



OPERATIONAL CONSULTANTS

Planning and Management Services

April 28, 2010

Elizabeth Bisbey-Kuehn
New Source Review
NMED Air Quality Bureau
1301 Siler Road - Bldg B
Santa Fe, NM 87507-3113



Dear Ms. Bisbey-Kuehn:

With reference to Premier Pellets application number 4166, provided below are our responses to your request for additional information.

NMED Request:

Submittal of the following information is necessary to make a determination whether the application is administratively complete:

- 1) The hourly production rate appears to be incorrect and if so must be modified to 7.6 tons per hour, based on a daily production limit of 130 tons per day and a 17 hour per day schedule.

Response:

In the revised application and spreadsheet, the facility will operate 17 hours per day at 90 Tons per Day (TPD). The hourly production rate will be limited to $90 \text{ TPD} / 17 \text{ hrs} = 5.29 \text{ tons/hour}$. Emissions were calculated and previously modeled for some processes at a higher production rate. Therefore, in this revised application there is a slight decrease in emissions.

Modeling does not have to be redone.

NMED Request:

- 2) Exemptions under 20.2.72.202.B(7) NMAC cover only abrasive blasting operations and cannot be referenced as the basis for an exemption for another source category.
- 3) Per 20.2.72.202.B(5) NMAC, multiple emissions units, operations, and activities that perform identical or similar functions shall be combined in determining the applicability of this exemption. You must combine all activities that are similar and demonstrate that the emissions continue to fall below the 0.5 tpy applicability threshold to qualify for this exemption.

Response:

In our revised version reference to 20.2.72.B(7) has been removed and all exemptions are based on 20.2.72.202.B5 All of the equipment presented below is listed as No Measurable Emissions (NME) or as “pass thru” equipment. No measureable emissions are the processes that move the logs prior to any processing. Pass Thru emissions are emissions that are generated and have a covered or enclosed process. The “pass thru” emissions are passed through the equipment processing (i.e., hammermill) and end up being sent to through one of three cyclones.

Equipment that does not have controls includes Unit C-1 Chipper, Unit 3 Debarking, Unit 5 – Log Cutting and Unit 8 – Log Shaving. Emissions from these units are further discussed under response to Question 4, 5 and 7.

Unit Number	Source Description	Emissions
1	Storage Log Decks	NME
2	Grappler	NME
4	Elevated Table Conveyor	NME
6, 7	East & West Log Decks	NME
9	Covered Conveyor	Pass Thru
10	Transfer Fan	Pass Thru
11	Diverter Valve	Pass Thru
A1, B1, C3	Cyclone	Pass Thru
A2	Bulk Storage Bin	Pass Thru
B2	Shaker Screen	Pass Thru
B4	(Dried) Bulk Shavings Storage	Pass Thru
B5	Shaving Bagger	Pass Thru
B6	Bagged Storage	Pass Thru
C2	Hammermill	Pass Thru
C5	Pellet Mill Surge Bin	Pass Thru
C6	Pellet Mill	Pass Thru
C7	Pellet Cooler	Pass Thru
C8	Pellet Bag Line	Pass Thru
C9	Pellet Bag Line Storage	Pass Thru

NMED Request:

- 4) Provide additional background documentation of the source of the emission factors (EF) from the TV Three Rivers Timber Permit, and that served as the basis for the EF used in this application.

Response:

Emission factors were used based on the Three Rivers Timber Statement of Basis (TRT-SOB) document prepared by USEPA Region 10 Staff. A complete copy of this document is attached as (ThreeRiversTimber.SOB.pdf). Table 5 on page 18 shows the emissions factors used in our calculations. Table 7, beginning on page 21, indicates the reference sources used in determination of the emissions factors. Both AP-42 emission factors as well as Oregon Department of Environmental Quality were cited as the reference for the emissions data used in the permit.

