAQS to prevent "a monitored violation of the standard" when this threshold is below the standard. Therefore, we suggest that if any "threshold exceedance" occurs, but the three-year design value is still below the NAAQS, Ecology should consult with Intalco to better understand the operational and/or meteorological conditions associated with peak monitored concentrations. This consultation may lead to a conclusion that continued Intalco operation without modification is still not likely to result in a NAAQS violation.

As one example, the consultation may determine that unusual (i.e., infrequent) meteorological conditions led to the elevated (but still less than the NAAQS) concentrations, and that no facility changes are needed at this time."

Response:

If any threshold exceedance occurs, Ecology will evaluate the operational conditions at Intalco and the meteorological conditions during the event. This evaluation would include a review to determine if Intalco's operations were the cause of the threshold exceedance. If Intalco's operations were determined to be the cause of the threshold exceedance, it would be necessary to determine if the facility was in compliance with Agreed Order #21310. If Intalco was in compliance with Agreed Order #21310, it's likely that the cause of the exceedance would be related to operational practices or emissions that were not accounted for in the modeling that was used to determine the unit-specific emissions limits set forth in Agreed Order #21310. The Contingency Measures section of the Attainment Plan specifies that in this specific scenario, Ecology would evaluate the need for additional operational changes.

Ecology chose the threshold levels specified in the Contingency Measures section to proactively identify and address elevated SO₂ levels before an exceedance of the 1-hour SO₂ NAAQS occurs. Ecology acknowledges that any threshold exceedance will require coordination and communication with Intalco to determine the appropriate response to the elevated SO₂ levels.

No changes were made to the Attainment Plan based on this comment.

Hearing memo

Copies of public comments

Hearing memo



Hearing Summary Memo

October 12, 2022

- TO:Laura Watson
DirectorFROM:Melanie Forster
Hearings Officer
- SUBJECT: SIP revision to bring the nonattainment area around the Intalco aluminum smelter into attainment of the sulfur dioxide NAAQS

| Program Name: | Air Quality Program |
|---------------|---------------------|
| Project Lead: | Anya Caudill |

Hearing #1 (webinar): 10 public attendees. No one provided testimony.

cc: Kathy Taylor, Program Manager
Martha Hankins, Air Quality Policy and Planning Section Manger
James DeMay, Industrial Section Manager
Joanna Ekrem, Acting Unit Supervisor
Anya Caudill, Project Lead
Katy Wolt, Agency Rules Coordinator

Copies of public comments

Patricia Davis

I fully support this action by Dept of Ecology. AND I thank the Dept of Ecology for working daily to protect people like me - the average citizen - from these lethal toxins. Thank you !

Patricia Davis

Subject: Public Comment INTALCO Sulfur Dioxide

Ms. Caudill and EPA staff: This email will represent my pubic comment to Agreed Order #21310 with regard to Intalco's sulfur dioxide emissions. In brief: thank you EPA for your diligence in protecting public health, the air we breathe and the planet itself. THANK YOU I support ECY and EPA efforts to get Intalco to take our health, air and planet seriously !

In addition to the proposed time lines, I would also like to request that Intalco be verifiably supervised, and I would also like to additionally suggest that "spontaneous/unexpected' inspections me made to ensure accurate and timely record keeping; and also emission verifications beyond those negotiated. VERIFY what they present.

Thank you

Laya Shriaberg

Please be REALLY STRICT with Intalco on their future sulphur dioxide emissions! As an elder citizen of Bellingham and with an already over-taxed personal respiratory system, please take care of me and my health! Put me first! Don't have a hand in contributing to overloading my and others' respiratory systems with corporately funded respiratory toxins. People come first not corporate aluminum smelters! I don't believe their "green" approach one bit! Please SCRUTINIZE them CLOSELY on their full accountability of their sulphur dioxide emissions!

Larry McCarter

Hello and thank you. Where is the paperwork showing EPA designated Ecology to manage these emissions and is that in the record and I just missed it? I wanted to comment that I assume the limits proposed are the most current, stringent limits of all pollutants and the order does not somehow permit the 'grandfathering' of any older, less stringent emission limit. Also, permitting the operation to simply start up and operate for another three years after this TOTAL SHUTDOWN and abandonment, before installing pollution controls is not fair to the children that live here; the best technology should be installed before any start up is allowed.

