U. S. EPA, Region 10

Administrative Record
for Revisions to
Prevention of Significant Deterioration (PSD)
&
Minor New Source Review
Air Permits

PotlatchDeltic Land & Lumber LLC
St. Maries Complex
St. Maries, Idaho
Coeur d'Alene Reservation

Final Revisions to Permits
October 10, 2019

Administrative Record
PotlatchDeltic – St. Maries Complex
October 10, 2019

The information listed below is included in the administrative record for this permitting action pursuant to 40 CFR 124.9 and 40 CFR 49.157 and 49.159.

United States Environmental Protection Agency
Region 10, Air & Radiation Division
1200 Sixth Avenue, Suite 155, 15-H13
Seattle, Washington 98101-3188

Permit Number: R10PSD00101
Issued: October 10, 2019
Effective: October 10, 2019
AFS Plant I.D. Number: 16-009-00001

Prevention of Significant Deterioration
Permit to Construct
Permit Revision No. 1

In accordance with the provisions of Part C to Title I of the Clean Air Act (CAA), 42 USC §§ 7472 to 7492, and 40 CFR Part 52.21, Federal Prevention of Significant Deterioration Program, Permit No. R10PSD00100, originally issued June 21, 2019, is revised by revising Condition 4.1.5 as follows:

4.1.5 Beginning the thirteenth hour of each batch's drying cycle, continuously measure the moisture content (%, dry basis) of a representative sample of boards (minimum of two courses[2]) in each load of lumber at a minimum of four equally-spaced locations (per load) along the length of the load using a capacitance-based in-kiln moisture measurement system. For partial loads, the number of monitoring locations shall be proportional to the load's length (e.g. two monitoring locations for a load spanning half the length of the kiln). Using the manufacturer's computerized kiln management system as required by condition 3.4, record the management system's calculated average of valid instantaneous measurements from all available locations every 6 minutes. Calculate and record the simple average of valid instantaneous measurements from all available locations at the end of the drying cycle, and prior to equalizing and conditioning (if done), to demonstrate compliance with Condition 3.4.

---

[2] A course is a single layer of lumber.

Today's revision to the original permit is the first. As such, the revised permit shall be designated as Permit No. R10PSD00101.

Daniel C Bray

Krishna Viswanathan, Acting Director
Air & Radiation Division
U.S. EPA, Region 10

10/10/19
Date

United States Environmental Protection Agency
Region 10, Air & Radiation Division
1200 Sixth Avenue, Suite 155, 15-H13
Seattle, Washington 98101-3188

Permit Number: R10TNSR01801
Issued: October 10, 2019
Effective: October 10, 2019
AFS Plant I.D. Number: 16-009-00001

Minor New Source Review Permit

Permit Revision No. 1

In accordance with the provisions of 40 CFR Part 49, Subpart C, Federal Minor New Source Review Program in Indian Country, Permit No. R10TNSR01800, originally issued June 21, 2019, is revised by revising Condition 4.3.7 as follows:

4.3.7 Beginning the thirteenth hour of each batch's drying cycle, continuously measure the moisture content (%, dry basis) of a representative sample of boards (minimum of two courses[2]) in each load of lumber at a minimum of four equally-spaced locations (per load) along the length of the load using a capacitance-based in-kiln moisture measurement system. For partial loads, the number of monitoring locations shall be proportional to the load's length (e.g. two monitoring locations for a load spanning half the length of the kiln). Using the manufacturer's computerized kiln management system as required by condition 3.4, record the management system's calculated average of valid instantaneous measurements from all available locations every 6 minutes. Calculate and record the simple average of valid instantaneous measurements from all available locations at the end of the drying cycle, and prior to equalizing and conditioning (if done), to demonstrate compliance with Condition 3.3.

[2] A course is a single layer of lumber.

Today's revision to the original permit is the first. As such, the revised permit shall be designated as Permit No. R10TNSR01801.

David C Bray

Krishna Viswanathan, Acting Director
Air & Radiation Division
U.S. EPA, Region 10

10/10/19
Date

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

AIR & RADIATION
DIVISION

OCT 10 2019

Mr. Steve Henson, Plant Manager
PotlatchDeltic Land and Lumber, LLC
St. Maries Complex
2200 Railroad Avenue
St. Maries, Idaho 83861

Dear Mr. Henson:

This letter responds to PotlatchDeltic's request for administrative amendments to the final Prevention of Significant Deterioration permit and the final tribal minor New Source Review permit issued by the U.S. Environmental Protection Agency to PotlatchDeltic on June 21, 2019, for the construction and operation of the Kiln #6 project in Saint Maries, Idaho. PotlatchDeltic's request was submitted by email to Region 10 Administrator, Chris Hladick, on October 1, 2019, and revised by a subsequent email to Regional Administrator Hladick on October 2, 2019. PotlatchDeltic requested technical corrections to the moisture content monitoring conditions in both permits to reflect the number and location of the Wellons true capacitance moisture meters, and the sampling frequency and calculations performed by the computerized multizone control system required by the permits. After staff level discussions over the last week, we have revised the moisture content monitoring conditions in both permits to address PotlatchDeltic's requested changes.

Both permits include a work practice standard designed to prevent the excess VOC and PM2.5 emissions that would result from over-drying a batch of lumber. It is the EPA's intention to rely on the data generated by the Wellons true capacitance moisture meters and computerized multizone control system to demonstrate whether any batch of lumber was dried to moisture contents less than the lowest product specification for the species dried in this new kiln (specifically, 13 percent moisture content on a dry basis). The current permit conditions do not correctly address the number and location of moisture sensors for partial loads and specify an incorrect sampling frequency. PotlatchDeltic erroneously told the EPA that the sampling frequency was every 60 seconds when in fact it is every 6 minutes. In addition, the current permit conditions do not specify what moisture content data to use for compliance purposes in the situation where a batch of lumber undergoes equalization and conditioning after the drying cycle is complete.

Because these technical corrections are de minimis in nature and are being made to align the permit language with the moisture content monitoring and calculations that the purchased kiln control system is performing, and do not alter our prior BACT or control technology analyses, we are processing the corrections that PotlatchDeltic requested as administrative amendments to the permits, effective immediately. Enclosed find the addenda to the original permits, issued today.

If you have any questions, please contact Kelly McFadden, Chief, Air Permits and Toxics Branch, at (206) 553-1679 or mcfadden.kelly@epa.gov.

