DEPARTMENT OF
ECOLOGY
State of Washington

Concise Explanatory Statement

Chapter 173-400 WAC

General Regulations for Air Pollution Sources

and

Chapter 173-401 WAC

Operating Permit Regulation

Summary of rulemaking and response to comments

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Air Quality Program
Washington State Department of Ecology
Olympia, Washington

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Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology's response to public comments.

This Concise Explanatory Statement provides information on The Washington State Department of Ecology's (Ecology) rule adoption for:

Title and Chapter(s):	Chapter 173-400 WAC General Regulations for Air Pollution Sources and Chapter 173-401 WAC Operating Permit Regulation
Adopted date:	August 16, 2018
Effective date:	September 16, 2018

To see more information related to this rulemaking or other Ecology rulemakings please visit our website: https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking.

Reasons for Adopting the Rule

The amendments focus on the General Regulations for Air Pollution Sources, the Operating Permit Regulation, and revising the State Implementation Plan (SIP). Because of federal court rulings, the US Environmental Protection Agency (EPA) has officially notified Washington (and 35 other states) to change their current rules and update their SIPs to correct the identified deficiencies (a SIP call[1]).

The primary purpose of this revision is to align Chapter 173-400 WAC with federal court decisions[2] holding that emission standards apply at all times, even during periods of startup, shutdown and malfunction (SSM), and without automatic or discretionary exemptions. These decisions and EPA's SIP call require us to correct overly broad enforcement discretion and other provisions that would bar enforcement by EPA or other parties in federal court. Existing Ecology rules exempt exceedances of an emission standard during SSM, or allow avoidance of enforcement actions against a company for these emissions.

[1] See State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, Final Action [SSM SIP Call], 80 FR 33839 (June 12, 2015).

[2] NRDC v. EPA, 749 F.3d 1055, 1063 (D.C. Cir. 2014) and Sierra Club v. Johnson, 551 F.3d 1019 (D.C. Cir. 2008). See the settlement agreement based on Sierra Club et al. v. Jackson, No. 3:10–cv–04060–CRB (N.D. Cal.).

Under Ecology's existing rule, facilities are not required to meet emission limits during periods of SSM, and EPA interprets our rule language to bar enforcement of excess emissions during periods of SSM under the federal Clean Air Act. Additionally, the state rule includes director's discretion provisions and automatic exemptions that violate the federal Clean Air Act. This rulemaking aligns our rule with the current federal requirements by removing impermissible provisions, establishing new alternative standards for opacity during startup or shutdown, and establishing a process to set facility specific permit limits for existing sources that exceed an emissions standard in the SIP.

We also changed public notification procedures based on a recent EPA rule that allows website posting of public notice of the start of a public comment period and draft permits in the Prevention of Significant Deterioration (PSD) and Air Operating Permit programs.[3] We extended website posting to these programs and our small source pre-construction permitting program. We will continue requiring publishing notice in a newspaper until June 30, 2019, to provide communities that rely on the one-day newspaper notice a transition period to web-posting.

This rulemaking also addresses stakeholder concerns about impacts from small nonroad engines (such as lawnmowers, small generators, and outdoor power tools) while providing ongoing environmental protection by evaluating impacts from nonroad engines on a project-by-project basis rather than on a site-wide basis. We concluded that a project basis is more representative of operations performed by nonroad engines and of the original intent for how the section would operate.

Other rule amendments include:

- Outlawing wigwam and silo burners.
- Updating the definition of volatile organic compounds (VOC) to reflect the current federal definition.
- Correcting typos and clarifying rule language without changing its effect.
- Updating the adoption by reference of federal rules from January 1, 2016 to January 24, 2018.
- Deleting redundant requirements for catalytic cracking unit and sulfuric acid plants.

Below is a summary of the rule amendments

Startup, shutdown, malfunction-related provisions:

- Remove exemptions from emissions standards and replace the exemptions with opacity standards for some types of sources.
- Create a process to establish facility specific permit limits for existing sources that exceed an emissions standard in the SIP during startup and shutdown.
- Simplify the notification process related to excess emission events.
- Align unavoidable excess emission provisions with federal limitations, EPA policy, and the state law.

[3] See 81 Federal Register 71613 (October 18, 2016).

Other provisions:

- Require an agency to post notice of a public comment period and draft permits on its website instead of requiring publication in a newspaper and a physical location for permit materials for the following permit actions: Prevention of Significant Deterioration and Air Operating permits, permit actions with a mandatory public comment period, and permit actions with significant public interest. Publication in a newspaper is required through June 30, 2019.
- Outlaw existing and new wigwam and silo burners on January 1, 2020.
- Simplify the application of nonroad engine requirements.
- Update the definition of volatile organic compounds (VOC) to reflect the current federal definition.
- Delete requirements for catalytic cracking unit and sulfuric acid plants.
- Correct typos and clarify rule language without changing the effect.
- Update adoption by reference of federal rules from January 1, 2016 to January 24, 2018.

Differences Between the Proposed Rule and Adopted Rule

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the *Washington State Register* and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are some differences between the proposed rule filed on February 5, 2018 and the adopted rule filed on August 16, 2018. Ecology made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The following content describes the changes and Ecology's reasons for making them. Where a change was made solely for editing or clarification purposes, we did not include it in this section. The additions to the language are underlined and the deletions have strikethrough text.

Chapter 173-400 WAC – throughout rule

- Retained the publication date of the Ecology "Source Test Manual - Procedures for Compliance Testing" because the date establishes the version of the document that had been available for review during the public comment period.
- Added both "malfunction or upset" when the text referenced either term because the provisions apply to both events, which are not the same thing.

WAC 173-400-025 Definitions

- Alternative emission limitation: Expanded to include "alternative emission limit."
- Industrial furnace: Deleted the confusing and unnecessary definition.
- Federally enforceable: Deleted the reference to an engineering calculation that does not exist.
- Hog fuel: Clarified that the term includes hogged fuel.
- Volatile organic compound (VOC): Added alternate names of several chemicals that are not VOC.
- Excess emissions: Clarified that the term also applies to permit-established limits that could be lower than an applicable emission standard.
- Wood waste: Changed the name of the defined term to "waste wood" to remove confusion between air quality and solid waste rules, and clarified that the term also applies to wood materials from forest health logging, land clearing or pruning. Replaced "wood waste" with "waste wood" throughout rule.

WAC 173-400-040 (2) Visible emissions.

(e)(i) A planned startup or shutdown means that the owner or operator notifies the permitting authority:

~~(i)~~(A) At least twenty-four hours prior to the planned boiler startup or shutdown; or
(B) ~~As early as possible, but not later than~~ Within two hours after restarting the boiler for a startup within 24-hours after the end of an unplanned shutdown (i.e., malfunction or upset).

Reason for change
We added omitted language that specified that a planned startup or shutdown of a hog fuel or wood fired boiler means the owner or operator provides notice. We clarified the period for a restart after an unplanned shutdown, and that an unplanned shutdown includes an upset, to distinguish that a malfunction and upset are not the same thing.

(e)(vi) The facility complies with one of the following ~~work practice~~ requirements:

Reason for change
We deleted "work practice" because only one of the two requirements is a work practice requirement.

(e)(vi)(B)(II) In the boiler, use only clean fuel ~~in the boiler~~ identified in 5.b. in Table 3 in 40 C.F.R. Part 63, Subpart DDDDD;

Reason for change
We clarified that the federal rule identifies what constitutes clean fuel.

(e)(vi)(B)(III) ~~Once you start to feed the boiler any fuels that are not clean fuels, you must~~ Engage all applicable control devices so as to comply with the ~~emission limits~~ 20 percent opacity standard within four hours of the start of supplying useful thermal energy;

Reason for change
We clarified that the rule requires compliance with the 20 percent opacity standard within four hours after the start of supplying useful thermal energy. We removed text to reduce confusion on whether the use of non-clean fuels or the start of supplying useful thermal energy is used as a reference to the four-hour limit.

(f) Furnace refractory alternative visible emission standard. This provision takes effect on the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. For emissions that occur during curing of furnace refractory in ~~an existing~~ a lime kiln~~, industrial furnace,~~ or boiler, visible emissions (as determined by ecology method 9A) shall not exceed forty percent opacity for more than three minutes in any hour, except when (b) of this subsection applies. For this provision to apply, the owner or operator must meet all of the following requirements:

Reason for change
To reduce confusion around our intent, we deleted "existing" to clarify that the provision applies to all lime kilns, both current and future. We also deleted "industrial furnace" because the proposed definition for this term was confusing and unnecessary; lime kilns and boilers more appropriately reflect the universe of sources covered by this provision.

WAC 173-400-050 Emission standards for combustion and incineration units.

(1) Combustion and incineration emissions units must meet all requirements of WAC 173-400-040 and, in addition, no person shall cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf), except, for an emissions unit combusting waste wood ~~derived fuels~~ for the production of steam.

Reason for change
We substituted the newly defined term "waste wood" for the undefined and therefore confusing phrase "wood derived fuels" to clarify intent.

(4) Commercial and industrial solid waste incineration units constructed on or before November 30, 1999.

(c) (ix) Air curtain incinerators….

(A) 100 percent wood waste, as defined in 40 C.F.R. 60.2265.

(B) 100 percent clean lumber.

(C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste, as these terms are defined in 40 C.F.R. 60.2265.

Reason for change
We clarified that the federal rule provides the definition for these terms.

WAC 173-400-082 Alternative emission limit that exceeds an emission standard in the SIP.

(2)(a)(iii) WAC 173-415-030 (3)~~(a)~~; and

Reason for change
The reference was incorrect so we corrected it.

(3)(c)(iii) Demonstrate why it is not technically feasible to use the existing control system or any practicable operating scenario that would enable the emission unit to comply with the SIP emission standard, and avoid the need for an alternative emission ~~standard~~ limit;

Reason for change
We corrected the term.

(4)(a)(i)(B) Specify the reason(s) for determining the request is incomplete, if applicable.

Reason for change
We clarified the intent of the provision.

WAC 173-400-108 Excess emissions reporting.

(2)(b) Chapter 173-401 WAC source: As provided in WAC 173-401-615(3) and subsection (4) of this section. Subsection (3) of this section does not apply to a chapter 401 source reporting under WAC 173-401-615.

~~(f) Exemption. A chapter 143-401 WAC source must report information required by WAC 173-401-615. If the source reports this information, it is exempt from (a) through (e) of this subsection. Subsection (4) of this section continues to apply.~~

Reason for change
We consolidated all excess emissions reporting for chapter 401 sources (Title V) in one location.