Randall Potts

As a resident of Whatcom County, I strongly and resolutely oppose any effort to reopen the Intalco aluminum smelter. Claims that the smelter can be a "green" industrial complex are nonsense.

As you know, despite curtailment, Ferndale's Intalco aluminum smelter continues to exceed safe emission levels of sulfur dioxide, a respiratory risk, in the region. This is unacceptable. The focus on 700 jobs versus the public health of all the residents of Whatcom county shows just how little incentive the county has to protect the health of its residents if jobs or tax revenue are at stake.

According to the proposed plans, the plant will need significant modification to produce "permanent and enforceable reductions to SO2 emissions" at the facility, including the installation and operation of a sulfur dioxide emissions control system. The plant will also need to merge existing stacks and increase the height of the merged stacks, as well as limit facility-wide and unit-specific sulfur dioxide emissions. These proposed plans are not clearly tied to deadlines and monitoring results that must be met before the plant can open, they are simply requirements for continued operation. Based on the lax regulatory oversight of Cherry Point, I am not confident that the county or any other public agency will enforce these "plans." And even if they did, we are still left with a dirty not "green" industrial plant.

Whatcom county has become a dirty industry safe zone with open coal trains passing through Bellingham and other cities in the region to reach Cherry Point and the broken promises and outright lies of the fossil fuel companies located there. The Intalco project will significantly degrade an already dangerous health situation for residents. As well, the project demands a sweetheart deal to get cheap energy to make the plant profitable. Again, public health is being put at risk by subsidising a dirty industrial project with energy that could be used to support non-polluting, truly green industries.

We need good paying jobs and affordable housing in Whatcom County, but not by creating further pollution. The level of corruption of local political officials in terms of controlling dirty industries is well documented and should not be ignored. Even our elected officials are more interested in donor money and union jobs connected to dirty energy than the health of their constituents. This is sad, but true.

The bottom line is that Whatcom county needs to be encourage to attract real green companies and build an economy based on improving the health and well being of its residents, the environment, our tribal obligations and our imperiled wildlife. I am counting on you to make that happen by blocking the return of Intalco's dangerously polluting plant.

Lummi Nation

The Lummi Natural Resources Department finds that the proposed Intalco Sulfur Dioxide Attainment Plan (Attainment Plan) is insufficient to ensure protection of air quality on and near the Lummi Indian Reservation, located less than 0.5 miles south of the currently designated sulfur dioxide non-attainment zone. While we agree with the provisions of the Attainment Plan and Agreed Order requiring (1) installation operation of a new sulfur dioxide scrubber, (2) merging of existing stacks and increasing the height of the merged stacks, and (3) limiting facility-wide and until-specific sulfur dioxide emissions, we feel that a more rigorous implementation plan is needed. Specifically, the Attainment Plan allows the facility to restart on or before April 30, 2025 without the aforementioned controls installed. We find it unfathomable that the State would permit polluting operations to resume prior to the installation of controls that the State deems (and Lummi Nation agrees) are absolutely necessary to reduce sulfur dioxide emissions from facility operations.

Intalco Aluminum LLC

On behalf of Intalco Aluminum LLC, please find our comments in the attached letter.

Intalco Aluminum LLC

4050 Mountain View Rd, Ferndale, WA 98248, United States Tel: 1 412 315 2900

October 14, 2022

Ms. Kelsey Holbrook Washington State Department of Ecology Industrial Section P.O. Box 47600 Olympia, WA 98503-7600

Re: Comments on the Intalco Sulfur Dioxide Attainment Plan

Dear Ms. Holbrook:

Intalco Aluminum LLC ("Intalco") would like to take this opportunity to provide comments on the Intalco Sulfur Dioxide Attainment Plan (dated September 2022),¹ or State Implementation Plan revision (SIP), developed by Washington State Department of Ecology ("Ecology") in response to the 1-hour sulfur dioxide (SO₂) nonattainment area (NAA) designation. Following the public comment period, we understand that Ecology will submit the SO₂ attainment plan for review by the US Environmental Protection Agency (EPA) and EPA will present its intended action (approval or disapproval), which will then be posted for public comment in 2023.

