



Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	Weyerhaeuser NR Company		Facility:	Heaters	
Region:	8	Plant ID:	007-00016	Application #:	13-17611
Engineer:	Kessler, Joe		Category:	Wood Prod	
Physical Address:	3601 Gauley Turnpike Heaters WV 26627		SIC: [2493] LUMBER & WOOD PRODUCTS, EXCEPT FURNITURE - RECONSTITUTED WOOD PRODUCTS NAICS: [321219] Reconstituted Wood Product Manufacturing		
County:	Braxton				
Other Parties:	MILL MGR - MERICA, JESSE 304-765-4217 Consultant - Hanshaw, Jesse 304-545-8563				

Information Needed for Database and AIRS
1. Need valid physical West Virginia address with zip
2. Pending result code (99) more than two months old

Regulated Pollutants		
CO	Carbon Monoxide	227.910 TPY
PM10	Particulate Matter < 10 um	99.600 TPY
SO2	Sulfur Dioxide	18.060 TPY
VOC	Volatile Organic Compounds (Reactive organic gases)	149.960 TPY
PM2.5	Particulate Matter < 2.5 um	99.600 TPY
PT	Total Particulate Matter	99.600 TPY
VHAP	VOLATILE ORGANIC HAZARDOUS AIR POLLUTANT	42.700 TPY
NOX	Nitrogen Oxides (including NO, NO2, NO3, N2O3, N2O4, and N2O5)	247.470 TPY

Summary from this Permit 13-17611		
Air Programs	Applicable Regulations	
MACT		
TITLE V		
Title V/Major		
Fee Program	Fee	Application Type
9M	\$3,500.00	MODIFICATION

Notes from Database
 Permit Note: Replacement of the Regenerative Catalytic Oxidizers (RCOs) with a biofilter. Additionally, potential emissions from various emission units at the facility have been recalculated using updated emission factors and assumptions.

Activity Dates	
APPLICATION RECEIVED	04/05/2016
APPLICATION FEE PAID	04/06/2016
ASSIGNED DATE	04/06/2016
APPLICANT PUBLISHED LEGAL AD	04/12/2016
APPLICATION DEEMED COMPLETE	05/05/2016

NOTICE

NON-CONFIDENTIAL

Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 007-00016
 Company: Weyerhaeuser NR Company
 Printed: 06/16/2016
 Engineer: Kessler, Joe

IPR FILE INDEX

Applicant : Weyerhaeuser NR Company
Facility : Sutton OSB Mill

Plant ID No.: 007-00016
R13-1761I

Chronological Order - Add Index Pages As Necessary

Date	To	From	Subject	# of pages
4/06/16	Weyerhaeuser	Sandra Adkins	48-Hour Letter	
4/22/16	Joe Kessler	Weyerhaeuser	Affidavit of Publication	
5/05/16	Weyerhaeuser	Joe Kessler	Completeness Determination	
5/05/16	File	Joe Kessler	Biofilter Information	
6/27/16	File	Joe Kessler	DAQ/Weyerhaeuser E-mails	
6/27/16	File	Joe Kessler	Draft Permit R13-1761I, Evaluation/Fact Sheet, Tracking Manifest	
	Various	Sandra Adkins	Public Notice Documents	

JRK
6/27/16

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On April 4, 2016, Weyerhaeuser NR Company applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to modify the Sutton OSB Mill located at 3601 Gauley Pike, Heaters, Braxton County, WV at latitude 38.76245 and longitude -80.65324. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the modified facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit as R13-1761I.

The following potential change in emissions will be authorized by this permit action: Particulate Matter less than 2.5 microns, 3.44 tons per year (TPY); Particulate Matter less than 10 microns, 3.44 TPY; Particulate Matter, 3.44 TPY; Sulfur Dioxide, 0.89 TPY; Oxides of Nitrogen, 19.01 TPY; Carbon Monoxide, -2.55 TPY; Volatile Organic Compounds, 59.19 TPY; Hazardous Air Pollutants, 10.08 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on **XXXXXX**. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed modification will meet all State and Federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Joe Kessler, PE
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304/926-0499, ext. 1219
FAX: 304/926-0478

Entire Document
NON-CONFIDENTIAL

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx

Kessler, Joseph R

From: Adkins, Sandra K
Sent: Wednesday, June 29, 2016 2:04 PM
To: 'wentworth.paul@epa.gov'; 'bradley.megan@epa.gov';
matthew.rutherford@weyerhaeuser.com; Jesse Hanshaw
Cc: Durham, William F; McKeone, Beverly D; McCumbers, Carrie; Hammonds, Stephanie E; Rice,
Jennifer L; Kessler, Joseph R; Taylor, Danielle R
Subject: FW: WV Draft Permit R13-1761I for Weyerhaeuser NR Company; Sutton OSB Mill
Attachments: 1761I.pdf; Eval1761I.pdf; AttachmentA.pdf; Notice.pdf

Correction to date of publication only. Due to confusion at the newspaper, public notice was published on Tuesday, June 28. The thirty day comment period will end on Thursday, August 4, 2016.

From: Adkins, Sandra K
Sent: Wednesday, June 29, 2016 11:39 AM
To: 'wentworth.paul@epa.gov' <wentworth.paul@epa.gov>; 'bradley.megan@epa.gov' <bradley.megan@epa.gov>;
'matthew.rutherford@weyerhaeuser.com' <matthew.rutherford@weyerhaeuser.com>; 'Jesse Hanshaw'
<jhanshaw@slrconsulting.com>
Cc: Durham, William F <William.F.Durham@wv.gov>; McKeone, Beverly D <Beverly.D.Mckeone@wv.gov>; McCumbers,
Carrie <Carrie.McCumbers@wv.gov>; Hammonds, Stephanie E <Stephanie.E.Hammonds@wv.gov>; Rice, Jennifer L
<Jennifer.L.Rice@wv.gov>; Kessler, Joseph R <Joseph.R.Kessler@wv.gov>; Taylor, Danielle R
<Danielle.R.Taylor@wv.gov>
Subject: WV Draft Permit R13-1761I for Weyerhaeuser NR Company; Sutton OSB Mill

Please find attached the Draft Permit R13-1761I, Engineering Evaluation, Attachment A and Public Notice for Weyerhaeuser NR Company's Sutton OSB Mill located in Braxton County.

The notice will be published in the *Braxton Citizens' News* on Tuesday, July 5, 2016, and the thirty day comment period will end on Thursday, August 4, 2016.

Should you have any questions or comments, please contact the permit writer, Joe Kessler, at 304 926-0499 x1219.

Kessler, Joseph R

From: Adkins, Sandra K
Sent: Wednesday, June 29, 2016 2:00 PM
To: Wheeler, Cathy L
Cc: Kessler, Joseph R
Subject: FW: DAQ Public Notice

Correction to date of publication only. This notice was published in the paper on Tuesday, June 28. Thirty day public comment period will still end on Thursday, August 4, 2016.

From: Adkins, Sandra K
Sent: Wednesday, June 29, 2016 11:40 AM
To: Wheeler, Cathy L <Cathy.L.Wheeler@wv.gov>
Cc: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: DAQ Public Notice

Please see below the Public Notice for Draft Permit R13-1761I for Weyerhaeuser NR Company's Sutton OSB Mill located in Braxton County.

The notice will be published in the *Braxton Citizens' News* on Tuesday, July 5, 2016, and the thirty day public comment period will end on Thursday, August 4, 2016.

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

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Joe Kessler, PE

WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304/926-0499, ext. 1219
FAX: 304/926-0478

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www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx

Kessler, Joseph R

From: Adkins, Sandra K
Sent: Monday, June 27, 2016 10:31 AM
To: Allen Heath
Cc: Kessler, Joseph R
Subject: Publication of Class I Legal Ad for the WV Division of Air Quality

Please publish the information below as a Class I legal advertisement (one time only) in the Tuesday, July 5, 2016, issue of the *Braxton Citizens' News*. Please let me know that this has been received and will be published as requested. Thank you.

Send the invoice for payment and affidavit of publication to:

Sandra Adkins

**WV Department of Environmental Protection
DIVISION OF AIR QUALITY**

601- 57th Street

Charleston, WV 25304

AIR QUALITY PERMIT NOTICE

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WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE

Charleston, WV 25304
Telephone: 304/926-0499, ext. 1219
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www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Tuesday, May 03, 2016 10:29 AM
To: Kessler, Joseph R
Subject: RE: Weyerhaeuser Excel File

OK,

Thanks for steering Weyerhaeuser in the proper legal direction with respect to document handling.

As you work your way through the calculations please feel free to use me as a resource to help you through any questionable points that may arise.

Thanks Again,
Jesse

Entire Document
NON-CONFIDENTIAL

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: May 03, 2016 10:23 AM
To: Jesse Hanshaw
Subject: RE: Weyerhaeuser Excel File

No, do not send it. If you send it I cannot hold it without going through all CBI procedures, which is in no way worth the effort. I can get by without it.

Joe

From: Jesse Hanshaw [mailto:jhanshaw@slrconsulting.com]
Sent: Tuesday, May 03, 2016 10:21 AM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: Weyerhaeuser Excel File

I.D. No. 007-00016 Reg. 1761E
Company WEYERHAEUSER
Facility HEAT/SLURRY Region
Initials JM

Hi Joe,

I had to obtain approval from Weyerhaeuser because as it turns out there is quite a bit of CBI production mix and rate information contained within this calculation document. Matthew Rutherford and I discussed how it could help you with your review so he agreed to allow the document be transferred to the DAQ for the review as long as it's clear that in no way shall it ever be made part of the public file. As a result, Weyerhaeuser ask that you agree to delete the excel file from the application record when your review is complete.

If you feel these conditions are acceptable please let me know and I will send it right over.

Thanks,
Jesse

Jesse Hanshaw
Principal Engineer
SLR International Corporation

Cell: 304-545-8563
Office: 681-205-8949

Email: jhanshaw@slrconsulting.com

8 Capitol Street Suite 300, Charleston, WV, 25301, United States

www.slrconsulting.com



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From: Kessler, Joseph R. [<mailto:Joseph.R.Kessler@wv.gov>]

Sent: May 03, 2016 9:43 AM

To: Jesse Hanshaw

Subject: Weyerhaeuser Excel File

Jesse, I believe you were going to send me the excel file with the calculations for Sutton. I never received it. If you have a chance, will you e-mail that to me.

Thanks,

Joe Kessler, PE

Engineer

West Virginia Division of Air Quality

601-57th St., SE

Charleston, WV 25304

Phone: (304) 926-0499 x1219

Fax: (304) 926-0478

Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Wednesday, May 04, 2016 11:22 AM
To: Kessler, Joseph R
Subject: RE: R13-1761I Weyerhaeuser

Joe,

I will have to go back and look at the application in order to refresh my memory on the detail related to these questions which may take me a day or two. However, from memory, I thought we supplied press calculations because we talked about the press' average production rate changing slightly. I will double check and make sure you have a specific calc for the press bypass.

As far as the higher NOx limits, I don't think that is in relation to the biofilter mod. This is what's already been defined for the facility wide Title V Permit limits. I don't recall there being any changes necessary from the Rule 13 side. Since this is a joint application the calculations may have focused on a little more than just what's being modified.

