Air Quality Permitting
Response to Public Comments

March 23, 2017

Tier I Operating Permit No. T1-2014.0031

Project No. 61408

Bennett Lumber Products
Princeton, Idaho

Facility ID No. 057-00008

Prepared by:
Tom Burnham, Permit Writer
AIR QUALITY DIVISION

Final
Table of Contents

1.

BACKGROUND .................................................................................................................. 3

PUBLIC COMMENTS AND RESPONSES ..................................................................... 3

APPENDIX ...................................................................................................................... 6
BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the draft Tier I operating permit Bennet Lumber Products Princeton from September 21, 2016 through October 21, 2016, in accordance with IDAPA 58.01.01.364. During this period, comments were submitted in response to DEQ’s proposed action. Each comment and DEQ’s response is provided in the following section. All comments submitted in response to DEQ’s proposed action are included in the appendix of this document.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the draft permit are summarized below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department’s technical analysis, or the draft permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at: http://adminrules.idaho.gov/rules/current/58/0101.pdf.

Comment 1:

HAP emissions have a permitted threshold of 9.49 T/yr, presumably set at that level to stay below the HAP emissions threshold for major sources of 10 T/yr. Given that HAP emissions are calculated based on throughput of lumber, it seems appropriate that this permit include operational limitation on lumber throughput as well as HAP emission limits to ensure permissible levels are not exceeded. Additionally, we are concerned over whether 0.51 T/yr provides a sufficient buffer to ensure HAP emissions will not exceed the 10 T/yr threshold for major sources? We are curious if there are any examples during the previous permit cycle where an excessive amount of lumber was processed and caused an exceedance of the 10 T/yr threshold. If such examples do exist, the worst exceedance event (i.e. – maximum HAP emission above 10 T/yr) should be used as the appropriate buffer amount. For example, if during the previous permitted cycle an event occurred where HAP emissions were calculated at 11 T/yr, the additional 1 T/yr should be used as a buffer amount, resulting in a new permissible threshold of 9 T/yr.

Response 1: Tier I operating permits, also known as Title V operating permits pursuant to the Clean Air Act, are designed to compile all applicable state and federal air quality requirements for an existing major facility into one document. Major source HAP thresholds are set forth in Title V as 10 T/yr for any single individual HAP, and 25 T/yr for aggregate HAPs. The Tier I permit includes conditions that sets HAP emission rate limits in Operating Conditions 4.3 through 4.5 for the Hog- fuel boiler and 5.4 through 5.5 for the kilns. The Hog fuel boiler and Kiln monitoring and recordkeeping requirements work to together with the operating conditions produce federally enforceable HAP limits. Additionally, the facility was over 30% below these HAP limits based on recent source tests at the throughput permitted.

Comment 2:

Table 5.5 in DEQ’s Statement of Basis lists 38 emission units classified as insignificant, although there is no accompanying estimates of emissions from each individual unit. While each unit, individually, may be insignificant, we are concerned that the presence of such a large number of units could have a cumulative impact and thus should be considered when determining permissible thresholds. Either DEQ or the applicant should provide emission estimates for each unit in order to evaluate any potential cumulative impacts resulting from aggregating emissions from all of these units.

We are especially concerned over HAP emissions and the narrow buffer allotted to BLP
to remain under the major source threshold of 10 T/yr. Given such a large number of emission units, coupled with a narrow HAP buffer, it would be prudent for DEQ to aggregate emissions from all units deemed insignificant into one cumulative emission unit in order to incorporate potential emissions into permissible thresholds.

Response 2: This Tier I operating permit renewal is issued in accordance with IDAPA 58.01.01.300 through 399 (Rules). There is no limit to the number of insignificant sources that can be a part of a facility's production. All of the sources in Table 5 are listed in IDAPA 58.01.01.317. The emissions from these units have not been excluded for purposes of the emission rate limits for a Title V facility. For example, HAP emissions from the storage and diesel tanks are included in the facility-wide potential to emit (PTE) in the application listed as “Solvents”.

Comment 3:

BLP’s facility has the potential to emit 70.95 T/yr of NOx and 122.163 T/yr of VOCs. Both of these constituents are precursors to the secondary formation of ozone in the atmosphere. It would be appropriate for DEQ to require modeling of secondary ozone formation to ensure the National Ambient Air Quality Standard for ozone is not violated.

Response 3: This Tier I operating permit renewal is issued in accordance with IDAPA 58.01.01.300 through 399 (Rules). These regulations do not require an applicant’s demonstration of compliance with the National Ambient Air Quality Standards through dispersion modeling. Tier I operating permits, also known as Title V operating permits pursuant to the Clean Air Act, are designed to compile all applicable state and federal air quality requirements for an existing major facility into one document.

