

Response to Comments
Draft Air Pollution Control Permit to Construct for North Springfield Sustainable Energy Project, LLC (NSSEP) issued August 9, 2012

On August 9, 2012 the Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Pollution Control Division (Agency) issued a Draft Air Pollution Control Permit to Construct to North Springfield Sustainable Energy Project, LLC (NSSEP). The Agency then held a public meeting on August 29, 2012 to accept oral and written comments regarding the draft air permit. In addition, the Agency accepted written comments on the Draft Air Pollution Control Permit to Construct until September 10, 2012.

The Agency has summarized herein all the oral and written comments submitted regarding the draft Air Permit and is providing the Agency's responses to those comments below. Similar comments and concerns have been grouped together into a single response where appropriate. A list of all commenters is provided at the end of this document.

During the comment period, the Agency received a number of comments that fall outside the scope of the Agency's air permitting authority, and in many cases beyond the Agency's area of expertise with respect to air pollution. The Agency's air permitting process is governed by 10 VSA Chap. 23. The statutory provisions contained therein delegate to the Agency the authority to grant permits to control sources of air pollution. To implement this permitting authority, the Agency promulgated the Vermont Air Pollution Control Regulations to establish the requirements that permit applicants must follow when applying for an air permit. Under 10 VSA §556(c), the Agency is required to issue an air pollution permit to construct if "the secretary determines that the proposed construction or installation of an air contaminant source will be in compliance with all requirements of this chapter and the rules adopted under this chapter." On the other hand, 10 VSA §556(c) requires the secretary to deny the permit if the Agency "determines that the proposed construction or installation of an air contaminant source will not be in compliance with all requirements of this chapter and the rules adopted under this chapter." Thus, the scope of the Agency's permitting authority is limited to determining whether a permit application has complied with the requirements in 10 VSA Chap. 23 and Vermont's Air Pollution Control Regulations. Thus, with respect to comments that exceed the Agency's jurisdiction under 10 VSA Chap. 23, the Agency's

response simply notes that the issue(s) raised by the comment fall outside the scope of the Agency's permitting authority.

The Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Pollution Control Division (Agency) has summarized herein all the written comments submitted and is providing the Agency's responses to those comments below.

Comments related to the size of the project:

Comment #1: The facility rating in MWe does not match what has been filed at the PSB (Commenters 3, 9, 26)

The draft permit states (p. 2) "*The high pressure steam is directed to a multi-stage condensing steam turbine-generator, with a maximum gross electrical output of approximately 42.5 MWe. Due to internal energy demands, the Facility is designed to produce an average of approximately 37 MWe (net) for sale*"

This does not match statements made to the PSB where the applicant has repeatedly stated that the facility will be between 25 and 35 MW in capacity. Wood use by the facility has been estimated based on a total capacity of 35 MW. The difference in wood use between a 42.5 MW plant and a 35 MW plant is substantial. This point needs to be clarified and the wood use numbers corrected if this plant is really going to be this large.

Response: *On 12/22/2011 H. Dana Smith, of Waldron Engineering and Construction Incorporated, provided testimony on behalf of the NSSEP to the Vermont Public Service Board. On page 3 of this testimony Mr. Smith indicated "when at full load, the facility will consume approximately 50 tons per hour of natural biomass wood fuel and it will generate 35,000 kW of power at 46,000 kV, delivered to CVPS Fellows Gear Substation."*

The Air Pollution Control Permit application was submitted for a 35 MW (35,000 kW) net electric capacity. This electric output is consistent with the testimony noted above. Additionally the fuel usage value provided by Mr. Smith is similar to the Agency's estimated hourly fuel usage rate of 51.5 tons/yr. During the development of the draft permit, NSSEP refined their system design and increased the proposed plant's overall energy efficiency so they could achieve a net electrical output of 37 MW without increasing the energy input (wood fuel usage) to the boiler. Thus, the Agency has estimated emissions and wood fuel consumption based on the full 42.5 MW gross and 37 MW net electric power generation.

Comment #2: The proposed large scale biomass electric project is not in-line with Governor Shumlin's goals for reducing CO₂ emissions and/or for renewable energy development. (Commenters 4, 9, 24, 27)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comments related to emission calculations and BACT/MSER:

Comment #3: Potential to emit has been calculated incorrectly (Commenter 26)

Page 5 of the draft technical support document states: the Permittee has not proposed any operating limits for the Boiler. However, the annual potential to emit calculations are based on an average heat input of 464 MMBtu/hr (vs. the maximum design heat input of 502 MMBtu/hr), for 365 days per year, so the permit will have an annual heat input limit of 4,064,640 MMBtu/yr. Assuming 4,500 Btus per pound of 45% moisture wood, this equates to approximately 451,627 tons/yr of wet wood fuel.

Page 6 of the draft technical support document states: for the Boiler, the calculated allowable annual emissions of SO₂, NO_x, PM, CO and VOCs are based on the established emission limits expressed in lbs/MMBtu and an annual average maximum heat input of 464 MMBtu/hr.

This is not the correct way to calculate the potential to emit (PTE). The PTE is correctly calculated by multiplying the maximum heat input capacity of the boiler (502 mmbtu) by the maximum hours of operation (8760) by the emission rate of the pollutant.

The avoidance of correctly estimating PTE is explained on page 20 of the permit, which states that the heat input of the facility will be limited to 4,064,640 mmbtu per 12 month period. However, there is little evidence that this limit can be enforced.

Response: *The review of this permit application followed the guidance in the U.S. EPA 'New Source Review Workshop Manual (Draft October 1990). In this guidance document, the potential to emit (PTE) may include limitations such as restrictions on design capacity utilizations, restrictions on hours of operation and restrictions on the types or amount of material processed. The heat input limit of 4,064,640 MMBtu/hr per 12 month period is a permitted limit and is used to limit the PTE.*

The heat input limit is enforceable since the heat input to the boiler will be calculated and recorded on an hourly basis and can be averaged over the course of a full year.

The Equipment Specifications table on page 3 of the draft permit will be changed to reflect that 464 MMBtu/hr (with 45% moisture content fuel) is the annual average ‘maximum’ heat input to the boiler, while 505 MMBtu/hr is the short term maximum heat input. The purpose of identifying a higher short term heat input, is to recognize that during periods of time when firing very wet fuel, the pollutant emission rate will be higher, and the short term (≤ 24 hour standards) NAAQS review must be conducted with these higher pollutant emission rates. Conversely, compliance with the annual NAAQS was based on the annual average heat input limit.

Comment #4: The emission rate of pollutants from this project will be greater than coal plants: wood is dirtier than coal (4, 14, 23, 24, 25, 27, 29)

Response: *Some of the comparisons for pollutant emission rates from NSSEP and the Mount Tom Coal Plant have shown the reported actual emission rates from Mt. Tom and comparing them to the proposed permit limits for NSSEP. A more appropriate comparison would be to compare the permitted emission limits for Mt. Tom and the proposed emission limits for NSSEP. Most of the limits in the draft NSSEP permit are in terms of heat input, for comparison purposes, these limits have been converted to electrical output assuming a heat rate of 12,541 Btu/kWh and are shown in the following table. It should be noted that the Mt. Tom coal plant has been upgraded and has modern emission control equipment installed and operating: it is much cleaner than a typical 52-year old coal plant.*

Pollutant	Permitted Emissions (lb/MWh)	
	Mt. Tom Coal Plant	NSSEP
SO ₂	2	0.25
NO _x	1.5	0.38
PM	0.25	0.24
VOC	0.024	0.063
CO	1.66	0.94
CO ₂	1800	2675
NH ₃	0.03	0.075

Comment #5: MSER for CO is not really the most stringent emission rate (Commenter #26)

Page 6 of the draft permit states that MSER for CO is 0.075 lb/mmBtu. This is not the most stringent emission rate. The air permit for the Palmer Renewable Energy facility, which also includes a Babcock and Wilcox boiler, has a 12 month CO emission rate of 0.0365 lb/mmBtu, achieved with use of an oxidation catalyst. Considering the location of the North Springfield facility, in close proximity to other businesses, etc, the ANR should require the MSER rate to *actually be* the “most stringent”. This would require use of an oxidation catalyst.