Intalco has worked with Ecology on some aspects of the SIP. Specifically, we negotiated with Ecology on the SO₂ emissions limits and operational conditions within Agreed Order 21310 (SIP Appendix D) and Intalco, and their consultant AECOM, developed the Intalco SO₂ Attainment Plan Modeling Report (SIP Appendix C). As the Intalco SO₂ Attainment Plan Modeling Report explains, Intalco has curtailed operations at the end of August 2020, thereby reducing SO₂ emissions to zero. Since then, the ambient air monitoring stations in the NAA have been measuring SO₂ concentrations at background levels, well below the 1-hour SO₂ National Ambient Air Quality Standard (NAAQS). Therefore, measures to be taken at the Intalco facility to reduce SO₂ emissions are only necessary should the facility restart operations and within the timeline cited in the Agreed Order.

Intalco has reviewed other aspects of the SIP posted for public comment and would like to provide feedback. Overall, we agree with Ecology's characterization of the SO₂ Attainment Plan Modeling Report prepared by Intalco and AECOM. We appreciate Ecology's recognition that the modeling report used conservative, worst case assumptions in that, as Ecology states, "The modeling presented assumes conservatism in the SO₂ emission control device (modeled at 80% efficiency) despite being designed for 90% efficiency), explicitly modeling scenarios if the SO₂ emission control device is non-operational, and including the maximum monthly average emissions of the

¹ <u>https://apps.ecology.wa.gov/publications/SummaryPages/2202035.html</u>

nearby modeled refineries to assume that the nearby sources emit constantly at the highest monthly emission rate."

There are a few notable areas of the SIP that Intalco requests revisions or clarification. The SIP sections and Intalco comments are described below.

Executive Summary, Introduction

In the SIP Executive Summary and Introduction sections (p. 12, 13), there is no mention of the Intalco curtailment or that Intalco is currently emitting no SO_2 because of the curtailment. This topic is not discussed until the Intalco Primary Metals Works Aluminum Smelter section (p. 20). As a result of the curtailment, the monitored SO_2 concentrations in the NAA have dropped to very low background levels. In a related matter, there have been some public news articles that vaguely refer to continued SO_2 issues during the curtailment period that are inaccurate.

Comment: We request that Ecology add a clarifying statement to the Executive Summary in which the Intalco curtailment is recognized as well as its effect upon the monitored SO₂ concentrations in the NAA. This simple revision could address potential misunderstandings of the facility's current status. Once Ecology finalizes the SIP, Intalco understands that the SIP will be submitted to EPA. A clarifying statement regarding the curtailment could also benefit EPA's review process during which EPA will review the SIP and present its intended action (approval or disapproval), which will be posted for a public comment period in 2023.

Intalco Primary Metals Works Aluminum Smelter

Ecology states that Alcoa built the Intalco Primary Metals Works aluminum smelter (Intalco) in 1965 in Whatcom County. (p. 20)

Comment: In the SIP Intalco Primary Metals Works Aluminum Smelter section, please note that the Intalco smelter began operations as Intalco Aluminum Corp., under the ownership of Alumax, Pechiney and Howmet. In 1998, Alcoa Inc. and Alumax merged, creating Alcoa Intalco Works. By 2006, Alcoa bought out its remaining partners; however, at all times Intalco has been the owner and operator of the facility.

Non-SO₂ Regulatory Actions

In the SIP Non-SO₂ Regulatory Actions section (p. 29), Ecology lists historical enforcement actions and notices of violation for Intalco related to pollutants other than SO₂.

Comment: We would like to request the removal of the "Ecology's Enforcement Actions" and "EPA Notices of Violation" sections, which are not relevant to the Intalco SO₂ Attainment Plan. Intalco has had no recent enforcement actions or notices of violation for SO₂, the pollutant at issue in the SIP.

