AmeriTies

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April 10, 2020

Mr. J.R. Giska (jonathan.giska@state.or.us)
DEQ CAO Program Engineer
Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: Cleaner Air Oregon Emissions Inventory

Dear Mr. Giska:

AmeriTies West LLC (AmeriTies) received your letter dated March 11, 2020 and requesting additional information related to our Cleaner Air Oregon (CAO) inventory. Below is our response to each of your questions.

Specific Comments

1. Diesel Scrubber Control Efficiency.

AmeriTies is concerned that your comment regarding the control efficiency suggests a misunderstanding of the system design and misstates the basis for our control efficiency calculations. The 98.75% control efficiency stated in our CAO emissions inventory does not reflect a diesel scrubber efficiency of 98.75% as you suggest. The stated control efficiency is for the entire system, not just the scrubber. You note in your letter that the Stella-Jones facility in Fulton, KY demonstrated a naphthalene removal efficiency of 88% from a biodiesel scrubber. While we cannot comment on the nature of that test, the operating conditions of that facility at the time of testing or the design or size of that scrubber, we note that we only assumed a 75% control efficiency from our diesel scrubber. Therefore, we see nothing inconsistent between the example you reference and our system.

For AmeriTies, the scrubber is just one component of a complex system. Our process and associated controls do not operate like a conventional industrial process. In a conventional

process like a dryer, you have exhaust ducted to a control device. To determine system removal efficiency you just test the dryer control device. That is not how our system works. In our system air flows back and forth within the closed system between tanks and retorts. Because our treating solution is expensive, we do everything that we can to recover any volatilized material and return it to the process. As a result we have condensers and other process equipment that are intended to convert those vapors back to liquid phase thus saving on replacement solution. The diesel scrubber is not our primary control but just one element in the overall reduction of vapors from our system. To assess the 98.75% control efficiency, you need to take into account each of the components of our system and not just look at the scrubber. That is what we did to derive the control efficiency.

We agree that the 2017 oil scrubber evaluation report was intended to assess one component of the system—the optimal frequency of diesel changeout. We are not aware of having represented that testing differently.

Finally, as we describe in greater detail below, the load being serviced by the diesel scrubber will shortly change. A substantial majority of the emissions routed to the scrubber are vapors coming from the retorts during the purge process. Soon, those emissions will be directed to the new regenerative thermal oxidizer (RTO) currently undergoing permitting review. Once the RTO is on line and the purge process emissions redirected, the load on the diesel scrubber will be significantly reduced.

2. Naphthalene Content of Creosotes

Please see attachments. We receive a certificate of analysis with every shipment of creosote. We have provided in Attachment A those certificates of analysis for the 12 month period ending in March 2020.

The information in Attachment A is Confidential Business Information and should not be released to the public.

3. Specific Comments Related to CBI Materials

In Appendix A of your letter, you raise questions about the means by which we estimated our calculations. The theme of the questions is that the Department does not like using a theoretical approach to estimating PAH emissions from our facility. While we do not disagree that theoretical calculations have the potential to over or under estimate emissions, they are the best approach that we have available. As is explained below, the emissions from the drip pad are largely being eliminated as a result of our new operating procedures that will take effect by the fall (assuming no COVID-19 related delays). Emissions from the retort opening will be measured directly by stack testing the RTO. Therefore, the only place about which you raised concerns that will remain unchanged and that will have emissions estimated using Raoult's Law will be the storage yard. As we discussed with you at length and outline further below, it is not possible to test emissions from the storage yard. The yard is incapable of being enclosed and, even if that were possible, the act of enclosure would fundamentally change the emission characteristics thereby rendering any testing nonrepresentative. For that reason, while we

recognize that calculating emissions using the laws of thermodynamics may not be perfect, they nonetheless provide the most accurate estimation methodology available. Raoult's Law is based on immeasurable empirical data across many organic solutions. That is why the approach has been adopted industry-wide as the basis for annual reporting, TRI reporting and permitting.

We have included as Attachment B the materials that you requested in Appendix A of your letter.

The information in Attachment B is Confidential Business Information and should not be released to the public.

Source Testing

In your letter you suggest that we should source test our retort door opening, the drip pad, the storage yard, Boiler 2 (on oil) and the diesel scrubber. At the time you made these requests, we fully recognize that you were not aware of the substantial physical and operational changes that were proposed at the facility and undergoing Department review at the regional level. Since that time we have had the opportunity to discuss the substantial improvements we are making and how they will affect our operations. Before addressing the source test requests, we summarize what our current operations are and then outline the changes that will start to occur in the weeks and months ahead.