Response: *The 0.075 lb/mmBtu emission rate is the same emission rate the Agency established for the similar Beaver Wood Energy Fair Haven permit. Beaver Wood Energy had proposed the use of an advanced stoker design boiler and an oxidation catalyst to achieve this emission rate. NSSEP has designed their boiler to achieve this emission rate without the need of an oxidation catalyst. In response to this comment regarding CO BACT, the Agency instructed the Permittee to conduct additional analysis to determine the cost effectiveness of using a an oxidation catalyst for their boiler to achieve 0.0365 lb/MMBtu. The addition of an oxidative catalyst to achieve a reduction in CO from 0.075 lb/MMBtu to 0.0365 lb/MMBtu would result in a potential reduction in annual CO emissions of 74 tons. The estimated cost to add a CO catalyst is \$16,800/ton of CO controlled (includes cost to install and an estimated catalyst life of 3 years, which requires an estimated cost of \$1,200,000 to replace the catalyst). Based on these costs, which can be considered in an MSER determination, the Agency determined that 0.075 lb/mmBtu still constitutes MSER for CO.*

Comments related to Hazardous Air Pollutants (HAPS) and Hazardous Air Contaminants (HACs):

Comment #6: The facility should be considered a major source for HAPs (Commenter #26)

The HAPs emissions limit of 25 tons appears to be unenforceable, both because HCl emissions will likely exceed 10 tons (discussed below) and because organic HAPs emissions have likely been underestimated significantly.

The absence of acid gas controls makes staying below 10 tons of HCl highly unlikely - The permit states, (p. 3) “Acid gases (SO₂, H₂SO₄, and HCl) are limited by inherently very low sulfur and chlorine levels in the wood fuel, and further reductions in the boiler and fabric filter from natural alkalinity in the wood ash.”

Both the biomass plants cited by the applicant are using sorbent systems for acid control. Therefore, it is not reasonable for NSSEP, which is not using a sorbent system, to cite these rates as achievable. Further, in our own database of over 70 recently issued air permits for biomass facilities around the country, we found that sorbent injection is more common than not. In fact, a number of facilities with boilers one half or less the capacity of the NSSEP boiler propose to use sorbent systems for acid gas control. There is nothing special about the NSSEP facility other than the inexperience of the developer. Acid gas control systems are now standard in the industry. Why is ANR not requiring one?

Response: NSSEP HCl emission rate is based on the emission limit in the Palmer Renewable Energy permit and the Burgess Biopower permit: 8.34×10^{-4} lb/MMBtu. While Burgess Biopower's design includes a dry sorbent injection system to control the emission of SO₂ and H₂SO₄, this system is only required to be operated 'as needed' to achieve the SO₂ and H₂SO₄ emission limits. The Palmer Renewable Energy design included a dry circulating fluid bed scrubber to control acid gases from the use of construction and demolition (C&D) fuel. When the Palmer project was re-proposed to use just unadulterated wood for fuel (no C&D), they did not seek approval to remove the use of the acid gas scrubber.

The Agency concluded that the proposed emission rate is achievable without an acid gas scrubber based on testing results of similar facilities. In the past, the Agency has reviewed potential HCl emissions by using the average of the stack tests from these four boilers, none of which use an acid gas control device: McNeil (1.1×10^{-4} lb/MMBtu), Ryegate (2.3×10^{-4} lb/MMBtu), Schiller Station (1.39×10^{-4} lb/MMBtu) and Bridgewater Power (8.7×10^{-4} lb/MMBtu). Average of these four facilities = 3.4×10^{-4} lb/MMBtu. With the exception of Bridgewater Power, which was within 5% of the 8.34×10^{-4} lb/MMBtu emission rate, all of these boilers, without an HCl control device would have met the limit. The Agency anticipates that other biomass boilers, including NSSEP, in this region burning unadulterated wood will also have low emission rates of HCl.

The Agency will modify the NSSEP permit to include an emission limit of 8.34×10^{-4} lb/MMBtu for HCl. If the HCl stack test demonstrates that the emission of HCl is greater than 8.34×10^{-4} lb/MMBtu, then the Permittee must take corrective action to reduce the emissions of HCl and demonstrate that it can achieve an HCl emission rate that is less than 8.34×10^{-4} lb/MMBtu.

Comment #7: The applicant has consistently underestimated HAPs emissions (Commenter #26)

We have reviewed the actual data that lies behind the AP-42 estimates of HAPs, and we have reviewed hundreds of test results for boilers burning unadulterated wood in EPA's December 2011 boiler database underpinning the new MACT rules. Similarly,

we have reviewed the data that lies behind the NCASI emission factors (much of which is the same as the AP-42 dataset). The applicant has in some cases cherry picked data to eliminate data points that they don't like and that they identify as "outliers", even though they used no statistical test to identify them as such, and has invented new emissions factors. For nearly every HAP emitted in any significant amount, the applicant has chosen or invented an emission factor that is significantly lower than the AP-42 factor.

Response: The EPA AP-42 emission factors for wood combustion in boilers are based on emission testing at facilities that are wide ranging in size that burn wood residue in the form of hogged wood, bark, sawdust, shavings, chips, mill rejects, sander dust, or wood trim. For some of the facilities included in the AP-42 database, the wood fuel included waste plywood/particle board, wood contaminated with up to 15% urea formaldehyde resins, laminated wood, paper mill sludge, or wood finishing waste. The emissions from the combustion of these contaminated wood fuel types, often in older boilers, is not considered to be representative of the combustion of unadulterated, natural wood that is the allowable wood fuel for NSSEP with more modern combustion controls. The NCASI data from Technical Bulletin No. 858 was based primarily on the emission data set used for AP-42, but NCASI used only the test data for the combustion of unadulterated natural wood, mostly from larger boilers. The Agency believes that the NCASI data is more representative of the HAP emissions from the combustion of natural wood from larger boilers compared to the AP-42 EFs.

The evaluation of the potential emissions of hazardous air pollutants (HAPs) and Hazardous Air Contaminants (HACs) for NSSEP is based on a combination of (1) emission data from the National Council for Air and Stream Improvements (NCASI), (2) emission factors from the EPA's AP-42 emission factors, and (3) AP-42 emission factors adjusted for outlier data. In general, the Permittee selected the higher emission factor (NCASI or AP-42), but in some cases they selected a less conservative emission factor. This was done for the following pollutants: acrolein, benzene, carbon tetrachloride, formaldehyde, HCl, propionaldehyde, styrene, toluene, arsenic, and manganese.

The Agency will ensure that the permit requires testing of all HAPs that represent a significant portion of the total HAP emissions. Many HAPs will not be required to be tested for since they are predicted to be very low emissions and are unlikely to influence whether the facility exceeds the EPA HAP Major Source thresholds of 10 tons/yr for a single HAP or 25 tons/yr for total HAPs.