Control Strategy – Required Level of Control / RACM

In the SIP Required Level of Control / RACM section (p. 56), Ecology describes a condition within Agreed Order 21310 that requires Intalco to notify Ecology prior to any planned curtailment to the entire portion of potline A that Center 1's SO₂ wet scrubber system would serve. In the SIP, Ecology writes that if Center 1's pots are curtailed, then Ecology will evaluate the circumstances

and take enforcement action as necessary. Ecology further states that, "For example, Ecology may require additional modeling to demonstrate achievement of the NAAQS when the credit for stack adjustments is not included." This section appears to indicate that if the SO₂ control is not operational for a period longer than periodic maintenance/malfunction, then Ecology may view it as a violation of the Agreed Order.

Comment: We ask that the statement of potential enforcement action or additional modeling in the event of Center 1's curtailment be removed from the SIP. Agreed Order 21310 requires Intalco to notify Ecology if Center 1 pots are curtailed; however, the Agreed Order does not limit the duration of a curtailment. It should be recognized that if Center 1 pots are curtailed, then the resulting emissions are much lower (zero) than they would be when the SO₂ control is operational. In the Intalco SO₂ Attainment Plan Modeling Report, modeling demonstrates compliance when Center 1 pots are operational with and without the SO₂ wet scrubber control. Therefore, one can conclude that zero emissions for Center 1 would also demonstrate compliance.

Contingency Measures

The SIP Contingency Measures section (p. 84) explains that the Clean Air Act requires an attainment SIP to identify specific contingency measures that will be put in place should the SIP fail to make reasonable further progress or fail to bring the NAA into attainment by the applicable attainment date. Ecology identified three Contingency Measure Thresholds that would trigger the implementation of contingency measures. In particular, "threshold exceedance" #3 would trigger contingency measures if a three-year design value at the Mountain View or Kickerville monitor is greater than 67.5 ppb, which is less than the 1-hour SO₂ NAAQS of 75 ppb. If SO₂ air monitoring stations' data exceeds any of the three thresholds, Ecology states they would require review of Intalco operations for violations of the Agreed Order 21310 and SIP. If the review finds that Intalco was in compliance but still caused the "threshold exceedance", Ecology will consult with Intalco to seek one or more operational changes to implement as necessary "to reasonably prevent any future monitored violation of the standard." The operational change would be implemented within at least 18 months of the date that the threshold exceedance was identified by Ecology.

Comment: We request that Ecology rephrase this section to remove the requirement of further operational changes in the event of "threshold exceedances" and instead focus on using the exceedances to review ambient air monitoring data, determine the cause of the "threshold exceedance", and, if needed, begin a conversation between Intalco and Ecology to review operational practices. Contingency measures are applicable if a NAA fails to make reasonable further progress or fails to meet the NAAQS by the applicable attainment date. Through this proposed provision, Ecology is seeking to implement contingency measures before the NAA would fail to meet the NAAQS. The potential to require further operational changes at Intalco if a lower-than-NAAQS threshold is exceeded (threshold #3's 67.5 ppb design value vs. the 75 ppb NAAQS) is unsupported because it is not a violation of the standard. Ecology fails to explain why they have selected a threshold that is below the NAAQS to prevent "a monitored violation of the standard" when this threshold is below the standard. Therefore, we suggest that if any "threshold exceedance" occurs, but the three-year design value is still below the NAAQS, Ecology should consult with Intalco to better understand the operational and/or meteorological conditions associated with peak monitored concentrations. This consultation may lead to a conclusion that continued Intalco operation without modification is still not likely to result in a NAAQS violation.

As one example, the consultation may determine that unusual (i.e., infrequent) meteorological conditions led to the elevated (but still less than the NAAQS) concentrations, and that no facility changes are needed at this time.

We thank Ecology for consideration of these comments during the public review process.