(4) (c) All additional information required under WAC 173-400-109 ~~(2), (3), (4) ((or)),~~ (5)~~, or (6)~~ supporting the claim that the excess emissions were unavoidable.

Reason for change
We removed unnecessary references because only subsection (5) requires additional information.

WAC 173-400-109 Unavoidable excess emissions.

(2) The owner or operator of a source shall have the burden of proving to the permitting authority ((or the decision-making authority)) in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under subsection~~((s (3),)) (4)((and))~~ (5))) of this section.

Reason for change
We corrected the reference from subsection 4 to 5.

(5) Excess emissions due to an upset((s)) or ~~equipment~~ malfunction((s)) will be considered unavoidable provided the source reports as required by WAC 173-400-108 and adequately demonstrates to the permitting authority that:

Reason for change
We deleted the sole use of "equipment malfunction" in the rule for consistent application of the term "malfunction."

WAC 173-400-171 Public notice and opportunity for public comment.

(6)(a)(vi), (7)(a), and (10)(a)

Change
We removed the requirement to exclude a Washington State holiday that falls within a public comment period from the day count.

Reason for change

A simple count of days was easier to understand and reduced the possibility for errors in calculating the length of a public comment period.

(6)(a)(vi) and (8)

Change

We removed "thirty-day" before "public comment period."

Reason for change

We removed "thirty-day" before "public comment period" because thirty-days is a minimum comment period.

(6) Public notice components. ~~Public notice must be posted by noon of the first day of the public comment period.~~

Reason for change

We deleted the sentence because it does not cover the content of a public notice. Refer to subsection (7) (Length of the public comment period) for posting requirements.

(6)(a)(vi) Start date and end date for a ~~thirty-day~~ public comment <u>period consistent with subsection (7) of this section</u>~~. If a Washington state holiday falls within this period, the holiday is not one of the thirty days.~~<u>;</u>

Reason for change

- We simplified the requirement.

(7)(a) The public comment period must <u>consist of a minimum of thirty days and</u> ~~extend~~ <u>start</u> at least thirty days prior to any hearing. ~~The thirty-day period must be counted as required in subsection (6)(a)(vi) of this section.~~ <u>The first day of the public comment period begins on the next calendar day after the permitting authority posts the public notice on their website.</u>

Reason for change

We clarified existing requirements and simplified the method to count the days in a public comment period.

(10)(a) At least thirty days prior to the hearing ~~(as counted as required in subsection (6)(a)(vi) of this section)~~ the permitting authority ~~will~~ <u>must</u> provide notice of the hearing as follows:

Reason for change

We clarified that providing notice is mandatory.

(10)(a)(i) Post the public hearing notice on the permitting authority website as directed by subsection (4) <u>and (7)</u> of this section;

Reason for change

We added a reference to subsection (7) for additional requirements related to the length of a public comment period.

WAC 173-400-740 PSD permitting public involvement requirements.

(2)(b)(i) Public notice must be posted on ecology's website ~~by noon of the first day of the public comment period~~ for a minimum of thirty days. Day one of the public comment period begins on the next calendar day after ecology posts the public notice.

Reason for change
We clarified the length of the website posting and simplified the method to count the days in a public comment period.

(2)(b)(iii)(A) Post the extension notice on the same web ~~site~~ page where the original notice was posted;

Reason for change
We clarified that Ecology must post an extension notice on the same location (web page) as the original notice.

(2)(b)(iv) If a hearing is held, the public comment period must extend through the hearing date and comply with the notice requirements in subsection (4)(c) of this section.

Reason for change
We clarified that Ecology must notify the public at least thirty days prior to the date of the hearing and keep the public comment period open through the hearing date.

(3) Public notice content.
~~(a)The date the public notice is posted;~~
~~(j) The web site posting notice that includes the information in subsection (2)(b)(i) of this section;~~
(~~k~~i) The start date and end date of ~~for a minimum of a thirty-day~~ the public comment period consistent with subsection (2)(b)(i) of this section. ~~starting from the date of posting notice on the web site. If a Washington state holiday falls within this period, that holiday is not one of the thirty days~~;
(~~l~~j) A statement that a public hearing may be held if ecology determines within ~~a thirty-day~~ the public comment period~~, as determined by (k) of this subsection,~~ that significant public interest exists;

Reason for change
We streamlined the content of a public notice by:
- Removing the posting date because the notice must include the start and end date of the public comment period.
- Consolidating requirements.
- Simplifying the method to count days in a comment period.
- Removing the "thirty day" reference to a public comment period because this is a minimum length.
- Removing the requirement to exclude a Washington State holiday that falls within a public comment period from the day count because a simple count of days is easier to understand and reduces the possibility for errors in calculating the length of a public comment period.

(4)(a) The applicant, any interested governmental entity, any group, or any person may request a public hearing within the ~~thirty-day~~ public comment period established consistent with (2)(b)(i).

Reason for change
We removed the "thirty day" reference to a public comment period because this is a minimum length and added a reference to the subsection on the length of comment period.

(6)(b) Ecology shall post the final determination on the same web ~~site~~ page where the draft permit and public notice was posted according to subsection (2)(b) of this section.

Reason for change
We clarified that an extension notice must be posted on the same location (web page) as the original notice.

WAC 173-401-800 Public involvement.

(2)(d) Public notice must include:

(d)~~(i) The date the notice is posted;~~

(d)(ii) The start date and end date of the ~~thirty-day~~ public comment period. ~~If a Washington state holiday falls within this period, the holiday is not one of the thirty days~~;

Reason for change
We streamlined the content of a public notice by removing:

- The posting date because the notice already includes the start and end date of the public comment period.
- The "thirty day" reference to a public comment period because this is a minimum length.
- The requirement to exclude a Washington State holiday that falls within a public comment period from the day count because a simple count of days is easier to understand and reduces the possibility for errors in calculating the length of a public comment period.

(2)(e)(i) The permitting authority must post the draft permit and statement of basis (technical support document) on its web site for the duration of the public comment period.

Reason for change
We added the correct title of the technical support document for an air operating permit.

(3)(a) This comment period begins on the next calendar day after the permitting authority posts the public notice on their web site ~~date of~~ ((publication of notice in the Permit Register or publication in the newspaper of largest general circulation in the area of the facility applying for the permit, whichever is later.)) ~~posting notice on the permitting authority's web site. Public notice must be posted by noon of the first day of the public comment period~~;

Reason for change
We simplified the method to count the days in a public comment period.

List of Commenters and Response to Comments

Ecology accepted comments between February 5 and March 20, 2018.

We summarized and edited some of the comments in this section for clarity. You can see the original content of the comments we received at: http://ac.ecology.commentinput.com/?id=bfe7G.

Comments and Responses are grouped together and organized by topic. Under each topic heading, you can see all the comments Ecology received for that topic, followed by Ecology's single response to all the comments on that topic.

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		Boilers – Missing Text	B-5-3
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Affiliation	Commenter Name	Topics Where Comments Were Assigned	Associated Comment Numbers
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Comments on General Comments

Commenter: KapStone, Roberto Artiga - Comment B-3-1

Longview Fibre Paper and Packaging, Inc. dba KapStone Kraft Paper Corporation (KapStone) supports the industry comments submitted by the Northwest Pulp and Paper Association (NWPPA) on the proposed rulemaking.

Response to General Comments

Thank you for your comments.

Comments on General Comments – Support

Commenter: KapStone, Roberto Artiga - Comment B-3-5

We thank you for your outreach to our industry, and for the opportunity afforded to us to participate in this rule-making.

Commenter: Interfor, Sean Murphy - Comment B-1-3

We appreciate the tremendous effort that has gone into this rulemaking and are submitting our comments in the hopes to ensure that Ecology's regulations allow for safe and responsible operation of boilers during startup and shutdown situations using the lowest emission impact fuels.

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-12

Thank you for your extensive outreach to our industry to educate us, and then to listen and learn of our interests with the topics of this rule-making.

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-11

NWPPA supports the practical regulatory approaches proposed in WAC 173-400-107 Excess Emissions, -108 Excess Emission Reporting, and -109 Unavoidable Excess Emissions.

Commenter: Western States Petroleum Association, Jessica Spiegel - Comment O-1-2

WSPA appreciates Ecology's efforts to address WSPA's concerns during the rulemaking process, and intends to continue to work with Ecology to ensure that an adequate compliance approach is available for its members' Washington facilities.

Summary Response to General Comments – Support

We thank you for your support for this rulemaking. It is the result of many combined efforts.

Comments on SIP Call – General Comments

Commenter: Patricia Martin - Comment I-2-1

In reviewing the proposed language I am concerned with several changes that appear to be weakening regulations that are currently federally enforceable under the State Implementation Plan (SIP). Ecology has an obligation to enforce Washington State's more stringent laws.

- Ecology proposes to "Align unavoidable excess emission provisions with federal limitations, EPA policy, and the state law." Ecology's plan to "align" with federal

limitations and EPA policy may not be consistent with Washington' s more stringent standards, and should be reviewed in light of statutory authority before any "alignment" occurs. Exempting startup, shutdown and malfunction is prohibited under federal statute.

- Ecology plans to "Remove exemptions for emissions and replace (them) with opacity standards." This doesn't appear to be prohibiting the exemptions, just assigning them a measure of opacity. The law requires the SSM emissions be accounted for and controlled.

Setting opacity standards is not a means of control. Emission limitations set under the NSPS are intended to be “technology forcing," i.e., forcing industry to develop control technologies to meet standards that will become more and more stringent. When Ecology promulgates rules undermining these requirements - or fails to implement and enforce them -- it delays the development of more effective and efficient controls necessary to protect our air.

Please review the rules as proposed and remove those sections that allow emissions in excess of the SIP, including those caused by SSM and during transient mode(s) of operation.

Commenter: Western States Petroleum Association, Jessica Spiegel - Comment O-1-1

WSPA members are committed to achieving compliance with Washington's environmental regulations and support protection of the environment and consistent application of Ecology's rules. Environmental controls and compliance represent one of the largest investment categories at the Washington refineries. However, WSPA members are concerned about the proposed regulatory changes in relation to the operation of their businesses and their ability to maintain safety and compliance at their facilities.

The proposed revisions, specifically those provisions related to operation of equipment during periods of startup: shutdown, and malfunction (SSM) have significant impacts to WSPA members. WSPA has been actively involved in the stakeholder process during this rulemaking in an effort to ensure that Ecology understands the import of these proposed revisions.

Ecology's current rules contain an unavoidable excess emissions rule or "SSM rule" (WAC 173- 400-107) that is approved under the Washington State Implementation Plan (SIP) by the Environmental Protection Agency (EPA). The SSM rule has been carefully applied by Washington air permitting authorities for decades to excuse civil penalties for exceedances that could not have been reasonably avoided. Without this rule, owners and operators of facilities in Washington faces compliance exposure if they are unable to meet emission standards which are designed to be achievable during normal operations, when they experience unavoidable equipment malfunctions, or need to shut down equipment to safely perform necessary maintenance.