What constitutes a 'significant portion'? The following table shows the HAPs with the highest estimated emissions from NSSEP. The HAPs in the right column will be specified for compliance stack testing at NSSEP once it is operational:

<i>Top HAPs, based only on AP-42, that account for >85% of total estimated HAP emissions.</i>	<i>Top HAPs from NSSEP Application that account for >85% of total estimated HAP emissions.</i>
Hydrogen Chloride	Formaldehyde
Formaldehyde	Benzene
Benzene	Hydrogen Chloride
Acrolein	Methanol
Styrene	Chlorine
	Styrene
	Dichloromethane (methylene chloride)
	Hexane
	Acrolein
	Acetaldehyde

Comment #8 : Commenters expressed concerns about the emission of air toxics (a.k.a. hazardous air pollutants and hazardous air contaminants):

“The plant will be a major source of toxic pollutants according to all available information and data.” (Commenter 19)

“As you know well scientific evidence indicates that carbon monoxide and a variety of "noxins," as well as a broad range of particulate matter comes from biomass burning” (Commenter 27)

“A number of reports indicate that expansion of biomass energy would undermine Vermont’s stated goals of reducing greenhouse gas emissions and will send hazardous air pollutants (HAPs) into our environment” (Commenter 9).

Response: As stated in the response to Comment #7 the facility is not considered to be a Major Source of HAPs. However, the plant will emit pollutants that are categorized as toxic. The proposed plant is designed to minimize the formation and emission of these toxic air pollutants. As noted in the response to Comment #8, the Agency will ensure that NSSEP will conduct stack testing of all of the HAPs that represent a significant portion of the total HAP emissions.

Comments related to air dispersion modeling and analysis:

Comment #9: Stack height is inadequate (Commenters 8, 19, 25, 26)

Good engineering practice for the stack height at NSSEP would be 290 feet, according to page 5-8 of the air permit application. However, according to testimony submitted by NSSEP to the PSB, the FAA has placed restrictions on the stack height of the facility. Page 19 states that the stack will be 140 feet in height. This facility is going to

be located in a densely populated area. If the stack height can't be made maximally protective to disperse pollutants, then the facility should not be built in this area.

Response: *The basis for a "good engineering practice" (GEP) stack goes back to the development of air dispersion models for stationary sources of air pollution. The original intent of the GEP stack height was to disallow the use of stack heights above this level to demonstrate compliance with ambient standards.*

The EPA wanted large facilities to utilize better control equipment to reduce emissions rather than constructing taller and taller stacks to disperse the pollutants into the upper atmosphere, and then downwind for hundreds of miles. There is no requirement for a facility to construct a GEP stack. A facility is allowed to make a demonstration of compliance with ambient standards at any stack height they wish so long as it is not greater than GEP, although lower stacks are progressively more difficult to show compliance. NSSEP has demonstrated compliance with all applicable ambient standards at a stack height of 140 feet.

Comment #10: SIL and SIA modeling results are obfuscated and appear to have been misrepresented (Commenter #26)

The ANR should consider rewriting and explaining the following section so that it actually says what it is supposed to say. On page 7 of the draft permit, it states:

The following pollutants/averaging times were had (sic) predicted concentrations that were greater than their respective SIL: PM₁₀ 24-hr, PM_{2.5} 24-hr, PM_{2.5} annual, SO₂ 1-hr, SO₂ 24-hr and NO₂ 1-hr. The interactive source modeling included the following two sources: APC Paper in Claremont, NH (SO₂ & NO₂) and Wheelabrator Claremont in Claremont, NH (SO₂ & NO₂). No nearby sources with significant emission rates of PM₁₀ or PM_{2.5} were identified.

But then on page 8, we are told: *For the 1-hr NO₂ and SO₂ standards it was necessary to identify the Facility's contribution to impacts at the receptors that had a total impact that is greater than the NAAQS. This analysis was done and it was determined that the predicted impacts from this proposed project at those receptors were well below the significant impact level. This review concluded that the Facility does not contribute to these predicted violations of the NAAQS.*

So which is it? We are told on page 7 that several pollutant measures have "predicted concentrations that were greater than their respective SIL", then on page 8 we are told that the predicted impacts are "well below" the significant impact level. Then we are told in the table on page 9 that for the pollutants requiring cumulative source modeling, even though the NAAQS are already

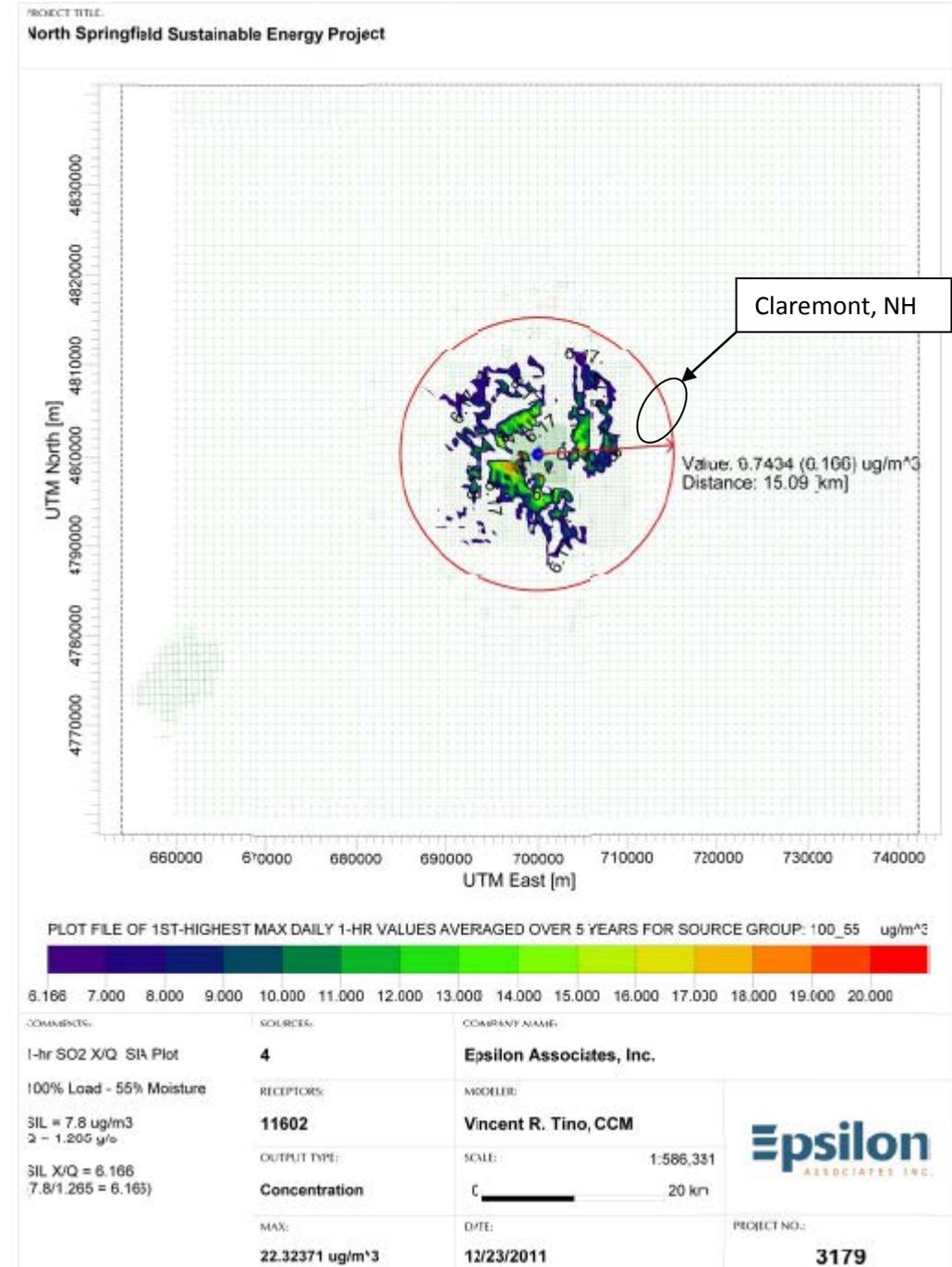
exceeded for the 1-hour NO₂ and SO₂ standards, not to worry, the contribution of NSSEP is so small, it does “not contribute” to the violations.

