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VIA ELECTRONIC MAIL to merlyn@lrapa.org, max@lrapa.org

Merlyn Hough
Director
Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477

Max Hueftle, Permit Writer
Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477

Re: Comments on Application for Modification of Air Contaminant Discharge Permit for Seneca Sustainable Energy, LLC

Dear Merlyn and Max:

Thank you for the opportunity to comment on the proposed modification of Standard Air Contaminant Discharge Permit 206470 issued to Seneca Sustainable Energy, LLC (SSE). We appreciate the opportunity to weigh in on these important issues that may affect the public health in communities in and around West Eugene, Oregon. As you know, Beyond Toxics has a long history of working with these communities to ensure that their concerns are considered and addressed by the Lane Regional Air Protection Agency (LRAPA) and other responsible government agencies.

Our understanding is that this permit modification has been triggered principally because the original vendor guarantees for emissions of particulate matter (PM) were unreliable and inaccurate as they failed to account accurately for condensable PM. Seneca is therefore requesting a new emission factor for PM of 0.010 lb/MMbtu at normal operations. Whereas the original permit set a Plan Site Emission Limit (PSEL) of 14 tons/year, the proposed modification would result in a PSEL of 16 tons/year. The proposed modification would also address the PM_{10} compliance testing method for the boiler.

We also understand that the proposed modifications include revisions to certain emissions factors and emission limits for Hazardous Air Pollutants (HAPs), as well as an increase in the 8-hr average carbon monoxide (CO) limit. We also address these issues in our comments below.

As you are aware, Beyond Toxics and the West Eugene community are very concerned about air quality and human health, and our comments are therefore intended to ensure that LRAPA has structured the public comment

process in a way that facilitates meaningful public participation and to ensure that the outcomes are lawful and equitable. Based on the information presented to the public to date, LRAPA does not have a rational basis to approve the proposed modification of the permit. We therefore request that LRAPA deny the proposed modification or, at bare minimum, conduct additional analysis followed by further public comment. We appreciate your attention to these concerns and would welcome an opportunity to discuss them with you in more detail.

I. LRAPA must conduct a disproportionate impacts analysis under Title VI of the Civil Rights Act.

LRAPA takes the position here that the proposed modification is not subject to New Source Review or an air quality impacts analysis for fine particulate matter ($PM_{2.5}$) because this source obtained its original pre-construction permit prior to finalization of the rule regulating $PM_{2.5}$ as a criteria pollutant.[1] We strongly object to LRAPA approving the permit modification without at least considering whether the increase in emissions of $PM_{2.5}$ will threaten public health in West Eugene communities. While we do not know with complete certainty at this point whether the proposed modification threatens human health, we are very concerned that LRAPA will not give adequate consideration to this issue prior to approving the requested modification. Stating simply that LRAPA will not address health threats from fine particulate matter because of a legal technicality is hardly reassuring to all Eugene residents and particularly to the environmental justice communities in West Eugene.

The concerns of the community are informed by the Environmental Protection Agency's (EPA's) findings that $PM_{2.5}$ presents unique and serious risks to human health. EPA tightened the National Ambient Air Quality Standard (NAAQS) for $PM_{2.5}$ for precisely this reason:

> [a] causal relationship exists between both long- and short-term exposures to $PM_{2.5}$ and premature mortality and cardiovascular effects and a likely causal relationship exists between long- and short-term $PM_{2.5}$ exposures and respiratory effects. Further, there is evidence suggestive of a causal relationship between long-term PM2.5 exposures and other health effects, including developmental and reproductive effects (e.g. low birth weight, infant mortality) and carcinogenic, mutagenic, and genotoxic effects (e.g., lung cancer mortality).[2]

EPA has therefore made the decision to regulate PM_{10} and $PM_{2.5}$ as separate pollutants because of the unique threats posed by fine particulate matter. LRAPA's

[1] Permit Review Report at 5-6.
[2] 78 Fed. Reg. 31086, 31013 (Jan. 15, 2013).

approach here – to regulate all particulate matter as PM_{10} – does not address any of the unique threats that may be posed by the increase in emissions of $PM_{2.5}$.

