



State of Oregon
Department of
Environmental
Quality

Questions and Answers on AmeriTies

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What alternative preservatives are you looking into?

AmeriTies will use a wood preservative that contains less naphthalene than the current preservative. It's referred to as P3 creosote formulation.

Do you expect that UP will sign off on using a different preservative?

The expectation from AmeriTies is that they will, yes.

Besides being low in naphthalene, what are they comprised of?

The new preservative contains the same polycyclic aromatic hydrocarbons, or PHAs, as the formula AmeriTies has recently used. Generally the new formula contains fewer hydrocarbons, including naphthalene. However the new formula contains more petroleum byproducts than the existing formula did not, though generally these emissions are relatively low, including emissions of hydrogen sulfide.

How will you be evaluating effectiveness?

The priority is lowering naphthalene emissions and odors, though there is a trade-off with the change in formulation. As mentioned above, since oil will be mixed equally to create the new formula, DEQ expects to see relatively small emissions of some pollutants due to the use of oil.

Will considerations for the preservative change be limited to merely odor reduction, or for health risks as well?

The reason for switching formulas is to reduce odors, which will also reduce many PAHs, including naphthalene.

Where can I find the amended timetable for the preservative change?

It's available at <http://www.deq.state.or.us/er/docs/AmeriTiesWest/AmeritiesWestAmend2.pdf>

Please explain to me again why are you waiting to perform the oil scrubber study? AmeriTies submitted it on time, and you've had it for almost a year.

DEQ did not want to do an evaluation before the company switched to the new solution. As the company has agreed to accelerate its use of P3, DEQ will be proceeding with the scrubber evaluation as soon as that change is made.

What about other pollution control devices like electrostatic precipitators or high-temp. fabric filters, that are touted as "industry standards"?

Those devices are meant to reduce particulates, not hydrocarbons, which is the main source of odors.

Could you provide a written account of the enforcement procedures that could be implemented, and the criteria AmeriTies must meet before such enforcement can be applied?

DEQ could pursue enforcement action only if AmeriTies violates its permit, is shown to be operating with the incorrect permit or fails to comply with the terms of the Mutual Agreement and Order. If any of these are found to be happening with AmeriTies, DEQ could refer to the case for enforcement action.

Has DEQ staff been out to officially inspect the facility for compliance, without informing the facility?

Yes

With the most recent report stating that we are exceeding our long-term threshold exposure limit in conjunction with this apparent limited sampling technique, if we are exceeding our long-term threshold with data that is not taking into account the strong days, isn't it possible that, on average, we may be exceeding our immediate health threat threshold?

Given current levels at the near-source location and the production levels on those days, it is unlikely, at the current production rates and product use, that The Dalles will exceed the short-term screening level recently set by OHA.

I think it we need a more robust sampling method-preferably one that monitors the air quality 24/7. Are there any plans to adjust the monitoring methods you have been using so we get a more accurate representation of the air quality impacts of Amerities?

DEQ will be doing two weeks worth of continual monitoring in The Dalles, comprised of two periods of one week each at each of the new sampling locations, the near source and background locations.

Who do we ask – DEQ or another agency – to conduct an epidemiological study with regard to AmeriTies' chemical releases in The Dalles?

Oregon Health Authority is the appropriate agency to contact regarding health studies in The Dalles.

Would you please consider evaluating the place/location of the meeting and have an effective sound system so that each speaker and individual can be heard clearly? Thank you.

Yes. DEQ is purchasing a new, mobile PA system for use in the future.

Why not place monitors at the homes of citizens whose complaints have occurred over and over? Who decided where monitors are placed?

DEQ considers odor complaints as well as other factors in determining where to place monitors, including DEQ odor surveys, meteorological data and access to electricity.

Will AmeriTies know which days the monitors are collecting data? How can we be assured that the data won't be skewed?

AmeriTies will know the duration of monitoring, just as the public knows the duration of the monitoring. DEQ will consider production at the plant as part of the data analysis.