The public should not have to work this hard to interpret an air permit. This text is impenetrable, and the presentation of information conveys the impression that there is a problem with this facility’s emissions, but they are hiding it. Worse yet, ANR signing off on a permit containing such confusing verbiage makes it look like ANR isn’t minding the store. This permit needs work, and if ANR has the slightest doubt about the modeling results from the facility, they should require the modeling to be repeated, with the Agency supervising closely.

Response: To determine the size of the significant impact area (SIA), just the emissions from the proposed source are modeled to identify the maximum distance from the source where modeled impacts equal or exceed the significant impact limit (SIL). The nature of modeling is that the impacts will be distributed unevenly due to the variability in the meteorological data such as mixing height, stability and wind speed as well as the topography of the land. The furthest away receptor with a predicted impact at or above the SIL will establish the radius of the SIA, and the SIA, a circle in shape, will cover large areas where the predicted impacts were below the SIL. This is a conservative approach for identifying other nearby sources that may have an overlapping impact area with NSSEP. To use the actual individual points of significant impact to identify such sources would be more difficult and prone to missing potentially applicable nearby sources.

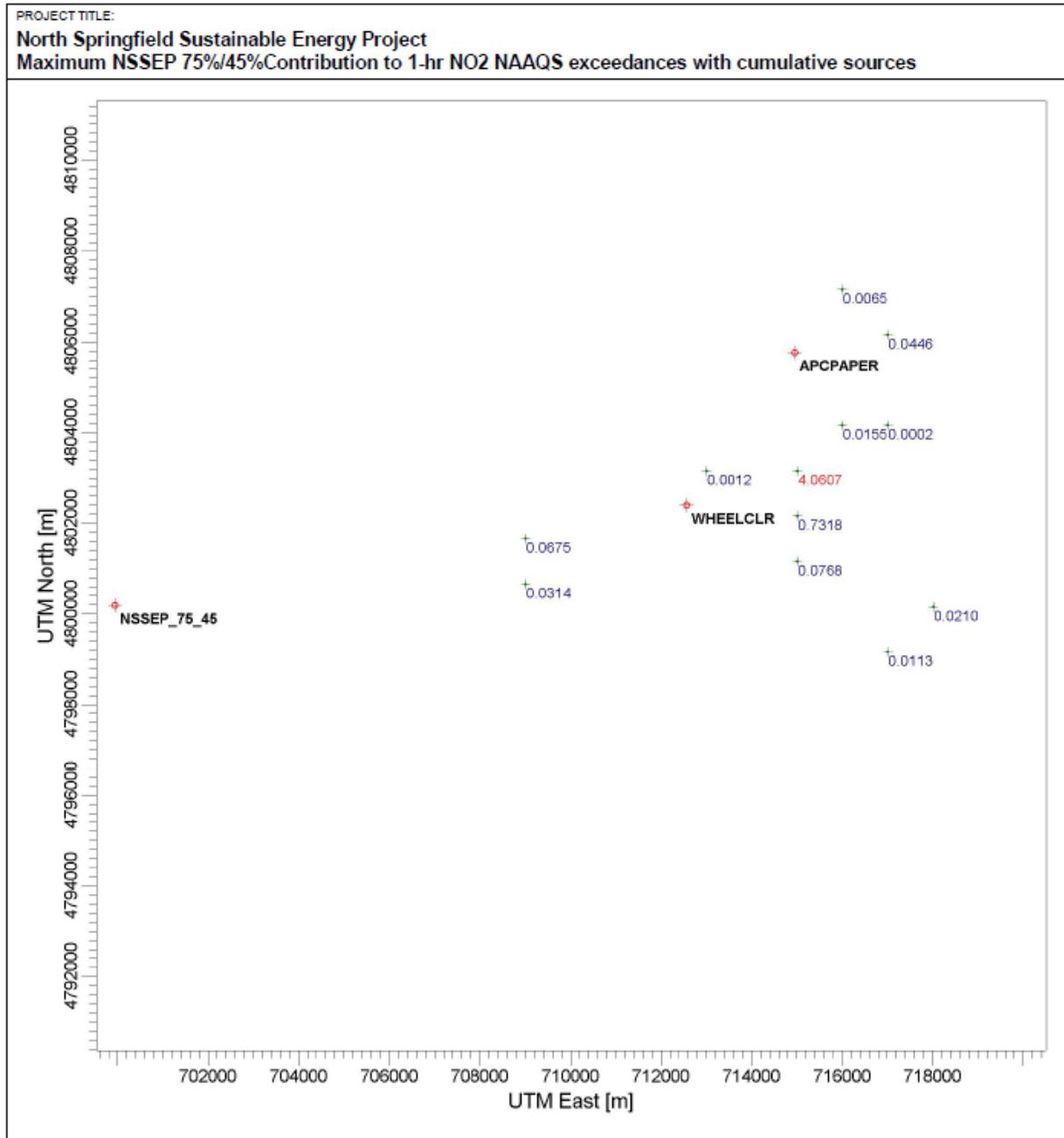
The shaded areas on the attached map (Figure 1) show where there are modeled impacts from NSSEP for SO₂ at or above the SIL. This map also has a circle representing the SIA. There are many receptors within the SIA that are below the SIL (represented by the white area), including the area around Claremont, NH. Since the radius of the SIA was great enough that it included the two air pollution sources in Claremont, these two existing sources were included in the ‘interactive modeling.’ Interactive modeling is conducted to make sure that new projects do not combine with existing significant source of air pollution and result in exceedances of the NAAQS.

As noted in the draft permit and technical support document, the interactive modeling identified potential exceedances of the 1-hr SO₂ NAAQS at 263 receptors near Claremont. The highest modeled contribution from NSSEP at these receptors was 0.11 µg/m³ which is well below the SIL of 7.8 µg/m³. Based on this data, the Agency determined that the NSSEP does not cause or contribute to these predicted violations of the 1-hr SO₂ NAAQS.

Figure 1: Significant Impact Area – 1-hr SO₂


For NO₂, the radius of the SIA was also great enough that it also included the two air pollution sources in Claremont, NH. The interactive modeling identified potential exceedances of the 1-hr NO₂ at 12 receptors near Claremont. The modeling analysis reviewed the 4 operating scenarios and found the highest predicted impact from the NSSEP occurred with the “75% boiler load/45% wood moisture content” scenario. The attached map (Figure 2) shows the locations of 12 receptors where there are predicted exceedances of the 1-hr NO₂ NAAQS. The contribution from for the NSSEP 75%/45% scenario is also marked on the map: the highest contribution from the NSSEP is 4.06 µg/m³ which is below the SIL of 7.5 µg/m³.