I agree limits should be based on calculations plus an emission factor. Also, I will have to check how many hours we assumed for RCDME but I like your approach.

More info to come. Thanks for your patients.

Jesse

Jesse Hanshaw
Principal Engineer
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From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: May 04, 2016 10:16 AM
To: Jesse Hanshaw
Subject: R13-1761I Weyerhaeuser

A couple of questions/comments:

- The Press Bypass emissions (EP 24) in the permit application do not match those in the currently active R13 permit. Unless you submit updated calculations for that emission source, I have to go with what is in the permit (not much different, but a couple of tons VOC and HAPs.) Anything in the Title V permits only do not have standing under R13 - the NSR PTE remains as last permitted.
- If we go with higher NOx emission limit from main stack (so as to push facility-wide NOx PTE to 249 TPY), that is going to represent about a 20 TPY increase in NOx facility-wide and that is what I will have to put in my advertisement (not a -4.81 TPY decrease). Similar issues with the other pollutants and what is in your ad.
- Similar to the above comment, if we give EP's 1-9, 21, and 23 an aggregate limit of 243.2, that will result in a large increase for the facility that we will have to advertise as the current permit had much lower limits. Also, unless there is real concern about accuracy of the VOC emissions, I would prefer to go with limits that reasonably reflect the operations of the facility - with appropriate safety factors.
- I understand how the annual uncontrolled VOC/HAP emissions were calculated and the RCDME contribution determined (3% of this annual number). But as we are talking about a small number of possible non-consecutive hours for the RCDME scenario, would it not be more representative to calculate the RCME emission limits based on the worst case uncontrolled hourly rates @ 263 hours?

Thanks,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Thursday, May 05, 2016 10:19 AM
To: Kessler, Joseph R
Subject: RE: R13-1761I Permit Application Status

Thanks,

Your assistance is very much appreciated. I will work on your questions today and try to get you some answers by the end of the week.

Jesse Hanshaw
Principal Engineer
SLR International Corporation

Cell: 304-545-8563
Office: 681-205-8949
Email: jhanshaw@slrconsulting.com
8 Capitol Street Suite 300, Charleston, WV, 25301, United States

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From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: May 05, 2016 10:13 AM
To: jesse.merica@weyerhaeuser.com
Cc: Jesse Hanshaw
Subject: R13-1761I Permit Application Status

RE: Application Status: Complete
Weyerhaeuser NR Company
Sutton OSB Mill
Permit Application: R13-1761I
Plant ID No.: 007-00016

Mr. Merica,

Your application for a construction permit was received by the Division of Air Quality (DAQ) on April 5, 2016 and assigned to the writer for review. Upon an initial review, the application has been deemed complete as of the date of this e-mail. The ninety (90) day statutory time frame began on that day.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact me at (304) 926-0499 ext. 1219 or reply to this email.

Thank You,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Tuesday, May 31, 2016 10:21 AM
To: Kessler, Joseph R
Subject: RE: R13-1761I Weyerhaeuser

Good Morning Joe,

You have been on my to do list for a while know so I apologize. Thanks for the reminder, I will see what I can come up with today.

Thanks,
Jesse

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: May 31, 2016 10:17 AM
To: Jesse Hanshaw
Subject: RE: R13-1761I Weyerhaeuser

Hey Jesse, just checking in. I think I am still waiting on a couple of responses from your end, right?

Thanks,
Joe

From: Jesse Hanshaw [mailto:jhanshaw@slrconsulting.com]
Sent: Wednesday, May 04, 2016 11:22 AM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: R13-1761I Weyerhaeuser

Joe,

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As far as the higher NOx limits, I don't think that is in relation to the biofilter mod. This is what's already been defined for the facility wide Title V Permit limits. I don't recall there being any changes necessary from the Rule 13 side. Since this is a joint application the calculations may have focused on a little more than just what's being modified.

I agree limits should be based on calculations plus an emission factor. Also, I will have to check how many hours we assumed for RCDME but I like your approach.

More info to come. Thanks for your patients.

Jesse

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Fax: (304) 926-0478

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Tuesday, May 31, 2016 5:08 PM
To: Kessler, Joseph R
Cc: Rutherford, Matthew
Subject: RE: R13-1761I Weyerhaeuser
Attachments: 3-29-16 CBI Facility Wide PTE Emissions Calculations Press Bypass.pdf; 3-29-16 CBI Facility Wide PTE Emissions Calculations RCDME .pdf

Hey Joe,

I have attached a few more calculation sheets from the master spreadsheet to elaborate on the press bypass and RCDME emissions.

I feel the facility would be OK with the recognized increase of NOx emissions from a Rule 13 permitting basis even if it has to run in a new ad. However, I'm still trying to catch up with the original basis. I feel it may have been an uncertainty buffer requested within the past Title V application that reflects the possibility of various load conditions within the fuel cells.

I will let you know more tomorrow.

Thanks again from your patients and willingness to work through your questionable points with us.

Jesse

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: May 31, 2016 10:17 AM
To: Jesse Hanshaw
Subject: RE: R13-1761I Weyerhaeuser

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Office: 681-205-8949
Email: jhanshaw@slrconsulting.com
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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: May 04, 2016 10:16 AM
To: Jesse Hanshaw
Subject: R13-1761I Weyerhaeuser

A couple of questions/comments:

- The Press Bypass emissions (EP 24) in the permit application do not match those in the currently active R13 permit. Unless you submit updated calculations for that emission source, I have to go with what is in the permit (not much different, but a couple of tons VOC and HAPs.) Anything in the Title V permits only do not have standing under R13 - the NSR PTE remains as last permitted.
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- Similar to the above comment, if we give EP's 1-9, 21, and 23 an aggregate limit of 243.2, that will result in a large increase for the facility that we will have to advertise as the current permit had much lower limits. Also, unless there is real concern about accuracy of the VOC emissions, I would prefer to go with limits that reasonably reflect the operations of the facility - with appropriate safety factors.
- I understand how the annual uncontrolled VOC/HAP emissions were calculated and the RCDME contribution determined (3% of this annual number). But as we are talking about a small number of possible non-

consecutive hours for the RCDME scenario, would it not be more representative to calculate the RCME emission limits based on the worst case uncontrolled hourly rates @ 263 hours?

Thanks,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Friday, June 03, 2016 9:20 AM
To: Kessler, Joseph R
Subject: Re: R13-17611 Weyerhaeuser

Thanks Joe,

Great summary. I have forwarded over to Matthew Rutherford and hopefully will have some feedback for you next week.

Hope you have a great weekend!

On Jun 2, 2016, at 10:48 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov> wrote:

OK, here is where I am at. Couple of points:

1. I have modified the permit to authorize use of both the RCO and the biofilter. Both (and operation in RCDME mode) contribute toward the new annual limits. This should give Weyerhaeuser the flexibility to operate the RCOs during construction, shakedown, etc. I suggest after the biofilter is up and running Weyerhaeuser should submit an Administrative Update to remove the RCO from the permit to help reduce the complexity.
2. I have calculated both the RCDME annual emissions and Press Bypass annual emissions as based on worst-case hourly multiplied by 263 and 500 hours, respectively. Based on the limited hours of operation, this seems more reasonable to me than basing on annual average emission factors. Does not represent big changes in PTE, though.
3. I have set the annual emission limits of NOx at the higher level based on PSD major source threshold. CO was already set near this level. I have set annual VOC emissions at the individual emission point levels. I feel like both the NOx and CO emissions are very high for biofilter operation as there will be no products of combustion as with the RCOs. This might be something to revisit in the Administrative Update.

Attached is a copy of the "pre-draft" permit for your review so we can tackle any issues before we go to notice. Please let me know if you have any questions or comments. As my supervisor has not yet approved this pre-draft, all language is subject to change. Major additions/changes to the draft permit are highlighted.

Thanks

Joe Kessler, PE
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From: Jesse Hanshaw [<mailto:jhanshaw@slrconsulting.com>]
Sent: Tuesday, May 31, 2016 5:08 PM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Cc: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
Subject: RE: R13-1761I Weyerhaeuser

Hey Joe,

I have attached a few more calculation sheets from the master spreadsheet to elaborate on the press bypass and RCDME emissions.

I feel the facility would be OK with the recognized increase of NOx emissions from a Rule 13 permitting basis even if it has to run in a new ad. However, I'm still trying to catch up with the original basis. I feel it may have been an uncertainty buffer requested within the past Title V application that reflects the possibility of various load conditions within the fuel cells.

I will let you know more tomorrow.

Thanks again from your patients and willingness to work through your questionable points with us.

Jesse

From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: May 31, 2016 10:17 AM
To: Jesse Hanshaw
Subject: RE: R13-1761I Weyerhaeuser

Hey Jesse, just checking in. I think I am still waiting on a couple of responses from your end, right?

Thanks,
Joe

From: Jesse Hanshaw [<mailto:jhanshaw@slrconsulting.com>]
Sent: Wednesday, May 04, 2016 11:22 AM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: R13-1761| Weyerhaeuser

Joe,

I will have to go back and look at the application in order to refresh my memory on the detail related to these questions which may take me a day or two. However, from memory, I thought we supplied press calculations because we talked about the press' average production rate changing slightly. I will double check and make sure you have a specific calc for the press bypass.

As far as the higher NOx limits, I don't think that is in relation to the biofilter mod. This is what's already been defined for the facility wide Title V Permit limits. I don't recall there being any changes necessary from the Rule 13 side. Since this is a joint application the calculations may have focused on a little more than just what's being modified.

I agree limits should be based on calculations plus an emission factor. Also, I will have to check how many hours we assumed for RCDME but I like your approach.

More info to come. Thanks for your patients.

Jesse

Jesse Hanshaw
Principal Engineer
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Sent: May 04, 2016 10:16 AM

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Subject: R13-1761I Weyerhaeuser

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Thanks,

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Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

<1761I_dpm.pdf>

Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Tuesday, June 14, 2016 10:50 AM
To: Kessler, Joseph R
Subject: Re: 1761I Comments

Will be in your hands today.

Thanks

On Jun 14, 2016, at 8:33 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov> wrote:

Jesse, are you going to be able to get me the comments today? I will be out next week on vacation and would like to finish up the pre-draft work by then so I can get the package to Bev before I leave.

Thanks,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
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Kessler, Joseph R

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Tuesday, June 14, 2016 4:54 PM
To: Kessler, Joseph R
Cc: Rutherford, Matthew; Nathaniel Lanham
Subject: RE: Draft Comments for Biofilter Preliminary Permit Draft
Attachments: 1761I_dpm Comments from Weyerhaeuser.docx

Hi Joe,

Thanks for the opportunity to comment at this preliminary draft phase of permit development. I have attached a copy of the draft with Weyerhaeuser comments/suggestions highlighted in blue. I had to format it as a word document so please disregard the formatting changes that resulted.