We also have similar questions with respect to the offset that SSE alleges will address any increase in emissions resulting from the proposed modification. More specifically, we ask that LRAPA clarify the details of the offsets that were purchased by SSE and, in particular, what fraction of those offsets were $PM_{2.5}$ as opposed to PM_{10}, if known. Attaining offsets for PM_{10} doesn't address regulating for $PM_{2.5}$. Neither does it address any potential health impacts to environmental justice communities of increased emissions for $PM_{2.5}$. LRAPA's claim that the offsets are "in the same class of emissions" is insufficient to address either health concerns. Furthermore, the offsets were obtained from a shuttered boiler approximately 16 miles to the east, which raises the concern that the offsets do not remediate disproportionate burdens for environmental justice communities and residents proximal to the Seneca facility in West Eugene.

Regardless of whether LRAPA may avoid subjecting this proposed modification to the New Source Review program, it has a separate and independent obligation to consider whether this proposed modification will subject environmental justice communities to disproportionate impacts pursuant to Title VI of the Civil Rights Act.[3] As a recipient of federal funding, LRAPA must comply with EPA's implementing regulations.[4]

Those regulations prohibit LRAPA from administering its programs in manners "which have the effect of subjecting individuals to discrimination because of their race, color, or national origin."[5] Moreover, each recipient shall "adopt grievance procedures that assure the prompt and fair resolution of complaints which allege violation of this part."[6]

LRAPA must therefore conduct a separate and independent analysis of whether this proposed permit modification may result in a disproportionate impact to an environmental justice community – and certainly West Eugene qualifies. In carrying out this duty, we want to emphasize strongly up front that LRAPA cannot simply rely upon supposed compliance with outdated NAAQS as its means of assessing compliance with its obligations under Title VI.[7]

In the *Shell* matter, Region 10 of EPA relied upon compliance with an outdated NAAQS for NO_2 for its environmental justice analysis. In doing so, it ignored whether the proposed emissions would cause violations of an updated, short-term standard and

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[3] 42 U.S.C. § 2000d
[4] 40 C.F.R. Part 7.
[5] 40 C.F.R. § 7.35(b).
[6] 40 C.F.R. § 7.90.
[7] *See In re Shell Gulf of Mexico, Inc. & Shell Offshore, Inc*., 15 E.A.D. __ (Dec. 30, 2010) (*Shell*).

therefore whether the emissions may have an adverse impact on an environmental justice community. Although the Region issued the challenged permits *before* the revised NAAQS went into effect, the Environmental Appeals Board still rejected Region 10's attempt to rely the prior standard for its environmental justice analysis.[8]

> The Board's concerns in this case lie with the Region's stated reliance on its demonstration of compliance with the NAAQS in effect at the time of the Permits' issuance despite the fact that the Administrator has finalized a new 1-hour NO_2 NAAQS prior to the issuance of the Permits, and thus the Administrator has already concluded, prior to issuance of the Permits, that the annual NO_2 NAAQS alone did not provide requisite protection of the public health.[9]

The Board concluded by stating that compliance "with a NAAQS standard that the Agency has already deemed to be inadequate to protect the public health cannot by itself satisfy a permit issuer's responsibility to comply with" its obligation to conduct an environmental justice analysis.[10]

Since the *Shell* matter was decided, EPA has issued a draft policy document that further undermines LRAPA's approach here to rely solely on an outdated NAAQS.[11] In its draft guidance document, EPA states that it "has elected to reexamine the weight it accords compliance with environmental health-based thresholds because this issue, in particular, sits directly at the crossroads of environmental and civil rights law, and to respond to concerns raised by external Title VI stakeholders."[12] In its draft policy, EPA states that "presuming compliance with civil rights laws whenever there is compliance with environmental health-based thresholds may not give sufficient consideration to other factors that could also adversely impact human health."[13] EPA then details other relevant considerations that should be evaluated, which include:

> the existence of hot spots, cumulative impacts, the presence of particularly sensitive populations that were not considered in the establishment of the health-based standard, misapplication of environmental standards, or the existence of site-specific data demonstrating an adverse impact despite compliance with the health-based threshold.[14]

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[8] *Id*. at 69-71.
[9] *Id*. at 74.
[10] *Id*. at 75.
[11] Environmental Protection Agency, *Title VI of the Civil Rights Act of 1964: Adversity and Compliance with Environmental Health-Based Thresholds* (Draft 1/24/13) (available at http://www.epa.gov/ocr/docs/pdf/t6.adversity_paper1.24.13.pdf).
[12] *Id*. at 2.
[13] *Id*. at 4.
[14] *Id*.