There are no apparent issues with the time-tested Washington SSM rule necessitating the current rulemaking. Rather, Ecology undertook this rulemaking in response to a 2015 SIP-call by EPA. EPA found that Washington and 35 other states do not meet certain Clean Air Act requirements due to the content of their SSM rules. Ecology proposes to revise its SSM rule to comport with the earlier SIP call. Today, however, EPA is reconsidering its criteria for review of state responses to the SIP call and may reach a different determination regarding the adequacy of Washington' s SSM rule. WSPA strongly encourages Ecology to reconsider the need to revise its rules until EPA has completed its reconsideration process.

Summary Response to SIP Call – General Comments

Historically, emission standards have only applied during normal operation which meant periods other than startup, shutdown and malfunction (SSM). The federal courts and EPA established that emission standards apply during all periods, including startup, shutdown, and malfunction.

The 2015 Federal Register notice identified specific deficiencies in WAC 173-400-107. The notice provides guidance on how states may replace existing, carte blanche exemptions for excess emissions during SSM events with alternative emission limitations. These alternative emission limitations become a legally binding restriction on emissions. An emission limitation can take various forms or a combination of forms (such as a numerical emission limit or a work practice standard). The primary criterion for an alternative emission limitation to be included in a State Implementation Plan or SIP is that there must be a limitation applicable to the source continuously, i.e., there can be no periods during which emissions from the source are legally or functionally exempt from regulation. As EPA said, "Alternative emission limitations applicable during startup and shutdown cannot allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions, as those would constitute impermissible de facto exemptions for emissions during certain modes of operation."[4]

The rule replaces existing carte blanche exemptions from meeting any emission standard with higher opacity standards for three situations: soot blowing/grate cleaning, hog fuel boilers, and refractory curing. The new more stringent opacity standard reduces permissible opacity-causing emissions. The rule eliminates and does not replace other carte blanche exemptions from meeting emission limitations and standards (such as those for orchard heaters) during start up and shut down.

In our rules, WAC 173-400-107 (Excess emissions) provides an affirmative defense for excusing excess emissions and associated civil penalties and is included in the Washington SIP. In the 2015 Federal Register notice, EPA directed Ecology to remove WAC 173-400-107 from the SIP. In 2011, we modified the rule text to invalidate WAC 173-400-107 once EPA removes it from the SIP.

We disagree with the comment that the proposed rule fails to comply with federal or state laws and rules. In 2011, we adopted WAC 173-400-108 (Excess emissions reporting) and WAC 173-400-109 (Unavoidable excess emissions) as replacement requirements to be effective once EPA removes WAC 173-400-107 (Excess emissions) from the SIP. In the current rulemaking we need to update the requirements in WAC 173-400-109 to align with federal court decisions, EPA's 2015 guidance[5] and the Washington Clean Air Act. The proposed text achieves the required alignment. RCW 70.94.431(8) requires Ecology adopt a rule provision addressing and forgiving excess emissions from enforcement if the excess emissions are unavoidable and "in accordance with the state implementation plan." Therefore, WAC 173-400-109(1)(b) states that emissions higher than an emission standard are a violation – regardless of the reason for the higher emissions – but may not be subject to a penalty if the regulating authority determines the emissions to be unavoidable using the

[4] 81 FR 33980.
[5] "Recommendations for Development of Alternative Emission Limitations Applicable During Startup and Shutdown," 81 FR 33980, June 12, 2015.

provided criteria. WAC 173-400-109(3) states that the section does not apply to an exceedance of a federal emission standard.

On April 24, 2017, EPA announced its intention to review its position on the 2015 SSM SIP call for possible modification or repeal. Until EPA officially revises this decision through a final Federal Register notice, we remain subject to EPA's finding of substantial inadequacy that directs us to remove WAC 173-400-107 from the SIP. When EPA removes WAC 173-400-107 from the SIP, this will trigger the applicability of WAC 173-400-108 and -109, and the alternative opacity standards for soot blowing/grate cleaning operations, hog fuel/wood fired boilers using dry particulate matter controls, and refractory curing. This also voids the existing exemptions for soot blowing/grate cleaning and orchard heating. The alternative standards provide reasonable alternative limits for three transient modes of operation that would not be available if we were to retain WAC 173-400-107 without undertaking this rulemaking.

Comments on SIP Call – Affirmative Defense

Commenter: TransAlta Centralia Generation LLC, David Nicol - Comment B-1-2

Removing the Affirmative Defense Clause Would Make SSM Fines Unavoidable

It is currently impossible for TransAlta Centralia Generation (TCG) to startup without opacity exceedances. If the affirmative defense clause is removed, then TCG will be fined for each startup. During SSMs, it would be impossible for TCG to ensure that opacity does not exceed 40% for more than three minutes in one hour, or fifteen minutes in eight hours. Chapter 173-400-040(2) WAC. Even at 40% it would be difficult -- if not impossible -- for TCG to achieve compliance during SSMs. Further, the proposed rulemaking does not indicate what the fines will be for opacity exceedances during SSMs. TransAlta is concerned about the potential economic impacts of these fines and that the proposed rulemaking makes it practically impossible to comply.

Response to SIP Call – Affirmative Defense

This is a two part response.

Part 1 addresses difficulty meeting the SIP limitation of 20% opacity during startup of a coal boiler.

> We recognize the difficulty that meeting the requirements of EPA's SSM SIP call requirements will give to many sources. EPA and Ecology acknowledge that some sources will need to change how they startup and shutdown equipment as a result of this federal action. Some sources may find it necessary to install additional or different emission controls than currently used.
>
> However, the SIP Call and the court cases leading to the SSM SIP Call make affirmative defenses illegal under federal law. While we might retain an affirmative defense provision in state rule, that rule could not be included in the SIP or relied on for defense in any potential federal enforcement action.

In consideration of the potential implementation difficulties and other factors, we are not making the vacature of WAC 173-400-107 immediate. Instead we are providing for delayed implementation to the date EPA finalizes the removal of this section from the SIP. We anticipate EPA's action could take several years after we submit our rule revision to EPA.

We encourage you to work with your regulator on an appropriate set of site-specific emission limitations that can include work practices that apply during startup of a coal unit. If the site-specific emission limitations are higher than the limits in state rule or the SIP, these limitations or procedures will need to be included in the SIP as a specific requirement for your plant through the procedures in WAC 173-400-082.

Part 2 asks about the monetary value of the fine for exceeding the opacity standard in state law and the SIP.

Your regulator, Southwest Clean Air Agency, will determine fines for opacity exceedances during unit startup. RCW 70.94.430 limits the penalty for a violation of a permit limit or emission standard. Your permitting agency will determine the exact amount of any penalty issued after looking at:

- The information you provide;
- Their enforcement program requirements;
- Any existing agreements with your facility and the Southwest Clean Air Agency related to enforcement included in your permit; and
- The enforcement guidance issued by Ecology and EPA.

Comments on SIP Call – TransAlta

Commenter: TransAlta Centralia Generation LLC, David Nicol - Comment B-1-3

Application of the proposed SSM rule to TransAlta Centralia Generation (TCG) is impermissible and any final rule should exempt the TCG. Application of the proposed rule to the TCG would also contravene the MOA signed with the State of Washington in 2010 as well as its enacting legislation, whereby TCG agreed, among other things, to install SNCR systems on both units for reduction of nitrogen oxides and committed $55 million in financial assistance for (i) economic development, (ii) energy efficiency and weatherization initiatives, and (iii) research in new energy technologies. In exchange for the benefits of entering into the Memorandum of Agreement, the State agreed, among other things, that (a) the plant's two units would not need to comply with the greenhouse gas emissions performance standard set forth in RCW 80.80.040 until December 31, 2020 and December 31, 2025, respectively, (b) the State would recognize that power generated at the plant "is a product that meets the greenhouse gas emissions performance standards of the State," and (c) the State would "provide certainty regarding environmental requirements that affect power generation operations" of the plant. Memorandum of Agreement at paragraph E. The continued operation of the plant is also an express condition of TCG's obligation to continue funding the above investments in Lewis County, which all parties agreed are necessary and desirable to help offset the significant economic impact of closing the two units. Memorandum of Agreement at Section 8.d. These commitments were enacted into legislation by Senate Bill 5769, codified in relevant part at

RCW 80.80.100 and RCW 80.80.110, which specifically prohibits the State from imposing any additional "operating or financial requirement or limitation relating to greenhouse gas emissions" on the plant such as those contained in the proposed rule. See RCW 80.80.110. The proposed SSM rule constitutes a requirement or limitation relating to greenhouse gases because it potentially affects TCG's ability to control emissions that fall within the definition of greenhouse gases in Washington. Accordingly, application of the proposed SSM rule to the TCG is impermissible and any final rule should exempt the TCG.

Response to SIP Call – TransAlta

Thank you for your views on the relation of our response to a federal requirement to provisions in state law and the memorandum of understanding between the Governor's Office and TransAlta. We do not agree with your interpretation that the proposed rule will regulate greenhouse gas emissions from your facility. We also are unable to exempt your facility from requirements that all other facilities in the state are required to meet under the federal Clean Air Act.

The federal courts and EPA have both determined that all sources must comply with emission limitations on a continuous basis. The courts have clearly stated that not having to meet any emission limitation during defined operating periods such as startup or shutdown does not equate to continuous compliance with emission limitations. Thus we are unable to provide you the carte blanche exemption from meeting requirements during boiler startup that you request. Similarly, the courts have found that an affirmative defense against enforcement due to certain types of emission exceedances is also impermissible under the federal Clean Air Act.

Ecology staff have endeavored to provide sources in Washington as much regulatory certainty as the requirements of federal and state laws require, yet allow flexibility for real operations at actual facilities. As discussed in the SSM SIP call, federal courts have determined that when the federal Clean Air Act says "continuous compliance" that is exactly what is meant - continuous. The courts and EPA have determined that continuous compliance does allow for different emission limits to apply during defined, short operating conditions, such as when starting up a boiler.

With your assistance, Southwest Clean Air Agency (your permitting agency) may develop site-specific startup emission limitations or operating practices to include in your Air Operating Permit. If these site-specific alternative emission limitations would result in the exceedance of an emission limitation in the SIP, the site-specific alternatives would have to be included in the Washington SIP as plant specific emission limitations similar to the emission limitations in the BART order for the facility.