The list of comments are itemized as follows:

1. Condition 4.1.2., Em Pt 23 - In order to include RCDME emissions in the annual limits the VOC and HAP numbers were adjusted to reflect (8760-263)hr/yr at normal operation + 263 hr/yr with no biofilter control. This increased each by roughly 1 tpy.
2. Also on the same Em Pt 23 – the lb/hr HAPs was adjusted to reflect the total HAPs, “17.01” on a controlled basis from the “Main Stack” calculations page.
3. Lastely on the footnote under the emission table of 4.1.2. the last word on #6 was removed “and”. Additionally, footnote #3 may need to have some additional language to note emissions during RCDME actually are vented through EmPt 21. Suggested clarifying text was added for consideration.
4. Condition 4.1.6.(f) “use” was removed as a preference to add clarity.
5. On Condition 4.1.9(d) the annual production limit was changed to 753,360 MSF/yr to reflect the average annual OSB Production (86 MSF/hr) listed under the Wet ESP calculations page.
6. With respect to Condition 4.2.4, we would like to get a check that your intent is to use the monthly production average to justify compliance with the maximum hourly rate limit, 4.1.9(d)?
7. On Condition 4.1.20 we feel that an “or” is necessary to link the operating requirements between “a.” and “b.”
8. Under Condition 4.3.1 within the introductory text Weyerhaeuser would like for the Agency to consider being specific to MACT-HAPs rather than VOC-HAPs. Weyerhaeuser would like to request the consideration of MACT HAPs being the focus of the testing to reduce the need for additional test methods having to be used for Cumene and Xylene. Although these other pollutants were included within the calculations for completeness we feel the MACT HAPs that US EPA has identified represents the most prevalent HAP constituents warranting testing.
9. Also within Condition 4.3.1(a) we would like to have reflected the emission test methods allowed by the PWCP MACT or just incorporate by reference that EPA testing methods should be used. This requirement seems to be somewhat outdated the way it stands and doesn’t allow the flexibility allowed under the MACT.

10. Condition 4.4.8. listed the tracking of pine under the RCDME operating scenario, which is currently only specific to the RCO. Therefore, we would like for you to consider removing the reference to the biofilter within this recordkeeping provision as well as 4.1.6(b).
11. It has come to our attention that emission point 39, the wax resin tank heater has been take out of service. If possible, could we go ahead and strike it from the equipment table. I believe this is the only place it shows up.
12. Lastly, just as a preference, could you please find all the lower case references to “biofilter” and replace with “Biofilter”. I did it in the draft but they were too numerous to highlight.

Please let us know if you have any questions or comments you would like to discuss further related to the suggestions above. Again, thank you for the opportunity to work with you on this preliminary draft.

Best Regards,
Jesse

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Principal Engineer
SLR International Corporation

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Kessler, Joseph R

From: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
Sent: Thursday, June 16, 2016 8:19 AM
To: Jesse Hanshaw; Kessler, Joseph R
Cc: Nathaniel Lanham
Subject: RE: Draft Comments for Biofilter Preliminary Permit Draft

Yes, appreciate the timely effort to get this done.

Just one comment on Attachment A – Can remove the “Wax/Resin Tank Heater” from the facility-wide PTE table. This will also update Table 1: Change in Facility-Wide Annual PTE and gives a slight decrease in CO & NOx.

Thanks,
Matthew

From: Jesse Hanshaw [mailto:jhanshaw@slrconsulting.com]
Sent: Wednesday, June 15, 2016 6:08 PM
To: Kessler, Joseph R
Cc: Rutherford, Matthew; Nathaniel Lanham
Subject: RE: Draft Comments for Biofilter Preliminary Permit Draft

Thanks for all the hard work to get this one ready ASAP.

Hope you have a great vacation!

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: June 15, 2016 2:02 PM
To: Jesse Hanshaw
Cc: Rutherford, Matthew; Nathaniel Lanham
Subject: RE: Draft Comments for Biofilter Preliminary Permit Draft

Thanks for the good comments. I believe I have corrected/modified the pre-draft permit (all previous qualifications still apply) as suggested or close to it (see attached). I am going to go ahead and finish up and submit the review package and submit to my supervisor for review. Hopefully, I will have notice approval when I return to the office on 6/27. Also attached is my updated facility-wide PTE table to give you an idea of what I am using to calculate the increases for this modification. Below is a table from the evaluation showing the calculated changes from this modification.

Table 1: Change In Facility-Wide Annual PTE

Pollutant	R13-1761G ⁽¹⁾	R13-1761I	Change
	tons/year	tons/year	tons/year
CO	230.46	229.21	-1.25
NO _x	228.46	249.01	20.55
PM _{2.5} /PM ₁₀ /PM	96.16	99.72	3.56
SO ₂	17.17	18.07	0.90
VOCs	90.77	150.07	59.30
HAPs	32.62	42.70	10.08

(1) Emissions estimated from Permit Number R13-1761G.

Thanks

Joe Kessler

From: Jesse Hanshaw [<mailto:jhanshaw@slrconsulting.com>]
Sent: Tuesday, June 14, 2016 4:54 PM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Cc: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>; Nathaniel Lanham <nlanham@slrconsulting.com>
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Please let us know if you have any questions or comments you would like to discuss further related to the suggestions above. Again, thank you for the opportunity to work with you on this preliminary draft.

Best Regards,
Jesse

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West Virginia Department of Environmental Protection

Division of Air Quality

*Earl Ray Tomblin
Governor*

*Randy C. Huffman
Cabinet Secretary*

Permit to Modify



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R13-1761I

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Weyerhaeuser NR Company

Sutton OSB Mill

007-00016

DRAFT

*William F. Durham
Director*

*Issued: **DRAFT***

This permit will supercede and replace Permit R13-1761G issued on March 12, 2009.

Facility Location: Heaters, Braxton County, West Virginia
Mailing Address: 3601 Gauley Pike, Heaters, WV 26627
Facility Description: Orientated Strand Board (OSB) Manufacturer
SIC/NAICS Codes: 2493/321219
UTM Coordinates: 529.939 km Easting • 4,290.213 km Northing • Zone 17
Latitude/Longitude: 38.76245/-80.65324
Permit Type: Modification
Description of Mod.: Replacement of the Regenerative Catalytic Oxidizers (RCOs) with a biological oxidation scrubber (Biofilter). Additionally, potential emissions from various emission units at the facility have been recalculated using updated emission factors and assumptions.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

The source is subject to 45CSR30. The permittee has the duty to update the facility's Title V (45CSR30) permit to reflect the changes permitted herein.

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1.0 Emission Units⁽¹⁾

Emission Unit ID	Emission Point ID	Emission Unit Description	Control Device ID(s)	Control Device
1S	1	Flaking and Screening System	4313-00-10	Fabric Filter
3S	3	Dry Flake Area	4333-00-10	Fabric Filter
4S	4	Mat Trim System	4345-00-10	Fabric Filter
5S	5	Rough Trim System	4353-00-10	Fabric Filter
6S	6	Tongue & Groove and Sawing System	4363-00-10	Fabric Filter
7S	7	Sander Dust System	4374-00-10	Fabric Filter
9S	9	Dry Waste System	4397-00-10	Fabric Filter
3800-00-10 3816-00-11	10 21 23	Energy Cell No. 1 ⁽²⁾	3820-00-10 4110-00-10 4440-00-10 4460-00-10	Multiclone, Wet ESP No. 1, RCO No. 1 RCO No. 2 Biofilter
3900-00-10 3916-00-11	11 21 23	Energy Cell No. 2 ⁽²⁾	3920-00-10 4120-00-10 4440-00-10 4460-00-10	Multiclone, Wet ESP No. 2, RCO No. 1 RCO No. 2 Biofilter
3130-00-11	21 23	Dryer No. 1	4110-00-10 4440-00-10 4460-00-10	Wet ESP No. 1 RCO No. 1 Biofilter
3230-00-11	21 23	Dryer No. 2		
3330-00-11	21 23	Dryer No. 3	4120-00-10 4440-00-10 4460-00-10	Wet ESP No. 2 RCO No. 2 Biofilter
3430-00-11	21 23	Dryer No. 4		
4700-00-10	21 23 24	OSB Press	4110-00-10 4120-00-10 4440-00-10 4460-00-10	Wet ESP No. 1, Wet ESP No. 2, RCO No. 1 RCO No. 2 Biofilter
27S	27	Emergency Diesel Generator	N/A	None
31S	31	Liquid Phenolic Resin Tank #1	N/A	None
32S	32	Liquid Phenolic Resin Tank #2	N/A	None

1.0 Emission Units⁽¹⁾

Emission Unit ID	Emission Point ID	Emission Unit Description	Control Device ID(s)	Control Device
33S	33	Liquid Phenolic Resin Tank #3	N/A	None
34S	34	Liquid Phenolic Resin Tank #4	N/A	None
35S	35	MDI Tank #1	N/A	None
36S	36	MDI Tank #2	N/A	None
37S	37	Wax Tank #1	N/A	None
38S	38	Wax Tank #2	N/A	None
40S/41S	40/41	Paint Booth No.1	N/A	Filters
42S/43S	42/43	Paint Booth No.2	N/A	Filters
44S/45S	44/45	Paint Booth No.3	N/A	Filters
46S	46	Liquid Phenolic Resin Tank #5	N/A	None
47S	47	Liquid Phenolic Resin Tank #6	N/A	None

- (1) ESP = Electrostatic Precipitator; RCO = Regenerative Catalytic Oxidizer
- (2) Energy Cells are authorized to operate in the following scenarios: During “normal operations,” gases will be vented through Wet ESPs and RCO or Biofilter and out Emission Point 21 or 23, respectively. During RCDME, gases will be vented through Wet ESPs and out Emission Point 21. During “Idle Run Condition,” gases will be vented through Multiclones and out Emission Points 10 and 11. During “Energy Cell Only Mode,” gases will be vented through Wet ESPs and out Emission Point 21.

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM_{2.5}	Particulate Matter less than 2.5µm in diameter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations	Ppb	Pounds per Batch
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	Ppmv or ppmv	Parts per million by volume
DEP	Department of Environmental Protection	PSD	Prevention of Significant Deterioration
dscm	Dry Standard Cubic Meter	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	PTE	Potential to Emit
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
M	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

2.4. Term and Renewal

- 2.4.1. This permit supercedes and replaces previously issued Permit R13-1761G. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the applicable plans and specifications filed in Permit Application R13-1761 through R13-1761I and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 13-10.3]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may

at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
[WV Code § 22-5-4(a)(15)]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State-Enforceable only.*]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

If to the USEPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance
(3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee.