Sincerely,

Krishna Viswanathan
Acting Director

Enclosures

1. Revision No. 1 to PSD Permit No. R10PSD00100
2. Revision No. 1 to Tribal Minor NSR Permit No. R10TNSR01800

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

AIR & RADIATION
DIVISION

October 10, 2019

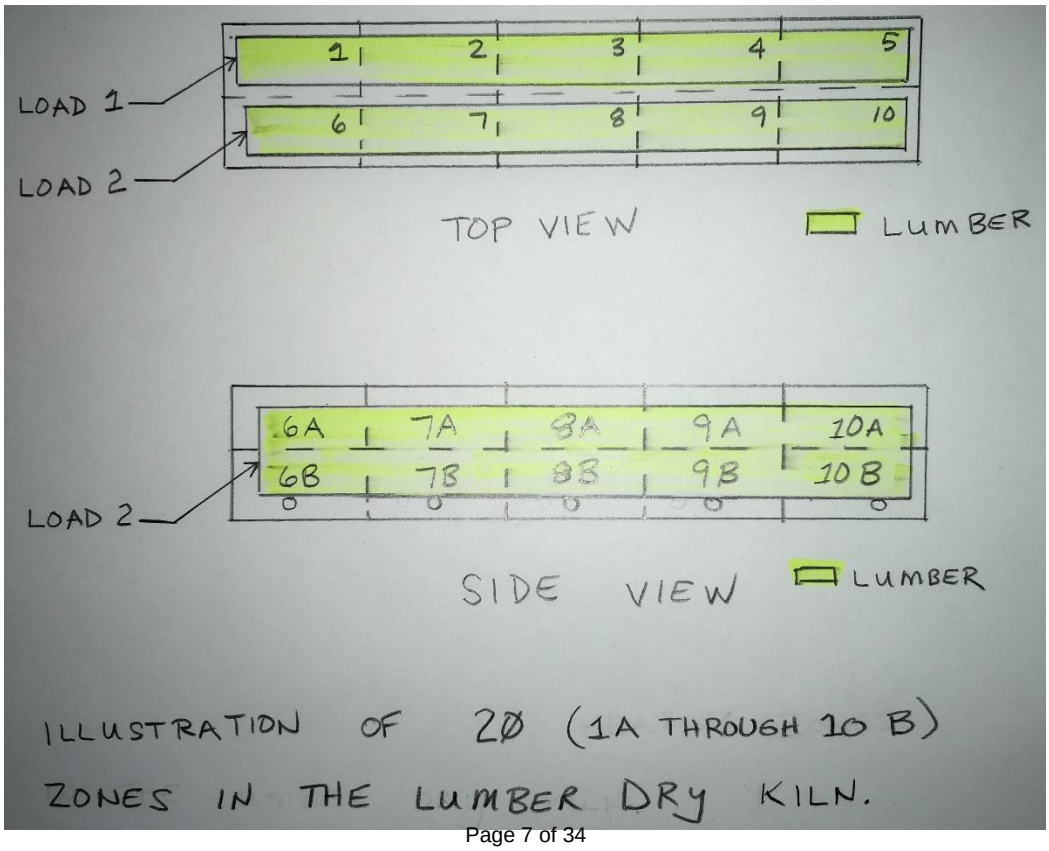
MEMORANDUM

SUBJECT: Monitoring the Temperature of the Air Inside Lumber Dry Kiln LK-6 at PotlatchDeltic's St. Maries Complex

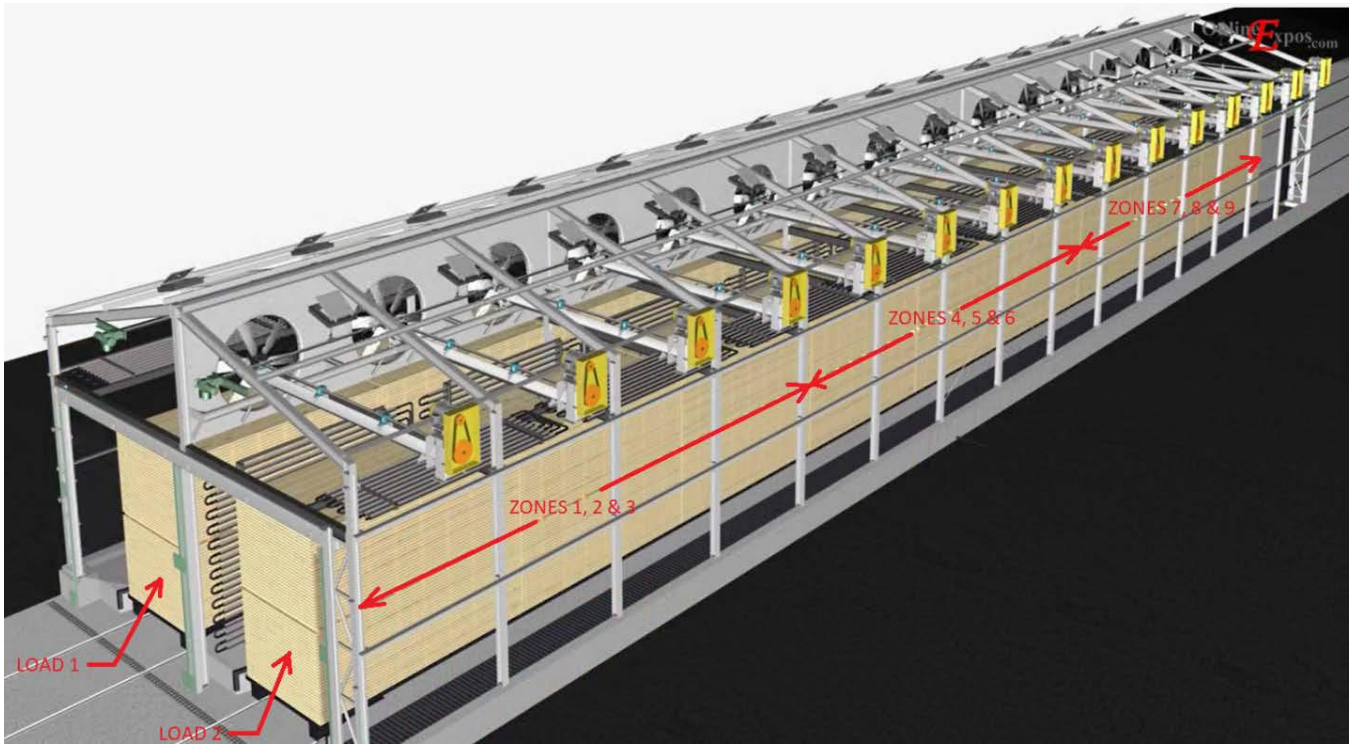
FROM: Dan Meyer, EIT /s/
Stationary Source Unit