Are the scrubbers working/functioning? How do we know if they are working?

The oil scrubber serving the vacuum vessel must operate at all times (permit condition 3.2). DEQ staff inspects operation and maintenance records periodically. AmeriTies is required to conduct an oil scrubber effectiveness study as per the enforceable agreement and permit condition 6.4.

Why has the DEQ allowed creosote, a hazardous air pollutant that has been banned by the EPA for every other application, to be used by the railroad industry with little or no consideration for public health?

The company is lawfully permitted under existing state and federal regulations to use creosote and emit naphthalene.

Special condition G.4 of AmeriTies' current air permit issued in March 2015 states that AmeriTies must submit a plan for evaluating the performance of the oil scrubber. The MAO shows the plan was submitted in September 2015 and is still being evaluated by DEQ. Why?

AmeriTies has submitted the scrubber assessment plan to DEQ, and the assessment will be done after the company uses alternative preservative materials. DEQ did not want to assess scrubber functionality until the characteristics of the new chosen preservative are identified.

Was AmeriTies considered in violation when the nuisance odor process took effect?

No. The company was not and is not in violation of its air quality permit.

How does the 290 micrograms per cubic meter of naphthalene recorded at the plant compare to the DEQ benchmarks? Does the company provide long-term health insurance for workers?

The naphthalene reading referred to is higher than the DEQ lifetime benchmark of .03 micrograms per cubic meter. The lifetime benchmark is not applicable to employment environments. Instead, work environments must comply with OSHA exposure standards. Questions on worker benefits should be directed to AmeriTies.

Why doesn't the MAO include a long-term odor action plan?

The plan requires additional measures if odor reduction goals are not met. DEQ cannot know what additional measures could be effective in the long term without first assessing effectiveness of the existing measures in the enforceable agreement.

Why did the DEQ issue AmeriTies' current air permit despite the lack of implementation of the long-term plan for odor reduction required by AmeriTies in 2009?

The permit renewal required the company to create an odor reduction plan. However, the company was not required to implement all measures in the long-term plan.

Can interested residents or groups donate funds to support ongoing air quality monitoring or additional monitoring to feed into DEQ's study and evaluation (i.e.: beyond the 90-day monitoring)?

No. DEQ does not have a method for accepting funds in this manner.

Since Union Pacific owns all the ties on site, treated or untreated, why are they not being held responsible for the off-gassing of creosote into The Dalles' airshed?

The air quality permit and the conditions in it apply to AmeriTies. DEQ does not have authority to regulate an entity solely based on ownership of treated materials, or, in this case, manufactured railroad ties.

Why has Representative Huffman accused residents of falsifying DEQ reports? What would residents possibly have to gain from this?

This question should be addressed to Representative Huffman, who explained his comments in person at the public meeting May 17, 2016.

Won't reducing the amount of naphthalene in the creosote formulation put vulnerable populations at risk since naphthalene alerts us that the air is toxic and so our kids stay inside and our elderly parents don't garden? What good is that without a comprehensive control technology that addresses all the constituent poisons found in creosote?

Creosote formulations with less naphthalene should result in fewer odors and fewer emissions of hazardous air pollutants. The company is required to have control technologies to reduce both odors and emissions, though it is permitted to operate and emit pollutants.

Why is an open air facility in a residential area permitted by the DEQ for a wood-treatment plant using creosote, which is known to pose a serious, imminent health threat?

Zoning and other land use questions should be addressed to the city of The Dalles. Questions on the health risk posed by odors and air toxics should be directed to the Oregon Health Authority.

Who will be reading the air monitors and when? How are we assured that that readings are not biased?

DEQ staff will be collecting air monitoring data in The Dalles. DEQ has quality assurance and controls in place to verify data.

Will the monitors be recording data for all 24 hours a day?

For part of the study, data will be collected every third day for a 24 hour period. For two consecutive weeks within the 90-day monitoring period, data will be collected continuously for the 14 consecutive days.