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The permittee shall operate the following particulate matter control devices and said control devices shall be designed to achieve the removal efficiencies as listed:

Table 4.1.1.: Particulate Matter Control Device Removal Efficiencies

Particulate Sources	Control Device Description and ID No.	Removal Efficiency
Flaking and Screening Dust Control	Baghouse (4313-00-10)	99.9
Dry Dust Control System	Baghouse (4333-00-10)	99.9
Mat Trim System	Baghouse (4345-00-10)	99.9
Rough Trim System	Baghouse (4353-00-10)	99.9
T & G and Finish Saws System	Baghouse (4363-00-10)	99.9
Sander Dust System	Baghouse (4374-00-10)	99.9
Dry Waste Relay System	Baghouse (4397-00-10)	99.9
30 MMBTU/hr Energy Cell (3800-00-10) Idle Run	Multi-Clone (3820-00-10)	80.0
30 MMBTU Energy Cell (3900-00-10) Idle Run	Multi-Clone (3920-00-10)	80.0
175 MMBTU/hr Energy Cell (3800-00-10)	WESP (4110-00-10)	80.0
175 MMBTU/hr Energy Cell (3900-00-10)	WESP (4120-00-10)	80.0

4.1.2. Emissions to the air from the permitted facility shall not exceed the following:

Table 4.1.2.: Emission Limits⁽¹⁾

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
1	Flaking and Screening System	Fabric Filter (4313-00-10)	PM ₁₀	0.59	2.58
			VOC	0.01	0.05
3	Dry Flake Area	Fabric Filter (4333-00-10)	PM ₁₀	0.48	2.11
			VOC	0.82	3.57
4	Mat Trim System	Fabric Filter (4345-00-10)	PM ₁₀	0.55	2.41
			VOC	0.82	3.59
5	Rough Trim System	Fabric Filter (4353-00-10)	PM ₁₀	0.57	2.51
			VOC	0.85	3.74
6	Tongue & Groove and Sawing System	Fabric Filter (4363-00-10)	PM ₁₀	0.62	2.70
			VOC	0.92	4.02

Emission Point	Source	Control Device	Pollutant	Emission Limit			
				Hourly (pph)	Annual (tpy)		
7	Sander Dust System	Fabric Filter (4374-00-10)	PM ₁₀ VOC	0.40 0.39	1.77 1.72		
9	Dry Waste System	Fabric Filter (4397-00-10)	PM ₁₀ VOC	0.86 1.27	3.74 5.58		
10 ⁽²⁾	Energy Cell No. 1 (3800-00-10) (Idle Run Mode Only)	Multi-Clone (3820-00-10)	PM ₁₀	6.8	9.5		
	Auxiliary Burners (3816-00-11) (Idle Run Mode Only)		SO ₂	1.0	1.4		
11 ⁽²⁾	Energy Cell No. 2 (3900-00-10) (Idle-Run Mode)	Multi-Clone (3920-00-10)	CO	6.0	8.4		
			VOC	9.1	12.8		
	NO _x		8.0	11.2			
	Benzene		0.45	0.63			
	Hydrochloric Acid		0.22	0.31			
	Lead Compounds		0.01	0.01			
	Methylene Chloride		0.07	0.10			
Auxiliary Burners (3916-00-11) (Idle-Run Mode)	Naphthalene	0.43	0.60				
	POM	0.43	0.60				
	Total HAP	2.71	3.79				
21 ⁽³⁾	Energy Cell No. 1 (3800-00-10)	Wet ESP No. 1 (4110-00-10) Wet ESP No. 2 (4120-00-10)	PM _{2.5} /PM ₁₀ /PM	34.68	N/A ⁽³⁾		
	Energy Cell No. 2 (3900-00-10)					SO ₂	12.26
	Dryer No. 1 (3130-00-11)					CO	40.66
	Dryer No. 2 (3230-00-11)					VOC	59.09
	Dryer No. 3 (3330-00-11)					NO _x	88.23
	Dryer No. 4 (3430-00-11)					Acetaldehyde	2.40
	OSB Press (4700-00-10)					Acrolein	0.93
	Auxiliary Burners (3816-00-11)					Formaldehyde	4.55
	Auxiliary Burners (3916-00-11)					Lead Compounds	0.01
						Methanol	10.49
						Phenol	0.00
	Propionaldehyde	1.00					
	Total HAP	26.21					

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
21 ⁽⁴⁾	Energy Cell No. 1 (3800-00-10)	Wet ESP No. 1 (4110-00-10)	PM _{2.5} /PM ₁₀ /PM	34.68	N/A ⁽⁵⁾
	Energy Cell No. 2 (3900-00-10)		SO ₂	12.26	
	Dryer No. 1 (3130-00-11)	Wet ESP No. 2 (4120-00-10)	CO	44.66	
	Dryer No. 2 (3230-00-11)		VOC	16.84	
	Dryer No. 3 (3330-00-11)	Regenerative Catalytic	NO _x	88.23	
			Acetaldehyde	0.73	
	Dryer No. 4 (3430-00-11)	Oxidizer No. 1 (4440-00-10)	Acrolein	0.28	
			Formaldehyde	4.45	
	OSB Press (4700-00-10)	Regenerative Catalytic Oxidizer	Lead Compounds	0.01	
			Methanol	3.21	
Phenol			0.00		
Auxiliary Burners (3816-00-11)	No. 2 (4460-00-10)	Propionaldehyde	0.31		
Auxiliary Burners (3916-00-11)		Total HAP	11.34		
23 ⁽⁶⁾	Energy Cell No. 1 (3800-00-10)	Wet ESP No. 1 (4110-00-10)	PM _{2.5} /PM ₁₀ /PM	34.68	79.40
	Energy Cell No. 2 (3900-00-10)		SO ₂	12.26	17.90
	Dryer No. 1 (3130-00-11)	Wet ESP No. 1 (4110-00-10)	CO	44.66	225.40
			VOC	48.60	118.40
	Dryer No. 2 (3230-00-11)	Wet ESP No. 1 (4110-00-10)	NO _x	88.23	246.55
			Acetaldehyde	2.40	4.89
	Dryer No. 3 (3330-00-11)	Wet ESP No. 2 (4120-00-10)	Acrolein	0.93	1.21
			Cumene	4.74	5.67
	Dryer No. 4 (3430-00-11)	Biofilter (4800-00-10)	Formaldehyde	4.56	10.32
			Lead Compounds	0.01	0.03
	OSB Press (4700-00-10)	Biofilter (4800-00-10)	Methanol	1.05	3.15
			Phenol	0.00	0.00
			Propionaldehyde	1.00	0.83
	Auxiliary Burners (3816-00-11)		Xylenes	0.45	1.96
Auxiliary Burners (3916-00-11)	Total HAP		17.01	33.16	

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
24	OSB Press (4700-00-10) (Bypass Mode)	N/A	PM ₁₀	2.5	0.48
			CO	9.0	2.95
			VOC	36.0	7.86
			Acetaldehyde	1.94	0.33
			Chlorine	1.14	0.09
			Cumene	12.0	1.10
			Formaldehyde	6.00	1.49
			Methanol	15.5	4.88
			MDI	0.03	0.01
			Phenol	0.52	0.06
			Total HAP	37.3	7.96
27	Emergency diesel-fired generator	N/A	PM ₁₀	0.44	0.03
			SO ₂	3.1	0.16
			CO	4.2	0.21
			VOC	0.50	0.03
			NO _x	18.2	0.92
31	Liquid Phenolic Resin Tank No. 1	N/A	VOC	--	0.01
32	Liquid Phenolic Resin Tank No. 2	N/A			
33	Liquid Phenolic Resin Tank No. 3	N/A			
34	Liquid Phenolic Resin Tank No. 4	N/A			
35	MDI Tank No. 1	N/A	VOC	--	--
36	MDI Tank No. 2	N/A			
37	Wax Tank No. 1	N/A	VOC	--	0.01
38	Wax Tank No. 2	N/A			
39	Natural gas fired wax/resin tank heater (8109-00-10)	N/A	PM ₁₀	0.03	0.12
			SO ₂	0.01	0.01
			CO	0.29	1.30
			VOC	0.02	0.11
			NO _x	0.34	1.54
40 & 41	Paint Booth No. 1	Filters	PM ₁₀	0.39	1.71
42 & 43	Paint Booth No. 2	Filters			
44 & 45	Paint Booth No. 3	Filters			

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
46	Liquid Phenolic Resin Tank No. 5	N/A	VOC	--	0.01
47	Liquid Phenolic Resin Tank No. 6	N/A			

- (1) The VOC emissions from emission points 1-11 are based on estimations using industry averages and not testing data.
- (2) These emission limits are applicable only when the Energy Cells are in “Idle Run Mode” as defined under 4.1.3. As these emissions are less than those generated during normal operation or RCDME, they do not contribute to the facility’s PTE.
- (3) These emission limits are applicable only when the mill is operating under the RCDME as defined under 4.1.3. Emissions generated during the RCDME contribute toward the annual emission limits given under footnote (6) as applicable. Although the RCDME Emissions are contribute toward the limits under Emission Point 23 they are actually vented through Emission Point 21.
- (4) The hourly emission limits are applicable when the RCOs are being utilized during all times of “normal operation” and during times of “Energy Cell Only Mode” as defined under 4.1.3. The annual emission limits also include contributions made during RCDME events.
- (5) Emissions when the RCOs are being utilized during all times of “normal operation” and during times of “Energy Cell Only Mode” as defined under 4.1.3. contribute toward the annual emission limits given under footnote (6) as applicable.
- (6) The hourly emission limits are applicable when the Biofilter is being utilized during all times of “normal operation” and during times of “Energy Cell Only Mode” as defined under 4.1.3. The annual emission limits also include contributions made during RCDME events.

4.1.3. For the purposes of this permit, the following operating scenarios are defined:

- a. “Normal operation” shall mean those times when:
 - (1) The Energy Cells are in operation, material is being dried in the dryers, gases are vented through the operating WESPs and RCOs, and emitted from Emission Point 21; or
 - (2) The Energy Cells are in operation, material is being dried in the dryers, gases are vented through the operating WESPs and the Biofilter, and emitted from Emission Point 23.
- b. “Idle run mode” shall be defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating Multi-clones, and emitted from Emission Points 10 and 11.
- c. “Energy Cell Only Mode” shall be defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating WESPs, and emitted from Emission Point 21.
- d. “RCDME” shall be defined as those times when the Energy Cells are operating, material is being dried in the dryers, gases are vented through the operating WESPs, and emitted from Emission Point 21.

4.1.4. Operation of the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) shall be in accordance with the following requirements:

- a. The permitted facility shall burn only hogged wood as the primary fuel or natural gas as the backup fuel to fire the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10). Alternative fuels may be used only after receiving prior written approval from the Director;
 - b. During Idle Run Mode, Energy Cells shall be limited to a combined total of 2,800 hours of operation on a consecutive 12-month period; and
 - c. During Idle Run Mode, the combined heat input rate to Energy Cells shall be limited to 40 MMBTU/hr. Additionally, the maximum heat input rate to each individual energy cell shall be less than 30 MMBTU/hr.
- 4.1.5. The auxiliary natural gas fired burners, designated as 3816-00-11 and 3916-00-11, (associated with the Energy Cells), shall not exceed a maximum design heat input of 29 MMBTU/hr per unit.
- 4.1.6. Pursuant to 40 CFR 63, Subpart DDDD, operation of the facility under the Routine Control Device Maintenance Exemption (RCDME) shall be according to the following requirements:
- a. For each process unit, a maximum of 3% of its actual annual operating hours may be during periods when its controlling RCO or Biofilter is offline for routine maintenance. This exemption applies to each dryer (1-4) and the press. Additionally, since the press is controlled by both the RCOs or Biofilter, any and all time it operates while either RCO or Biofilter is offline for routine maintenance shall be counted fully towards its 3% limit;
 - b. In order to minimize emissions, the facility shall not process any pine during any time when either of the RCOs is offline for routine maintenance and the press and/or any of the dryers (1-4) which are controlled by the offline RCO continues to operate;
 - c. As a minimization strategy, the facility shall to the greatest extent practically possible perform routine maintenance during periods when the press and dryers are already offline (not producing product) for maintenance or other reasons;
 - d. As a minimization strategy, the facility shall to the greatest extent practically possible take only one RCO offline at a time for routine maintenance, continuing the normal operation of the other RCO so long as the process units which it controls are operating;
 - e. The permittee shall follow the Standard Operating Procedure submitted as Attachment T in permit application R13-1761G to prevent pine from being processed during periods of operation under the RCDME; and
 - f. After startup of the Biofilter, operation of the facility under the RCDME shall only occur after a new RCDME request specific to the Biofilter (submitted pursuant to the requirements of Subpart DDDD) is approved in writing by the Director.
- 4.1.7. The permitted facility shall route the press vent exhaust fumes into the Energy Cells and Dryers during normal operations. At times when the press is processing wood materials, the facility will be allowed to exhaust press vent fumes directly to the atmosphere through a press Bypass Stack (emission point 24) for a maximum of 500 hours per consecutive 12 month period. When the presses are not processing wood, the press vent fumes may be exhausted directly to the atmosphere through the press Bypass Stack for an unrestricted amount of time.
- 4.1.8. The auxiliary natural gas fired burners (for Dryers No. 1 through No. 4), designated as 3130-00-11, 3230-00-11, 3330-00-11, and 3430-00-11, shall not exceed a maximum design heat input of 55 MMBTU/hr per unit.

