

December 20, 2018

Mr. Debebe Dererie  
Washington Department of Ecology  
P.O. Box 47600  
300 Desmond Drive SE  
Lacey, WA 98504-7600

**RE: Comments on Proposed WAC 173-415 Rulemaking**

Dear Mr. Dererie:

Intalco Aluminum (a wholly-owned subsidiary of Alcoa Corporation) appreciates the opportunity to participate in the Washington Department of Ecology's (Ecology) Chapter 173-415 WAC rulemaking process. As an industry directly affected by both the Chapter 173-400 and Chapter 173-415 rulemakings, we actively participated in the rulemaking's pre-proposal stakeholder activities and believe we have already provided meaningful input to this process. Our involvement so far has been to review and assess Ecology's pre-proposal draft, the proposed Chapter 173-415 regulatory requirements, and the supporting documentation available on Ecology's rulemaking web site.

Through this correspondence we wish to provide documentation of our official public comments regarding the proposed version of the regulation. Much of what we are commenting on has been previously discussed during Ecology's two stakeholder meetings and a subsequent conference call with members of Ecology's Air Program staff.

- 1. The proposed changes Ecology made to Chapter 173-415-030(7) are incorrect and inconsistent with the primary purpose given by Ecology in its filing with the Office of the Code Reviser.** Ecology's purpose for undertaking the Chapter 173-415 rulemaking is documented in its CR-102 "Proposed Rule Making" filing with the Office of the Code Reviser.<sup>[1]</sup> In the "Proposed Rule Making" document filed and recorded in the Office of the Code Reviser on November 7, 2018, the purpose of this rulemaking is to (1) align Chapters 173-405, 410, and 415 WAC with previously revised Chapter 173-400 WAC - General Regulations for Air Pollution Sources, the Clean Air Act (CAA) and the USEPA's SSM policy; and (2) **to make other changes specific to primary aluminum plants** and pulping mills and to correct typos and citations, and **clarify rule language without changing the intent of the rules.**

Similarly, on its Rulemaking WEB Site <sup>1</sup>, the Department of Ecology states its reason for proposing changes via this rulemaking is to align three air quality rules:

- Chapter 173-405 WAC — Kraft Pulping Mills
- Chapter 173-410 WAC — Sulfite Pulping Mills
- Chapter 173-415 WAC — Primary Aluminum Plants

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<sup>[1]</sup> <https://ecology.wa.gov/DOE/files/b5/b52f6154-8cb3-4332-bbe5-3c16478f0ab5.pdf>

<sup>1</sup> <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC173-405-410-415>

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with the August 2018 amendments to Chapter 173-400 WAC — General Regulations for Air Pollution Sources. Ecology revised Chapter 173-400 WAC to comply with EPA’s direction in the Startup-Shutdown-Malfunction State Implementation Plan Call (SSM SIP Call) (80 FR 33840) and to make other changes to address stakeholders' concerns and improve readability.

In the CR-102 document filed and recorded in the Office of the Code Reviser on November 7, 2018, Ecology states that other WAC-173-415 rule changes are to protect human health and the environment through early identification of excess emissions of fluorides by maintaining the monthly total fluoride performance testing frequency for the secondary emission control systems of primary aluminum plants.

2. **Monthly fluoride testing is not a requirement of the current WAC-173-415 regulation which needs to be maintained in the future WAC-173-415 regulation.** The currently applicable fluoride emission standard codified in WAC-173-415-030 states that “The emission of total fluorides from a primary aluminum reduction plant shall meet the MACT requirements specified in 40 CFR Part 63, Subpart LL.” The source testing required to demonstrate compliance with the applicable Subpart LL fluoride emission standard requires owners or operators to measure and record the emission rates exiting the outlet of the primary control system and the rate of secondary emissions exiting through each roof monitor, or for a plant with roof scrubbers, exiting through the scrubbers and to compute and record the average of at least three runs semiannually for secondary emissions and at least three runs each year for the primary control system.<sup>2</sup> By rule, WAC 173-415-030 has already replaced monthly secondary fluoride emission testing with a requirement to perform at least three runs semiannually for secondary emissions. Contrary to what was provided in Ecology’s CR-102 submission to the Office of the Code reviser, there is no codified monthly testing requirement to be maintained, the requirement to perform monthly fluoride emission testing significantly changes the testing requirement of the currently codified regulation; and the semi-annual testing baseline was not considered in Ecology’s Preliminary Regulatory Analyses,<sup>3</sup> rendering the analysis erroneous and incomplete.
3. **The requirement to perform monthly fluoride emission testing significantly changes the testing requirement of the currently codified regulation.** As previously noted in these comments, the currently codified Washington fluoride testing requirement in WAC-173-415 does not require monthly secondary fluoride emission testing. The codification of a requirement to perform monthly secondary fluoride emission testing through this regulation represents a 600% increase in the secondary emission source testing requirement. An increase of this magnitude can only be considered as a significant regulatory change. The cost to perform each in-house potline secondary emission performance test is typically about \$4,500 (USD). The cost associated with the currently codified testing requirement in WAC-173-415-030 and 40 CFR Part 63, Subpart LL is equivalent to a single secondary emissions performance test cost and the single primary emissions performance test cost. The increased performance test cost of the proposed requirements in WAC-173-415-030(7)(a) will be at least six times (6X) the secondary emission testing cost. The cost increase will be at least \$134,000, (USD) annually. This represents a significant increase in the burden of this regulation on our industry. Without providing quantitative and qualitative benefits to either human health or the environment, this regulation

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<sup>2</sup> 40 CFR 63, Subpart LL, §63.847(d)(1)

<sup>3</sup> Publication No. 18-02-039, November 2018

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does not comport with the requirements in RCW 34.05.328(1)(d) to determine that the probable benefits of the rule are greater than its probable cost.