The emission factors we used for Unit C-1 Chipper, Unit-3 Debarking, Unit 5 Log Sawing, and Unit 8 Log Shaving were based on *Uncontrolled* emission factors from the TRT-SOB. We believe this information should satisfy the NMED AQB of the validity of the factors used. This is based on the following:

- The emission information cited is based on factors from USEPA – AP 42.
- AP-42 Emission Factors are overly conservative.
- The Three Rivers Timber Permit is a federally enforceable permit from the USEPA. Information and source data cited in the permit application became federally enforceable as part of the permit. As such, the NMED AQB should be able to utilize the TRT-SOB as a reference information as to further validate any permitting action performed by NMED.

NMED Request:

- 5) Update Table 2-E to include TSP from Units 5, 8, and C1.

Response:

The requested TSP values have been included on Table 2-E. Please see Table 2-E row highlighted in the attached Spreadsheet.

NMED Request:

- 6) Cyclones have variable collection efficiencies based on design, particulate loading, gas velocity through the unit, cyclone diameter and residence time. Cyclones do not control PM at 100% and are less efficient for small particles, therefore you must calculate the estimated PM, PM10 and PM2.5 that are emitted from the cyclones.

Response:

Please note that all cyclone(s) exhaust will be diverted to the burner intake (Unit B3) and there will be only combustion based emissions. Combustion emissions have been accounted for and are shown on Table 2E.

NMED Request:

- 7) There is no reference to a PM10:PM2.5 ratio in the WHO document submitted in the application. Please provide additional justification for assumptions made in the TAPs calculations.

Response:

The raw product (logs) is green/wet wood from which shavings are produced and the size of shavings is relatively large. Although not quantifiable related to air quality permitting, the final shaving product does have a requirement that the product should not have particles sizes that impact animal respiration (ie, shavings are used for race horses).

Secondly, it is not possible to find PM2.5 from wood shavings when WHO itself states that there is no significant emissions. We believe that the word significant is usually 1% or less. However, we have conservatively assumed that 10% of the PM10 is PM2.5. Please note this is a very conservative approach and overestimates emissions by ten-fold.

Uncontrolled emissions from all four process units were combined (Unit C-1, 3, 5, and 7) and calculated to be equal 0.09 lbs/hour. This value is below the significance level of 0.33 lbs/hour for Wood Dust defined as a New Mexico Toxic Air Pollutant (TAP). Therefore no further analysis should be required.

NMED Request:

- 8) The length of haul road has been underestimated for the Haul Road Pellet Output and Bulk and Bagged Shaving Output. My calculations indicate the two-way distance of this roadway is 0.4 miles, not 0.2 miles as submitted in the application.

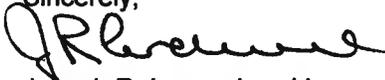
Response:

Haul Roads were calculated based on two different routes for trucks entering the facility. The haul log-in area (raw product in) was calculated at 0.5 miles roundtrip. The shaving unloading area was estimated at 0.2 miles roundtrip (see attached drawing) while the pellet bagging area was calculated at 0.1 miles roundtrip. The roads were driven, and the actual length of the haul roads is slightly less than the calculated lengths. Emissions modeling indicate no exceedance of the ambient air quality standards. (See attached facility drawing and Google map.)

We believe these responses address your identified concerns. Please let us know promptly if there are additional items you want addressed. Otherwise, we look forward to your deeming this application administratively complete.