Comment 4:

Permit condition 3.8 requires BLP to either continuously monitor opacity or conduct quarterly inspections to ensure visible emission limits are not violated. We believe monthly facility inspections conducted by employees is inherently subjective and not appropriate for assessing opacity compliance. Conversely, utilizing continual opacity monitoring as a means to assess visible emissions provides an objective means to assess visible emissions independent of human influence. This equipment removes the reliance on subjective interpretation and replaces personal opinion with clear, continuous data indicating whether or not the facility is complying with visible emission standards. Given this benefit, we request that DEQ requires continual opacity monitoring and removes the option for facility inspections conducted by employees.

Response 4: Permit Condition 3.8 is standard language for Facility-wide requirements for Tier 1 facilities that are included in all Tier 1 Operating permits to apply equitably statewide. IDAPA 58.01.01.322.06 requires the monitoring to be sufficient to ensure compliance, which DEQ asserts can be achieved with either continual opacity measurements or periodic monitoring. Furthermore, Method 9 observation required in this permit condition removes subjectivity from the monitoring. Additionally, this facility has not had a history of erratic release of visible emissions.

Comment 5:

Table 4.2 lists hourly and yearly permissible PM10 emissions from the hog fuel boiler of 27 lbs/hr and 99.48 T/yr. Section 5.1 of DEQ’s Statement of Basis states that the boiler operates continuously except for one week throughout the year for maintenance. If this is the case, the proposed hourly emission limit equates to the following:

$$\frac{27 \text{ lbs}}{\text{hr}} \times \frac{24 \text{ hours}}{\text{day}} \times \frac{7 \text{ days}}{\text{week}} \times \frac{51 \text{ week (operating)}}{1 \text{ year}} \times \frac{0.0005 \text{T}}{1 \text{lb}} = 115.67 \text{T/yr}$$
Therefore, BLP could simultaneously be compliant with their hourly emission limit while exceeding their yearly limit. We feel it would be appropriate for DEQ to include a permissible hourly limit of 23.22 lbs/hr in order to have consistent hourly and yearly emission limits.

Response 5: The hourly rate protects the NAAQS and has been reviewed by DEQ staff to be correct. The tons per year is based on controlled emissions and is utilized for facility classification. Since the facility is already major, the higher limit is unnecessary, and lowering the short term limit is not justified.

Comment 6:

After a valid complaint concerning fugitive dust is received or if fugitive dust emissions are not being reasonably controlled, permit conditions 3.3 and 3.4 state the following respectively: “The permittee shall take appropriate corrective action as expeditiously as practicable…” and “…the permittee shall take corrective action as expeditiously as practicable.” While we understand that corrective actions can take many different forms and their implementation may be equally variable, the language quoted above is not specific enough to be practically enforceable. Regarding these permit conditions, DEQ should further clarify a timeframe within which BLP must complete appropriate action. In addition, DEQ should also provide clarity as to what forms of appropriate action BLP must take when fugitive dust emissions are not being reasonably controlled.

Response 6: Permit Conditions 3.3 and 3.4 are standard language for Facility-wide requirements for Tier 1 facilities that are included in all Tier 1 Operating permits to apply equitably statewide. These permit conditions require the facility to keep accurate records of complaints and responses. Permit Condition 10.14 allows DEQ to access the facility at any time for inspection, including records of responses to complaints. Furthermore, IDAPA 58.01.01.322.10 requires the reporting every 6 months of corrective measures. Additionally, this facility has a very good track record of reporting promptly on other notifications and has received no complaints in their last inspection period.

Comment 7:

Commentary at page 35 of the Statement of Basis claims that 40 CFR 63.11200(a), and (c) through (g) do not apply to BLP. It is not clear why subsection (f) does not apply to BLP. Subsection (f) is a subcategory of boiler with an oxygen trim system that maintains an optimum air-to-fuel ration that would otherwise be subject to a biennial tune-up. On or around 2012, BLP installed such an oxygen trim system. This permit should reflect that BLP’s boiler identifies under both 40 CFR 63.11237 (b) and (f). Accordingly, the permit must also include any and all conditions required due to BLP’s boiler classification under 40 CFR 63.11237 (b) and (f).

Response 7: The designation at page 35 of the Statement of Basis (SOB) has been changed to include the (f) subcategory of boiler with an oxygen trim system that maintains an optimum air-
to-fuel ration. The tune-up requirements are already in the permit.

Comment 8:

On pages 22 and 23 of the Statement of Basis, the MRRR’s order 4.21 and 4.22 appear to cite the incorrect permit conditions. To ensure clarity, the Statement of Basis should be revised to accurately reflect the intention of the MRRR’s.
Response 8: MRRR’s 4.21 and 4.22 in the SOB have been corrected.