- 4.1.9. The permittee shall not exceed the following material or production limits (annual limits based on a rolling twelve (12) month period):
- a. Phenol formaldehyde resin (liquid or powder) shall not exceed 31,697,525 pounds/yr measured on a solids basis;
 - b. MDI shall not exceed 15,457,049 pounds/yr;
 - c. Wax shall not exceed 14,155,990 pounds/yr; and
 - d. Production of OSB shall not exceed a maximum hourly rate of 94 MSF/hr or a maximum annual rate of 753,360 MSF/yr as adjusted to 3/8 inch OSB.
- 4.1.10. The natural gas fired heater (Wax/Resin Tank Heater), designated as 8109-00-10, shall not exceed a maximum design heat input of 3.5 MMBTU/hr and shall not consume in excess of 30.7 million cubic feet of natural gas on an annual basis.
- 4.1.11. The permittee shall operate and maintain filter systems for the purpose of controlling particulate matter released from Paint Booths No. 1, 2 and 3.
- 4.1.12. All access roads used in conjunction with the operations permitted herein shall be paved.
- 4.1.13. **45CSR2**
The permitted facility shall comply with all applicable requirements of 45CSR2, provided, however, that compliance with any more stringent requirements under Section 4.0 of this permit shall also be demonstrated. The pertinent sections of 45CSR2 applicable to this facility include, but are not limited to, the following:
- §45-2-3.1
No person shall cause, suffer, allow or permit emission of smoke an/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
- §45-2-11.1
Any fuel burning unit(s) having a heat input under ten (10) million B.T.U.'s per hour will be exempt from sections 4, 5, 6, 8, and 9. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.
- 4.1.14. **45CSR7**
The permitted facility shall comply with all applicable requirements of 45CSR7, provided, however, that compliance with any more stringent requirements under Section 4.0 of this permit shall also be demonstrated. The pertinent sections of 45CSR7 applicable to this facility include, but are not limited to, the following:
- §45-7-3.1
No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.
- §45-7-3.7
No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to subsection 5.1 is required to have a full enclosure and be equipped with a particulate matter control device.

§45-7-4.1

No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule.

§45-7-4.2

Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B found at the end of this rule.

§45-7-5.1

No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

§45-7-5.2

The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

§45-7-8.1

At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

§45-7-8.2

The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

§45-7-9.1

Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

4.1.15. **45CSR10**

The permitted facility shall comply with all applicable requirements of 45CSR10, provided, however, that compliance with any more stringent requirements under Section 4.0 of this permit shall also be demonstrated. The pertinent sections of 45CSR10 applicable to this facility include, but are not limited to, the following:

§45-10-3.3

Maximum Allowable Emission Rate for Similar Units in All Priority III Regions Except Region IV. – No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

§45-10-3.3.f

For Type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

§45-10-10.1

Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 through 8. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

§45-10-10.3

The owner or operator of a fuel burning unit(s) which combusts natural gas, wood or distillate oil, alone or in combination, shall be exempt from the requirements of section 8. Manufacturing operations in which the process is to partially combust wood during the manufacture of charcoal shall be exempt from the requirements of section 8.

4.1.16. **45CSR27**

The permitted facility shall comply with all applicable requirements of 45CSR27, provided, however, that compliance with any more stringent requirements under Section 4.0 shall also be demonstrated. The pertinent sections of 45CSR27 applicable to this facility include, but are not limited to, the following:

§45-27-3.1

Except as provided in Sections 3.2 and 3.3 of this rule, the owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in the Table A shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specially subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

4.1.17 **40 CFR 63, Subpart DDDD Add-on Control Systems Compliance Options (RCOs)**

Except for periods when the mill is operating under the RCDME or during times of SSM, the permittee shall, while using the RCOs, limit emissions of total HAP from emission point 21, measured as THC (as carbon), to 20 ppmvd.

[Table 1B of 40 CFR 63, Subpart DDDD]

4.1.18 **40 CFR 63, Subpart DDDD Operating Requirements (RCOs)**

The permittee shall meet the following RCO operating requirements:

- a. For a thermal oxidizer, maintain the 3-hour block average firebox temperature above the minimum temperature established during the performance test or maintain the 3-hour block average THC concentration in the thermal oxidizer exhaust below the maximum concentration established during the performance test.
- b. For a catalytic oxidizer, maintain the 3-hour block average catalytic oxidizer temperature above the minimum temperature established during the performance test; AND check the activity level of a representative sample of the catalyst at least every 12 months or maintain the 3-hour block average THC concentration in the catalytic oxidizer exhaust below the maximum concentration established during the performance test.

[Table 2 of 40 CFR 63, Subpart DDDD]

- 4.1.19. **40 CFR 63, Subpart DDDD Add-on Control Systems Compliance Options (Biofilter)**
Except for periods when the mill is operating under the RCDME or during times of SSM, the permittee shall, while using the Biofilter:
- a. Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd; or
 - b. Reduce methanol emissions by 90 percent; or
 - c. Reduce formaldehyde emissions by 90 percent.
[Table 1B of 40 CFR 63, Subpart DDDD]
- 4.1.20 **40 CFR 63, Subpart DDDD Operating Requirements (Biofilters)**
The permittee shall meet the following Biofilter operating requirements:
- a. Maintain the 24-hour block Biofilter bed temperature within the range established according to §63.2262(m); or
 - b. Maintain the 24-hour block average THC concentration in the Biofilter exhaust below the maximum concentration established during the performance test.
[Table 2 of 40 CFR 63, Subpart DDDD]
- 4.1.21 The permittee shall develop a written SSM plan according to 40 CFR 63, Section 63.6(e)(3).
- 4.1.22. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the operating limits set forth in Section 4.1.3(a) of this permit, the permittee shall monitor and record the monthly and rolling twelve month total number of hours the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) operate in the idle run mode.
- 4.2.2. For the purpose of determining compliance with the operating limits set forth in Section 4.1.7. of this permit, the permittee shall monitor and record the monthly and rolling twelve month total number of hours the press vent fumes are being exhausted directly to the atmosphere through the press Bypass Stack (Emission Point 24).
- 4.2.3. For the purpose of determining compliance with the throughput limits set forth in Section 4.1.9(a) through (c) of this permit, the permittee shall monitor and record the monthly and twelve month rolling total throughput of phenol formaldehyde resin (liquid or powder) as measured on a solids basis, polymeric diphenylmethane diisocyanate (MDI), and wax.
- 4.2.4. For the purpose of determining compliance with the production limit set forth in Section 4.1.9(d) of this permit, the permittee shall monitor and record the monthly and rolling twelve month total of OSB (as adjusted to 3/8 inch) produced at the facility. Compliance with the hourly production limit shall be based on the average hourly production rate as calculated for each month.
- 4.2.5. The permittee shall meet all applicable RCO and Biofilter monitoring requirements pursuant to 40 CFR 63, Subpart DDDD.

4.3. Performance Testing Requirements

- 4.3.1. Performance testing shall be in accordance with the following:
- a. At the same time as the initial performance test required under 40 CFR 63, Subpart DDDD, the permittee shall conduct, or have conducted, a performance test during “normal mode” as defined under 4.1.3(a)(2) to determine compliance at Emission Point 23 with the hourly emission limits of VOCs and the HAPs targeted by 40 CFR 63, Subpart DDDD;
 - b. Use of test methods shall be in accordance, where applicable, with 40 CFR 63, Subpart DDDD or in accordance with information contained in an approved test protocol; and
 - b. Any required performance test shall be in accordance with 3.3.1.
- 4.3.2. The permittee shall meet all applicable RCO and Biofilter testing requirements pursuant to 40 CFR 63, Subpart DDDD.

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. *[Reserved]*

4.4.5. *[Reserved]*

4.4.6. *[Reserved]*

4.4.7. For the purpose of determining compliance with 4.1.6(a), the permittee shall keep a daily record of any start-up, any shut-down, total hours operated and hours operated while the unit's controlling RCO or Biofilter is offline for routine control device maintenance. And, as regards the RCO and Biofilter, the permittee shall keep daily records of any start-up, any shut-down, total hours operated and total hours off-line for routine maintenance.

4.4.8 For the purpose of determining compliance with 4.1.6(b), the permittee shall keep records which indicate how much, if any, pine is processed during any period of routine RCO maintenance.

4.4.9. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
[40 CFR §60.48c(g)]

4.4.10. The permittee shall meet all applicable RCO and Biofilter record-keeping requirements pursuant to 40 CFR 63, Subpart DDDD

4.5. Reporting Requirements

4.5.1. The permittee shall meet all applicable RCO and Biofilter reporting requirements pursuant to 40 CFR 63, Subpart DDDD.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹

(please use blue ink)

Responsible Official or Authorized Representative

Date

Name and Title

(please print or type)

Name

Title

Telephone No. _____

Fax No. _____

This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.



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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-1761I
Plant ID No.: 007-00016
Applicant: Weyerhaeuser NR Company
Facility Name: Sutton OSB Mill
Location: Heaters, Braxton County
SIC/NAICS Codes: 2493/321219
Application Type: Modification
Received Date: April 4, 2016
Engineer Assigned: Joe Kessler
Fee Amount: \$3,500
Date Received: April 6, 2016
Complete Date: May 5, 2016
Due Date: August 2, 2016
Applicant's Ad Date: April 12, 2016
Newspaper: *The Braxton Citizens News*
UTM's: 529.939 km Easting • 4,290.213 km Northing • Zone 17
Latitude/Longitude: 38.76245/-80.65324
Description: Replacement of the Regenerative Catalytic Oxidizers (RCOs) with a biological oxidation scrubber (biofilter). Additionally, potential emissions from various emission units at the facility have been recalculated using updated emission factors and assumptions.