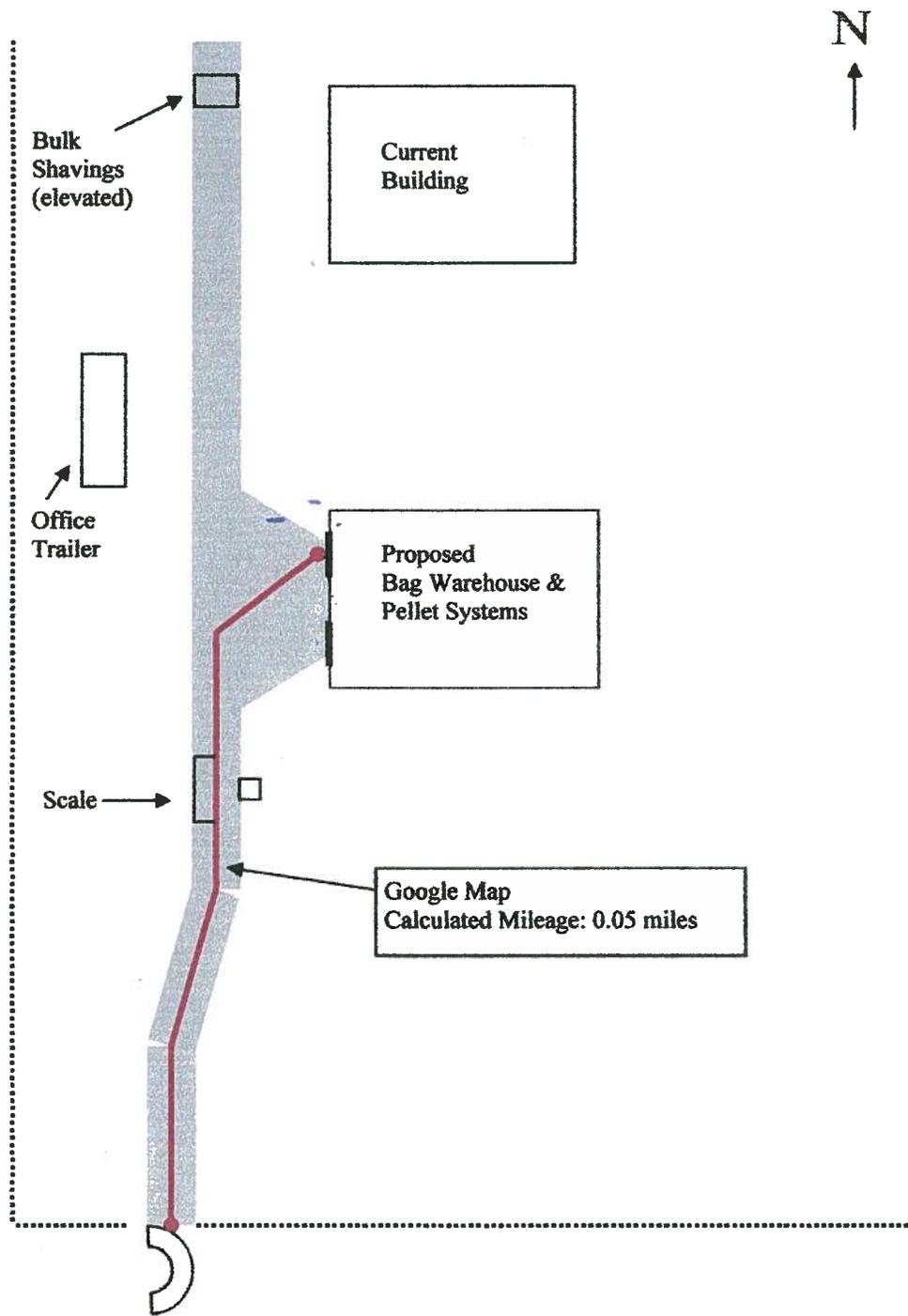
Thank you again for your assistance in this matter.

Sincerely,



Joseph R. Lewandowski
Senior Consultant

attached: Tables 2A through 20
 Emissions Table & Model Input
 List of Exempted Equipment
 Three Rivers Timber, Inc. – Title V Permit to Operate
 Facility Drawing
 Google map



<p>Premier Pellets Site Drawing April 2010</p>	<p>Developed by OPERATIONAL CONSULTANTS</p> 
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Moon Valley Rd

- Current Building
- Bag Warehouse Pellet Production
- Scale

© 2010 Google
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Imagery Date: Sep 1, 2004 33°02'53.68" N 106°00'07.61" W elev 4490 ft Eye alt 6274 ft