What this means for LRAPA here is that it has an obligation under civil rights law - Title VI of the Civil Rights Act and EPA's implementing regulations - to ensure that its decision on this proposed permit modification does not impose a disproportionate impact on environmental justice communities in West Eugene. One of our principle concerns in this regard is the proposed increase in $PM_{2.5}$, which results from the flawed and inaccurate information regarding condensables provided by the vendor and applicant to the agency and the public during the initial permitting proceedings. We therefore requests that LRAPA refrain from approving the modification at this time until it determines how it will satisfy its obligations under applicable civil rights laws and then provides that information to the public and allows for public comment.

Finally, we note that EPA's regulations include an administrative complaint procedure.[15] Those administrative complaints are handled by EPA's Office of Civil Rights (OCR) in Washington, DC.[16] We would prefer not to involve OCR in this matter, instead working with LRAPA to agree upon a rational methodology for assessing disproportionate impacts under Title VI. If, however, LRAPA decides to move forward without any analysis of disproportionate impacts under Title VI – or if it simply takes these comments and then in its final decision equates compliance with the outdated PM_{10} standard as its environmental justice analysis – we may be forced to seek assistance from OCR.

We would also communicate to OCR the response give to the public from LRAPA staff at the October 2013 public hearing. When the public asked how they could best provide meaningful comment to the air permit renewal process, LRAPA staff responded that public comment would not matter and the permit would be approved for technical reasons because the permittee met the technical requirements. The public was dismayed at this answer and clearly stated their frustration and concern about community health impacts in their oral comments at the podium.

Furthermore, on slide 13 of the LRAPA presentation, labeled Particular Matter – Comparison, on the permit renewal, we have additional concerns:

- LRAPA does not differentiate between PM10 and PM 2.5, thus ignoring the increased health impacts from the smallest particles.
- Community-level exposures to PM 2.5 are lumped together under the entire Urban Growth Boundary of Eugene-Springfield, without a more accurate portrayal of the cumulative and denser exposures for low-income and minority neighborhoods directly downwind of heavy industrial polluters.

[15] 40 C.F.R. Part 7, Subpart E.
[16] 40 C.F.R. § 7.105.

II. Seneca should be required to conduct annual source tests as required by the original permit.

Pursuant to paragraph 11 in the original permit, Seneca "shall demonstrate compliance" with the emission limitations for PM_{10} using a "source test to be conducted annually * * *."[17] The permit then contains a detailed scheduled, which includes a requirement to conduct quarterly tests if the emission limit for PM_{10} is exceeded as part of an annual test.[18]

The proposed modified permit, however, substantially weakens these requirements even though the source testing lies at the very heart of the problems identified to date and the reasons for the proposed modifications to the emissions limit for particulate matter. LRAPA now proposes to require only one source test per permit term (*i.e.* every five years), and LRAPA has also eliminated the requirement for quarterly testing in the event that the annual test reveals exceedances of the emissions limit for PM_{10}.[19]

LRAPA has failed to explain why it has decided to greatly reduce the frequency of source testing required by this permit. In the original permit, there was no provision to reduce the frequency of source testing at any time during the life of the permit even if all subsequent tests revealed that the source was complying with the emission limit for particulate matter. Here, however, tests revealed that the source could not comply with those limits because of inaccurate vendor guarantees relating to condensables. Even if LRAPA agrees with Seneca's approach to testing for total particulate matter, and even if past tests suggest that the source may be able to comply with the revised permit limits, there is still no basis to require only a single source test during the life of the permit. That is clearly contrary to the first permit, and LRAPA has not set forth any basis for changing course now. Furthermore, we ask for clarification from LRAPA on whether this source test has occurred already or whether Seneca would be required to conduct at least one more source test prior to expiration of the permit. While we appreciate that LRAPA is including an annual test using EPA Method 5 to ensure that the ESP is operating properly, it does not appear that this annual test will not be used to measure compliance with the emission limit for particulate matter.