Sincerely,

Tia Daulph Site Manager Intalco Aluminum LLC E: <u>Tia.Daulph@alcoa.com</u>

Intalco Aluminum LLC

4050 Mountain View Rd, Ferndale, WA 98248, United States Tel: 1 412 315 2900

October 14, 2022

Ms. Kelsey Holbrook Washington State Department of Ecology Industrial Section P.O. Box 47600 Olympia, WA 98503-7600

Re: Comments on the Intalco Sulfur Dioxide Attainment Plan

Dear Ms. Holbrook:

Intalco Aluminum LLC ("Intalco") would like to take this opportunity to provide comments on the Intalco Sulfur Dioxide Attainment Plan (dated September 2022),¹ or State Implementation Plan revision (SIP), developed by Washington State Department of Ecology ("Ecology") in response to the 1-hour sulfur dioxide (SO₂) nonattainment area (NAA) designation. Following the public comment period, we understand that Ecology will submit the SO₂ attainment plan for review by the US Environmental Protection Agency (EPA) and EPA will present its intended action (approval or disapproval), which will then be posted for public comment in 2023.

Intalco has worked with Ecology on some aspects of the SIP. Specifically, we negotiated with Ecology on the SO₂ emissions limits and operational conditions within Agreed Order 21310 (SIP Appendix D) and Intalco, and their consultant AECOM, developed the Intalco SO₂ Attainment Plan Modeling Report (SIP Appendix C). As the Intalco SO₂ Attainment Plan Modeling Report explains, Intalco has curtailed operations at the end of August 2020, thereby reducing SO₂ emissions to zero. Since then, the ambient air monitoring stations in the NAA have been measuring SO₂ concentrations at background levels, well below the 1-hour SO₂ National Ambient Air Quality Standard (NAAQS). Therefore, measures to be taken at the Intalco facility to reduce SO₂ emissions are only necessary should the facility restart operations and within the timeline cited in the Agreed Order.

Intalco has reviewed other aspects of the SIP posted for public comment and would like to provide feedback. Overall, we agree with Ecology's characterization of the SO₂ Attainment Plan Modeling Report prepared by Intalco and AECOM. We appreciate Ecology's recognition that the modeling report used conservative, worst case assumptions in that, as Ecology states, "The modeling presented assumes conservatism in the SO₂ emission control device (modeled at 80% efficiency) despite being designed for 90% efficiency), explicitly modeling scenarios if the SO₂ emission control device is non-operational, and including the maximum monthly average emissions of the

¹ <u>https://apps.ecology.wa.gov/publications/SummaryPages/2202035.html</u>

nearby modeled refineries to assume that the nearby sources emit constantly at the highest monthly emission rate."

There are a few notable areas of the SIP that Intalco requests revisions or clarification. The SIP sections and Intalco comments are described below.

Executive Summary, Introduction

In the SIP Executive Summary and Introduction sections (p. 12, 13), there is no mention of the Intalco curtailment or that Intalco is currently emitting no SO_2 because of the curtailment. This topic is not discussed until the Intalco Primary Metals Works Aluminum Smelter section (p. 20). As a result of the curtailment, the monitored SO_2 concentrations in the NAA have dropped to very low background levels. In a related matter, there have been some public news articles that vaguely refer to continued SO_2 issues during the curtailment period that are inaccurate.

Comment: We request that Ecology add a clarifying statement to the Executive Summary in which the Intalco curtailment is recognized as well as its effect upon the monitored SO₂ concentrations in the NAA. This simple revision could address potential misunderstandings of the facility's current status. Once Ecology finalizes the SIP, Intalco understands that the SIP will be submitted to EPA. A clarifying statement regarding the curtailment could also benefit EPA's review process during which EPA will review the SIP and present its intended action (approval or disapproval), which will be posted for a public comment period in 2023.

Intalco Primary Metals Works Aluminum Smelter

Ecology states that Alcoa built the Intalco Primary Metals Works aluminum smelter (Intalco) in 1965 in Whatcom County. (p. 20)

Comment: In the SIP Intalco Primary Metals Works Aluminum Smelter section, please note that the Intalco smelter began operations as Intalco Aluminum Corp., under the ownership of Alumax, Pechiney and Howmet. In 1998, Alcoa Inc. and Alumax merged, creating Alcoa Intalco Works. By 2006, Alcoa bought out its remaining partners; however, at all times Intalco has been the owner and operator of the facility.

Non-SO₂ Regulatory Actions

In the SIP Non-SO₂ Regulatory Actions section (p. 29), Ecology lists historical enforcement actions and notices of violation for Intalco related to pollutants other than SO₂.