Entire Document
NON-CONFIDENTIAL

On October 24, 1994, Weyerhaeuser was issued Permit No. R13-1761 for the construction of a 450,000 TPY oriented strand board (OSB) facility. Since that date, multiple revisions to the permit have been made as follows:

- Permit No. R13-1761R was issued on June 5, 1997 to reflect "as built" design changes to the facility's environmental controls for press emissions;
- Permit No. R13-1761A was issued on June 17, 1998 allowing increased resin usage;
- Permit No. R13-1761B was issued on December 2, 1999 allowing an increase in formaldehyde emissions;

Promoting a healthy environment.

- Permit No. R13-1761C was issued to allow the removal of the RCOs, which were operating on the wood flake dryers at the facility. It was argued by Weyerhaeuser that the operation of the RCOs should not be required to control volatile organic compound (VOC) emissions from the wood flake dryers because the facility's uncontrolled emissions (without the operation of the RCOs) were considered minor (less than 250 tons/year of VOC); as defined by the Prevention of Significant Deterioration (PSD) regulations;
- Permit Application No. R13-1761D was withdrawn on February 16, 2006;
- Permit No. R13-1761E was issued on June 22, 2007 primarily allowing for an increase in permitted emission limits based on stack testing;
- Permit No. R13-1761F was issued on July 23, 2008 to install two Regenerative Thermal/Catalytic Oxidizers (RTO/RCOs) to comply with the Plywood and Composite Wood Products (PCWP) MACT (40 CFR 63, Subpart DDDD). Weyerhaeuser also proposed to use a powdered resin (in replacement of an equivalent amount of liquid resin) and requested to remove the pine wood processing limit;
- Permit No. R13-1761G was issued on March 12, 2009 as a Class II Administrative Update (A/U) to (1) add language concerning the Routine Control Device Maintenance Exemption (RCDME) pursuant to 40 CFR 63, Subpart DDDD and (2) requested authorization to add an additional operating scenario to the permit; during idle run conditions (times when the dryers are not drying material), venting the exhaust gases of the energy cells through the dryers and wet ESPs and out Emission Point 21. This operating scenario was called "Energy Cell Only Mode"; and
- Permit No. R13-1761H was withdrawn on October 11, 2012.

DESCRIPTION OF PROCESS/MODIFICATION

Existing Facility

Weyerhaeuser's Sutton OSB Mill is an OSB production facility with the potential to make a maximum of 80,250 ft² of 3/8 inch board per hour. The OSB is produced primarily from hardwood and is made with methylene diphenyl diisocyanate (MDI) resin, phenol-formaldehyde (PF) resin, wood strands, wax, and other additives to form the surface and core layers of the composite board. Major processing areas at the facility are: Log Intake and Storage, Flaking and Screening, Strand Drying, Mat Preparation, Pressing, Board Finishing, and Shipping.

Cut logs are unloaded and stored at the site. During the winter months, the logs are conditioned and thawed. The logs are debarked, cut to length and flaked into thin strands approximately 0.025 inches thick, 0.75 inches wide, and 3.0 inches long. The removed bark material is used in the hog feed system to fire two energy cells.

The wood strands are stored in a bin, and during production are fed into one of four rotary dryers. The 175 mmBtu/hour wood-waste fired energy cells (with natural gas backup primarily used during start-up and designed at a heat input of 29 mmBtu/hour) provide the heat to the dryers in the

form of direct contact with the flue gases. In the dryers, the moisture in the flakes is reduced from a range of 40 to 60 percent to 2 to 4 percent. The dryers, during normal operation, exhaust through two Wet Electrostatic Precipitators (WESPs) and two RCOs for control of particulate matter and hydrocarbons prior to exhaust into the air. The facility is currently permitted to run in several other operating modes:

- “Idle run mode” - defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating Multi-clones, and emitted from Emission Points 10 and 11;
- “Energy Cell Only Mode” - defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating WESPs, and emitted from Emission Point 21; and
- “RCDME” - defined as those times when the Energy Cells are operating, material is being dried in the dryers, gases are vented through the operating WESPs, *not* controlled by the RTOs, and emitted from Emission Point 21.

The dried wood strands are screened into three classifications: surface, core, and fines or fuel. Larger strands are used for the surface layers of the OSB, while the core layers contain the intermediate sizes. The fines contain very small flakes or dust that cannot be used in the OSB. The larger flakes are blended with resins and wax and formed into mats that contain two surface layers and two core layers. These mats are trimmed and loaded into a sixteen-slotted press. In the press, mats are heated up to 4,050 degrees Fahrenheit under a pressure of 750 pounds per square inch. This process cures the thermosetting resin and forms the sheets of Structurwood.

The press discharges the sheets onto a sawline conveyor system. The fumes from the press and the handling operations are routed to the energy cells as part of the feed air for combustion. This arrangement takes advantage of the preheated press vent exhaust (which facilitates efficient combustion), and it acts to oxidize the volatile organic compounds, carbon monoxide, and hazardous air pollutants (formaldehyde and benzene) in the press vent exhaust.

Each of the four separate dryers is designed to process up to 28,000 lb/hr of dried wood flakes, for a total facility process rate of 111,000 lb/hr of dried flakes. When combined with resins and wax, which will average approximately 7.3 percent of total weight of the product, the press will handle up to 120,800 lb/hr and 450,000 tons/year of commercial Structurwood.

Proposed Modifications

Weyerhaeuser has now submitted a permit application to make the following substantive modifications:

- Increase the maximum production of the facility from 80,250 ft² of 3/8 inch board per hour to 94,000 ft² of 3/8 inch board per hour (with an annual average of 86,000);

- Replacement of the RCOs with a biological oxidation scrubber - commonly referred to as a biofilter - to control hydrocarbon emissions (in compliance with 40 CFR 63, Subpart DDDD) from the Energy Cells. The RCOs will continue to be used during biofilter construction;
- Revision of the Press Bypass Mode emissions to account for small changes in emission factors and calculation methodology; and
- Removal of the Wax/Resin Tank Heater (Emission Point Number 39) from the permit.

Biofilter Description

Weyerhaeuser has proposed to replace the existing RCOs with a biological oxidation scrubber - commonly referred to as a biofilter - to control hydrocarbon emissions (in compliance with 40 CFR 63, Subpart DDDD) from the Energy Cells. A biofilter is basically a very large scrubber which has three packed bed sections. The scrubbing liquid is water with live bacteria that have been designed to digest water soluble hydrocarbons. Biofilters are especially efficient at controlling methanol as it is very water soluble.

When the Energy Cells are operating in normal mode, contaminated gas is drawn from the process ducting (at nearly atmospheric pressure) using a centrifugal fan and is pushed into the biofilter to be distributed through the gas absorption section. In this section soluble contaminants are transferred to the liquid phase. Less soluble compounds are treated after passing through the absorption section in the gas phase bio-oxidation section. A mist eliminator removes entrained water droplets from the gas before emitting through the stack to atmosphere. Contaminated liquid from both the absorption section and the gas bio-oxidation section drain by gravity to the liquid phase bio-oxidation section. Aeration and mixing in the liquid bio-oxidation section facilitate degradation of the absorbed contaminants.

Liquid required for sump mixing and spray in the absorbing and gas bio-oxidation sections is circulated using two (2) centrifugal pumps. A portion of flow is directed to an aerator located in the sump using the Aerator Pump. Another fraction of liquid is pumped using the Spray Pump to an automatic backwash filter system where large solids that may clog the spray nozzles are removed. Backwash is returned to the sump or directed to process water system as blowdown according to conductivity and Total Suspended Solids (TSS) measurements. Liquid from the filter is split to the absorbing and gas bio-media sections.

Nutrients are added in the gas bio-oxidation spray line for distribution over the gas bio-media bed. Nutrients trickle through the gas media sections and reach the sump for liquid biomass uptake. Nutrients added to the nutrient tank are supplied in the form of a powder packaged in one pound water-soluble bags. A specified number of bags are added monthly into the nutrient tank which is filled with non-potable water. A slow mechanical agitator mixes the nutrients in water. A heater and embedded thermostat regulate the nutrient tank temperature.

The top section of the packing is for the gas phase biological reaction so it has a relatively small spray mist of water that keeps the packing wetted with activated microbes where it can come into contact with any hydrocarbons that may have escaped the middle absorption packing section. The middle section consists of structured packing and will have a large amount of water trickling

through the media to absorb as much of the water soluble pollutants into the aqueous phase as possible. Although the exact flow rates that will be needed have not yet been established, this middle section has the capacity to deliver 6,500 gallons of water a minute. The bottom section of the scrubber has a random packing material made from High Density Polyethylene (HDPE) which is submerged in the liquid phase. This allows additional residence time for the microbes to reduce the hydrocarbon concentrations.

SITE INSPECTION

Due to the nature of the modification, the writer did not conduct a site inspection for this permitting action. According to information in the DAQ database, the last on-site inspection occurred on November 16, 2015 by Mr. Richard Ray of the Compliance/Enforcement Section. Based on that inspection, the facility was determined to be “Status 30 - In Compliance.”

AIR EMISSIONS AND CALCULATION METHODOLOGIES

Weyerhaeuser included in Attachment N of the permit application a recalculated estimate of the potential emissions produced by the energy cells/dryers and based on the use of the biofilter instead of the RCOs. Emissions were based on site-specific stack test data, revised throughputs as noted above, and a biofilter methanol control efficiency of 90%. Emission limits for operation during “normal mode” and “Energy Cell Mode” from both Emission Point 21 and 23 given under Table 4.1.2. are now aggregated to allow Weyerhaeuser flexibility to operate both the RCOs and the biofilter during construction and shakedown. Due to the complexity of the calculations, refer to Attachment N for a detailed understanding of the calculations.

Emissions Summary

Based on the estimation methodology as submitted in Attachment N of the permit application, the post-modification facility-wide PTE of the Sutton OSB Mill is given in Attachment B. The change in annual facility-wide PTE as a result of the modifications evaluated herein is given in the following table:

Table 1: Change In Facility-Wide Annual PTE

Pollutant	R13-1761G ⁽¹⁾	R13-1761I	Change
	tons/year	tons/year	tons/year
CO	230.46	227.91	-2.55
NO _x	228.46	247.47	19.01
PM _{2.5} /PM ₁₀ /PM	96.16	99.60	3.44
SO ₂	17.17	18.06	0.89
VOCs	90.77	149.96	59.19
HAPs	32.62	42.70	10.08

(1) Emissions estimated from Permit Number R13-1761G.

REGULATORY APPLICABILITY

The following will discuss only the regulatory applicability of general rules and specific rules to the emission units that have been proposed to be modified as part of this permitting action.

45CSR13: Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification of the Sutton OSB Mill has a potential to emit a regulated pollutant in excess of six (6) lbs/hour and ten (10) TPY (see Table 1) and, therefore, pursuant to §45-13-2.17, the proposed changes are defined as a “modification” under 45CSR13. Pursuant to §45-13-5.1, “[n]o person shall cause, suffer, allow or permit the . . . modification . . . and operation of any stationary source to be commenced without . . . obtaining a permit to . . . modify.” Therefore, Weyerhaeuser is required to obtain a permit under 45CSR13 for the proposed changes.

As required under §45-13-8.3 (“Notice Level A”), Weyerhaeuser placed a Class I legal advertisement in a “newspaper of *general circulation* in the area where the source is . . . located.” The ad ran on April 12, 2016 in *The Braxton Citizens News* and the affidavit of publication for this legal advertisement was submitted on April 22, 2016.