Your assertion that our proposal will limit or restrict greenhouse gases from the facility is incorrect. Our proposal does not address greenhouse gases (which are not regulated under rules in the SIP) and does not alter any existing state or Southwest Clean Air Agency emission limitation or standard with which the plant must comply. The proposal is silent regarding TransAlta and makes no requirements for the facility to change fuels or otherwise alter its operating practices.

The amended rule allows permitting agencies to continue using their current approach concerning excess emissions occurring during startup and shutdown of emission units, like a coal boiler, until EPA acts on our request to amend the SIP to remove WAC 173-400-107 and include the changes in this proposal. There is adequate time before EPA acts on our SIP submittal for your or any other company to work with its local clean air agency and Ecology to develop and demonstrate site-specific alternative emission limitations that would apply during boiler startup. If the site-specific alternative emission limitations allow an emission standard in the SIP to be exceeded, then we also have time to go through the state and federal approval process outlined in WAC 173-400-082.

Comments on Adoption by Reference

Commenter: Patricia Martin - Comment I-2-2

I am concerned that rules adopted by reference might weaken Washington State's CAA. In light of the current federal administration's work to gut environmental regulations, adopting by reference should only be done when the rule is as stringent, or more stringent than existing Washington State regulations and statutes. The state has the prerogative to promulgate and retain more stringent air quality regulations, but lacks the authority to "backslide."

Response to Adoption by Reference

The federal rules that Ecology has adopted by reference do not weaken the Washington Clean Air Act. These federal rules provide emission controls for many sources that we do not regulate through a state rule. For example, our rule adopts by reference over 100 federal rules covering emissions of toxic air pollutants for large sources that a Washington rule does not cover. A regulated business must comply with a state and federal requirement, when both exist, which is why we try not to duplicate federal requirements in our rules. However, if we determine EPA has weakened an NSPS or an air toxics requirement (MACT rule) in a manner unacceptable to us, we can choose to not adopt the newer version and instead retain an earlier, more stringent version.

Comments on Boilers – 20% Moisture Content

Commenter: Interfor, Sean Murphy - Comment B-1-1

Interfor US, Inc. (Interfor) operates a hogged fuel-fired boiler at its Port Angeles sawmill. Particulate emissions from this boiler are controlled using an electrostatic precipitator (ESP). We request that the rule language not include the requirement under the definition of clean fuel that biomass have less than 20% moisture.

Interfor initially starts up its boiler on dry biomass with 20%). The boiler is not capable of being fully started up on dry biomass. Interfor continues to feed wet biomass to the cells in a stepwise process that warms the boiler and ESP as prescribed by the manufacturer. Once the ESP exhaust temperature reaches approximately 200dF and is able to maintain that temperature for 3 hours, the ESP is energized following safe operating procedures. This minimum exhaust temperature at which the ESP can safely be started is dictated by the manufacturer. Energizing the ESP within 1 hour of feeding "non-clean" fuel, as that term is defined in the proposed rules, and seeking to meet the 20% opacity standard within 4 hours of feeding "non-clean" fuel, will create a serious safety risk as this is well below normal operating temperature (N320dF) and results in significant condensation on the high voltage equipment.

Interfor appreciates Ecology's efforts to develop an alternative standard to address the unique needs of biomass boilers. However, we are concerned that the proposed rule language does not adequately address biomass boilers such as ours. Our boiler and ESP require time to get up to temperature. It is not possible to get a boiler such as ours up to temperature using just dry fuel such as shavings; the boiler needs hog fuel with its higher heat content to get up to temperature before turning on the ESP. It is a challenge in our region to keep even shavings below the 20% moisture content needed for clean biomass to meet the clean fuels definition. Our available biomass is clean, but even our driest material can exceed the 20% cap (depending on the season). The moisture content does not impact our emission levels, as Boiler MACT testing has demonstrated. Therefore, we request that the rule language not include the requirement under the definition of clean fuel that biomass have less than 20% moisture. We recognize that we must start our ESP as soon as it is safe to do so--a practice that we already engage in. However, requiring that the ESP be started within 1 hour of adding hog fuel to the combustion chamber and be fully energized within 4 hours of adding hog fuel is not physically possible with our boiler.

Response to Boilers – 20% Moisture Content

You requested that we modify the definition of "clean fuel" to eliminate the criterion that wood fuel be less than 20 percent moisture, supported by your experience on the difficulty of starting your boiler using wood fuel meeting the 20 percent limitation.

We wrote the alternative opacity work practice option knowing that facilities that energize their ESPs prior to starting the fire in the boiler have challenges to meet the 40 percent alternative opacity standard during startup and shutdown. An owner or operator of a boiler can make physical and/or operational changes to ensure compliance with the startup requirements and the 20 percent opacity standard at the end of the startup. These changes may include, but are not limited to, building a shed to hold or dry the fuel, purchase dry fuel, or modify the boiler to use auxiliary fuel to spread on the hog fuel.

The use of dry fuel during the startup period provides two benefits. First, it will minimize the production of air pollutants during the startup period. Second, since more of the energy available in the wood will be used to heat the firebox, boiler tubes and particulate control device (rather than heating water in the fuel to get the fuel dry enough to burn), the equipment can complete the startup process faster.

Based on this information we believe that there are options and alternative startup sequences that you can use to comply with either the emission limits in your permit or one of the two alternative emission limitations that apply during boiler startup.

The commenter incorrectly understands how the four-hour limit operates. The rule requires that you engage all applicable control devices to meet the 20 percent opacity standard within four hours after the start of supplying useful thermal energy, not after the start of feeding non-clean fuel. We amended the rule language to clarify this point.

Comments on Boilers – Extend Deadline

Commenter: Interfor, Sean Murphy - Comment B-1-2

Requiring that the ESP be started within 1 hour of adding hog fuel to the combustion chamber and be fully energized within 4 hours of adding hog fuel is not physically possible with our boiler. We believe that the rule should mirror the federal rule and allow a boiler operator to seek extensions of the 1 hour/4 hour requirements where longer periods are necessary in order to prevent unsafe work conditions. The boiler MACT rule, 40 CFR 63.7555(d)(13), states that if a source is "unable to safely engage and operate your PM control(s) within 1 hour of first firing of non-clean fuels, you may submit to the delegated permitting authority a request for a variance with the PM controls requirement, as described below."

The boiler MACT allows an extension of the deadline to engage dry controls where the permitting authority concludes that such an extension is justified to avoid a documented safety issue. We are unaware of a similar pathway under the proposed rule changes. We recognize that there is the ability to obtain alternative SIP limits under WAC 173-400-081, but this process is extremely burdensome and in our situation, and presumably also in the case of other small facility hog fuel boilers, an alternative limit is not necessarily needed. We just need additional time to warm up our ESP to prevent a serious safety concern which can occur when there is CO buildup in the ESP and excess moisture causes the ESP to spark.

We hope that Ecology shares our desire to avoid creating unsafe work conditions for our employees. We believe that the best means to do so is to copy the option allowed under the Boiler MACT rules (which are heavily referenced in the draft Ecology rules) and allow boiler operators to seek time extensions from their permitting authority upon a demonstration that the requirements in 40 CFR 63. 7555(d)(13) have been met. Failing to provide this pathway could result in conflicts between the state and federal rules with no commensurate environmental benefit.

If you believe that this pathway is already provided for under the rules (short of getting an alternative SIP limit under WAC 173-400-081) we request that you clarify that pathway and discuss exactly how such a time extension is granted in your response to comments.

Response to Boilers – Extend Deadline

The significant differences in what the federal boiler MACT rule and this rule accomplish make your request not possible as an option.

- The purpose of a MACT rule is to establish emission standards reflecting the application of control technology to minimize the emissions of hazardous air pollutants. The MACT standards do not consider whether ambient air quality standards or emission limitations in a SIP may be exceeded.
- Our rule proposal must consider whether the proposal would cause a SIP emission standard or emission limitation to be exceeded and whether these emissions would cause or contribute to an exceedance of an ambient air quality standard. As such, our proposal is to limit the quantity and duration of excess emissions (emissions above the standard). Including the opportunity for a permitting agency to allow a longer time-period for higher emissions makes it difficult to demonstrate that the proposed alternative emission limitation

for a startup would not cause or contribute to exceeding a national ambient air quality standard.

We recognize that there are legitimate safety and operational considerations in starting up boilers with dry particulate controls such as ESPs and bag houses. That is the reason for proposing this alternative emission standard. The process in WAC 173-400-082 provides the flexibility to get a facility-specific alternative emission limit so this is the mechanism to request an extension of the 1-hour or 4-hour limit to engage dry particulate controls and meet the otherwise applicable emission standard.

While it is acceptable to EPA to allow extended startup periods to address potential safety problems in the MACT standard, EPA does not allow this type of unilateral change in an emission standard in a SIP by a state without following the process in WAC 173-400-082.

See also the Response on Boilers – 20% Moisture Content.

Comments on Boilers – Notice Requirements

Commenter: Boise Cascade Wood Products, LLC, Eric Steffensen - Comment B-5-2

WAC 173-400-040(2)(e)(i)(B) requires a notification within two hours following an unplanned shutdown. The excess emission reporting requirements WAC 173-400-107 and 108 allow twelve hours to report excess emissions that are a potential threat to human health or safety, so unplanned shutdowns should not require a more stringent reporting requirement than 12 hours. Having similar reporting times that are consistent with other reporting requirements is less confusing for our operators. If 12 hours is acceptable when human health or safety is threatened, than it should also be adequate for an unplanned shutdown.

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-6

WAC 173-400-040(2)(e)(i) and (ii) — NWPPA appreciates the development of an alternative emission limit to apply during startup/shutdown periods. However, the notification requirements are unnecessarily prescriptive, and this could inadvertently preclude access to the proposed Alternative Emission Limit. The conditions defining startup are too limiting.

- What is the reasoning behind specifying "at least twenty-four hours" regulatory agency notice as a criterion for reliance on the AEL? The proposed rule language does not suggest the permitting authority intends to approve/disapprove a facility decision to startup/shutdown a boiler. As such, providing advance notice of boiler operation is a courtesy but with low regulatory oversight value. Why 24-hours as opposed to any other time period? Would a facility lose access to the AEL if a notice was delayed to less than 24-hours before a startup/shutdown?
- On boiler startup, what is significant about a two-hour notice window?

As perspective, we note that proposed WAC proposes a 12-hour timeframe to report excess emissions that potentially threaten human health of safety. Providing notice of a boiler startup is certainly less critical. Boiler operators and facility environmental professionals have numerous responsibilities during periods of equipment startup or shutdown. Adhering to good air pollution control practices may require attention to priorities other than submitting pro forma notices to a permitting authority within certain time windows.