Figure 2: Significant Impact Area: 1-hr NO₂:



Comment #11: Referring to the review of the potential Class 1 Area visibility impairment, a commenter asked the following; “Was this level 1 Screening procedure documented and does the ANR have a copy? The question of adverse Impact from the facility’s plume visibility . . . was that based on a 360 degree viewing area? Since

we have yet to see a clear, concise diagram, or picture or architectural rendering of the building, the stacks, or precisely how the project appears on the piece of property in relation to all the other buildings and landscapes, I question that statement with what will be seen coming from the 140 ft stack and the 6-65 ft cooling areas?" (Commenter 3)

Response: The EPA's VISCREEN model is used to evaluate the potential visibility impacts at federally listed Class 1 Areas due to the emission plume. In the case of NSSEP, the evaluation was for the Lye Brook Wilderness Area. This visibility assessment was not intended to determine if the buildings and stacks of NSSEP are visible in the immediate surrounding area. This screening procedure is documented and the Agency has a copy that is available upon request.

Comment #12: There are many comments and concerns regarding the dispersion of the pollutants from NSSEP. Many of these concerns had to do with the topography around the plant and inversions.

"North Springfield Industrial Park is situated in a hollow of the Black River Valley and up the prevailing wind from much of Springfield." (Commenter 6)

"The draft permit documents do not appear to consider: local terrain, local lower level wind condition, concentration effect on emissions of terrain and wind. . .What state or federal standards apply to such situations? How can a project go forward without such analysis? (Commenter 8)

"The town of North Springfield is a valley and there are many days in the winter when the entire area is immersed in a smoky haze created by a relatively small number of home heating wood stoves used in the area. This is particularly bad when we experience a temperature inversion. These conditions sometimes persist all day." (Commenter 24)

"I ask that the Agency of Natural Resources carefully considers the impact of the emissions on North Springfield residential areas given the poor site, prevailing winds, and lower stack height." (Commenter 19)

Response: The proposed project has been thoroughly reviewed to determine how the pollutants from the main stack will disperse into the surrounding area. This process is referred to as an Ambient Air Quality Modeling Analysis. NSSEP was obligated to use the USEPA approved American Meteorological Society/ EPA Regulatory Model (AERMOD) for their air quality computer dispersion modeling analysis. According to the EPA, AERMOD employs best state-of-practice parameterizations for characterizing the meteorological influences and dispersion. The AERMOD atmospheric dispersion modeling system incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. It is an integrated system that includes three modules:

1. A steady-state dispersion model designed for short-range (up to 50 kilometers) dispersion of air pollutant emissions from stationary industrial sources.
2. A meteorological data preprocessor (AERMET) that accepts surface meteorological data and upper air soundings. It then calculates atmospheric parameters needed by the dispersion model, such as atmospheric turbulence characteristics, mixing heights, friction velocity, and surface heat flux. The surface meteorological data is from the Hartness Airport, located a mile from the NSSEP. The upper air soundings are from Albany, NY which, while not very close to North Springfield, is still considered to be representative of the upper air conditions for the purpose of air dispersion modeling.
3. A terrain preprocessor (AERMAP) whose main purpose is to provide a physical relationship between terrain features and the behavior of air pollution plumes. It generates location and height data for each receptor location. It also provides information that allows the dispersion model to simulate the effects of air flowing over hills or splitting to flow around hills.

AERMOD also includes PRIME (Plume Rise Model Enhancements) which is an algorithm for modeling the effects of downwash created by the pollution plume flowing over nearby buildings.

This modeling process takes into account all winds (including the prevailing winds), inversions, the elevation of the ground, as well as the affect of temperature, and calculates hourly pollutant concentrations at the worst case (highest) pollutant concentrations over a 5 year period (meteorological data from 2006 – 2010).

After reviewing the air dispersion modeling for NSSEP, the Agency has concluded that the proposed project will not cause or contribute to violations of the National Ambient Air Quality Standards (NAAQS), will not exceed Vermont's Prevention of Significant Deterioration (PSD) increments, will not significantly impact any Class I areas, nor will it significantly deteriorate existing air quality.

Comment #13: My home sits on land 700 feet above sea level, putting my home at precisely the same elevation as the top of the stack. What will be the concentration of pollutants and odors at my home when the wind is blowing from the northwest at various velocities? . . ." (Commenter 8)

Response: Based on the location of the home on French Meadow Road, the output from the AERMOD analysis indicates an increase in the annual average concentration of $PM_{2.5}$ of $0.15 \mu\text{g}/\text{m}^3$. This is an increase of approximately 2% over the current background level of $7.8 \mu\text{g}/\text{m}^3$ for $PM_{2.5}$. For the 24-hr $PM_{2.5}$ concentration, the AERMOD analysis indicates an increase of $1.5 \mu\text{g}/\text{m}^3$; this is an increase of approximately 8% over the current background level of $19.1 \mu\text{g}/\text{m}^3$ for $PM_{2.5}$. When these potential increases in $PM_{2.5}$ are added to the $PM_{2.5}$ background concentration,

the total is still well below the NAAQS for $PM_{2.5}$. Note that the air dispersion modeling does not estimate odors.

Comment #14: “I formally request that a thorough analysis of nearby (within a 2 mile radius) emission distribution and concentration effects of the interaction of wind and terrain be made, provided to the public and reviewed before a permit is issued. (Commenter 8)”

Response: *The air dispersion modeling described above in response to comment 12 included using a receptor grid spacing of 100 meters out to a distance of 3 kilometers from the source (approximately 3600 individual receptors). The 100 meter receptor grid spacing covers an area similar to the requested 2 mile radius. The receptor grid continues out to a distance of 40 km, with receptor spacings greater than 100 meters; there are a total of 11,602 receptors. As noted above this modeling includes the effects of the interaction of wind and terrain. Moreover, this modeling was carefully reviewed by the Agency and is available to the public upon request.*

Comment #15: “Was particulate matter concentrations and air impacts related to the plant’s fire pump and the standby/auxiliary generator (sized at 3,000 kW) is included as part of the air permit? It looks like in the technical support summary the generator and fire pump are noted as tier 3 units but should they not be part of the totals? Or are they?” (Commenter 9)

Response: *The emissions estimates for the diesel engine fire pump and the diesel engine generator were included in the facilities total allowable emissions. This information is available in Table 3-4 of page 8 of the draft Technical Support Document. These engines are only permitted to operate up to 65 hours/year for testing and maintenance and will result in negligible PM emissions, so they were not included in the air dispersion modeling analysis. Note that only the fire pump’s engine is to be a Tier 3 certified engine. The 3,000 kW generator is anticipated to be a Tier 2 certified engine.*

Comments related to particulate matter (PM) emissions and impacts:

Comment #16: There were numerous comments and concerns regarding the emission of particulate matter from this proposed facility. Many concerns have been raised regarding the possibility that the emissions from the plant will exacerbate existing health conditions of nearby residents and that the regulations do not protect those with fragile health. (Commenters 6, 11, 13, 17, 19, 20, 22, 23, 27, 29)

Response: *Any criteria pollutant emissions that are emitted from the plant must comply with the applicable National Ambient Air Quality Standards (NAAQS) as set by*

the US EPA. The NAAQS are developed for the purpose of protecting the most sensitive persons in the population, including people with diseases (e.g. asthma, cardiovascular disease, etc.), children and the elderly, with an adequate margin of safety as stated in the Clean Air Act (CAA). The development and ongoing review process for the NAAQS includes several key elements which are planning, science assessment, risk/exposure assessment, policy assessment, and notice and comment rulemaking. The Clean Air Scientific Advisory Committee (CASAC) is involved throughout the NAAQS review process in providing review and advice on the air quality criteria (AQC) and the standards. The CASAC is composed of seven members that include at least one member of the National Academy of Sciences (NAS), one physician, and one person representing State air pollution control agencies. Under the CAA, each NAAQS must be reviewed by the CASAC periodically and revised as appropriate.