45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration - (NON APPLICABILITY)

The Sutton OSB Mill is located in Braxton County, WV. Braxton County is classified as “in attainment” with all National Ambient Air Quality Standards (NAAQS). Therefore, as the facility is not a “listed source” under §45-14-2.43, the individual major source applicability threshold for all pollutants is 250 TPY. As given in Table 1, the facility-wide PTE of the modified Sutton OSB Mill remains less than 250 TPY for all criteria pollutants. Therefore, the facility is not defined as a “major stationary source” under 45CSR14 and the rule does not apply.

45CSR30: Requirements for Operating Permits

45CSR30 provides for the establishment of a comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act. The Sutton OSB Mill, defined under Title V as a “major source,” was last issued a Title V renewal permit on April 22, 2013 (R30-00700016-2013). Proposed changes evaluated herein must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

40 CFR 63 Subpart DDDD: National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

40 CFR 63, Subpart DDDD, sets standards for plywood and composite wood product (PCWP) manufacturers located at major sources of HAPs. Pursuant to §63.2231(a), a PCWP is defined as a facility “that manufactures plywood and/or composite wood products by bonding wood

material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a structural panel or engineered wood product.” The Sutton OSB Mill meets this definition and is therefore, as a major source of HAPs (pursuant to §63.2231(b)), subject to the applicable requirements of Subpart DDDD.

Subpart DDDD allows sources to choose from a variety of compliance options to reduce emissions of HAPs: production-based compliance options (§63.2240(a)), compliance options for add-on control systems (§63.2240(b)), and an emissions averaging compliance option (§63.2240(c)). Weyerhaeuser had previously chosen to meet Subpart DDDD by using a compliance option for an add-on control systems - in there case installation of RCOs. Currently, Weyerhaeuser is showing compliance by reducing Total Hydrocarbons (THC) to 20 ppm_{v,d} as specified under Table 1B of the rule. Now Weyerhaeuser is proposing to replace the RCOs with one (1) biofilter (as allowed under §63.2240(b)). Due to the uncertainty in final operation, Weyerhaeuser is proposing to show compliance with the rule through one of the following proscribed demonstrations under Table 1b:

- Limit emissions of total HAP, measured as THC (as carbon)a, to 20 ppmvd; or
- Reduce methanol emissions by 90 percent; or
- Reduce formaldehyde emissions by 90 percent.

Additionally, Weyerhaeuser will have to meet one of the operating requirements proscribed for use of a biofilter under Table 2 of Subpart DDDD:

- Maintain the 24-hour block biofilter bed temperature within the range established according to §63.2262(m); or
- Maintain the 24-hour block average THC concentration (methane may be subtracted) in the biofilter exhaust below the maximum concentration established during the performance test.

Additionally, to demonstrate initial compliance with the compliance options and operating requirements, Weyerhaeuser must conduct performance tests and establish each site-specific operating requirement in Table 2 of Subpart DDDD according to the requirements in §63.2262 and Table 4.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

This section provides an analysis for those regulated pollutants that may be emitted from the existing Sutton OSB Mill and that are not classified as “criteria pollutants.” Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NO_x), Ozone, Particulate Matter (PM₁₀ and PM_{2.5}), and Sulfur Dioxide (SO₂). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect the public health and welfare. Other pollutants of concern, although designated as non-criteria and without national concentration standards, are regulated through various federal and programs designed to limit their emissions and public exposure. These programs include federal source-specific Hazardous Air Pollutants (HAPs) limits promulgated under 40 CFR 61 (NESHAPS) and 40 CFR 63 (MACT). Any potential applicability to these programs were discussed above under REGULATORY APPLICABILITY.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The following table lists each HAP's carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)) that is identified in the permit application as having a PTE as emitted through the biofilter greater than 0.05 TPY (100 pounds/year):

Table 2: Potential HAPs - Carcinogenic Risk

HAPs	Type	Known/Suspected Carcinogen	Classification
Acetaldehyde	VOC	Yes	B2 - Probable Human Carcinogen
Acrolein	VOC	No	Inadequate Data
Benzene	VOC	Yes	Category A - Known Human Carcinogen
Carbon Disulfide	VOC	No	No Assessment Available
Chlorine	VOC	No	No Assessment Available
Chlorobenzene	VOC	No	D - Not classifiable as to human carcinogenicity
Chloroform	VOC	Yes	B2 - Probable Human Carcinogen
Cumene	VOC	No	D - Not classifiable as to human carcinogenicity
Formaldehyde	VOC	Yes	B1 - Probable Human Carcinogen
n-Hexane	VOC	No	Inadequate Data
Hydrogen Chloride	VOC	No	No Assessment Available
Manganese	PM	No	D - Not classifiable as to human carcinogenicity
Mercury (elemental)	PM	No	D - Not classifiable as to human carcinogenicity
Methanol	VOC	No	No Assessment Available
Methyl Chloride	VOC	No	D - Not classifiable as to human carcinogenicity
Methyl Isobutyl Ketone	VOC	No	Inadequate Data
Dichloromethane	VOC	Yes	Likely to be carcinogenic to humans
Propionaldehyde	VOC	No	Inadequate Data
Tetrachloroethylene	VOC	Yes	Likely to be carcinogenic to humans
Toluene	VOC	No	Inadequate Data
Xylene	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological

conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. For a complete discussion of the known health effects of each compound refer to the IRIS database located at www.epa.gov/iris.

AIR QUALITY IMPACT ANALYSIS

The estimated maximum increase in emissions are less than applicability thresholds that would define the proposed modification as “major” under 45CSR14 and, therefore, no air quality impacts modeling analysis was required. Additionally, based on the nature of the modification, an air quality impacts modeling analysis was not required under 45CSR13, Section 7.

MONITORING, COMPLIANCE DEMONSTRATIONS, REPORTING, AND RECORDING OF OPERATIONS

The only substantive change to the monitoring, compliance demonstration, reporting, and record-keeping requirements (MRR) in the draft permit is the following as added under 4.2.4.:

- For the purpose of determining compliance with the production limit set forth in Section 4.1.9(d) of this permit, the permittee shall monitor and record the monthly and rolling twelve month total of OSB (as adjusted to 3/8 inch) produced at the facility. Compliance with the hourly production limit shall be based on the average hourly production rate as calculated for each month.

PERFORMANCE TESTING OF OPERATIONS

Due to the replacement of the RCOs with the biofilter, the following new performance testing is required under 4.3.1. of the draft permit:

- At the same time as the initial performance test required under 40 CFR 63, Subpart DDDD, the permittee shall conduct, or have conducted, a performance test during "normal mode" as defined under 4.1.3(a)(2) to determine compliance at Emission Point 23 with the hourly emission limits of VOCs and the HAPs targeted by 40 CFR 63, Subpart DDDD.

CHANGES TO PERMIT R13-1761G

The substantive changes made changes to R13-1761G were limited to:

- Emission Units Table 1.0 of the draft permit was updated with the proposed use of the biofilter;

- Emission Point 23 was added to Table 4.1.2. of the draft permit with the now aggregated emission limits for both Emission Points 21 and 23 during “normal mode” and “Energy Cell Mode”;
- Additional footnotes were added to Table 4.1.2. of the draft permit;
- An additional operating scenario was defined under 4.1.3(a)(2);
- Requirements for submitting a new RCDME for use of the biofilter were added under 4.1.6(f);
- New OSB Production limits were added under 4.1.9(d);
- 40 CFR 63, Subpart DDDD language specific to the biofilter was added under 4.1.19. and 4.1.20.;
- New production throughput monitoring was added under 4.2.4.;
- New performance testing was added under 4.3.1; and
- The Wax/Resin Tank Heater was removed from the Emissions Unit Table.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that compliance with all applicable state and federal air quality regulations will be achieved. Therefore, I recommend to the Director the issuance of a Permit Number R13-1761I to Weyerhaeuser NR Company for the proposed modification of the Sutton OSB Mill located in Heaters, Braxton County, WV.



Joe Kessler, PE
Engineer



Date

Attachment A: Facility-Wide PTE
Weyerhaeuser NR Company: Sutton OSB Mill
Permit Number R13-17611: Facility ID 007-00016

Emission Unit	EP ID	CO		NO _x		PM _{2.5} /PM ₁₀ /PM		SO _x		VOC		Formaldehyde		HAPs	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Flaking and Screening System	1	0.00	0.00	0.00	0.00	0.59	2.58	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00
Dry Flake Area	3	0.00	0.00	0.00	0.00	0.48	2.11	0.00	0.00	0.82	3.57	0.00	0.00	0.00	0.00
Mat Trim System	4	0.00	0.00	0.00	0.00	0.55	2.41	0.00	0.00	0.82	3.59	0.00	0.00	0.00	0.00
Rough Trim System	5	0.00	0.00	0.00	0.00	0.57	2.51	0.00	0.00	0.85	3.74	0.00	0.00	0.00	0.00
Tongue & Groove and Sawing System	6	0.00	0.00	0.00	0.00	0.62	2.70	0.00	0.00	0.92	4.02	0.00	0.00	0.00	0.00
Sander Dust System	7	0.00	0.00	0.00	0.00	0.40	1.77	0.00	0.00	0.39	1.72	0.00	0.00	0.00	0.00
Dry Waste System	9	0.00	0.00	0.00	0.00	0.86	3.74	0.00	0.00	1.27	5.58	0.00	0.00	0.00	0.00
Idle Run Mode ⁽¹⁾	10,11	6.00	8.40	8.00	11.20	6.80	9.50	1.00	1.40	9.10	12.80	0.00	0.00	2.71	3.79
RCDME ⁽¹⁾	21	40.66		88.23		34.68		12.26		59.09		4.55		26.21	
Main Stack - RCOs ⁽¹⁾	21	44.66	225.40	88.23	246.55	34.68	79.40	12.26	17.90	16.84	118.40	4.55	10.32	11.34	33.16
Main Stack - Biofilter ⁽¹⁾	23	44.66		88.23		34.68		12.26		48.60		4.56		11.34	
Press Bypass Mode ⁽¹⁾	24	9.21	2.30	0.00	0.00	2.55	0.64	0.00	0.00	36.90	9.23	6.15	1.54	38.15	9.54
Emergency Generator	27	4.20	0.21	18.20	0.92	0.44	0.03	3.10	0.16	0.50	0.03	0.00	0.00	0.00	0.00
Storage Tanks	31-38, 46, 47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.000	0.00	0.00	0.00
Paint Booths	40-45	0.00	0.00	0.00	0.00	0.39	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facility-Wide Total →		58.07	227.91	106.43	247.47	42.13	99.60	15.36	18.06	91.09	149.96	10.71	11.86	49.49	42.70

(1) The identified emission units represent operating scenarios as defined under 4.1.3. and 4.1.7. of the permit. As "Idle Run Mode" has lower emissions and operates in lieu of other scenarios, to avoid double counting, it does not contribute emissions toward the facility-wide PTE.