Since the structure of the AEL does not suggest a permitting authority will/must make and announce a regulatory judgment based on the notice information, would it be acceptable to adjust the specific 24- and 2-hour notice windows from these regulation subsections, and simply require "timely" notices?

Summary Response to Boilers – Notice Requirements

A goal of this rulemaking was to establish alternative opacity emission standards for planned events. The 24-hour notice for a boiler restart or shutdown establishes that the event was planned. This timeframe was negotiated with stakeholders during rulemaking. Other states apply different metrics to determine a planned event. For example, Texas requires a ten day advance notice, Minnesota requires 24 hours advance notice for a planned shutdown if the shutdown would increase emissions, and Ohio considers planned maintenance without a two week notice to be a malfunction.[6]

While there is merit to consistent reporting requirements, the different reasons for the notice warrant the different periods. Reporting within 2 hours after restarting a boiler following an unplanned shutdown (not within 2 hours of a shutdown) maintains the integrity of the alternative standard for planned startups – that the plant is in the process of a normal startup of the boiler – and allows the permitting agency an opportunity to observe the startup to confirm compliance with the opacity emission standard.

The purpose of the 12-hour notice after an excess emissions event that threatens public health and safety is to allow an agency to be able to respond to inquiries from the public on what is happening at the plant and the nature of the emergency the plant is experiencing.

We revised the rule language to clarify that the alternative standard applies to a planned startup or shutdown, which means the facility notified the permitting authority 24 hours in advance of the shutdown. We also clarified that a planned notice for a restart after an unplanned shutdown must occur within a 24 hour period and we retained the requirement to provide notice within two hours after restarting the boiler.

Comments on Boilers – Missing Text

Commenter: Boise Cascade Wood Products, LLC, Eric Steffensen - Comment B-5-3

WAC 173-400-040(2)(e)(i) appears to be missing the phrase "Permitting authority is notified...". Without that verbiage, WAC 173-400-040(2)(e)(i) (A) and (8), do not make sense.

Commenter: Southwest Clean Air Agency, Wess Safford - Comment A-1-1

In WAC 173-400-040(2)(e), there appears to be missing text in (i)(A).

Summary Response to Boilers – Missing Text

We agree with the comments. We mistakenly omitted a statement that an owner or operator must notify the permitting authority if they want to use the alternative opacity standard. We revised the final rule to include this and clarified that this provision applies to a planned event.

[6] Texas: https://www.epa.gov/sites/production/files/2017-07/documents/ch_101_sect_101.211.pdf; Minnesota: http://epa.ohio.gov/portals/27/regs/3745-15/3745-15-06_Final.pdf; Ohio: http://epa.ohio.gov/portals/27/regs/3745-15/3745-15-06_Final.pdf.

Comments on Boilers – Startup

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-7

Consistent with its definition in WAC 173-400-030, "Startup" in WAC 173-400-040 (2)(e)(ii) should be considered the "setting in operation" of an emission unit. Contrary to (2)(e)(ii), boiler startup begins before "fuel is ignited in the boiler fire box." As one example, an early boiler startup action is to run the ID fan to purge any explosive gases from ducting, primary collectors, and the ESP or other dry collector. On some occasions particulate has collected on these surfaces and would be exhausted and measured as opacity (the ESP would not have been energized on a cold startup) at >20% for longer than three minutes.

There are certainly boiler unit and control equipment-specific considerations, but the point is that adherence to the -030 definition "setting in operation" phrasing for reliance on the startup AEL is superior to "fuel is ignited in the boiler."

Response to Boilers – Startup

The general definitions of startup and shutdown in WAC 173-400-030 apply to all source categories. Their use in WAC 173-400-040(2)(e)(ii) provides additional specific text to indicate the beginning and end of the startup or shutdown period to make the condition enforceable as required by EPA. We believe these definitions are neither contradictory nor redundant so we are not making the suggested change.

Based on the limited information we have, ID fans start running at the same time as the start of firing of the boiler (beginning of the startup); and thus the opacity due to the initial purging is covered by the alternative emission limit.

Comments on Definitions – Industrial Furnace

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-3

The proposed definition of "industrial furnace" references the federal definition in 40 CFR Part 260, a hazardous waste rule. It seems odd to inject a definition from an EPA hazardous waste regulation into WAC 173-400. Any association of "hazardous waste" with 40 CFR Part 63, Subpart DDDDD emission units could create perception problems and maybe unintended regulatory outcomes. Instead of referencing the list in the federal rule, perhaps it could simply be presented in full in the industrial furnace definition. The rule uses the term once in the provision for an alternative emission standard during furnace refractory curing.

Response to Definitions – Industrial Furnace

Thank you for pointing out the potential conundrum our definition could cause. We intended to use "industrial furnace" in a more generalized way than as a specific device used to dispose of hazardous wastes, aka an incinerator. Therefore, we are removing the definition from the rule and the reference to it.

Comments on Definitions – Transient Mode of Operation

Commenter: Patricia Martin - Comment I-2-7

The "transient mode of operation" and "alternative emission limitation" seems to be another name/means for a polluting industry to exceed a federal emission standard with Ecology's blessing. This is not acceptable.

Response to Definitions – Transient Mode of Operation

The amended rule for setting alternative emission limitation does not allow a facility to exceed a federal emission standard. The criteria in WAC 173-400-082(3)(c)(viii) do not authorize an alternative emission limitation to allow an applicable NSPS or MACT standard to be exceeded. Similarly other criteria in WAC 173-400-082(3) do not allow a NAAQS or PSD increment to be exceeded.

The amended rule establishes a process for approving a permit limit that is higher than a state emission standard in the SIP. The pollutants that may be covered include opacity, sulfur dioxide, particulate matter, and a local clean air agency emission standard or permit limit in the SIP. (WAC 173-400-082(2)). We believe this process includes sufficient safeguards to ensure that the alternative emission limit generated through this process sufficiently stringent. The process prevents the use of the alternative emission limitation prior to Ecology and EPA's approval.

Comments on Definitions – Consistent Terms

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-2

The proposed rule defines an alternative emission limit and also uses an alternative emissions standard. We assume these are synonymous, in which case it would be best to use a common term throughout the regulation.

Response to Definitions – Consistent Terms

An alternative emission limit and an alternative emissions standard are not synonymous terms in Chapter 173-400 WAC. We reviewed the use of these terms in the rule and corrected WAC 173-400-082(3)(c)(iii) because it should be alternative emission limit instead of standard. An alternative emission limit is established through a permit whereas the rule establishes an alternative emission standard.

Comments on Definitions – Malfunction/Upset

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-8

The language on malfunctions and shutdowns is confusing. The rule does not define malfunction, unplanned and upset. Clarification is needed. Is there a difference between upset and malfunction?

- WAC 173-400-040(2)(e)(i)(B) concerns when a boiler operator must report the startup of a boiler after "an unplanned shutdown (i.e., malfunction). The rule contains a note saying "A shutdown due to a malfunction is part of the malfunction."

- WAC 173-400-109(4) says that "Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset of malfunction under subsection (5) of this section."

There is no apparent reason for applying the alternative emission limit to a shutdown under one circumstance but not another, Likewise, an alternative emission limit for startup periods should apply regardless of whether the startup occurs after a shutdown related to a malfunction. The note is unnecessary and could be read to limit the applicability of alternative emission limits to only certain types of shutdowns.

Response to Definitions – Malfunction/Upset

The commenter suggests that we need to add definitions for common, long standing terms. We are not providing rule specific definitions of upset or malfunction in this rule. Instead, we intend that a dictionary such as the Merriam-Webster or Webster's New American provide the meaning given to these words.

The commenter correctly notes that we have inconsistently used upset and malfunction, and malfunction alone. We are modifying the rule for consistency so both terms are always used because in all cases where the text uses malfunction, we also mean upset. We also deleted the single use of equipment before malfunction.

The alternative opacity limitation is available to all startups of wood fired boilers with dry particulate controls. This includes startups after a malfunction or upset that resulted in a shutdown. All that is required to use the alternative opacity limitation is to provide notification to your permitting authority within the time limits in the rule – provided your permitting agency allows the use of the alternative limitation.

The commenter is correct in that the criterion in WAC 173-400-109(4) is intentional, and may limit the ability of the operator of a wood fired boiler to use the alternative limit during shutdown of the boiler. This requirement in WAC 173-400-109(4) applies to all emission units and sources, not just wood fired boilers. Its purpose is to clarify the treatment of emissions occurring during two specific situations. The first situation covers a malfunction or upset that causes excess emissions from an emissions unit during a normal, planned shutdown. The second situation covers the situation where there is a malfunction or upset with excess emissions during a normal, planned startup.

These situations are in contrast to the situation described in the footnote to WAC 173-400-040(2)(e)(i)(B). The footnote identifies that the excess emissions from a shutdown occurring due to a malfunction or upset are addressed as part of the malfunction or upset. The shutdown would not have occurred without the underlying malfunction. Even though the shutdown may have used the same procedures required for a planned shutdown, any excess emissions are considered to have occurred as part of the malfunction or upset.

Note that WAC 173-400-109(5) will provide a state-only affirmative defense for unavoidable excess emissions resulting from an upset or malfunction.

Comments on Definitions – Wood Waste

Commenter: Boise Cascade Wood Products, LLC, Eric Steffensen - Comment B-5-1

The rulemaking on WAC 173-350 Solid Waste Handling Standards proposes to remove the term hogged fuel from the definition of wood waste in WAC 173-350-100. Hog fuel will not be a wood waste nor a solid waste per the proposed rule WAC 173-350-021(3). Therefore, we support the comments being made today by the Northwest Pulp and Paper Association suggesting Ecology replace the terms hog fuel and wood waste with the following:

"Biomass or bio-based solid fuel" is fuel that consists of wood pieces or particles generated as a by-product from the manufacturing of wood products, and the handling and storage of raw materials, trees, and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, log sort yard material, effluent treatment solids, and non-hazardous secondary materials used as fuel in a combustion unit as approved by the Environmental Protection Agency through provisions of 40 CFR 241.

If Ecology intends to retain the term hog fuel in this rule making, then to simplify and clean-up the draft WAC 173400 definitions we propose the following:

- Definition 173-400-030(106) Wood Waste should be deleted and incorporated into the definition of Hog Fuel.
- Definition 173-400-030(45) Hog fuel should be changed to read: Hog Fuel (a.k.a. Hogged Fuel or Wood Fuel) is a fuel that consists of wood pieces or particles generated as a by-product from the manufacturing of wood products, and the handling and storage of raw materials, trees, and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, and log sort yard material, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate

Commenter: Department of Ecology, Waste 2 Resources Program, Chuck Matthews - Comment A-2-1

By definition, the proposed rule makes hog fuel a sub-category of "wood waste" which in turn is defined as a sub-category of solid waste. Hog fuel is most often managed as a commodity. W2R does not agree that hog fuel should be categorized as "solid waste." W2R recommends that "solid waste that consists of" be removed from the definition of "wood waste" to eliminate the presumption that all wood waste is solid waste. As written, the definition of "wood waste" suggests that units constructed to burn woody materials managed for fuel are automatically subject to the environmental impact statement requirement of RCW 70.95.700 and the operator certification requirements of RCW 70.95D.