Finally, we also ask for clarification on how the one-test per permit term would operate if the permit were administratively extended under LRAPA 37-0082-1. Whereas an annual test would clearly continue to apply in that circumstance, it is unclear how long Seneca could go under a permit that was extended administratively without conducting another source test. Without periodic source tests, the emission limits are not practically enforceable.

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[17] Standard ACDP No. 206470 at 5.
[18] *Id*.
[19] Draft Permit at 12 (paragraph 49).

III. LRAPA should reject the proposed modifications to the emission factors for Hazardous Air Pollutants.

It is apparent from reviewing the proposed permit, that LRAPA is considering modifications to the emission factors for six hazardous air pollutants: hydrogen chloride, acetaldehyde, acrolein, formaldehyde, styrene, and toluene.[20] Apart from the very basic chart referenced above, LRAPA fails to provide any explanation for why it would change the emission factors. The permit review report notes on page 1 that the proposed permit would revise "selected hazardous air pollutant (HAP) emission factors and emission limits," but the report never provides a basis for these revisions or any further explanation. Paragraph 24 of the report is labeled "Hazardous Air Pollutants," and yet it is completely silent as to the proposed revisions to the emission factors. Furthermore, both the notice regarding the October 16, 2013 public hearing and the notice regarding the July 17, 2013 information meeting failed to include any mention that the proposed modifications included revisions to the emission factors for six separate HAPs.

Pursuant to LRAPA's rules regarding public participation, the public notice information is therefore inadequate.[21] Public notice information must contain a description of the "air contaminant emissions" that includes "any decreases or increases since that last permit action for the facility."[22] The public must also be provided a "summary of the discretionary decisions made by LRAPA in drafting the permit" and the "basis and need for the proposed permit or draft permit action."[23] Here, LRAPA has failed to set forth any explanation for why it is approving revisions to the emission factors for these six HAPs.

The application submitted by SSE documents that they are requesting the revisions based upon a single source test from April, 2011 involving three separate runs. Based on these extremely limited data, SSE "proposes to establish the new emission factors by using the highest value from an individual test run and to increase that value by 20%."[24] In the staff presentation, the reason given for the revised permit is that the permittee needed "wiggle room" to guarantee that their exceedances did not violate their permit because their emissions testing had been unreliable and difficult to control.

We are surprised that LRAPA would propose to amend standard EPA and state agency emission factors on a site-specific basis premised upon a single source test. The data presented in the application submitted by SSE is clearly unreliable for amending the emission factors, as the quantity of data is simply inadequate to ensure that the data is representative of the emissions. There is no statistical analysis of the data presented

[20] Permit Review Report at 9.
[21] LRAPA 31-0040.
[22] LRAPA 31-0040-1.C.
[23] LRAPA 31-0040-1.I, K.
[24] Application at 5-3.

because, of course, a single source test does not allow for any reasonable statistical comparison to actual emissions from the source during normal operating conditions. Similarly, SSE does not provide any basis whatsoever for its correction factor of 20%, which again would be impossible to provide with such limited data based on a single source test. The source test included in the original permit was designed to confirm that the emission factors, which were premised upon standard emission factors backed up by a much more robust data set, were not exceeded. The source test was never intended to and should not now provide a basis for establishing new emission factors. If LRAPA intended for the testing set forth in the original permit to provide a basis for amending the emission factors, it should have informed the public of this fact up front and then discussed what data and therefore what sampling plan would be necessary to make this determination later in time in a statistically sound way.