TO: Administrative Record

On June 21, 2019, EPA Region 10 issued PSD permit R10PSD00101 and minor NSR permit R10TNSR01800 authorizing PotlatchDeltic to construct and operate another lumber dry kiln at its St. Maries Complex. Through communications with PotlatchDeltic since then, I have learned that the computerized kiln management system (that PotlatchDeltic purchased from kiln manufacturer Wellons) is designed to measure and record the temperature of the air entering and exiting 20 different areas or "zones" in the kiln. This means that the PSD permit requires PotlatchDeltic to install, operate and maintain 40 air temperature sensors; 20 to measure the temperature of the air entering the loads (10 per load) and 20 to measure the temperature of the air exiting the loads (10 per load). The minor NSR permit requires half that as its air temperature monitoring focus is strictly on the air exiting the load. The following drawing (that I created based upon input from PotlatchDeltic) illustrates that the 20 zones are arranged along the length and width of the kiln from the entrance to the exit.



Section 1 of the current permits erroneously refers to the kiln as being designed with ten heating zones arranged along the length of the kiln as follows:



The illustration was extracted from both the Fact Sheet to the PSD permit and the Permit Analysis to the minor NSR permit.

PotlatchDeltic indicates that construction of the kiln has begun and that it intends to begin operating the kiln soon.

From: Bray, Dave
To: Meyer, Dan
Subject: FW: [EXTERNAL] We need help
Date: Friday, October 11, 2019 12:53:34 PM

Here's the last email.

Dave

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Thursday, October 10, 2019 2:56 PM
To: Bray, Dave <Bray.Dave@epa.gov>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>
Subject: RE: [EXTERNAL] We need help

We are fine and supportive of this Dave.

Steven Henson
Complex Manager
PotlatchDeltic
2200 Railroad Avenue
St. Maries, Idaho 83861
Office-208-245-7535
Cell-208-568-1701

"We Manufacture Quality Wood Products-Safely"

From: Bray, Dave <Bray.Dave@epa.gov>
Sent: Thursday, October 10, 2019 2:38 PM
To: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>
Subject: RE: [EXTERNAL] We need help

Hi all,

Nearly ready to put the administrative amendments and transmittal letter into the concurrence and signature process. Need to get you feedback on one minor addition to the language. Dan realized that we really needed to say something about the kiln-wide average being calculated by the kiln operating system to make sure that nobody down the road would think that it is just a simple average. I know that you removed the term "weighted" because that actually might not be a good description of the actual calculation. How does the addition in red below look to you?

4.1.5 Beginning the thirteenth hour of each batch's drying cycle, continuously measure the moisture content (%, dry basis) of a representative sample of

boards (minimum of two courses[2]) in each load of lumber at a minimum of four equally-spaced locations (per load) along the length of the load using a capacitance-based in-kiln moisture measurement system. For partial loads, the number of monitoring locations shall be proportional to the load's length (e.g. two monitoring locations for a load spanning half the length of the kiln). Using the manufacturer's computerized kiln management system as required by condition 3.4, record the management system's calculated average of valid instantaneous measurements from all available locations every 6 minutes. Calculate and record the simple average of valid instantaneous measurements from all available locations at the end of the drying cycle, and prior to equalizing and conditioning (if done), to demonstrate compliance with Condition 3.4.

Dave

David C. Bray
Associate Director
Office of Air and Radiation, Region 10
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-4253

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Wednesday, October 09, 2019 8:34 AM
To: Bray, Dave <Bray.Dave@epa.gov>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>
Subject: RE: [EXTERNAL] We need help

Dave,

We have someone running a little late. I will call you in just a bit. What is a good number to call?

Steven Henson
Complex Manager
PotlatchDeltic
2200 Railroad Avenue
St. Maries, Idaho 83861
Office-208-245-7535
Cell-208-568-1701

"We Manufacture Quality Wood Products-Safely"

From: Bray, Dave <Bray.Dave@epa.gov>
Sent: Wednesday, October 9, 2019 8:29 AM

To: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>
Subject: RE: [EXTERNAL] We need help

Give me five minutes and I'll call you.

Dave

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Wednesday, October 09, 2019 8:27 AM
To: Bray, Dave <Bray.Dave@epa.gov>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>
Subject: RE: [EXTERNAL] We need help

Dave,

Haven't heard from you so I assume your morning got busy……how about 9:30 am Pacific time for a catch-up alignment call?

Steven Henson
Complex Manager
PotlatchDeltic
2200 Railroad Avenue
St. Maries, Idaho 83861
Office-208-245-7535
Cell-208-568-1701

"We Manufacture Quality Wood Products-Safely"

From: Steve Henson
Sent: Tuesday, October 8, 2019 8:24 PM
To: Bray, Dave <Bray.Dave@epa.gov>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>
Subject: Re: [EXTERNAL] We need help

Dave can we talk at 8:30am Pacific Time? Please call my office and we will walk through the issues.

Steven Henson
St. Maries Complex Manager
PotlatchDeltic
2200 Railroad Avenue
St. Maries, Idaho 83861

Office-208-245-7535
Cell-208-568-1701

"We produce quality wood products-safely"

On Oct 8, 2019, at 5:37 PM, Bray, Dave <Bray.Dave@epa.gov> wrote:

> Hi Steve.
>
> Sorry, been out of the office at meetings since 2:30.
>
> We agree that we need to stay with the original language of 10 zones – they are just arranged different that we thought – Dan thought that there were 10 zones running down the length of the kiln and we now know that there are 5 zones running the length of each load. And we've always understood that there are 20 pairs of dry bulb thermometers – 10 in each load – again just arranged differently than we originally thought.
>
> I'll call you tomorrow morning to discuss whether we need to make any changes to the permit language or not – I'm OK with not changing either section 1 or the temperature monitoring conditions if we're on the same page as to how the 20 pairs of dry bulb thermometers will be used in the temperature calculations.
>
> Dave
>
> ---
>
> **From:** Steve Henson <Steve.Henson@PotlatchDeltic.com>
> **Sent:** Tuesday, October 08, 2019 3:18 PM
> **To:** Bray, Dave <Bray.Dave@epa.gov>
> **Subject:** RE: [EXTERNAL] We need help
>
> Dave,
>
> The final permit says 10 zones. We would like to stay with the original permit language of 10 zones.
>
> Steven Henson
> Complex Manager
> PotlatchDeltic
> 2200 Railroad Avenue
> St. Maries, Idaho 83861
> Office-208-245-7535
> Cell-208-568-1701
>
> "We Manufacture Quality Wood Products-Safely"
>
> ---

From: Bray, Dave <Bray.Dave@epa.gov>
Sent: Tuesday, October 8, 2019 1:23 PM
To: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Subject: RE: [EXTERNAL] We need help

Hopefully you won't find any gristle as you chew.