Summary Response to Definitions – Wood Waste

Wood waste and hog fuel are not interchangeable with the suggested definition of "biomass or bio-based solid fuel." The suggested definition of biomass fuel would expand the scope of acceptable feed stocks to include "effluent treatment solids and non-hazardous secondary materials..." which are not considered a wood waste nor a hog fuel under Chapter 173-400 WAC. We did not change the rule as a result of this comment.

By proposing to use the definition of wood waste from Chapter 173-350 WAC, we mistakenly linked air quality and solid waste rules. To resolve this, we changed the defined term in our rule from "wood waste" to "waste wood," removed the reference to solid waste, and clarified that waste wood includes woody-forest products. The rule retains "hog fuel" as a defined term because this term appears in the rule.

Comments on Definitions – Wood Waste Consistency

Commenter: Boise Cascade Wood Products, LLC, Eric Steffensen - Comment B-5-4

Replace "wood derived fuels" in WAC 173-400-050 (1) with "hog fuel." Wood derived fuels is only one component of hog fuel.

Response to Definitions – Wood Waste Consistency

We agree that the provision could be clearer so the final rule replaces "wood derived fuels" with the new defined term of "waste wood" because this term reflects the intent of the provision and includes hog fuel.

Comments on Nonroad Engines – NSPS

Commenter: Patricia Martin - Comment I-2-5

I would like confirmation that Ecology's definition of non-road engine does not include engines subject to New Source Performance Standards (NSPS). Please confirm that WAC 173-400-035 does not apply to internal combustion engines subject to the NSPS.

Response to Nonroad Engines – NSPS

The definition of a nonroad engine in WAC 173-400-035 mirrors EPA's definition and does not apply to an internal combustion engine subject to a federal New Source Performance Standard (NSPS). The state rule applies to a non-road engine while the federal NSPS requirements apply to a stationary internal combustion engine, that is, an engine that is not a nonroad engine. See 40 CFR 60.4219 and 60.4248.

The significant difference between a nonroad engine and a stationary engine is the length of time the engine remains on a site. A nonroad engine remains on a site for less than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. If this same engine remains more than 12 consecutive months, it becomes a stationary engine subject to the federal NSPS rules and associated state permitting requirements. (WAC 173-400-030(60) and 40 CFR 1068.30)

Comments on Nonroad Engines – Project

Commenter: BP Cherry Point Refinery, James Verburg - Comment B-3-1

Ecology has amended WAC 173-400-035(4) and 035(5) by adding the verbiage "a project requires the installation and operation of nonroad engines...". More specifically in WAC 173-400-035(5), Ecology has removed language from the previous version that applied the >2000 bhp applicability threshold for a single engine to multiple engines as a "project". There are concerns with the new language.

For example, a large maintenance event at a large industrial facility or a refinery "turnaround" (TAR) would have several different specific job scopes. If Ecology's intent is to include a broad range of equipment and job scopes into a single cumulative total, it may force regulated parties to make many more requests or notifications of intent to operate in the > 2000 bhp and in in the > 500 and <= 2000 bhp range. The "cumulative" approach for nonroad engines performing separate tasks at industrial sites would be over burdensome especially given that most areas are currently in NAAQS attainment.

Ecology has not defined what a "project" is in the WAC 173-400-040 definitions nor in the body of WAC 173-400-035.

- Is a project a single engine or group of nonroad engines performing the same function within a small footprint (e.g., a group of engines linked to generators temporarily providing electricity to a construction or single maintenance project at an industrial site)?
- Or is the intent to group all of the nonroad engines within the fence line or property of an industrial facility, take the "cumulative" bhp of all of the engines no matter how big or small (trash pumps, light plants, small generators etc.) and call those a "project"?

Ecology should either 1) in the context of nonroad engines define a "project" to mean a single engine or series of engines in close proximity performing the same function or task or 2) remove the amended language from 173-400-035(4) and 173-400-035(5) in their entirety.

Response to Nonroad Engines – Project

We proposed the change because there were different viewpoints on whether the requirement to consider the cumulative brake horsepower (BHP) applied to a single engine on a site or whether it applied to all nonroad engines on a site. The proposed change reflects our original intent that the provisions apply to a project, that is, a single engine or a group of nonroad engines performing the same function, such as a construction project to install new equipment at a site or in the case of petroleum refinery, a maintenance turnaround. By not defining a "project," the rule remains intentionally broad to provide flexibility to determine what constitutes a project.

A facility does not need to track the movement of many small engines, like leaf blowers, because the definition of a nonroad engine does not include leaf blowers or similar handheld engines, lawn mowers, off road construction equipment, or similar self-propelled or handheld engines.

A facility that wants additional operational flexibility could work with its permitting agency to submit an evaluation of nonroad engines > 2000 BHP to determine the total BHP of nonroad engines that will not exceed a national ambient air quality standard. This approval could provide the notification required under WAC 173-400-035(5) for future projects.

Comments on Nonroad Engines – Exemptions

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-4

In WAC 173-400-035(a) and (b), Ecology should recognize the needed demonstration of NAAQS compliance associated with short-term, emergency use of non-road engines can be

confidently based on a regulatory and engineering judgment. In a time-constrained emergency situation, this will shorten the review time to receive the necessary written approval to proceed with non-road engine use. Unexpected/emergency events occasionally occur at pulp and paper facilities which require use of non-road engines. To be extremely conservative, NWPPA would suggest that non-road engine usages of 3 days per year or less would be recognized as compliant with the literal structure of these short-term ambient air quality standards. This would be based on a professional judgement and support expeditious permitting agency review and written approval. This reasoning is supported by EPA modeling guidance that discusses modeling of non-road engines. EPA proposes to ignore units that are used less than 500 hours in a year. In addition, other EPA guidance advises that emissions from infrequent startup/shutdown scenarios not be included in short-term NAAQS modeling analyses (I-hour NAAQS Modeling Guidance, US EPA, March 2011).

Response to Nonroad Engines – Exemptions

You suggest that non-road engine usages of 3 days per year or less be considered compliance with this provision. This suggestion presents concepts that are substantially different from the rule language published in the rule proposal notice. If Ecology made this change now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. We are willing to consider and discuss your suggestion as part of a different rulemaking to work on changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

Comments on Opacity – General Comments

Commenter: Bison Engineering, Inc., Erica Shuhler - Comment B-4-2

[Oral Testimony] I would be interested to know how the alternative opacity standards were established.

Response to Opacity – General Comments

The alternative opacity standards were established based on requests from the wood products industries. They provided some information to us on the use of work practice standards based on the boiler MACT requirements. We queried the local air pollution control authorities for appropriate opacity limits based on their actual experience with observing boiler emissions during startups and shutdowns and as provided in excess emission reports submitted by companies.

During the process to finalize the proposed limitations, we also solicited input from EPA Region 10 on our proposal as it relates to the requirements in the SSM SIP call.

For the opacity limit applicable to soot blowing and grate cleaning, the opacity limit was also based on permitting authority experience observing these events. Since during soot blowing and grate cleaning all emission controls are already in operation. we do not expect that the proposed 40% opacity standard will be exceeded, but that there may be more than 3 minutes in an hour where the opacity may exceed 20% at the small wood fired boilers located at wood products facilities.

For curing furnace refractory, the proposal is based on information supplied by several companies using Wellons Boilers. The proposed standard reflects the 36 hour Wellons curing procedure for wood fired units of 100 MMBtu/hr heat input or smaller when the opacity may exceed 40 percent for up to 3 minutes in an hour. During parts of the refractory curing process, the emissions will consist of considerable amounts of water droplets. This prevents the use of continuous opacity monitors to read opacity, thus the requirement that the opacity be based on visual observation by a certified opacity reader.

The proposal will allow for this necessary refractory curing prior to the unit resuming normal operation. The operators of the Kraft pulp mills asked that their lime kilns be offered the same alternative opacity allowance as the boilers because their kilns have the same issues as their boilers. The representatives did not propose an alternative time period that might be appropriate for their kiln operations. As a result, the proposed rule provides kilns and boilers the same 36 hour curing period. EPA guidance on refractory curing also supports the use of this time period.[7]

Comments on Opacity – Applicability

Commenter: TransAlta Centralia Generation LLC, David Nicol - Comment B-1-1

TransAlta Centralia Generation, LLC (TCG) operates an electricity generating plant located near Centralia. The plant burns coal in two electric generating units to produce approximately 10% of the power necessary for Washington State. The plant also combusts ultra-low sulfur diesel fuel in the two coal fired units for startup and shutdown purposes. The proposed opacity standards in WAC 173-400-040(2) and work practice requirements are not achievable for TCG.

Response to Opacity – Applicability

The work practice standards proposed are specifically for wood fired boilers with dry particulate emission controls. As you state, your facility is a coal fired power plant. The alternate opacity standards in WAC 173-400-040(2)(e) are not available to your facility. Your facility must comply with the startup requirements and emission limitations in your air operating permit.

Comments on Opacity – Alternative Opacity Standards

Commenter: Puget Sound Clean Air Agency, Carole Cenci - Comment A-2-1

The visible emissions section in WAC 173-400-040 allows exceptions to the twenty percent opacity visible emissions standard. We believe this provision will not apply in the Puget Sound Clean Air Agency jurisdiction as we have a more stringent corresponding rule in Regulation I, Section 9.03.

Response to Opacity – Alternative Opacity Standards

Comment acknowledged. As allowed by the Washington Clean Air Act (Chapter 70.94 RCW), Olympic Region Clean Air Agency, Northwest Clean Air Agency, Southwest Clean

[7] EPA, "Instructional Manual for Clarification of Startup in Source Categories Affected by New Source Performance Standards," EPA-68-01-41-13, October 1979.

Air Agency, and Spokane Regional Clean Air Agency also enforce their own rules that include more stringent opacity standards than the proposed alternative opacity standards. Each of these agencies will need to revise their rules if they determine that they want any of the less stringent alternative opacity standards to apply to businesses in their jurisdiction.

Benton Clean Air Agency and Yakima Regional Clean Air Agency use the state rules in Chapter 173-400 WAC so they can immediately implement and enforce the final rule.

