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BY EMAIL & UPLOAD (<http://ac.ecology.commentinput.com/?id=bfe7G>)

Ms. Elena Guilfoil (elena.guilfoil@ecy.wa.gov)
Air Quality Program
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-
7600

Re: Comments on Draft Startup and Shutdown Regulations for Wood-Fired Boilers

Dear Ms. Guilfoil:

Thank you for this opportunity to comment on the Washington Department of Ecology's ("Ecology") draft rules addressing opacity emissions from wood-fired boilers. 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. Safety is our number one concern and we submit these comments in hopes that we are able to avoid the creation of unsafe work conditions.

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). Interfor initially starts up its boiler on dry biomass with <20% moisture. Once a fire is established in the cells Interfor begins feeding small amounts of hog fuel (wet biomass > 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 (~320dF) and results in significant condensation on the high voltage equipment.

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Our comments seek revisions to the rule that will ensure the safety of our workers while also protecting the environment.

1. Clean Fuels Should Include Biomass Regardless of Moisture Content

The proposed WAC 173-400-040(c)(2)(e) would establish an alternative opacity standard during startup and shutdown periods. A source making use of the alternative standard could comply using one of two options. The first option would require meeting a 40% opacity standard (3 minutes in 1 hour) during startup. This is not feasible for our boiler. The second option would be to start up or shut down according to a written plan whereby the boiler (a) initially starts on "clean fuel," (b) begin to energize the controls within 1 hour of starting the combustion of fuel not meeting the clean fuel definition, and (c) complete energizing of the controls and compliance with the 20% standard within 4 hours of starting the combustion of fuel not meeting the clean fuel definition.

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.

2. Allow Extensions to Time Requirements Consistent with Boiler MACT

In addition to removing the moisture content cap in the definition of clean fuel, 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.

“(i) The request shall provide evidence of a documented manufacturer-identified safety issue.

“(ii) The request shall provide information to document that the PM control device is adequately designed and sized to meet the applicable PM emission limit.

“(iii) In addition, the request shall contain documentation that:

(A) The unit is using clean fuels to the maximum extent possible to bring the unit and PM control device up to the temperature necessary to alleviate or prevent the identified safety issues prior to the combustion of primary fuel;

(B) The unit has explicitly followed the manufacturer's procedures to alleviate or prevent the identified safety issue; and

(C) Identifies with specificity the details of the manufacturer's statement of concern.

“(iv) You must comply with all other work practice requirements, including but not limited to data collection, recordkeeping, and reporting requirements.”

In other words, 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.

I hope you consider these points as you revise the draft rule. Please feel free to contact me if you have any questions about these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sean P. Murphy". The signature is fluid and cursive, with the first name "Sean" being the most prominent.

Sean Murphy ASP, COHC
EHS Coordinator