We are also concerned that LRAPA would propose to lower the emission limit for acetaldehyde from the biomass facility when the sawmill exceeded the permit-specific limit for that pollutant.[25] LRAPA recently increased the HAP emission limit in the sawmill permit, and emissions from the two facilities are considered together for purposes of determining whether the source is considered to be a major source. We are therefore concerned that by lowering the emission factor for acetaldehyde at the biomass facility that it could therefore pave the way for greater emissions at the sawmill before the combined emissions would trigger major source status. This same concern holds true for the other HAPs as well – any reduction in the emission factors at SSE would only allow the sawmill to emit even greater HAPs before becoming a major source or violating the emission limits in the two permit.

These inadequacies further emphasize the importance of LRAPA setting forth its own, independent basis in the public notice for why it is proposing to amend the emission factors for these six HAPs. The public relies upon LRAPA to conduct an independent review of information submitted by the applicant, and here the agency should describe for the public what data it is relying upon to revise the emission factors and why it considers that data to be adequate and representative of actual emissions. In its public powerpoint presentation, LRAPA asserts that overall HAP emissions would *decrease* as a result of this permitting action, but that conclusion is premised upon the assumption that the lowered emission factors are accurate. If, in fact, those emission factors are inaccurate, the modifications would allow an *increase* in HAPs, one that would go unnoticed and would be impossible to identify. LRAPA should therefore reject the proposed revisions to the emission factors for HAPs because there is simply inadequate data at this point in time to support those proposed emission factors.

We therefore ask that LRAPA clarify the following:

- Whether LRAPA believes the source testing data to be statistically valid for representing actual emissions from the source and, if so, the basis for LRAPA's conclusion in this regard.

[25] Permit Review Report at 17.

- Is there any other data regarding HAP emissions that would be relevant for assessing emission factors?
- What fuels was used during the source test and was that fuel representative of the facilities overall fuel mix?
- What other information is there on the conditions or operation at the facility when the test was conducted?
- Does the vendor for the boiler include emission factors for HAPs and how do SSE's proposed emission factors relate to those figures?
- Clarify the potential consequences if the limited source test data prove to be inaccurate – what could happen to overall emissions if the source test data is not representative of actual emissions and what would that mean for public health in West Eugene communities?
- Would a reduction in emissions factors at SSE allow for greater emissions of HAPs from the sawmill?

IV. LRAPA should reject the proposed modifications to the emission limits for HAPs.

For similar reasons, Beyond Toxics also objects to the proposed modifications to the emission limits for HAPs. Again, LRAPA has failed to provide adequate explanation for these changes in the public notice documents that were provided to the public, and we therefore have very little information upon which to comment.

Condition 20 in the original permit set forth the following specific emission limits for the biomass facility for HAPs:

Acetaldehyde	6 tpy
HAPs (any individual)	9.4 tpy
HAPs (aggregate)	17 tpy

Condition 24 in the revised permit states that "Total HAPs from this source, including HAPs from Seneca Sawmill (Permit No. 207459) shall not exceed 9 tons/year for a single HAP and 24 tons/year of total combination of HAPs during any consecutive 12 month period."

From this comparison, it is apparent that LRAPA is proposing to eliminate the specific emission limit for acetaldehyde at the biomass facility and, in fact, to eliminate any emission limit that applies solely to this source. Instead, LRAPA proposes to use an aggregate limit for both the sawmill and the biomass facility, capping the combined HAP emissions at 9 tpy for any one pollutant and 24 tpy for combined emissions.

LRAPA has failed to explain why it is making this shift. As discussed in the original permit review report, SSE elected to limit its HAP potential to emit to 6 tpy for

acetaldehyde.[26] LRAPA fails to explain why the SSE can now simply change its mind and can decide not to have a specific limitation on potential to emit (PTE) for acetaldehyde.[27] Furthermore, although LRAPA knew at that time that major source status was dependent on the combined emissions from the two facilities, SSE elected to and LRAPA included in the original permit specific emission limits for HAPs from SSE. Now, however, it appears that SSE wants to shift towards an aggregate permitting approach whereby there is only one overall limit that applies to both facilities. Again, combined with the proposed revisions to the emission factors at SSE, it appears that these two proposed modifications would result in the sawmill being able to emit greater hazardous air pollutants than it would otherwise be able to under the existing permit structure. Again, if the emission factors for SSE are inaccurate, this could result in a substantial increase in actual emissions – an increase that may never be identifiable. This again underscores the importance of LRAPA conducting a statistical analysis of the test results that are used to support amendments to the emission factors for HAPs at SSE to ensure that those test results are defensible and representative of actual emissions.