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Tuesday, October 08, 2019 1:17 PM
To: Bray, Dave <Bray.Dave@epa.gov>
Subject: Re: [EXTERNAL] We need help

We are chewing on your email Dave.

Steven Henson
St. Maries Complex Manager
PotlatchDeltic
2200 Railroad Avenue
St. Maries, Idaho 83861
Office-208-245-7535
Cell-208-568-1701

"We produce quality wood products-safely"

On Oct 8, 2019, at 1:04 PM, Bray, Dave <Bray.Dave@epa.gov> wrote:

> Thanks Steve. I was hoping for some thoughts from you all.
>
> Dave
>
> ---
>
> **From:** Steve Henson <Steve.Henson@PotlatchDeltic.com>
> **Sent:** Tuesday, October 08, 2019 12:58 PM
> **To:** Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>; McFadden, Kelly <McFadden.Kelly@epa.gov>; Bray, Dave <Bray.Dave@epa.gov>
> **Subject:** Fwd: [EXTERNAL] We need help
>
> Thoughts?
>
> Steven Henson
> St. Maries Complex Manager
> PotlatchDeltic
> 2200 Railroad Avenue
> St. Maries, Idaho 83861

Office-208-245-7535
Cell-208-568-1701

“We produce quality wood products-safely”

Begin forwarded message:

> **From:** Steve Henson <Steve.Henson@PotlatchDeltic.com>
> **Date:** October 8, 2019 at 12:53:10 PM PDT
> **To:** "Bray, Dave" <Bray.Dave@epa.gov>
> **Cc:** Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>, Larry Branson <Larry.Branson@PotlatchDeltic.com>, Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>, "McFadden, Kelly" <McFadden.Kelly@epa.gov>
> **Subject: Re: [EXTERNAL] We need help**
>
> Thanks for the quick reply Dave....
>
> Steven Henson
> St. Maries Complex Manager
> PotlatchDeltic
> 2200 Railroad Avenue
> St. Maries, Idaho 83861
> Office-208-245-7535
> Cell-208-568-1701
>
> “We produce quality wood products-safely”
>
> On Oct 8, 2019, at 12:12 PM, Bray, Dave <Bray.Dave@epa.gov> wrote:
>
> > Thanks Steve and all.
> >
> > I think we’ve got a final moisture content monitoring condition. Yay!
> >
> > As to the section 1 description, I fully understand what you’re saying. Let me check with my team to see if this works for the temperature conditions or whether we need to add one more thing to reflect the fact that each of the 10 zones is equipped with two pairs of dry bulb thermometers (upper and lower). Dan has really been trying to equate a “zone” with each pair of thermometers so that all twenty thermometers measuring temperature of air

entering the load and all twenty thermometers measuring temperature of air exiting the load would be used in the respective temperature monitoring conditions. I'm fine with noting that each of the 10 zones has two pairs of thermometers as opposed to trying to equate each pair with a zone as long as each pair (upper and lower) would be used to determine the highest hourly average air temperature entering and exiting the load for each zone.

Dave

David C. Bray
Associate Director
Office of Air and Radiation, Region 10
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-4253

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Tuesday, October 08, 2019 11:20 AM
To: Bray, Dave <Bray.Dave@epa.gov>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Larry Branson <Larry.Branson@PotlatchDeltic.com>; Thomas Mosher <Thomas.Mosher@PotlatchDeltic.com>
Subject: FW: [EXTERNAL] We need help

Dave,

Larry, Jacob and Thomas Mosher have huddled this morning and pulled together the following comments. I believe based on previous discussions the following recommendations tighten up the amendment and put everyone on the same page for insuring conformance of the permit, and alignment to real world lumber drying operations.

The term “simple average” is clear and works well for us. However, as you point out in your email, the term “weighted average” is used for the values produced by the Wellons’ software without defining how the values are weighted or how the calculations are done. For clarity, we suggest the following change to what you have proposed for Condition 4.1.5.

> Monitoring and Recordkeeping Requirements
>
> 4.1.5 Beginning the thirteenth hour of each batch’s drying cycle, continuously measure the moisture content (%, dry basis) of a representative sample of boards (minimum of two courses[2]) in each load of lumber at a minimum of four equally-spaced locations (per load) along the length of the load using a capacitance-based in-kiln moisture measurement system. For partial loads, the number of monitoring locations shall be proportional to the load’s length (e.g. two monitoring locations for a load spanning half the length of the kiln). ~~Calculate and record a weighted~~ Using the manufacturer’s computerized kiln management system as required by condition 3.5, record the average of valid instantaneous measurements from all available locations every 6 minutes ~~using the moisture content data collected by the computerized kiln management system required by Condition 3.5~~. Calculate and record a simple average of valid instantaneous measurements from all available locations at the end of

the drying cycle, and prior to equalizing and conditioning (if done), to demonstrate compliance with Condition 3.4.

On the topic of equalizing and conditioning, our history with lumber drying shows that any equalizing and conditioning done is primarily to stop the dying process and not re-introduce moisture back into the wood. With that being said, we can comply with the moisture content at the end of the drying cycle, which would be equal to any subsequent moisture averages in our experience. Also, we don't believe that the diagram adds any value to the permit. It helped during the discussion to clarify; however, we don't think it will be beneficial in the permit.

This proposed revision lists the kiln as have 20 zones instead of the original wording of 10 zones in the final permit. We would prefer to keep the 10 zone wording in the final permit. We don't believe that specifying 20 zones is as representative of our operation of the kiln, since the proposed additional 10 zones are just lower sections of the kiln. They do not have their own vents, so airflow is more aligned with the 10 zone wording of the original permit. These changes are presented below.