INTERNAL PERMITTING DOCUMENT TRACKING MANIFEST

Company Name WEYERHAEUSER NR COMPANY

Permitting Action Number R13-1761 I Total Days 71 DAQ Days 41

Permitting Action:

- | | | |
|---|------------------------------------|---|
| <input type="radio"/> Permit Determination | <input type="radio"/> Temporary | <input checked="" type="radio"/> Modification |
| <input type="radio"/> General Permit | <input type="radio"/> Relocation | <input type="radio"/> PSD (Rule 14) |
| <input type="radio"/> Administrative Update | <input type="radio"/> Construction | <input type="radio"/> NNSR (Rule 19) |

Documents Attached:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Engineering Evaluation/Memo
<input checked="" type="checkbox"/> Draft Permit
<input checked="" type="checkbox"/> Notice
<input type="checkbox"/> Denial
<input type="checkbox"/> Final Permit/General Permit Registration | <input checked="" type="checkbox"/> Completed Database Sheet
<input type="checkbox"/> Withdrawal
<input type="checkbox"/> Letter
<input type="checkbox"/> Other (specify) _____
_____ |
|---|---|

Date	From	To	Action Requested
6/15/16	Joe Kessler	Bev McKeone	<i>NOTICE APPROVAL</i>
<i>6/17</i>	<i>Bev</i>	<i>Joe</i>	<i>Co to Notice</i>

NOTE: Retain a copy of this manifest for your records when transmitting your document(s).

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Bio Oxidation

Dual-BioPhase™ Bio Oxidation: a game-changer in pollution abatement.

[View press release](#)

Advanced technology for HAP, VOC and odor control.

Air pollutants may be treated by chemical oxidation, thermal oxidation or biological oxidation. Bio Oxidation is a biological process that uses microorganisms to convert HAPs, VOCs and Odors into harmless by-products of carbon dioxide (CO₂) and water (H₂O). Recognizing the limitations associated with traditional bio-filters and other conventional technologies i.e. RTO/RCO, Process Combustion Corporation's (PCC) Dual-BioPhase™ system offers an innovative bio-filtration process that achieves an entirely new level of performance for biological air treatment systems.

What is Dual-BioPhase™ technology?

Pollutant compounds that dissolve in water are treated in the water phase, while compounds that remain in air are treated in the gas phase. The Dual-BioPhase™ design utilizes a unique synthetic media on which contaminant degrading microorganisms are immobilized as biofilm on the surface of the media. As air flows through the bed of media, the contaminant comes in contact with the active biofilms thus degrading the pollutant compounds. A continuous flow of water trickles through the media bed to keep the biofilms biologically active and free of biomass build up.

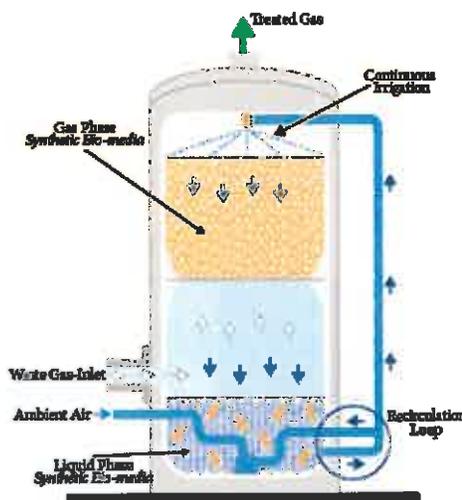
The system achieves maximum treatment efficiency by also adding a biocatalyst nutrient to the circulating water, enhancing absorption of the airborne contaminants into the water where they are biodegraded by suspended culture.

With the PCC Dual-BioPhase™ system, contaminant compounds in the waste gas are biodegraded in the liquid phase of the lower sump, as well as in the gas phase within the upper bed of special synthetic media.

Inlet waste gas temperature is typically in an ambient temperature range of 40°F – 200°F. Temperatures exceeding the design limitation can be adjusted by air mixing, quenching or heat exchanging, as required for each specific application.

Where to use Dual-BioPhase™ technology:

- **HAP & VOC abatement** – Dual-BioPhase™ technology has a significant cost advantage over RTO (Regenerative Thermal Oxidizer) technology. Typical pollutant concentration range is (25 – 5,000 ppmv). A single Dual-BioPhase™ unit can handle gas flow in excess of 250,000 acfm. Examples of organic compounds include, but are not limited to: aromatic hydrocarbons, sulfur and nitro containing carbon compounds, alcohols, aldehydes, carbonic acids, ethers, ketones, and some inorganic compounds i.e. ammonia and hydrogen sulfide.



Testimonials

We have never purchased a piece of equipment that was so easy to install and start-up, and so trouble-free. ☺☺

— Ashland Chemical

Find a PCC Rep in your region

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ID. No. 007-00016 Reg. 1761E
 Company WENGER/MEUSE
 Facility SUTTON/HOTTAS Region
 Initials JM



Select Date Range

From: 00/00/0000 To: 00/00/0000

Appl. Type: All Applied
Appl. Status: Open

Perm	Applicant	Application Type	Facility	Seq	App Date	App Status	Reg
1	00000000	Energy	2016-07-15T10:54:43	1	00/00/0000	Open	

Major Milestones	Notifications	Comments	Dates	Summary
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Milestone Description	Activity Date	Activity Comment	Dist Seq
Final V. 1.0	04/28/2016 10:54:43		
Email Notification Sent	00/00/0000 00:00:00		0

Kessler, Joseph R

From: Kessler, Joseph R
Sent: Thursday, May 05, 2016 10:13 AM
To: 'jesse.merica@weyerhaeuser.com'
Cc: Jesse Hanshaw (jhanshaw@slrconsulting.com)
Subject: R13-1761I Permit Application Status

**RE: Application Status: Complete
Weyerhaeuser NR Company
Sutton OSB Mill
Permit Application: R13-1761I
Plant ID No.: 007-00016**

Mr. Merica,

Your application for a construction permit was received by the Division of Air Quality (DAQ) on April 5, 2016 and assigned to the writer for review. Upon an initial review, the application has been deemed complete as of the date of this e-mail. The ninety (90) day statutory time frame began on that day.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact me at (304) 926-0499 ext. 1219 or reply to this email.

Thank You,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Entire Document
NON-CONFIDENTIAL

UC Defaulted Accounts Search Results

Sorry, no records matching your criteria were found.

FEIN:

Business name: WEYERHAEUSER NR COMPANY

Doing business

as/Trading as:

Please use your browsers back button to try again.

Workforce WV	Unemployment Compensation	Offices of the Insurance Commissioner
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UC Defaulted Accounts Search Results

Sorry, no records matching your criteria were found.

FEIN: 263481257

Business name:

Doing business as/Trading as:

Please use your browsers back button to try again.

WorkforceWV	Unemployment Compensation	Offices of the Insurance Commissioner
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Kessler, Joseph R

From: Norvell, Carolyn G
Sent: Wednesday, April 06, 2016 3:28 PM
To: Kessler, Joseph R
Subject: Weyerhaeuser NR Company (Heaters)/Permit Application Fee

This is the receipt for payment received from:

Weyerhaeuser NR Company, check number 0055648357, dated March 25, 2016, \$3,500.00
Weyerhaeuser NR Company Heaters R13-1761I id no 007-0016

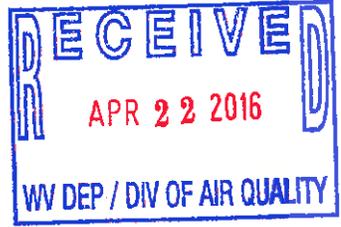
OASIS Deposit CR 1600109563

*Regards,
Carolyn G. Norvell*

WV Dept. Of Environmental Protection
Business & Technology Office
Fiscal Services, Accounts Receivable
Email: carolyn.g.norvell@wv.gov
Telephone: 304-926-0499, ext. 1075



SLR



April 21, 2016

Joe Kessler
WVDEP, Division of Air Quality
601 – 57th Street
Charleston, West Virginia 25304

Re: Rule 13 Permit Modification, R134-1761H "Biofilter Addition"
Weyerhaeuser NR Company
Heaters Facility I.D.007-00016

Dear Mr. Kessler,

SLR International Corporation has attached the original affidavit for the Class I Legal Advertisement pertaining to the Heaters OSB Mill's Biofilter Modification Permit on behalf of Weyerhaeuser NR Company.

The public notice was published by *The Braxton Citizens News* on 4-12-16. If any additional information is needed, please feel free to contact me at (681) 205-8949 or by e-mail jhanshaw@slrconsulting.com.

Sincerely,
SLR International Corporation

Jesse Hanshaw
Jesse Hanshaw, PE
Principal Engineer

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I.D. No. 007-00016 Reg. 17613
Company WEYERHAEUSER
Facility SUTTON/HEATERS Region _____
Initials JH

Attachment: Published Legal Advertisement Affidavit

BRAXTON CITIZENS' NEWS

Post Office Box 516 / 501 Main Street
Sutton, West Virginia 26601
(304)765-5193

PUBLISHER'S CERTIFICATE OF PUBLICATION

I, **Edward R. Given**, managing editor and publisher of the **Braxton Citizens' News**, a newspaper of general circulation, published at Sutton, in the County of Braxton, West Virginia, do certify that the attached:

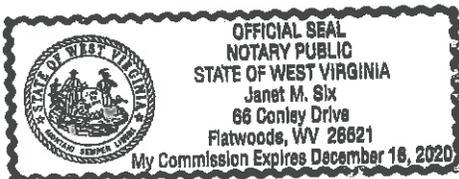
Air Quality Permit Notice
was published in said newspaper for one consecutive issues, to-wit, in its issues of April 12, 2016.

Edward R. Given
Managing Editor

Taken, sworn to and subscribed by the said **Edward R. Given** before me, in Braxton County West Virginia, this 12th day of April, 2016.

Janet M Six
Notary Public

My commission expires December 16, 2020.



AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Weyerhaeuser NR Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Rule 13 Permit to Modify the Sutton OSB Facility in Heaters, Braxton County, West Virginia. The latitude and longitude coordinates are: 38.762450 and -80.653240.

The applicant estimates the modification will change the facility's potential to discharge of the following Regulated Air Pollutants:

Pollutant	Tons/yr
VOC	61.4
PM	3.89
PM10	3.89
PM2.5	3.89
HAPs	9.85
Methanol	6.06
NOx	4.81
CO	6.08

Application will take place upon issuance of permit. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours. Dated this the 12th day of April, 2016.

By: Weyerhaeuser NR Company
Matthew Rutherford
Environmental Manager
3601 Gauley Pike
Heaters, WV 26627 4-12

**REPOSSESSED PROPERTY
FOR SALE AT PUBLIC AUCTION**
Little Birch Preowned Auto&RV
Sales will offer the following vehicles for sale at public auction on

Adkins, Sandra K

From: Adkins, Sandra K
Sent: Wednesday, April 06, 2016 9:00 AM
To: 'jesse.merica@weyerhaeuser.com'; 'Jesse Hanshaw'
Cc: McKeone, Beverly D; Kessler, Joseph R
Subject: WV DAQ Permit Application Status for Weyerhaeuser NR Company; Heaters

**RE: Application Status
Weyerhaeuser NR Company
Heaters
Plant ID No. 007-00016
Application No. R13-1761I**

Entire Document
NON-CONFIDENTIAL

Mr. Merica,

Your application for modification permit for the Heaters facility was received by this Division on April 5, 2016, and was assigned to Joe Kessler. The following item was not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.
Please use extension 1250 in legal advertisement

This item is necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.