In the case of NSSEP, it has been demonstrated that the plant will neither cause nor contribute to a violation of the NAAQS in terrain surrounding the site. Therefore, the plant will not have an adverse effect on public health or welfare in the area.

Comment #17: Several comments questioned the adequacy of the current NAAQS for PM:

“The EPA has announced that the National Ambient Air Quality Standards (NAAQS) are not stringent enough to protect people or the environment and stronger rules are in the works. I would respectfully request that the Agency of Natural Resources institute a moratorium on the permitting of additional biomass plants pending new rulings from the EPA. (Commenter 15)”

“This new evidence reinforces past research studies and supports the conclusion that particulate matter harms human health at exposure levels far below the current standards. This conclusion demands prompt action to protect human health and the EPA is considering stronger standards. (Commenter 20)”

“As you are aware the National Ambient Air Quality Standards are being revised for fine particle pollution, also known as fine particulate matter (PM 2.5). . . Our question - has the Vermont Air Pollution Control Division addresses these stronger emission standards in the draft permit? If not, why? Please explain. If the existing National Ambient Air Quality Standards regulations will be the benchmark, we question if the Air Pollution Control Division is protecting the health, safety and welfare from the effects of these emissions if these new standards are not followed, these pending standards are being strengthened to be the new benchmark. (Commenter 9)”

Response: *Section 109 of the Clean Air Act requires EPA to review the NAAQS at 5-year intervals, and to make such revisions in the NAAQS and promulgate such new NAAQS as may be appropriate. Considering this requirement it is conceivable that there will always be pending rules from the EPA with regards to the NAAQS. With regards to PM_{2.5}, the EPA has yet to propose any new standards lower than the current*

35 $\mu\text{g}/\text{m}^3$ 24-hr $\text{PM}_{2.5}$ NAAQS. On June 29, 2012 the EPA issued a proposed rule to lower the primary $\text{PM}_{2.5}$ annual standard from 15 $\mu\text{g}/\text{m}^3$ down to 12 or 13 $\mu\text{g}/\text{m}^3$ and introduce a secondary $\text{PM}_{2.5}$ visibility standard. On January 13, 2013 EPA finalized the primary $\text{PM}_{2.5}$ annual standard at 12 $\mu\text{g}/\text{m}^3$. While this revised standard is not yet in effect in Vermont, NSSEP has demonstrated that they will comply with this new lower standard.

Comment #18: There were many comments concerning the potential affects from the air pollutants emitted from NSSEP on the local population including the young, elderly and those who already suffer from respiratory issues such as asthma.

“While some people would suffer only headaches, North Springfield also houses Brookwood Estates, an assisted living community for senior citizens; many of the elderly living there already suffer from respiratory illnesses. Also, there are many children and adults suffering from asthma in the area. (Commenter 25)”

“Families in homes in North Springfield that line the two potential access roads to the site will be on the front lines. According to an earlier census, among the approximately 700 residents of North Springfield 17% are children and 35% are elderly. These two are the most at-risk groups as studies show.” (Commenter 27)

Response: See response to Comment 16.

Comment #19: There were comments and concerns about the amount of air pollution that is estimated to be emitted from NSSEP.

“The pollution from biomass causes respiratory problems in children and adults.” (Commenter 4)

“According to petitioner – significant emitter of several important pollutants.” (Commenter 6)

Response: See response to Comment 16.

Comments related to Greenhouse Gases:

Comment #19: The discussion of BACT for greenhouse gases is inadequate (Commenter #26)

ANR’s discussion of why the use of wood is “integral” to a power generation project is so weak, it reflects particularly poorly on the Agency. In its review of the Beaver Fair Haven plant, ANR justified wood as “integral” to power generation at the facility because the facility would, as a pellet plant, generate wood waste that would constitute some of the fuel supply at the power plant. However, that argument does not pertain to the NSSEP facility and the Agency’s argument for why wood is “integral” to the NSSEP facility. ANR’s remaining justifications for why wood is “integral” to the

NSSEP facility are not much more than a tacit admission that the sole purpose of the facility is to mop up subsidies for “renewable” power generation, something that they would not be able to do if they were burning natural gas, for instance.

ANR argues that the GHG analysis and discussion of BACT should not require the facility to consider other fuels and technologies, because this would constitute “redefining the source”. These arguments are shallow.

1. The NSSEP technical support document contains elements of the BACT analysis for greenhouse gases, such as it is. The following statement is found on page 32: “ 4. *Type of fuel. Due to their chemical makeup, some fuels generate less CO₂ per unit of energy when they are combusted. As noted above, fuel switching would redefine this source and is not part of the MSER review.*” This statement is deceptively incomplete. A major reason that a biomass plant emits so much more CO₂ than a coal plant, for instance, is *not* because the fuel carbon to energy ratio is so much higher (in fact coal and wood have a similar carbon to energy ratio) but because biomass plants are phenomenally inefficient. It is ludicrous to permit a technology as inefficient as biomass combustion to constitute “BACT” for CO₂ control.
2. Saying “The Agency finds that the Permittee’s objective is to build a biomass fuel electric generating facility” is no different from saying their objective is to build a coal facility. In that case, the applicant would likely still be compelled to consider alternate fuels and technologies, particularly if other fuels were in use at the plant, for instance during startup.
3. The statement “*The Agency further notes that the proposed facility is designed to allow low grade heat from the steam turbine at the electric generating plant to supply thermal energy for the adjacent industrial park*” is irrelevant to the nature of the fuel used. Low grade heat could be harvested from any kind of facility powered by any kind of fuel. It does not reflect well on the Agency to include this argument as a reason that wood is “integral”.

Response: BACT does not necessarily include consideration of a different type of fuel from the one proposed, especially if using another type of fuel would be inconsistent with the fundamental purpose of the facility. With respect to the NSSEP, the proposed fuel is biomass. As the Agency explains in the technical support document, requiring NSSEP to switch fuels would be inconsistent with the fundamental purpose of the facility. Having established this, it is appropriate for BACT to consider the most energy efficient design and control options for the proposed wood-fired power plant.

With respect to hypothetical coal-fired power plant raised by the commenter, there are a number of instances where applicants proposing to build a coal-fired power plant have not been required by EPA as a part of a BACT analysis to switch to a less

polluting type of fuel. See e.g., In re SEI Birchwood, Inc., 5 E.A.D. 25, 29-30 n.8 (EAB 1994) (switch to natural gas would redefine coal-fired electric generating plant); In re Haw. Commercial & Sugar Co., 4 E.A.D. 95, 99-100 (EAB 1992) (switch from coal to oil-fired combustion turbine not required); In re Old Dominion Elect. Coop., 3 E.A.D. 779, 793 (Adm'r 1992) (switch to natural gas would redefine coal-fired electric generating plant).

The Agency agrees that the thermal energy loop is irrelevant in the discussion of whether or not alternate fuels should be considered in the GHG BACT analysis; we will remove this reference on page 31 of the Technical Support Document.

Comment #20: There were several comments about rated energy efficiency of the proposed project.

“The combination of low efficiency and high emissions means that it is not renewable.” (Commenter 6)

“Please note that the NSSEP will only be 26.1% efficient (electricity production without the heating loop) according to the petitioner’s information provided to the PSB.”