4. **The testing requirement baseline used by Ecology in its Preliminary Regulatory Analyses<sup>4</sup> was erroneous and incomplete.** Ecology's failure to quantify, analyze, and include the significant adverse financial impact of the proposed WAC-173-415-030(7)(a) regulation in its regulatory analyses renders the justification presented in its regulatory analysis erroneous and incomplete. Ecology's failure to perform the requisite regulatory analyses results in the WAC-172-415 rulemaking falling short of the statutory requirements in RCW.05.328(2)<sup>5</sup> As is evidenced throughout these comments, the agency has failed to provide factual documentation of either sufficient quantity or quality so as to comply with the statutory requirements of RCW 34.05.328(1), or to provide documentation sufficient to persuade a reasonable person that its proposed monthly testing requirement is justifiably necessary to protect human health and the environment.
5. **The claim that monthly performance testing provides superior protection of human health and the environment is undocumented.** There are no health risk or adverse environmental effect assessments included in the 2018 Department of Ecology's rulemaking documentation to support a claim that monthly performance testing provides superior protection of human health and the environment or that monthly secondary emission performance testing provides an early identification of non-complying emission rates.

The CAA requires the EPA to conduct analyses of available technology and risks associated with source categories when reassessing and promulgating Residual Risk and Technology NESHAPs. Under the technology review, the EPA is required to review the technology-based standards and revise them, as necessary, pursuant to CAA section 112(d)(6). Under the residual risk review, the EPA is required to evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, **“to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.”** [Emphasis Added] Numerous data-based assessments are documented in EPA's 2015 Primary Aluminum Residual Risk NESHAP rulemaking Docket.<sup>6</sup> These assessments were used to inform the Final Rule that EPA promulgated in 2015.<sup>7</sup> In its 2015 final rule, the EPA determined that the NESHAP for prebake facilities (40 CFR 63, Subpart LL) **“provides an ample margin of safety to protect public health and prevent an adverse environmental effect,”**<sup>8</sup> even with its semi-annual performance testing provision [Emphasis Added]. The assertion that monthly total fluoride performance testing of primary aluminum plant secondary emissions is more protective of human health and the environment is arbitrary, undocumented and unsupported.

6. **The fluoride testing requirement of WAC 173-415-030(7) should be consistent with the testing requirements of the emission standards for which compliance is being demonstrated.** WAC

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<sup>4</sup> Publication No. 18-02-039, November 2018

<sup>5</sup> RCW 34.05.328(2). “In making its determination pursuant to subsections (1)(b) through (h) of this section, the agency must place in the rule-making file documentation of sufficient quantity and quality so as to persuade a reasonable person that the determinations are justified.”

<sup>6</sup> EAP-HQ-OAR-2011-0797

<sup>7</sup> 80 FR 62300

<sup>8</sup> 80 FR 62399

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173-415-030(7) establishes the applicable source testing requirements for demonstrating compliance with the emission standards in WAC 173-400, WAC 173-481, and WAC 173-415-030(1). Monthly source testing of primary aluminum plant secondary total fluoride emissions is not evidence of compliance or non-compliance with the semi-annual State emission standard in WAC 173-415-030(1). Therefore, to have a meaningful and value-added purpose, the testing requirements in the proposed WAC 173-415-030(7) rule should be revised to be consistent with the testing requirements in 40 CFR 63, Subpart LL, §63.847(d)(1) which will demonstrate compliance or non-compliance with the emission standard established by WAC 173-415-030(1).

- 7. Neither the 40 CFR 63, Subpart LL, WAC 173-415-030, nor the Washington Ambient Air Quality and Environmental Standards for Fluorides<sup>9</sup> establish an emission standard for “secondary total fluoride emissions.”** Ecology asserts in its CR-102 filing that aluminum plants have shown some history of exceedances of the secondary total fluoride emission standard, and as a result Ecology is proposing to require a monthly testing frequency to avoid undetected exceedances of the emission standard. [Emphasis added] WAC 173-415-030(1)(a), WAC 173-415-030(1)(b), and WAC 173-415-030(1)(c) establish the fluoride emission standards for primary aluminum plants located within the State. In general, these regulations require that primary aluminum plants comply with the applicable Federal NESHAP and the Washington State Ambient Air Quality and Environmental Standards for Fluorides. Ecology’s rationale for requiring monthly testing does not provide evidence of excess emissions associated with either the WAC-173-415-030(1)(a) [i.e. 40 CFR 63, Subpart LL NESHAP] or the WAC-173-415-030(1)(b) and WAC-173-415-030(1)(c) standards. Therefore, the stated purpose of the proposed rule to require a monthly testing frequency to avoid undetected exceedances of a “secondary total fluoride emission standard,” is unsupported because a secondary total fluoride emission standard does not exist. Furthermore, Ecology fails to demonstrate or cite any relevant history of such exceedances.