Current Operations

Under our current configuration, when we finish a treating cycle, a valve is opened and the retort is put under negative pressure. Air is drawn through the retort and to the control system where the retort emissions from the retort are intermingled with emissions from the tanks before ultimately passing out through the diesel scrubber (the last step in the control system). The purpose of this procedure is to allow the charge in the retort to partially cool before being removed and to take the elevated concentration vapors that occur during the initial cooling phase and route them to controls. After this initial cooling step, the retort door is opened and the charge is moved to the drip pad. As you observed while on-site, these warm charges are left on the drip pad until they stop dripping, at which point they are moved into railcars or to the storage yard for future shipment. AmeriTies passes control over the ties to Union Pacific once they are loaded into Union Pacific's rail cars.

Future Operations

Under the new configuration/operating practice, the area in front of the retorts will be enclosed by a 60' x 15' x 25' building with a collection hood mounted on the roof of the enclosure. A 15' door will be included in the structure to allow movement of product in and out of the enclosure, but the door will normally be closed whenever there is material in this process area. The practice of opening a valve and pulling ambient air through the retort and into the existing control system will cease. Instead, the retort door will be opened at the end of the charge cycle allowing the vapors from the warm charge to enter the enclosure. This enclosure will contain any emissions

that occur between when the retort is opened and the charge is taken out of the retort and moved to the drip pad. 15,000 scfm of air will be drawn from the enclosure and into a new Regenerative Thermal Oxidizer (RTO) to be installed as part of the project. This will allow for a complete air turnover within the enclosure approximately every 90 seconds.

The way we handle the ties from the moment the retort door is opened until they are loaded onto rail cars or moved to storage will change. The ties will sit in the retort with the door open until the ties have ceased dripping. The intent is for essentially all of the dripping that used to occur on the drip pad to occur in the retort with any fumes being combusted in the oxidizer.

The redesign is expected to be complete by the end of summer, COVID-19 permitting. Once the RTO is operational, we intend to test the system to quantify emissions from the RTO.

With that in mind, we address each of your testing requests below.

1. Retort Door Openings

In your letter you requested that we test retort door openings. As we have discussed and I outlined above, the way in which emissions from retort door openings occur is about to change significantly. Given these changes, we do not believe that retort door opening testing is appropriate at this time. AmeriTies is committed to testing the RTO once the retort door enclosure is installed and the system shaken down.

2. Drip Pad

You had also requested that we test emissions from the drip pad. As we have discussed and I outlined above, the way in which emissions from the drip pad occur is about to change significantly. Once we change our operating process, ties will spend little time on the drip pad—the intent is to have them fully drip off in the retort where we will have the area under negative pressure and will be combusting the vapors. Setting aside the substantial structural and safety challenges associated with trying to test an area the size of our drip pads with tons of ties moving back and forth throughout the day, there is little benefit focusing on that area under the new operating scenario. Again, AmeriTies is committed to testing the RTO once the retort door enclosure is installed and the system shaken down.

3. Storage Yard

You had also requested that we test emissions from our storage yard. Accurately testing storage would require tenting the entire 40 acre yard. Even if such an exercise was possible, the act of tenting would profoundly impact the emission rate. What you have suggested would not be safe and we cannot think of any way that it could be accomplished. If testing of this scale is to be attempted, it would have to occur at the industry level. Such testing is simply not feasible for an individual facilities that we have relied on calculations based on industry testing; we note that these calculations are accepted widely throughout the industry

4. Boiler 2

You had also requested that we test emissions from the boiler while combusting fuel oil. Boiler combustion emissions are among the best understood and most well-accepted emission factors available. In preparing our inventory, we employed AP-42 emission factors which are standardly used. Furthermore, we essentially never operate the boiler on oil. It is classified as a natural gas boiler for purposes of boiler MACT and as a matter of federal law we are not allowed to operate it other than during curtailment for more than 48 hours per year on fuel oil. Were we to source test the boiler on oil, we would exceed our maximum allowable annual time on oil and we would be in violation of Boiler MACT. We cannot see why DEQ would require us to spend days combusting fuel oil to prepare for and perform a source test when we normally would not use the fuel except in emergency situations.