(Commenter 9)

“I ask, is this electricity really needed and at such a low efficiency rate that this plant will operate at. I recall that the developer has stated that the plant will operate at about a 35% efficiency at best, and that includes a possible heating loop for which there are no firm plans dealing with the infrastructure—other than laying the main pipes.”

(Commenter 14)

“According to many authorities, not only does wood biomass fail to achieve efficiency standards but the efficiency shortcomings are compounded by the pollutants that come from wood biomass combustion and threats to public health.” (Commenter 27)

Response: *The Air Pollution Control Construction Permit does not directly establish the acceptable process energy efficiency. It has been the practice for Air Pollution Control Permits to limit the air emissions of regulated facilities, a boiler in the case of NSSEP, through the use of emission limits based on the rated heat input of the boiler. With the recent need to establish limits on greenhouse gas (GHGs) emissions from major sources of GHGs, this practice has changed and recent GHG limits are based on the energy output of the boiler/energy system. With an output based limit, the overall energy efficiency of the process becomes an important factor in the ability to meet the permit limit. As established in the Technical Support Document, the GHG BACT limit for this project is based on the performance of wood fired boiler/steam turbine process. The established GHG BACT limit for NSSEP is 2,675 lb CO₂e/MW-hr after the 3rd year of operation. To achieve this limit it is anticipated that the project will need to have an overall energy efficiency (based on electric and heat output) of 27.8%.*

Comments related to wood supply and wood fuel:

Comment #21: Several comments focused on wood fuel procurement issues: wood availability, forest harvesting practices, sustainable harvesting, invasive insect, deforestation, etc. (Commenters 7, 13, 15, 22, 23, 24, 26, 27, 29). One commenter questioned the INRS fuel availability study claiming that it misrepresents supply and the commenter concluded the wood supply is inadequate. (Commenter #26)

Response: *The review of fuel wood availability is outside the Vermont Air Pollution Control Division's area of expertise so the Air Division has provided the Vermont Department of Forest and Parks a copy of the commenter's review of the INRS study for their consideration.*

It should be noted that at this time Agency is not establishing wood procurement requirements in its air permits for biogenic sources. This may change in the future, for example when an accounting method for biogenic CO₂ emissions from the stationary sources is finalized. The Agency reserves its right to raise any issues related to the management of forest resources, and the potential impact of this or any other facility, in the context of other proceedings such as Act 250, Section 248, or other permitting regimes.

Comment #22: Why is the facility allowed to burn wood residues from wood product industries, such as plywood plants? These wood residues may contain chemicals. Also the applicant did not request the use of these types of wood fuels in their permit application. (Commenters 3, 11)

Response: *The provision for the allowable use of "wood residues from wood product businesses, including, but not limited to: fuel wood, sawmills, veneer mills, and the wood products manufacturing sector" will be removed from the permit.*

Comment #23: Of concern to me also is the material that would be incinerated in this plant. Once a permit is granted for wood byproducts of lumbering, would further post construction wood by products be granted? (Commenter 11)

Response: *The Air Pollution Control Permit to Construct being issued to NSSEP does not allow for the use of wood fuel from construction and demolition debris. If, in the future, the applicant wants to include this type of material as a fuel, they would need to submit a permit application to modify their permit and this request would be reviewed by the Agency which will include a opportunity for the public to review and comment on the proposed change(s).*

Comments related to trucking:

Comment #24: Concerns with the pollution from the tractor trailer trucks coming and going from the Facility. (Commenters 2,6,7,9,11,13,14,15,16,18,20,24,29)

Response: *The Air Pollution Control Permit to Construct only has the authority to regulate the stationary equipment at the facility. This permit does not apply to the truck traffic associated with the facility.*

*However, since the emissions from the diesel truck engines represent an air quality concern, the APCD did review the potential emissions from the anticipated truck traffic. This review was based on 18,720 trucks/yr (5 trucks/hr * 12 hr/day * 6 day/week * 52 weeks/yr) with an average roundtrip travel distance of 40 miles to represent both the travel to the NSSEP site and the return trip. This review used the most recent release of the EPA's mobile source (vehicles) emission estimating tool: MOVES2010b. MOVES2010B estimated an annual PM emission due to the exhaust from these trucks to be 0.29 tons/yr distributed over the entire road network used by the trucks. This level of emissions from trucks traveling on the roads is not expected to have a measurable impact on the ambient air quality.*

Comment #25: Concerns with noise from the facility and/or truck traffic associated with the facility. (Commenters 7, 13, 24)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment #26: Safety concerns with tractor trailer trucks traveling through streets in North Springfield (Commenters 2,7,9,10,13,14,15,16,18,24,27,29)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comments relating to future compliance by NSSEP with the Air Pollution Control Permit to Construct:

Comment #27: The VOC emission rate is unlikely to be achieved (Commenter #26)

NSSEP promises a VOC emission rate of 0.005 lb/mmBtu. The AP-42 standard emission rate for wood-fired boilers is 0.017 lb/mmBtu. In our database of biomass facility air permits, there are 30 facilities that specify a VOC emission rate. These rates range from 0.005 lb/mmBtu (only one has this rate - the Beaver Fair Haven facility) to 0.19 lb/mmBtu. The Palmer facility, which proposes to use an oxidation catalyst, was only able to promise to meet a rate of 0.01 lb/mmBtu, or twice the rate at the NSSEP plant. In other cases, for instance consideration of NO_x rates proposed for the Beaver facility in Fair Haven, ANR and the applicant have dismissed rates specified in the Palmer permit as unachievably low. However in this case, the limit proposed is only one-half that proposed at the Palmer plant, which intends to use control equipment that NSSEP will not use, and yet the applicant, and ANR, see no problem in proposing a rate that is much lower than that at the Palmer plant.

Response: The Agency's experience with VOC emissions from large wood boilers is based on the two operating wood fired EGUs in Vermont. The VOC testing at these two facilities both indicate that they emit VOCs at a rate less than 0.005 lb/MMBtu. Therefore, the Agency feels this rate is both achievable and has been achieved and therefore is MSER. NSSEP will be required to periodically test their VOC emission rate to demonstrate compliance with this emission limit.

Comment #28: The Agency received comments regarding the compliance record of the biomass energy sector: ref. Wall Street Journal articles on August 17, 2012 and July 23, 2012. The concerns extended to the anticipated compliance, or lack thereof by NSSEP (Commenters 3, 14, 26)

Response: There are several levels of compliance oversight related to the air permit for this proposed facility: (1) annual reporting of operations (fuel usage, electrical output, etc) and emission of pollutants; (2) annual site inspections by representative(s) of the Agency; (3) semiannual compliance certification reports; (4) continuous emission monitoring systems for carbon monoxide, and nitrogen oxides; and (5) periodic emissions testing for other pollutants. While the Agency cannot guarantee that NSSEP will comply with all the terms of their permit, the Agency will be closely monitoring the operation and performance of this facility and, if necessary, will address any air permit compliance issues that arise.

Comment #29: If there are odors and particulates at my house or aggravation of my wife's asthma what recourse do I have? (8)

Response: *If you experience objectionable odors or if someone experiences aggravation of a respiratory condition such as asthma and you believe that these event(s) are caused or contributed to by the emission(s) of NSSEP, contact the Air Pollution Control Division and they will investigate the complaint to determine if there is a permit violation and/or an identifiable condition at the facility that is causing the objectionable odors.*

Comments relating to the proposed location of the project:

Comment #30: Some comments addressed the close proximity of the proposed project and residential areas in North Springfield.