1. Source Information and Project Description

***

PotlatchDeltic proposes to construct a batch, dual-track kiln with two side-by-side track systems inside the kiln. The track system is used for moving carts carrying stacks of lumber into and out of the kiln between batch drying cycles. The lumber carried by the carts on a single track inside the kiln is considered one load, so there are two loads (one on each track system) in each batch of lumber dried. A batch drying cycle duration can range from about one day

to several days depending upon several factors. ~~As illustrated in the following drawing, the~~ The kiln is designed with ~~20~~ 10 heating zones arranged along the length and width of the kiln from the entrance to the exit wherein the drying process can be separately controlled.

These draft conditions are proposed for Section 1 and Condition 4.1.5 of the PSD permit. Is it intended for the same language to be applied to the mNSR permit Section 1 and Condition 4.3.7?

Let us know if you need any additional details or discussion.

Thanks Dave, for you and your team's hard work. I believe we are finally there.

Steve

From: Bray, Dave <Bray.Dave@epa.gov>
Sent: Friday, October 4, 2019 2:21 PM
To: Larry Branson <Larry.Branson@PotlatchDeltic.com>
Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>; Steve Henson <Steve.Henson@PotlatchDeltic.com>; McFadden, Kelly <McFadden.Kelly@epa.gov>
Subject: RE: [EXTERNAL] We need help

Hi Larry and Jacob,

Attached is our latest (and hopefully final) attempt to get a moisture monitoring condition that aligns with what is actually being done.

A couple of things. I've used the term "weighted average" for the moisture content values produced by the Wellons' proprietary software without specifying any details as to how the individual moisture content readings are weighted or how the calculations are done.

Some staff here are uncomfortable with allowing the use of proprietary software that but it is what I'm recommending for this condition. I've used the term "simple average" (if you couldn't tell by now, my BS is in Mathematics) for that final kiln-wide moisture content value that you log on your End-of-Run data sheet. Please make sure that those terms work for you and verify that they appropriately describe the two different calculations being done.

Also, to address the unlikely possibility that you would need to equalize and condition a batch of lumber that somehow got over-dried (we understand that you don't intend to and that it really isn't needed for dimensional softwoods) I've added language to clarify that the final moisture content value for purposes of compliance with the 13% limit would be the kiln-wide simple average value at the end of the drying cycle but before any equalizing and conditioning is done. I hope that will work for you because it really is consistent with the intent of the BACT condition to prevent over-drying.

Finally, let us know if Dan's revised description of the zone structure and placement of temperature sensors is accurate. Also, whether you think there is value in having the diagram in section 1 or whether it doesn't add value or creates confusion (I expect that our terminology doesn't match up with yours).

Let me know what you all think and we'll get this administrative amendment wrapped up and signed next week.

Dave

From: Larry Branson <Larry.Branson@PotlatchDeltic.com>
Sent: Friday, October 04, 2019 9:10 AM
To: Bray, Dave <Bray.Dave@epa.gov>

Cc: Jacob Odekirk <Jacob.Odekirk@PotlatchDeltic.com>
Subject: Re: [EXTERNAL] We need help

Call us at 1-208-245-7503 now if you're ready

Larry Branson

Larry.Branson@potlatchcorp.com
208_245_7544 - office
208-245_7542 - fax
208_568_0778 - cell

We Manufacture Wood Products "Safely"

On Oct 4, 2019, at 9:05 AM, Bray, Dave <Bray.Dave@epa.gov> wrote:

> **[External Email] – Exercise caution with links and attachments.**
>
> Morning Larry,
>
> We're working on changes to the monitoring condition based on yesterday's discussion. We've run into one question regarding the End of Run moisture calculation that makes us question whether we understand one other aspect of the moisture monitoring.
>
> Can I chat with you for a few minutes this morning?
>
> Dave
>
> ---
>
> **From:** Bray, Dave
> **Sent:** Thursday, October 03, 2019 10:01 AM
> **To:** Larry Branson <Larry.Branson@PotlatchDeltic.com>

Subject: Good time for a short call today on moisture monitoring?

Hi Larry,

Let me know what time would be good for you to talk about the moisture content monitoring condition. We will be able to revise that condition (in both permits) as an administrative amendment in short order but we want to make sure that we get the language right.

Dave

David C. Bray
Associate Director
Office of Air and Radiation, Region 10
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-4253

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Wednesday, October 02, 2019 2:45 PM
To: Hladick, Christopher <hladick.christopher@epa.gov>; Bray, Dave <Bray.Dave@epa.gov>
Subject: A Path Forward

Chris and Dave, I just completed another word by word review of both work products with my operations staff. Good news: I think we have identified a workable path forward. At this time PotlatchDeltic:

1) Withdraws its requests to change Permit Conditions 3.2.2, 3.2.3, 3.3, 4.1.3 and 4.1.4 of the PSD Permit and 3.2, 4.3.6 of the minor NSR permit. With respect to those Permit Conditions, PotlatchDeltic accepts and will comply with the permits as issued June 21, 2019.
2) Renews its request for administrative amendment of Permit Condition 4.1.5 of the PSD permit and 4.3.7 of the minor NSR permit, as provided to EPA this summer and reflected in the Table that you received October 1 (excerpt below). The requested changes are necessary to reflect the mistake in the June 21 permit (60 seconds should read 60 minutes) and to reflect the operational realities of measuring moisture content during lumber drying.

I look forward to hearing soon, if EPA can accomplish this single administrative change quickly and before the kiln is operational on October 14, 2019. If you would like to discuss, please call. Steve

Steve Henson
Complex Manager
PotlatchDeltic Corporation
St. Maries, Idaho 83861
Office- 208-245-7535
Cell- 208-568-1701

From: Steve Henson <Steve.Henson@PotlatchDeltic.com>
Sent: Tuesday, October 01, 2019 9:42 AM
To: Hladick, Christopher <hladick.christopher@epa.gov>
Cc: Bray, Dave <Bray.Dave@epa.gov>
Subject: PotlatchDeltic: Seeking Your Help, Again

Chris, we are very excited about our new kiln at St. Maries proudly photographed below. We greatly appreciate your assistance in getting our permit finalized and issued in July 2019. The project is ahead of schedule. PotlatchDeltic needs your assistance once again -- and before we commence operation in just 11 business days.