Comments on Opacity – Rule Citation

Commenter: Bison Engineering, Inc., Erica Shuhler - Comment B-4-1

[Oral Testimony] What are the rule citations for the alternative opacity standards, and in particular, regarding hog-fuel fired boilers or wood-fuel fired boilers?

Response to Opacity – Rule Citation

Alternative opacity standards are found in:

- WAC 173-400-040(2)(a)(i) for soot blowing and grate cleaning.
- WAC 173-400-040(2)(e) for a hog fuel or wood-fired boiler in operation before January 24, 2018.
- WAC 173-400-040(2)(f) for curing of furnace refractory.

Comments on Opacity – Soot Blowing/Grate Cleaning

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-5

NWPPA appreciates the proposed provision to accommodate the higher, short-term particulate loading (and thus stack opacity) that might occur during routine soot blowing/grate cleaning operating conditions. We encourage Ecology to include this provision in the final rule.

Response to Soot Blowing/Grate Cleaning

Comment noted.

Comments on Newspaper Notice

Commenter: Danna Dal Porto - Comment I-1-1

I am a resident of rural Grant County, Washington State. My local community, Quincy, has had many data centers constructed here. The local newspaper is the primary source residents use to find out about public hearings and comment deadlines. Any suggestion to use any other source of information for public notice is going to leave most local residents without notification of these events. Most rural people in Grant County do not have internet access, difficult as that might be to believe. I must insist that the newspaper remains as the primary source for Washington residents to be informed of Ecology Department announcements.

Commenter: Patricia Martin - Comment I-2-4

Ecology is a state agency in public service funded by the people they serve. Ecology proposes to "Require an agency to post notice of a public comment period and draft permits on its website instead of requiring publication in a newspaper and a physical location for permit

materials." This is unacceptable. People impacted by decisions of the agency, and the pollution being permitted, are entitled to notice in a newspaper of local circulation. There are still many families who do not have access, or cannot afford access, to the internet, and no one should have to be monitoring Ecology's website on a daily basis to know what the taxpayer funded agency is up to. Please retain the requirement that notice be published in the official local paper.

Summary Response to Newspaper Notice

The rule allows a permitting agency to identify when newspaper notice would better serve the public and when a newspaper notice should be included as part of the notification. Historically, advertising in a newspaper has been the most commonly accepted method of providing notice to the public on agency actions. The proposed change to rely on website posting reflects the objective for which notice is intended - to provide notice to as many people as possible. website posting broadens that reach by providing unlimited access continuously throughout the public comment period compared to a one-day newspaper notice. The public library system also provides access to computers and the Internet across the state, including the Grant County Public Library.

Starting with a rule change in 2012, permitting agencies have been posting notice for 15 days on their websites when they get a permit application. Unless an agency gets a request for a public comment period during the 15 day posting period, this is the extent of public notice except for four types of permits: permits that allow an increase in emissions, Prevention of Significant Deterioration (PSD) permits, Air Operating Permits (Title V), and permits where there is significant public interest.

Ecology is developing guidance for our permitting staff to use to determine when it is necessary or appropriate to amend the internet notification with a newspaper or other public noticing method appropriate to the community around a proposed permit action.

Comments on Public Notice – Dates

Commenter: Southwest Clean Air Agency, Wess Safford - Comment A-1-4

Ecology should remove the requirement in WAC 173-400-171(6)(a)(vi) and WAC 173-401-800(2)(d)(ii) that a public notice must include the start date and end of the associated public comment period.

Response to Public Notice – Dates

We disagree with the comment. The essence of public notice is that it includes the dates for the associated public comment period.

Comments on Public Notice – Washington State Holiday

Commenter: Southwest Clean Air Agency, Wess Safford - Comment A-1-2

Ecology proposes to exclude Washington State holidays from a thirty day public comment period in WAC 173-400-171(6)(a)(vi) and WAC 173-401-800(2)(d)(ii): Comment periods and waiting periods in existing state and local air quality regulations are generally based on consecutive calendar days. Likewise, comment periods and notification requirements in related federal air quality regulations are based on consecutive calendar days. Excluding state holidays

in this one particular section will increase the likelihood of administrative or procedural errors, cause confusion, and does not serve any obvious purpose. Please consider that some local agencies (e.g., SWCAA) don't recognize the same holidays as the state of Washington which creates further complication. Agency staff are not available to the public on some State holidays, but they are also not available on weekends and yet those days are not excluded. If the intent of the proposed change is to ensure a minimum number of agency work days during the comment period, a solution is to define the comment period in terms of business days rather than excluding holidays. Such a change would increase the overall number of review days for the public as well if that is the underlying intent. However, neither of these changes are needed or warranted. These rules set a minimum number of days for comment which can be lengthened at the Agency's discretion. The public may request additional days if they feel it is needed. It often makes sense to adjust a comment period length, but those adjustments should be done at an Agency's discretion and not mandated.

Commenter: Puget Sound Clean Air Agency, Carole Cenci - Comment A-2-2

Regarding proposed changes to WAC 173-400-171(6)(a)(vi) and (7) Public notice and opportunity for public comment/Public notice components/Length of the public comment period and WAC 173-401-800(2)(d)(ii) Public involvement/Public notice: The proposed rule requires that Washington State holidays not be counted as one of the thirty days in the required thirty day comment periods. This seems unnecessary and increases the likelihood of errors in determining the end date of a public comment period. It may also introduce uncertainty in how to determine the end date. For example, if a holiday is on a Saturday, it would not be counted in the thirty days, but this could easily be misunderstood or missed when determining the end date of the thirty days. If an agency were to make an error in the calculating the end date, the public comment period would presumably have to be started over, incurring unnecessary delays in issuing orders. The regulatory analysis identifies these reasons why this is being proposed:

- Excluding state holidays from public comment periods could result in better or more comprehensive public input.
- The proposed change to the 30-day public comment period would increase some public comment periods, and potentially benefit the public by reducing potential barriers to commenting that holidays might cause for the public.
- The proposed exclusion of state holidays from the 30-day comment period would increase some public comment periods, and potentially benefit the public by reducing potential barriers to commenting caused by holiday commitments, travel, or office closure. It would reflect a best practice in public engagement, and potentially better or more comprehensively reflect public input.

It seems unlikely that excluding one day (or possibly two depending on the public comment period) will result in more public comment or reduce barriers. If the goal is to provide additional time for the public to comment, it may be more useful to extend the required length of all comment periods by an additional day or more. At the same time, it increases the likelihood of errors.

Summary Response to Public Notice – Washington State Holiday

We agree that excluding Washington State holidays may lead to administrative or procedural errors if a permitting agency counts these days incorrectly. A permitting agency may adjust the length of a public comment period if they feel that is warranted. We

removed the requirement to exclude Washington State holidays from the day count in a public comment period.

Comments on Public Notice – Cross References

Commenter: Southwest Clean Air Agency, Wess Safford - Comment A-1-5

Ecology should remove the cross reference in WAC 173-400-171(10)(a) (Notice of public hearing) to WAC 173-400-171(6)(a) and exclude Washington State holidays that fall within the notice period.

Response to Public Notice – Cross References

We changed the rule text based on this comment.

Comments on Public Notice – Content

Commenter: Southwest Clean Air Agency, Wess Safford - Comment A-1-3

The purpose of rule section 400-171(6)(a) and WAC 173-401(2)(d) is to define the content of public notices, not the length of comment periods.

- As proposed, the new language in rule section 400-171(7) contains a cross reference back to 400-171(6)(a) rather than directly addressing comment period length.
- Comment period length and other requirements are addressed in rule section 401-800(3). The manner in which days are to be counted would be more appropriately addressed in that rule section.

Response to Public Notice – Content

We agree with the request to relocate these provisions. The proposed structure was unnecessarily complicated given that website posting expands access to 24 hours a day for the duration of a comment period. The rule proposed to count a public notice posted on the agency website by noon as the first day of a public comment period and required the notice to include the date of the posting. We simplified the day count by starting the public comment period on the day after posting the notice, removing any potential confusion around whether the posting took place before or after noon. We also removed the proposed requirement to exclude Washington State holidays, which we learned from public comment has the potential to cause confusion on the day count.

Comments on Section 081 (Emission limits during startup and shutdown)

Commenter: Patricia Martin - Comment I-2-6

Amendments to WAC 173-400-081 are not acceptable. The emissions from SSM must be considered during the permitting process and selection of the control technology. The state does not have the authority to allow a source to exceed an emission limit. Section -081 should be removed because it continues to allow exemptions for SSM. This section should be removed from regulation because they violate federal law.

Response to Section 081

The proposed revisions do not violate federal or state law and this section has been part of the SIP for many years. The proposed changes are mainly editorial in nature without changing existing regulatory requirements. WAC 173-400-081 applies to a new or existing facility when the BACT control technology does not include continuous compliance with the BACT emission limit, especially during startup and shutdown. A source must comply with a federal emission standard, but those federal (and state) emission standards frequently apply during periods of "normal operation" that exclude SSM periods. WAC 173-400-081(2) directs a permitting agency to establish emission limits or standards for a new or modified facility during startup or shutdown events when the BACT control technology is not capable of achieving continuous compliance with an emission standard or limit. EPA is revising its rules to establish emission limitations or work practice standards covering startup and shutdown events, but this will take many years. Neither the proposed revisions nor the existing rule language in this section applies to a malfunction or upset.

Comments on Section 082 (Setting alternative emission limit that exceeds an emission standard in the SIP) – General Comments

Commenter: Patricia Martin - Comment I-2-3

Emission limits are federally enforceable because they are adopted into the SIP. Ecology proposes to "Create a process to establish facility specific permit limits for existing sources that exceed an emissions standard in the SIP." WAC 173-400-082 appears to be an attempt by Ecology to violate federal law by creating an exemption" from the law for existing sources that are currently in violation of the SIP. Doesn't this mean that Ecology is in violation of the law for its failure to properly enforce the emission standards in the SIP. and additionally, for its planned circumvention of it? Isn't it Ecology's job to assure that permits are issued in compliance with the SIP?

WAC 173-400-082 should be removed because it impermissibly allows polluting sources to exceed federally enforceable emission limits in the SIP. This section should be removed from regulation because it violates federal law.

Response to Section 082 – General Comments

We disagree with the comment that WAC 173-400-082 impermissibly allows a source to exceed an emission limit in the SIP. WAC 173-400-082 is designed for the situation where a source cannot comply with an applicable SIP emission standard, listed in WAC 173-400-082(2), during a defined period such as a unit startup or shutdown. During these periods, some sources are unable to operate add-on emission controls and as such are unable to meet emission limitations in permits or in the state regulations. Historically these excess emissions have been excused from enforcement as allowed by WAC 173-400-107. WAC 173-400-107 is currently part of the SIP.