Comment 9: In Appendix C of BLP’s Permit Application, two tables were provided that are illegible. From what we can tell, the tables concern BLP emissions. All documents submitted to DEQ must be clear and legible, otherwise the public’s ability to consider and comment on permits impacting the air they breathe and the water they drink is diminished. Please ensure that all of BLP’s documents are legible.

Response 9: Legible copies the tables in Appendix C of the application have been received and are filed with the application.

Comment 10: The only comment Bennett Lumber Products (BLP) has on the draft air operating permit T1-2014-0031 renewal, currently out for public comment, is:

• In section 4.6, on the first line, please say "at least once every five years" or "before the end of 2020" instead of "prior to July 28, 2020"

Response 10: “prior to July 28, 2020” has been replaced with "at least once every five years" in the permit and SOB.

In light of this comment, and reviewing the CAM activities that have occurred during the Tier1 renewal period, including the finalization of CAM indicators for the Zurn hog-fueled boiler, and as part of the Tier1 renewal process, the CAM Permit Section 8 of this proposed permit have been removed and Table 4.3 of CAM requirements has been added to Permit Condition 4.5.

Appendix

Public Comments Submitted for

Tier I Operating Permit No.

T1-2014.0031
10/21/2016

Anne Drier  Bill Rogers
Air Quality Division  Air Quality Division
DEQ State Office  DEQ State Office
1410 N. Hilton  1410 N. Hilton
Boise, ID 83706  Boise, ID 83706

Submitted via email: anne.drier@deq.idaho.gov and William.rogers@deq.idaho.gov

RE: Tier 1 Operating Permit No. T1-2014.0031

Dear Ms. Drier and Mr. Rogers,

Thank you for the opportunity to comment on the draft Tier 1 air quality permit renewal for Bennett Lumber Products' (BLP) facility near Princeton, ID. Since 1973, the Idaho Conservation League has been Idaho’s leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho’s extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho’s air quality.

Please do not hesitate to contact me at 208-345-6933 ext. 23 or ahopkins@idahocconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

Austin Hopkins
Conservation Assistant

RE: Idaho Conservation League comments on Tier 1 Operating Permit No. T1-2014.0031 for Bennett Lumber Products

Page 1 of 4
HAP Emissions

HAP emissions have a permitted threshold of 9.49 T/yr, presumably set at that level to stay below the HAP emissions threshold for major sources of 10 T/yr. Given that HAP emissions are calculated based on throughput of lumber, it seems appropriate that this permit include operational limitation on lumber throughput as well as HAP emission limits to ensure permissible levels are not exceeded.

Additionally, we are concerned over whether 0.51 T/yr provides a sufficient buffer to ensure HAP emissions will not exceed the 10 T/yr threshold for major sources? We are curious if there are any examples during the previous permit cycle where an excessive amount of lumber was processed and caused an exceedance of the 10 T/yr threshold. If such examples do exist, the worst exceedance event (i.e. – maximum HAP emission above 10 T/yr) should be used as the appropriate buffer amount. For example, if during the previous permitted cycle an event occurred where HAP emissions were calculated at 11 T/yr, the additional 1 T/yr should be used as a buffer amount, resulting in a new permissible threshold of 9 T/yr.

Cumulative Impacts of Insignificant Activities

Table 5.5 in DEQ’s Statement of Basis lists 38 emission units classified as insignificant, although there is no accompanying estimates of emissions from each individual unit. While each unit, individually, may be insignificant, we are concerned that the presence of such a large number of units could have a cumulative impact and thus should be considered when determining permissible thresholds. Either DEQ or the applicant should provide emission estimates for each unit in order to evaluate any potential cumulative impacts resulting from aggregating emissions from all of these units.

We are especially concerned over HAP emissions and the narrow buffer allotted to BLP to remain under the major source threshold of 10 T/yr. Given such a large number of emission units, coupled with a narrow HAP buffer, it would be prudent for DEQ to aggregate emissions from all units deemed insignificant into one cumulative emission unit in order to incorporate potential emissions into permissible thresholds.

Ozone Modeling

BLP’s facility has the potential to emit 70.95 T/yr of NOx and 122.163 T/yr of VOCs. Both of these constituents are precursors to the secondary formation of ozone in the atmosphere. It would be appropriate for DEQ to require modeling of secondary ozone formation to ensure the National Ambient Air Quality Standard for ozone is not violated.