Background. Immediately after receipt of EPA's permits in July we detected a few wording differences between (1) what we described to EPA staff in April would be reasonable to show compliance, and (2) what the final permit language requires. After several prompts and promises over the summer to complete administrative amendments and reissue the final permits, we just received EPA's proposals on September 24, 2019. Instead of minor adjustments to reconcile our April communications with the July final permits, we now have new monitoring approaches that just won't work. EPA's suggestions ignore inherent operational variability jeopardizing compliance. In addition, these ideas subject St. Maries to compliance costs and burdens that we are confident no competitors experience.

Attachment. The outstanding disconnects are shown in the attachment by Permit Condition, Original text, PotlatchDeltic's administrative amendment requests, EPA's recent proposal, and our Justifications. The gist of the disagreement lies in the compliance methods for lumber moisture and kiln temperature BACT work practices. Sixty minute averages for compliance were finalized in the initial permits; but we needed specific tactics clarified. Now instantaneous measurements are EPA's preference and the tactics remain operationally challenging. These measurement approaches defy the operational realities of lumber drying jeopardizing our compliance certainty.

As our team expressed when we met in June, we will not commence operation of the kiln under a permit we cannot comply with, so we again seek your assistance to revise these words and reissue the two permits. We are confident that our edits do not diminish EPA's ability to verify compliance, nor diminish our operators' abilities to ensure compliance.

Next Steps. With only a few days before the kiln is operational, I would appreciate your guidance and assistance on finishing what we started together and helping the St. Maries community reap the benefits of this new kiln installation. If you have any questions for me, please call. Steve

Steven Henson
Complex Manager
PotlatchDeltic Corporation
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St. Maries, Idaho 83861

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Cell- 208-568-1701

" We Manufacture Quality Wood Products-Safely"

Permit Condition	EPA Permits R10PSD001, R10TNSR01800 (June 21, 2019)	PD Administrative Amendments (AA) (July 16, Aug. 6, 2019)	EPA Proposal September 24, 2019	Why not EPA Proposal; Request PD AA
PSD 3.2.2 Compliance Monitoring	*For batches of lumber consisting of any amount of Grand Fir or White Fir, each batch's emission factor (lb/mbf) shall be calculated by multiplying the highest 60-minute average dry bulb temperature of the heated air that enters a load of lumber in any zone of the kiln (°F) measured and recorded pursuant to Condition 4.1.3 by 0.0066 and subtracting 0.5818 from the product.*	*For batches of lumber consisting of any amount of Grand Fir or White Fir, each batch's emission factor (lb/mbf) shall be calculated by multiplying the highest kiln-wide average 60-minute average dry bulb temperature of the heated air that enters a load of lumber ~~in any zone of the kiln~~ (°F) measured and recorded pursuant to Condition 4.1.3 by 0.0066 and subtracting 0.5818 from the product.*	*For batches of lumber consisting of any amount of Grand Fir or White Fir, each batch's emission factor (lb/mbf) shall be calculated by multiplying the highest kiln-wide average instantaneous dry bulb temperature of the heated air that enters a load of lumber (°F) measured, calculated and recorded pursuant to Condition 4.1.3 by 0.0066 and subtracting 0.5818 from the product.*	*The Wellons system can record instantaneous temperatures but changing from 60-minute to an instantaneous (every 10 seconds) average ignores inherent, instantaneous variability in the kiln, jeopardizing our ability to comply with the BACT work practice.*
PSD 3.2.3 Compliance Monitoring	*For batches of lumber consisting exclusively of Western Hemlock, each batch's emission factor (lb/mbf) shall be calculated by multiplying the highest 60-minute average dry bulb temperature of the heated air that enters a load of lumber in any zone of the kiln (°F) measured and recorded pursuant to Condition 4.1.3 by 0.0037 and subtracting 0.3085 from the product.*	*For batches of lumber consisting exclusively of Western Hemlock, each batch's emission factor (lb/mbf) shall be calculated by multiplying the highest kiln-wide average 60-minute average dry bulb temperature of the heated air that enters a load of lumber ~~in any zone of the kiln~~ (°F) measured and recorded pursuant to Condition 4.1.3 by 0.0037 and subtracting 0.3085 from the product.*	*For batches of lumber consisting exclusively of Western Hemlock, each batch's emission factor (lb/mbf) shall be calculated by multiplying the highest kiln-wide average instantaneous dry bulb temperature of the heated air that enters a load of lumber (°F) measured, calculated and recorded pursuant to Condition 4.1.3 by 0.0037 and subtracting 0.3085 from the product.*	*The Wellons system can record instantaneous temperatures but changing from 60-minute to an instantaneous (every 10 seconds) average ignores inherent, instantaneous variability in the kiln jeopardizing our ability to comply with the BACT work practice.*

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PSD 3.3 [mNSR 3.2] BACT Work Practice	*The highest 60-minute average dry bulb temperature of heated air exiting each load of lumber in each zone of the kiln as measured and recorded pursuant to Condition 4.1.4 [or mNSR Condition 4.4.6] shall not exceed 245°F.*	*The ~~highest~~ kiln-wide 60-minute average dry bulb temperature of heated air exiting each batch ~~load~~ of lumber ~~in each zone~~ from the kiln as measured and recorded pursuant to Condition 4.1.4 [or mNSR Condition 4.4.6] shall not exceed 245°F.*	*The kiln-wide average instantaneous dry bulb temperature of heated air exiting each load of lumber as measured, calculated and recorded pursuant to Condition 4.1.4 [or mNSR Condition 4.4.6] shall not exceed 245°F.*	*The Wellons system can record instantaneous temperatures but changing from 60-minute to an instantaneous (every 10 seconds) average ignores inherent, instantaneous variability in the kiln jeopardizing our ability to comply with the BACT work practice.*
PSD 4.1.3 Compliance Monitoring	*Continuously measure the dry bulb temperature of the heated air that enters each load of lumber in each zone of the kiln (°F). For each load of lumber in each zone of the kiln, calculate and record an average temperature every 60 minutes using the temperature data collected by the computerized kiln management system required by Condition 3.5 over the 60-minute period. Use the highest 60-minute average temperature measured during each batch to calculate the batch's VOC emission factor pursuant to Conditions 3.2.2 and 3.2.3;*	*Continuously measure the dry bulb temperature of the heated air that enters each load of lumber in each zone of the kiln (°F). ~~For each load of lumber in each zone of the kiln,~~ Calculate and record a kiln-wide average temperature every 60 minutes using the temperature data collected by the computerized kiln management system required by Condition 3.5 over the 60-minute period. Use the highest 60-minute average temperature measured during each batch to calculate the batch's VOC emission factor pursuant to Conditions 3.2.2 and 3.2.3*	*Continuously measure the dry bulb temperature of the heated air that enters each load of lumber in each zone of the kiln (°F). Calculate and record a kiln-wide average instantaneous temperature every 10 seconds using the temperature data collected by the computerized kiln management system required by Condition 3.5. Use the highest kiln-wide average instantaneous temperature measured during each batch to calculate the batch's VOC emission factor pursuant to Conditions 3.2.2 and 3.2.3*	*The Wellons system can record instantaneous temperatures but changing from 60-minute to an instantaneous (every 10 seconds) average ignores inherent, instantaneous variability in the kiln jeopardizing our ability to comply with the BACT work practice.*