LRAPA must therefore fully discuss and disclose the basis for these modifications as required by Title 31, and, as discussed above, it must also conduct a rational analysis of whether and to what extent these changes may result in a disproportionate impact on environmental justice communities in West Eugene resulting from potentially increased emissions of HAPs in their neighborhood particularly in light of the fact that the issue of HAP's and the questionable choice of the boiler/manufacturer were raised during the first SSE permit application and public comment period. We ask that LRAPA state specifically why SSE requested and LRAPA approved a specific emission limit for acetaldehyde in the original permit, why SSE and LRAPA propose to now remove the pollutant-specific limit, and whether the proposed revisions to the emission factors and the emission limit at SSE could allow, as a practical matter, for the sawmill to emit greater HAPs than it could in the absence of this proposed modification.

We also object to LRAPA's apparent failure to include any further source testing or other means of verifying the emission factors. Condition 24.a in the proposed permit states that SSE must ensure compliance with the HAP limits by simply calculating emissions using the revised emission factors, but there would be no further tests required to test the continuing accuracy of those factors. The HAP limits therefore are not practically enforceable. We ask for clarification from LRAPA on how under the proposed modification would LRAPA or the public be able to verify in the future HAP emission factors and thereby overall emissions of HAPs.

[26] Original Permit Review Report at 5-6.
[27] Acetaldehyde is classified by EPA as a group B2, probably human carcinogen.

V. LRAPA should reject the proposed amendment to the emission limit for carbon monoxide (CO).

For reasons similar to those states above, we also encourage LRAPA to reject the proposed amendments to the emission limit for CO. In particular, both LRAPA and SSE have failed to provide any basis for amending the CO limit in the application and permitting requirements. The proposed limit does not appear to be based upon estimates of actual CO emissions from the source. If it is, that information has not been provided to the public. Rather it appears that the applicant simply back-calculated from the Significant Impact Level (SIL) to arrive at the highest possible emission limit without having to conduct any further air quality modeling. This is reflected in the permit review report:

> The CO limit on an 8-hour average is being revised with this permit action to increase the value to an amount that, when multiplied by the ratio of the new emission rate (149 lb/hr) to the old emission rate (105.8 lb/hr), shows that the CO impacts are still less than the Significant Impact Level (500 ug/m^3).[28]

LRAPA and the applicant have failed to demonstrate why this amendment is needed based on the actual operations of the facility and how it relates to the predicted emissions from the facility and/or any monitoring that has occurred. Furthermore, we question SSE's conclusion that the Significant Impact Level can be deduced simply by relying on the outputs of the prior modeling discounted by the ratio of the new emission rate to the old emission rate. Any number of variables could have changed since the initial permitting process, and SSE should be required here to submit a revised air quality impacts assessment consistent with LRAPA 42-0041-3.B.2.

[28] Permit Review Report at 16.

VI. Conclusion

For the reasons set forth above, we request that LRAPA deny the proposed permit modification until such time as it has provided to the public the requested information and allowed for public comment on this critical information. These are important issues that may affect the health and well-being of environmental justice communities in West Eugene, and we raised many similar issues relating to critical assumptions underlying the permitting decision when the initial permit was proposed. We therefore urge LRAPA to proceed cautiously in this circumstance, to identify and implement a protocol for assessing compliance with the civil rights laws and to verify that the assumptions that underlie the proposed modifications and the revised testing and monitoring protocols are reliable and adequate to protect public health and the environment.

Sincerely,

Lisa Arkin
Executive Director

C.C.: The LRAPA Board of Directors via U.S. mail
Dick Pederson, Oregon Department of Environmental Quality via electronic mail
Chris Winter, Crag Law Center via electronic mail