Comment: We would like to request the removal of the "Ecology's Enforcement Actions" and "EPA Notices of Violation" sections, which are not relevant to the Intalco SO₂ Attainment Plan. Intalco has had no recent enforcement actions or notices of violation for SO₂, the pollutant at issue in the SIP.

Control Strategy – Required Level of Control / RACM

In the SIP Required Level of Control / RACM section (p. 56), Ecology describes a condition within Agreed Order 21310 that requires Intalco to notify Ecology prior to any planned curtailment to the entire portion of potline A that Center 1's SO₂ wet scrubber system would serve. In the SIP, Ecology writes that if Center 1's pots are curtailed, then Ecology will evaluate the circumstances

and take enforcement action as necessary. Ecology further states that, "For example, Ecology may require additional modeling to demonstrate achievement of the NAAQS when the credit for stack adjustments is not included." This section appears to indicate that if the SO₂ control is not operational for a period longer than periodic maintenance/malfunction, then Ecology may view it as a violation of the Agreed Order.

Comment: We ask that the statement of potential enforcement action or additional modeling in the event of Center 1's curtailment be removed from the SIP. Agreed Order 21310 requires Intalco to notify Ecology if Center 1 pots are curtailed; however, the Agreed Order does not limit the duration of a curtailment. It should be recognized that if Center 1 pots are curtailed, then the resulting emissions are much lower (zero) than they would be when the SO₂ control is operational. In the Intalco SO₂ Attainment Plan Modeling Report, modeling demonstrates compliance when Center 1 pots are operational with and without the SO₂ wet scrubber control. Therefore, one can conclude that zero emissions for Center 1 would also demonstrate compliance.

Contingency Measures

The SIP Contingency Measures section (p. 84) explains that the Clean Air Act requires an attainment SIP to identify specific contingency measures that will be put in place should the SIP fail to make reasonable further progress or fail to bring the NAA into attainment by the applicable attainment date. Ecology identified three Contingency Measure Thresholds that would trigger the implementation of contingency measures. In particular, "threshold exceedance" #3 would trigger contingency measures if a three-year design value at the Mountain View or Kickerville monitor is greater than 67.5 ppb, which is less than the 1-hour SO₂ NAAQS of 75 ppb. If SO₂ air monitoring stations' data exceeds any of the three thresholds, Ecology states they would require review of Intalco operations for violations of the Agreed Order 21310 and SIP. If the review finds that Intalco was in compliance but still caused the "threshold exceedance", Ecology will consult with Intalco to seek one or more operational changes to implement as necessary "to reasonably prevent any future monitored violation of the standard." The operational change would be implemented within at least 18 months of the date that the threshold exceedance was identified by Ecology.

Comment: We request that Ecology rephrase this section to remove the requirement of further operational changes in the event of "threshold exceedances" and instead focus on using the exceedances to review ambient air monitoring data, determine the cause of the "threshold exceedance", and, if needed, begin a conversation between Intalco and Ecology to review operational practices. Contingency measures are applicable if a NAA fails to make reasonable further progress or fails to meet the NAAQS by the applicable attainment date. Through this proposed provision, Ecology is seeking to implement contingency measures before the NAA would fail to meet the NAAQS. The potential to require further operational changes at Intalco if a lower-than-NAAQS threshold is exceeded (threshold #3's 67.5 ppb design value vs. the 75 ppb NAAQS) is unsupported because it is not a violation of the standard. Ecology fails to explain why they have selected a threshold that is below the NAAQS to prevent "a monitored violation of the standard" when this threshold is below the standard. Therefore, we suggest that if any "threshold exceedance" occurs, but the three-year design value is still below the NAAQS, Ecology should consult with Intalco to better understand the operational and/or meteorological conditions associated with peak monitored concentrations. This consultation may lead to a conclusion that continued Intalco operation without modification is still not likely to result in a NAAQS violation.

As one example, the consultation may determine that unusual (i.e., infrequent) meteorological conditions led to the elevated (but still less than the NAAQS) concentrations, and that no facility changes are needed at this time.

We thank Ecology for consideration of these comments during the public review process.

Sincerely,

Tia Daulph Site Manager Intalco Aluminum LLC E: <u>Tia.Daulph@alcoa.com</u>