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PSD 4.1.4 [mNSR 4.3.6] Compliance Monitoring	*Continuously measure the dry bulb temperature of the heated air that exits each load of lumber in each zone of the kiln (°F). For each load of lumber in each zone of the kiln, calculate and record an average temperature every 60 minutes using the temperature data collected by the computerized kiln management system required by Condition 3.5 [or mNSR Condition 3.4] over the 60-minute period. Use the highest 60-minute average temperature measured during each batch to demonstrate compliance with Conditions 3.3 [or mNSR Condition 3.2]*	*Continuously measure the dry bulb temperature of the heated air that exits each load of lumber in each zone of the kiln (°F). ~~For each load of lumber in each zone of the kiln,~~ Calculate and record a kiln-wide average temperature every 60 minutes using the temperature data collected by the computerized kiln management system required by Condition 3.5 [or mNSR Condition 3.4] over the 60-minute period. Use the highest 60-minute average temperature measured during each batch to demonstrate compliance with Conditions 3.3 [or mNSR Condition 3.2]*	*Continuously measure the dry bulb temperature of the heated air that exits each load of lumber in each zone of the kiln (°F). Calculate and record a kiln-wide average instantaneous temperature every 10 seconds using the temperature data collected by the computerized kiln management system required by Condition 3.5 [or mNSR Condition 3.4] to demonstrate compliance with Condition 3.3 [or mNSR Condition 3.2];*	*The Wellons system can record instantaneous temperatures but changing from 60-minute to an instantaneous (every 10 seconds) average ignores inherent, instantaneous variability in the kiln jeopardizing our ability to comply with the BACT work practice.*

Permit Condition	EPA Permits R10PSD001, R10TNSR01800 (June 21, 2019)	PD Administrative Amendments (AA) (July 16, Aug. 6, 2019)	EPA Proposal September 24, 2019	Why not EPA Proposal; Request PD AA
PSD 4.1.5 [mNSR 4.3.7] Compliance Monitoring	*The moisture content (%, dry basis) of a representative sample of boards (minimum of two courses[2]) in each load of lumber at a minimum of four equally-spaced locations along the length of the load, measured continuously using a capacitance-based in-kiln moisture measurement system. The average of instantaneous measurements from all locations shall be calculated every 60 seconds and the lowest average moisture content during each batch shall be recorded to demonstrate compliance with Condition 3.4 [or mNSR Condition 3.3].*	*The moisture content (%, dry basis) of a representative sample of boards (minimum of two courses[2]) in the batch ~~each load of lumber at a minimum of four equally-spaced locations along the length of the load~~, measured continuously using a capacitance-based in-kiln moisture measurement system. The average of instantaneous measurements from all locations shall be calculated every 60 minutes ~~seconds~~ and the lowest average moisture content at the End-of-Run for ~~during~~ each batch shall be recorded to demonstrate compliance with Condition 3.4 [or mNSR Condition 3.3]*	*Beginning with the opening of a roof vent for the first time during the batch, continuously measure the moisture content (%, dry basis) of a representative sample of boards (minimum of two courses[2]) in each load of lumber at a minimum of four equally-spaced locations along the length of the load using a capacitance-based in-kiln moisture measurement system. Calculate and record the average of instantaneous measurements from all locations every 6 minutes using the moisture content data collected by the computerized kiln management system required by Condition 3.5 [or mNSR Condition 3.4] to demonstrate compliance with Condition 3.4 [or mNSR Condition 3.3].*	1. *PD mistakenly suggested 60 seconds; 60 minutes tracks BACT work practice.* *2. Moisture can be 0% during winter when RVs first open, if lumber is frozen; EPA's proposal jeopardizes compliance.* *3. End-of-Run is representative compliance point for BACT work practice.* *4. EPA assumes all kiln charges are full charges of lumber (they are not) and uses "load" to represent ½ the kiln. So, under EPA's proposal some sensors will read conditions in 'empty' portions of the kiln – jeopardizing compliance.*

United States Environmental Protection Agency
Pacific Northwest – Region 10
Federal Minor New Source Review Program in Indian Country
OMB Control No. Pending

Request for Administrative Permit Amendment

You are using this form to request:

☐ Correction of a typographical error
☐ More frequent monitoring and reporting
☐ Increase in allowable emissions below Minor NSR thresholds (see Instructions)
X Other: Correct Permit Conditions imposing BACT work practice monitoring, considering lumber dry kiln inherent operating conditions.

Use of this information request form is voluntary and not yet approved by the Office of Management and Budget. The following is a checklist of the type of information that Region 10 will use to process information your request. While submittal of this form is not required, it does offer details on the information we will use to complete your requested approval and providing the information requested may help expedite the process. Use of application forms for this program is currently under Office of Management and Budget review and these information request forms will be replaced/updated after that review is completed.

Please submit your request to:

U.S. EPA at:

Air Permit and Toxics Branch (15-H13)
U.S. EPA, Region 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

For more information: https://www.epa.gov/caa-permitting/caa-permitting-epas-pacific-northwest-region, call (205) 553-1679, or email mcfadden.kelly@epa.gov.

Tribe:

The Tribal Environmental Contact for the specific reservation:

Please contact EPA Region 10 if you need assistance in identifying the appropriate Tribal Environmental Contact and address.