The amended rule complies with EPA’s recommendation for setting alternative emission limits in the "Statement of the EPA's SSM SIP Policy as of 2015" (80 FR 33976). EPA provides direction in the Federal Register notice that an acceptable alternative limitation must only apply during short, well defined operating periods and could be a numerical or work practice limitation. The site-specific emission limitation would not be usable by the source until approved into the SIP by EPA (WAC 173-400-082(4)(c)(v)), preventing an

illegal variance from being issued by the state or local clean air agency. Further, this section does not allow a source to exceed an emission standard contained in an applicable federal NSPS, NESHAP, or MACT regulation (WAC 173-400-082(2)(c)(viii)).

The amended rule provides instructions to a source, the local clean air agency, and Ecology on how to process a request by a source for a site or unit specific emission standard to be included in the Washington SIP. The process is challenging, but EPA requires this documentation when requesting to relax an emission standard that is already in the SIP. As required by RCW 70.94.380(1), Ecology must approve any relaxation proposal by a local agency prior to submittal to EPA. This is a decision subject to public comment and review, prior to submittal to EPA. EPA's review process is the same as for SIP amendments and includes a public comment process, whether they propose to approve or reject the SIP amendment proposal.

Comments on Section 082 – Use Title V

Commenter: KapStone, Roberto Artiga - Comment B-3-4

Ecology should consider using Title V operating permits to address site-specific numerical limitations or work practice standards. The requirement that an AEL established under Section WAC 173-400-082 is first approved in the SIP before it becomes effective is not practical.

Other than stating that EPA is not changing "emergency defense" provisions in EPA regulations for state and federal Title V permitting and in existing Title V permits at the time, the SSM SIP Call Rule is silent on whether alternative emission limitations for a source can be addressed through amendment of the source's operating permit issued under CAA Title V and the EPA permitting regulations at 40 C.F.R. part 70.

So long as the alternative emission limitation in the permit was the subject of public notice and right to comment, and EPA did not exercise its right to object to the permit amendment, the alternative emission limitation would be federally enforceable and subject to public review.

Accordingly, Ecology may wish to include in its SIP the possibility of a source developing, and obtaining state approval as a Title V permit amendment, alternative numerical emission limitations or alternative emission limitations in the form of work practice standards, that would apply during SSM events as specified in the permit. This would provide a mechanism, for example, for sources to prepare, and Ecology, EPA, and the public to review, a site-specific set of work practices that would minimize emissions associated with startups, shutdowns, or malfunctions. Ecology could evaluate whether the proposed alternative limitation reflects any applicable minimum technology requirements and otherwise meets CAA goals, using the state agency's own expertise, and considering the factors that EPA states in the SSM SIP Call Rule that it thinks states should apply in developing alternative emission limitations, at 80 Fed. Reg. 33, 974-76, and 978-80.

Response to Section 082 – Use Title V

The Title V permit program is a national permit program that identifies in one document all the air quality requirements and conditions that a source must meet. EPA does not allow a Title V permit to create new substantive requirements (other than gap filling provisions) to ensure compliance with an applicable requirement. The provisions in WAC 173-400-081

and 082, which provide a process to establish permit-specific emission limitations, are substantive requirements, and therefore cannot be established through a Title V permit.

The 2015 SIP call requires states to change their rules in the SIP. If the Title V program could be used to meet the requirements of the SIP call, EPA would have specifically mentioned this in the Federal Register notice and allowed that option.

Start up and shutdown requirements that do not exceed an emission standard in the SIP (or an applicable NSPS or MACT standard) can be developed in a regulatory order and included in an air operating permit. In such a case, the alternative emission limitation would apply as soon as the regulatory order is effective.

Comments on Section 082 – Intent

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-1

The proposed definition of alternative emission limitation implies an ability to customize an alternative emission limitation to accommodate unique features of a production process, emission unit, control technology, etc., at a facility. Creating a regulatory mechanism to design an alternative emission limitation to account for operation- or emission unit-specific features is reasonable and necessary. NWPPA supports this rule language and requests that Ecology confirm this regulatory intent to support customized alternative emission limitation.

Response to Section 082 – Intent

Yes, this is the intent of the definition of alternative emission limitation and the criteria in WAC 173-400-081 and 082. These two sections provide the opportunity to implement site-specific alternative emission limitations.

Comments on Section 082 – Burdensome

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-10

NWPPA appreciates the creation of a regulatory mechanism to establish an Alternative Emission Limitation (AEL). The information requirements in subsection are unnecessarily comprehensive and build-in a regulatory process that is out-of-proportion to the environmental/regulatory significance of the underlying need. Ecology is requested to re-draft and slim down this section. It is somewhat disheartening that WAC 173-400-082 consumes four pages of rule text to elicit information.

While some of the procedural requirements are unavoidable, we suggest that several of the subsection requirements to "Demonstrate" or "Describe" are not essential to support an alternative emission limitation determination. In particular:

- Subsections -082(3)(c)(ii) and (iii) are redundant. One of those could be eliminated.
- Subsection 082(3)(c)(v) is broad and however answered would not provide information relevant to setting an AEL. This could be removed.
- Subsections 082(3)(c)(v)and (vi) — Most of the information solicited in addressing (cii) will address these two subsections.
- Subsections 082(3)(c)(vii) is largely redundant with (c)(iv) and (c)(vii).

- AEL applicants and permitting agency staff could well struggle to determine an adequate "demonstration."

Response to Section 082 – Burdensome

The purpose of this section is to provide a mechanism to establish an emission limitation that is higher than an emission standard in the SIP. Before EPA will approve the proposed limit, the permitting agency must provide an anti-backsliding analysis under Section 110(l) of the federal Clean Air Act. The provision lists the information that EPA requires to support the analysis, based on the seven recommended criteria in the "Statement of the EPA's SSM SIP Policy as of 2015" (81 FR 33980). Including this level of specificity in the rule reduces the time it could take for a final EPA approval because the applicant will provide the necessary comprehensive documentation with the initial application.

Comments on Section 082 – Malfunctions

Commenter: Roberto Artiga - Comment B-3-2

Ecology should include alternative emission limitations for malfunctions as well as for startup and shutdown. The proposed rule language only provides for a process to establish an alternative emissions limit for startup and shutdown events. Note that alternative emission limitations, including work practices, can be used to address malfunctions as well as startups and shutdowns.

In fact, the logic of EPA's endorsement of alternative emission limitations as a possible way of dealing with conditions during startup or shutdown that prevent meeting emission limitations based on normal operations—that some type of provision restricting emissions has to apply at all times, and that limitations generally should be reasonable and reflect the performance of available technology—applies equally to malfunction conditions (when malfunction is defined as EPA has defined it in the past: an unplanned condition that results in higher emissions, which could not have been avoided with proper design, operation, and maintenance of the source).

Response to Section 082 – Malfunctions

The commenter misunderstood the applicability of the 082 process. This section applies “during a clearly defined transient mode of operation.” While the use of an alternative emission limitation is planned for normal modes of operations (such as a shutdown or startup), the rule text does not preclude its use for a malfunction. Setting acceptable limitations for a malfunction – an unplanned, unpredictable and unforeseen event that could not be prevented by proper source design, maintenance and operation – is challenging. Consistent with EPA’s statement that the Clean Air Act “does not preclude that emissions during malfunctions could be addressed by an alternative emission limitation” (80 FR 33865), a facility could request an alternative emission limitation for a malfunction through WAC 173-400-082; provided, that the limitation is adequately stringent, and legally and practically enforceable.

Comments on Section 082 – Work Practice Standards

Commenter: KapStone, Roberto Artiga - Comment B-3-3

The use of "work practice standards" is an appropriate way for Ecology to address startup, shutdown and malfunction conditions. A work practice standard can apply to a limited category of sources or emitting processes during limited times (such as defined startup and shutdown periods), and can provide detailed, verifiable criteria that must be met. At the same time, though, part of the value of work practice standards is the ability to use them to address circumstances where emissions control performance cannot reasonably be predicted or monitored.

Response to Section 082 – Work Practice Standards

We agree that we could establish an alternative emission limitation in the form of work practice standards to establish emission limitations during startup or shutdown events, that is, during a clearly defined transient mode of operation. See the Response to Section 082 – Malfunctions for our response on applying work practice standards to a malfunction event.

Work practice standards must be adequately stringent, and be legally and practically enforceable, i.e., have adequate monitoring, recordkeeping and reporting requirements to assure compliance. In the SIP call, EPA reminds us that "[a]lternative emission limitations applicable during startup and shutdown cannot allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions, as those would constitute impermissible de facto exemptions for emissions during certain modes of operation." (80 FR 33980)

The amended rule in WAC 173-400-082 provides the process to request approval of site-specific alternative emission standards including work practice standards.

Comments on Section 109 (Unavoidable excess emissions)

Commenter: Northwest Pulp & Paper Association, Christian McCabe - Comment O-0-9

We assume that Ecology intends for the Unavoidable Excess Emissions provisions in proposed WAC 173- 400-109 to apply when an unplanned shutdown causes the source to exceed an applicable emission standard including any AEL that applies during shutdowns. We also assume the Unavoidable Excess Emissions provisions would apply if a malfunction occurs during a startup or shutdown (e.g., a wet scrubber pump fails). This would be the case regardless of whether that startup or shutdown was planned, and that malfunction causes the source to exceed an applicable emission standard including any AEL that applies to startup or shutdown of that source.

- Clarify this intention by adding "(i.e., emissions above an applicable standard, including any alternative emission limit applicable to the startup or shutdown of the source)" after "Excess emissions" in proposed WAC 173-400-109(4).
- If Ecology retains references in the rule to "an upset or malfunction," then it also needs to add "or upset" to 173-400-109(5)(d), which deals with circumstances when "the emitting equipment could not be shutdown during the malfunction...."

Response to Section 109

We agree that WAC 173- 400-109 applies when an unplanned shutdown causes the source to exceed an applicable emission standard including any alternative emission limitation that applies during shutdowns; provided, that emissions do not exceed an emission standard in the federal rules (WAC 173-400-109(3)). WAC 173-400-109(4) also specifies that excess emissions from an upset or malfunction during startup or shutdown are eligible for consideration as unavoidable under WAC 173-400-109(5).

We addressed one of your concerns by revising the definition of excess emission in WAC 173-400-030(31) to clarify that excess emissions also means emissions above an emission limit established in a permit or order, including an alternative emission limit.

We agree that the text should reference both terms (upset and malfunction) so we revised the rule.