"The primary lesson learned from the McNeil plant experience in Burlington, Vermont, is careful attention to the siting of a biomass-fueled plant. Siting the plant in a residential neighborhood of a small city has caused a number of problems and extra expenses over the years: a permit requirement to use trains for fuel supply, high taxes, high labor rates, local political involvement, and neighborhood complaints about odors and noise." (Commenter 27)

Response: *While the Agency does not control the site selection of proposed projects, the Agency does require applicants to submit all information that the Agency deems necessary to determine whether the proposed construction will be in compliance with air pollution control laws and regulations. In addition, Vermont law requires a certificate of public good from the Public Service Board before beginning site preparation or construction of electric generation facilities such as NSSEP.*

Comment #31: There was one commenter who raised the concern that there may be an environmental justice issue with the location of the NSSEP.

"This neighborhood surrounding County Road (the main access road) is comprised of mainly low to middle income families. These families have neither the legal knowledge nor financial resources to defend their rights for clean air, water, and quality of life in general. This appears to be an exploitation of this community to its absolute fullest without a vote on the matter and without proper and free legal representation." (Commenter 14)

Response: *Environmental Justice is intended to prevent the disproportionate burden of exposure to environmental risk on minorities and the poor. The EPA has been tasked with addressing Environmental Justice issues, and uses the NEPA process to include this review. NEPA covers many projects and/or activities of the Federal government, but permits issued under the Clean Air Act are conditionally exempt from NEPA review. A review of data available from the EPA's websites related to Environmental Justice issues, they offer a tool for establishing the social-economic composition of populations based on their geographic location. Using this tool, the Agency searched for the*

demographics of an area with a 1 mile radius around the Precision Drive Industrial Park – 1 mile is the smallest search area available using this tool. The data shows that the population in this area is >99% Caucasian and the % of the population classified as having incomes below the poverty level were 5.5%. This same database indicates that 9.4% of all Vermonters have incomes below the poverty level. This data indicates that there is not a notable concentration of minorities living near the proposed NSSEP and there is not a disproportionate level of low income citizens living around the project site. Additionally, it appears that the interests and concerns of the local population are being represented by NoSAG in the Public Service Board's Certificate of Public Good (CPG) process.

Comment #32: The proposed facility may negatively impact local property values (Commenters 7, 12)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Other Comments:

Comment 33: A commenter asked if NSSEP has submitted their Acid Rain permit application as required in Condition (8) of the draft Air Pollution Control Permit to Construct. (Commenter 3)

Response: *The Acid Rain permit application has not been received by the Agency as of the date of this document. As stated in the permit condition, the Acid Rain permit application must be submitted at least 24 months before commencing operation of the boiler.*

Comment #34: Please explain why the Air Quality Permit Application dated December 28th 2011, was accepted by ANR, it was signed and certified to be correct by a professional engineer who is not registered in Vermont as a professional engineer? (Commenters 2, 9)

Response: *The Agency does not require Air Pollution Control Permit Applications to be signed by a professional engineer or a professional engineer registered in the State of Vermont. The application submitted has met the standards required by the Agency.*

Comment #35: Upon examination ANR may also find that the firm who provided the services for the petitioner for the air quality permit is not registered as a corporation to do work in State of Vermont. (Commenter 9)

Response: *The Agency has confirmed that Epsilon Associates, Inc. was not registered as a corporation with the State of Vermont's Secretary of State at the time the Air Pollution Permit to Construct Application was submitted to the Agency. Under the advice of the Secretary of State's Corporations Division, the Air Division advised Epsilon Associates, Inc. that they should register with the Secretary of State's office.*

Comment #36: Several comments referenced the following position of the American Lung Association with regards to wood/biomass energy facilities issued on June 23, 2012: "The American Lung Association does not support biomass combustion for electricity production, a category that includes wood, wood products, agricultural residues or forest wastes, and potentially highly toxic feedstocks, such as construction and demolition waste. If biomass is combusted, state-of-the-art pollution controls must be required." (Commenters 6, 9, 20, 21, 25, 27)

Response: *The Agency is approving an Air Pollution Control Construction Permit for NSSEP that will use state-of-the-art pollution controls. Moreover, the permit does not authorize NSSEP to use potentially highly toxic feed stocks, such as construction and demolition waste.*

Comment #37: Two commenters were not in favor of the use of subsidies, fees and similar surcharges to help fund development projects such as renewable energy. (Commenters 7, 24)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment 38: A commenter cited news articles about fires and/or explosions at one or more biomass power plants. (Commenter 1)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment 39: One commenter questioned the validity of the election of Governor Shumlin and the appointment of Debbie Markowitz, the Secretary of the Agency of Natural Resources. (Commenter 1)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment 40: A comment claimed that the air emissions from the proposed project make the facility subject to the American's With Disabilities Act and it must make accommodations to individuals living in the area around the plant who have respiratory disabilities. (Commenter 1)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment 41: Several comments referenced regulatory requirements of other states, such as Massachusetts regarding renewable energy and biomass facilities in particular. (Commenters 9, 14, 15, 21, 22, 24)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment 42: Can the Air Pollution Control Division require a performance bond that will pay for relocation and property value compensation to homeowners experiencing such problems? What preliminary tests need to be done to ensure a comparison for such claims? (Commenter 8)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Comment 43: There is a claim that this project would adversely impact the health and habitat of the bald eagle and thereby violate of The Bald and Golden Eagle Protection Act. (Commenter 1)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit. This concern has been forwarded to the VT Department of Fish and Wildlife.*

Comment 44: The air quality goals of the Springfield town plan were noted in several comments. (Commenters 3, 9, 25)

Response: *The issue raised by this comment is outside the scope of the Agency's air permitting authority under 10 VSA Chap. 23, and therefore the Agency is not considering it in the final decision for this permit.*

Written and/or oral comments were received from the following individuals and organizations:

- [Commenter #1:](#) Cris Erikson
- [Commenter #2:](#) Julie Jones
- [Commenter #3:](#) Fredda Kischko
- [Commenter #4:](#) Judith Dubreuil
- [Commenter #5:](#) Bob Flint
- [Commenter #6:](#) Richard Hunter
- [Commenter #7:](#) Henry Kraft
- [Commenter #8:](#) Walter Dodd
- [Commenter #9:](#) Robert Kischko
- [Commenter #10:](#) Lorraine Dubreuil
- [Commenter #11:](#) Jan Zona
- [Commenter #12:](#) Steve Sysko
- [Commenter #13:](#) Jean Willard
- [Commenter #14:](#) Margaret Kelly
- [Commenter #15:](#) Julia Lloyd Wright
- [Commenter #16:](#) Kerstin Burlingame
- [Commenter #17:](#) Louise Peale
- [Commenter #18:](#) Daniel Lewis
- [Commenter #19:](#) Michael Wiese
- [Commenter #20:](#) The Vermont American Lung Association.
- [Commenter #21:](#) Eleanor Rice
- [Commenter #22:](#) Jan Ameen
- [Commenter #23:](#) Steve Donovan
- [Commenter #24:](#) Jeff and Debbie
- [Commenter #25:](#) Laurie Fila
- [Commenter #26:](#) The Partnership for Policy Integrity.
- [Commenter #27:](#) Randall Susman
- [Commenter #28:](#) USFS – Federal Land Manager
- [Commenter #29:](#) Wendy Thompson
- [Commenter #30:](#) Reuben Allen