We suspect that the request to test was based on the fact that our ACDP review report assumes 534,000 gallons annually of fuel oil combustion. However, the March 2015 permit predates Boiler MACT and so does not accurately represent our current operating mode. As noted above, if we operate more than 48 hours (other than during curtailment) while using any amount of fuel oil, we will violate Boiler MACT. Boiler operations during curtailment is necessarily an emergency activity and DEQ stated at the time of adopting the CAO rules that emergency operations would not be counted in assessing CAO compliance. We note that in preparing our CAO inventory we conservatively assumed that non-emergency operations would consume as much as 5,060 gallons for fuel oil annually. This was based on the boiler operating at or near maximum capacity for all 48 hours allowed annually—a very conservative assumption.

Given the extremely limited ability to operate on fuel oil, we respectfully request that we not be required to test the boiler on fuel oil.

5. Diesel Scrubber

As described above, the design and operation of the retorts will change dramatically in the next 6 to 9 months. Under the current configuration, upon completion of the treatment cycle the retort is purged by means of a vacuum being put on the retort. The air pulled through the retort is routed through the control system, ultimately passing through the diesel scrubber before discharging to atmosphere. Under the new configuration, the retort will be fully opened upon completion and any vapors from the retort will be routed to the thermal oxidizer. As stated above, AmeriTies is committed to source testing the oxidizer upon completion of the project. Testing the diesel scrubber would only provide partial information about the overall control of our system. Testing the scrubber when the nature of its use is about to change dramatically would not provide information relevant to future emission calculations and risk assessment.

For the reasons set out above, AmeriTies respectfully requests that DEQ withdraw its request for source testing other than the source testing we have committed to complete within 180 days of completion of the retort deck enclosure and RTO installation. We propose to submit a source test protocol at least 30 days prior to engaging in that testing.

Confidential Business Information

AmeriTies requests that portions of this submittal be managed as Confidential Business Information (CBI) and not be released in response to Public Record Act requests. AmeriTies considers the creosote content data and proprietary testing and assessment data to be highly confidential information. The justification for why these data qualify for trade secret protection is stated below. As required by Oregon Administrative Rule (OAR) 340-214-0130, each page of the attachment to this letter for which we are seeking confidential status is prominently marked as "Confidential Business Information--Do Not Release to Public." Let me express my appreciation of the manner in which you have handled our CBI to date and the way in which you segregated questions relating to CBI.

Chemical constituent data and emissions testing data meet the requirements of Oregon Revised Statute (ORS) §192.345(2) and OAR 340-214-0130(3) and are therefore exempt from disclosure. The basic technology of treating wood is not unique to AmeriTies. However, we use a proprietary formula and the means by which we assess our chemical composition of the process exhaust is highly proprietary. If one of our competitors was provided these data, they could use the data to their economic advantage.

The chemical constituent and emissions assessment data are entitled to CBI status because: (1) they consist of information that cannot be patented, (2) the information is known only to a limited number of individuals within AmeriTies who make every effort to ensure this information is not available to or obtained by competitors, (3) AmeriTies derives economic value by maintaining the confidentiality of the treatment formula and the proprietary testing/evaluation data that it has developed at great expense, and (4) maintaining the formula data and proprietary testing/evaluation data as confidential provides AmeriTies with a business advantage over its competitors. In support of these factors we note that AmeriTies never shares the constituent analysis of its formula or the proprietary testing/evaluation data with anyone outside of a select group of "need to know" employees and contractors. This information is consistently maintained as CBI as our competitors are always keenly interested in knowing details about the success of our operations. Sharing these data with a competitor would identify highly confidential information about our formulae, our facility configuration and our treating regimen. This is information we take great pains to keep confidential. If such information was released to the public, competitors could utilize that information to their advantage to steer sales away from AmeriTies or to avoid incurring the expense of conducting their own testing. This information derives independent economic value from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use--the very definition of a trade secret. The business advantage that our formula data and the proprietary testing/evaluation data provide us over our competitors would be eliminated if DEQ were to release these data to any member of the public.

We note that the data being provided are outside the scope of "emissions data." AmeriTies recognizes that the total emissions from the facility are emissions data and would be subject to public scrutiny. However, the facility activity level and the proprietary testing/evaluation data are not.

If the Department determines that any portion of the data for which we are requesting trade secret protection are not immune from a Public Records Act request, we request that you return these materials, in their entirety, to us so that we can find a different means of providing the information you need without endangering the viability of our business.

Please let me know if you have any questions after reviewing this letter.

Sincerely,

Jeff Thompson

President AmeriTies West LLC

Attachments

cc: Lance Bliss

Chad Darby Tom Wood