Accordingly, until such time as the Department of Ecology can provide requisite documentation that public health and the environment will be improved through monthly secondary emission testing beyond that which is provided by 40 CFR 63, Subpart LL and WAC-173-415-030(1); and how monthly performance testing will preclude exceedances of the applicable semiannual state and Federal emission standards, Ecology should remove the exception from WAC-173-415-030(7)(a), and delete the proposed regulatory text in WAC-173-415-030(7)(b), and WAC-173-415-030(7)(c).

- 8. Stakeholder discussion during the pre-proposal phase of this rule-making included a request for Ecology to identify the remaining applicable requirements in WAC 173-415, to shift those into a new source category-specific section in WAC 173-400, and then to rescind this Primary Aluminum Plants regulation.** The regulatory reform attributes of streamlining the regulations and rescinding WAC-173-415 are undeniable. The Industrial Section affirmed the merits of this action, and we note the soft commitment Ecology offers to accomplish this action.<sup>10</sup> Unfortunately, the agency’s intention to include extensive and poorly supported source testing requirements into WAC 173-415-030(7) works against this ultimate outcome.

The mismatch of this proposed language with source category NESHAP requirements and the existing WAC 173-415 language has been discussed. Setting aside the merits of any additional source testing interests, the proposed rule language also would create a significant rule-structure

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<sup>9</sup> WAC Chapter 173-481

<sup>10</sup> “Ecology committed to adding this proposal to the rules docket for future rulemaking consideration,” Section 6.3.1, page 26, *Preliminary Regulatory Analyses, Chapter 173-405, WAC 173-410, WAC 173-415*.

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problem. First, a choice to bury these unique requirements in the regulation creates applicable requirements for other primary aluminum plants. These uber-source test requirements are aimed specifically at Intalco. They may or may not be appropriate for other plants, a consideration that should be based on a customized source-specific review. Second, any agency interest in source-specific monitoring requirements can be most efficiently imposed through a regulatory order and Air Operating Permit addition. They do not need to be codified in nearly a full page of regulation language. Ecology certainly has this regulatory authority. Finally, placing these requirements in rule complicates the eventual WAC 173-415 to WAC 173-400 transfer. The agency should be strategic in taking the first step to that desired outcome.


9. **Ecology glosses over important elements of the required APA Significant Legislative Rule review. (RCW 34.05.328)** For example, as this proposed rule is drafted it would impose a significantly greater source testing cost burden for Total Fluoride compared to the current WAC 173-415 (as much as \$134,000 for the Intalco plant/year) Yet, the agency analysis states there will be no added costs attributable to the proposed regulation language.<sup>11</sup> This misunderstanding also then impacts the analysis of the “probable benefits needing to exceed the probable costs.” Further, the proposed rule language clearly differs from “any federal regulation ... applicable to the same activity...”. How is that difference supported by the proposed regulation language and what is the state statute and supporting evidence which justifies the more intensive state regulation? Finally, there is an over-arching obligation for the state to consider the SLR statutory elements and available evidence, and to adopt the “least-burdensome alternative for those required to comply with it...”.

We suggest this comment letter adds insights on the proposed WAC 173-415 rule language revisions that have not be adequately considered in the Significant Legislative Rule evaluation. We would welcome another opportunity to meet with the agency to discuss and then develop a less burdensome regulation that accomplishes public interests in evaluating the impact of total fluoride emissions on human health and the environment.

10. **We support Ecology’s proposed rulemaking that aligns the statewide WAC-173-415 rule with the General Regulations for Air Pollution Sources (WAC-173-400), the Federal Clean Air Act, and the Environmental Protection Agency startup, shutdown, and malfunction policy.** As indicated previously, we are pleased to have this opportunity to participate in your rulemaking process and to provide meaningful comments on Ecology’s proposed rule that will directly impact our primary aluminum production businesses that are located in Washington. As a point of emphasis, our records indicate that there have been no exceedances of either the WAC-173-415-030(1) or the applicable 40 CFR 63, Subpart LL fluoride emission standard since their applicability date; and we have also not documented non-compliance with the requirements of WAC-173-481-100 or WAC-173-481-110 since monitoring began.

Should you have any questions about any of our comments, or wish to discuss them with us, please contact Kathryn Mitchell by phone at (360)-961-6720, or by electronic mail at [Kathryn.mitchell@alcoa.com](mailto:Kathryn.mitchell@alcoa.com).

Very truly yours,



Ronald Jorgensen

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<sup>11</sup> Ibid, page 24

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Plant Manager  
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CC:

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