Visible Emission Monitoring

RE: Idaho Conservation League comments on Tier 1 Operating Permit No. T1-2014.0031 for Bennett Lumber Products
Permit condition 3.8 requires BLP to either continuously monitor opacity or conduct quarterly inspections to ensure visible emission limits are not violated. We believe monthly facility inspections conducted by employees is inherently subjective and not appropriate for assessing opacity compliance. Conversely, utilizing continual opacity monitoring as a means to assess visible emissions provides an objective means to assess visible emissions independent of human influence. This equipment removes the reliance on subjective interpretation and replaces personal opinion with clear, continuous data indicating whether or not the facility is complying with visible emission standards. Given this benefit, we request that DEQ requires continual opacity monitoring and removes the option for facility inspections conducted by employees.

**Discrepancy in PM$_{10}$ Emission Limits**

Table 4.2 lists hourly and yearly permissible PM$_{10}$ emissions from the hog fuel boiler of 27 lbs/hr and 99.48 T/yr. Section 5.1 of DEQ's Statement of Basis states that the boiler operates continuously except for one week throughout the year for maintenance. If this is the case, the proposed hourly emission limit equates to the following:

\[
\frac{27 \text{ lbs}}{hr} \times \frac{24 \text{ hrs}}{1 \text{ day}} \times \frac{7 \text{ days}}{1 \text{ week}} \times \frac{51 \text{ week (operating)}}{1 \text{ year}} \times \frac{0.0005 T}{1 \text{ lb}} = 115.67 \text{ T/yr}
\]

Therefore, BLP could simultaneously be compliant with their hourly emission limit while exceeding their yearly limit. We feel it would be appropriate for DEQ to include a permissible hourly limit of 23.22 lbs/hr in order to have consistent hourly and yearly emission limits.

**Fugitive Dust**

After a valid complaint concerning fugitive dust is received or if fugitive dust emissions are not being reasonably controlled, permit conditions 3.3. and 3.4 state the following respectively: "The permittee shall take appropriate corrective action as expeditiously as practicable..." and "...the permittee shall take corrective action as expeditiously as practicable." While we understand that corrective actions can take many different forms and their implementation may be equally variable, the language quoted above is not specific enough to be practically enforceable.

Regarding these permit conditions, DEQ should further clarify a timeframe within which BLP must complete appropriate action. In addition, DEQ should also provide clarity as to what forms of appropriate action BLP must take when fugitive dust emissions are not being reasonably controlled.

**Boiler Sub-categories**
Commentary at page 35 of the Statement of Basis claims that 40 CFR 63.11200(a), and (c) through (g) do not apply to BLP. It is not clear why subsection (f) does not apply to BLP. Subsection (f) is a subcategory of boiler with an oxygen trim system that maintains an optimum air-to-fuel ration that would otherwise be subject to a biennial tune-up. On or around 2012, BLP installed such an oxygen trim system.

This permit should reflect that BLP’s boiler identifies under both 40 CFR 63.11237 (b) and (f). Accordingly, the permit must also include any and all conditions required due to BLP’s boiler classification under 40 CFR 63.11237 (b) and (f).

**Typographical Errors**

On pages 22 and 23 of the Statement of Basis, the MRRR’s under 4.21 and 4.22 appear to cite the incorrect permit conditions.

To ensure clarity, the Statement of Basis should be revised to accurately reflect the intention of the MRRR’s.

**Illegible Tables**

In Appendix C of BLP’s Permit Application, two tables were provided that are illegible. From what we can tell, the tables concern BLP emissions. All documents submitted to DEQ must be clear and legible, otherwise the public’s ability to consider and comment on permits impacting the air they breathe and the water they drink is diminished. Please ensure that all of BLP’s documents are legible.
Re: BLP formal comment on IDEQ draft Title V air permit T1-2014-0031 renewal, IDEQ project number 63408

The only comment Bennett Lumber Products (BLP) has on the draft air operating permit T1-2014-0031 renewal, currently out for public comment, is:

- In section 4.6, on the first line, please say “at least once every five years” or “before the end of 2030” instead of “prior to July 28, 2020”

IDEQ wrote in its May 2016 CAM Plan approval letter “by July 28, 2020”, which would be five years to the day since the facility’s 2015 gas testing source test which set up that interval. IDEQ has set a precedent for interpreting the five year interval requirement anytime within the fifth calendar year (2020), though, rather than within five years to the day of the exact 2015 test calendar date (IDEQ, Resolution FO to IFG Grangerville in 2016). It seems only equitable that if other facilities are required to test at any date in the fifth year, then BLP should also be allowed to.

This message is intended to provide public comment from Bennett Lumber Products on the IDEQ draft air permit. If anything else is needed for these comments to be formally included, please let us know.

Thank you.

Chris Johnson
(208) 628-4036