A. Source Information

Source Name on Permit: PotlatchDeltic Land and Lumber, LLC – St. Maries Complex			
Tribal NSR Permit Number and Date Issued/Revised: R10TNSR01800 and R10PSD00100: Issued June 21, 2019			
Contact Information (name, title, phone number, email) Jacob Odekirk, Environmental Manager, 208-245-7503, jacob.odekirk@potlatchdeltic.com			
Mailing Address: 2200 Railroad Avenue, St. Maries, Idaho 83861			
Reservation: Coeur d'Alene Reservation	**County** Benewah	**Latitude** (decimal format) 47.321916	**Longitude** (decimal format) -116.583085

B. Description of Change

Provide a narrative description of the requested amendment to the permit and the following:
Please see the instructions for additional detail.

1. A description of the requested change, including information presented in sufficient detail to determine the effect the proposed change has on existing emissions unit and/or the source.

2. Why the proposed change can be made through an administrative amendment.

3. The proposed changes to be made to specific terms and conditions of the permit. A redline/strike out version of the permit may be used for this purpose.

4. If applicable, emissions calculations and all support data necessary to establish the existing allowable emissions and post-change allowable emissions. The requested information must be provided for each emissions unit (or pollutant-generating activity) being constructed or modified.

Applicant's Statement (to be signed by the applicant)
I certify that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.
Name: Steven Henson (Signature) Date: 9-30-19 Name: Steven Henson (Print or Type) Title: Complex Manager

Instructions

What administrative permit amendments require the use of a different form?

1. A change in ownership or operational control of a source where the reviewing authority determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the reviewing authority can be made through **the Change in Ownership Notification form**.

What administrative permit amendments require the use of this form?

1. Correction to typographical errors;

2. Incorporation of more frequent monitoring or reporting;

3. Establishment of an increase in an emissions unit's annual allowable emissions limit for a regulated NSR pollutant, when the action that necessitates such increase is not otherwise subject to review under major NSR or under this program (Minor NSR).

Proposed new construction or modifications should first be evaluated to determine if the change is major under the major NSR program. If the proposed construction does not qualify as a major under that test, then it may be subject to the requirements of the minor NSR rule at 40 CFR 49.151-161.

Minor NSR Thresholds (increases above these thresholds are not eligible for administrative permit revisions):

Pollutant	Attainment Area	Nonattainment Area
Carbon Monoxide	10 tpy	5 tpy
Particulate Matter (PM)	10 tpy	5 tpy
Particulate Matter (PM_{10})	5 tpy	1 tpy
Particulate Matter ($PM_{2.5}$)	3 tpy	0.6 tpy
Sulfur Dioxide (SO_2)	10 tpy	5 tpy
Nitrogen Oxides (NO_X)	10 tpy	5 tpy
Volatile Organic Compound (VOC)	5 tpy	2 tpy
Lead	0.1 tpy	0.1 tpy
Fluorides	NA	1 tpy
Sulfuric Acid Mist	NA	2 tpy
Hydrogen sulfide (H2S)	NA	2 tpy
Total reduced sulfur (including H2S)	NA	2 tpy
Reduced sulfur compounds (including H2S)	NA	2 tpy
Municipal waste combustor emissions	NA	2 tpy
Municipal solid waste landfill emissions (as NMOC)	NA	10 tpy

Helpful Definitions from the Federal Minor NSR Rule (40 CFR 49) – This is not a comprehensive list.

- *40 CFR 49.152(d) - Modification* means any physical or operational change at a source that would cause an increase in the allowable emissions of the affected emissions units for any regulated NSR pollutant or that would cause the emission of any regulated NSR pollutant not previously emitted.

  The following exemptions apply:

  (1) A physical or operational change does not include routine maintenance, repair, or replacement.

  (2) An increase in the hours of operation or in the production rate is not considered an operational change unless such increase is prohibited under any federally-enforceable permit condition or other permit condition that is enforceable as a practical matter.

  (3) A change in ownership at a source is not considered a modification.

- *40 CFR 49.152(d) - Allowable emissions* means "allowable emissions" as defined in §52.21(b)(16), except that the allowable emissions for any emissions unit are calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

- *52.21(b)(16) - Allowable emissions* means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

  (i) The applicable standards as set forth in 40 CFR parts 60 and 61;

  (ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or

  (iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

Calculating Emissions

"Allowed" means the source is restricted by permit conditions that limit its emissions and are enforceable as a practical matter (i.e., allowable emissions). The allowable emissions for any emissions unit are calculated considering any emissions limitations that are enforceable as a practical matter on the unit's PTE.

Pre-Change Allowable Emissions: Current permitted annual emissions for a pollutant expressed in tpy.

The current allowable emissions are the allowable rate of emissions for the preceding calendar year and must be calculated using the permitted operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.

The total pre-change allowable emissions for the facility would be the sum of following:

1. Each emissions unit with an allowable emissions limitation. Calculated using the allowable operating

hours, production rates, in-place control equipment, and/or types of materials processed, stored, or combusted.

PLUS

2. Each emissions unit without any emissions limitations. Calculated using the maximum possible operating hours, production rates, and/or dirtiest types of materials processed, stored, or combusted.

Post-Change Allowable Emissions: The proposed allowable emissions for a pollutant expressed in tpy. Unless the source is restricted by permit conditions or other requirements that are enforceable as a practical matter, the post-change allowable emissions would be equivalent to post-change uncontrolled emissions.

The total proposed increase in allowable emissions resulting from your proposed change would be the sum of following:

1. Each emission unit with a proposed emission limitation. Calculated using the proposed allowable operating hours, production rates, in-place control equipment, and/or types of materials processed, stored, or combusted.

PLUS

2. Each emissions unit without a proposed emission limitation. Calculated using the maximum possible operating hours, production rates, and/or dirtiest types of materials processed, stored, or combusted.

Emissions Estimates

Any emission estimates submitted to the Regional Administrator should be verifiable using currently accepted engineering criteria. The following procedures are generally acceptable for estimating emissions from air pollution sources:

(i) Source-specific emission tests;
(ii) Mass balance calculations;
(iii) Published, verifiable emission factors that are applicable to the source. (i.e., manufacturer specifications)
(iv) Other engineering calculations; or
(v) Other procedures to estimate emissions specifically approved by the Regional Administrator.

Guidance for estimating emissions can be found at http://www.epa.gov/ttn/chief/efpac/index.html