When will OHA begin *our* public health assessment?

The Oregon Health Authority will review monitoring data and work in partnership with DEQ to determine if any steps should be taken to protect public health.

Why haven't soil and water samples been taken after we have told you our concern for health?

Sampling soil and water for naphthalene would not provide additional information on the potential health risk of naphthalene in the air.

Why don't you revoke AmeriTies' permit when we know the risks from creosote?

DEQ has no authority under existing regulations to revoke the company's air quality permit. If monitoring data suggests that a health risk exists, DEQ and Oregon Health Authority would take appropriate action to protect public health.

Is the MAO final or can we have an appeal process?

The enforceable agreement is signed and in effect.

One of the odor reduction measures is to stagger drip pad times, but if the naphthalene collects in the air, how is staggering when it's released going to do anything? Can you comment on the naphthalene concentration dispersal times?

The practice of staggering drip times can reduce odors by spreading out the time that ties are off gassing, thus reducing the concentration of odors at the drip pad at any given time. The off gassing of naphthalene from the ties is substantial when the ties are removed from the retort to the drip pad, though naphthalene continues to be off-gassed while they are stored in the yard.

Doesn't the MAO substantially recycle AmeriTies' previously proposed actions? Did DEQ bring anything new to this agreement or its negotiations?

The enforceable agreement codifies some actions the company was already taking to reduce odors. It also adds additional and new measures, including a requirement to experiment with formulations containing less volatiles, including naphthalene.

The Les Schwab Tire Company has very strong odors. Will this be considered as a possible monitoring site?

Yes. DEQ considered this and many other sites while developing the monitoring plan.

Is the benchmark currently voluntary?

Under existing regulations, the benchmark for naphthalene is not considered when drafting the air quality permit. Rather, the benchmark is a statewide clean air goal and is not enforceable in the permit. However, DEQ and OHA are in a rulemaking process to bring statewide and risk-based regulations to the air toxics permitting program. Learn more about [Cleaner Air Oregon](#).

Why is DEQ only focusing on odor instead of the air pollution being inflicted on residents and their health?

DEQ is required to review and issue permits for any facility that meets all applicable state and federal regulations. The enforceable agreement is focusing on odors because the community provided the minimum number of odor complaints required to begin an odor investigation. The monitoring for PAHs will provide information necessary to understand potential for health impacts due to Naphthalene in the area.

What can we do if the MAO closes doors to any further changes we want done?

The enforceable agreement does not limit the ability of citizens or DEQ to work for additional odor reductions in The Dalles.

How do we know AmeriTies isn't getting monitored on days with less pollution (or less production at the facility)?

DEQ will evaluate AmeriTies' production when conducting the data analysis.

If you are only monitoring every three days for 3 weeks, how can you determine long-term health effects when you aren't monitoring long-term?

DEQ will conduct monitoring over 90 days, which is the minimum amount of time needed for Oregon Health Authority to determine potential risks to public health. DEQ may conduct additional monitoring based on the results of the 90-day monitoring effort.

How will the general public become informed of DEQ policy? Historically it hasn't been done or has not been done in a timely manner.

DEQ will share monitoring information when it is available, both by posting the data online and holding upcoming public forums in The Dalles.

Will The Dalles Chronicle keep us informed?

DEQ will share the information with media through distribution of news releases.

When can The Dalles expect significant toxic odor reductions that currently impact our residents?

The intent of the measures included in the enforceable agreement is to reduce odors. It's impossible to know how much the odors will be reduced and by when.

What is the health benchmark for creosote/naphthalene?

Oregon's benchmark or clean air goal for naphthalene is 0.03 micrograms per cubic meter.

Why doesn't AmeriTies have to meet health benchmarks? Why can they emit naphthalene when it causes an exceedance of many times the benchmark in the surrounding air?

Benchmarks are a clean air goal for Oregon and are not currently tied to regulations or permit conditions.

If the monitors find levels of naphthalene like those found in 2011/2012 (26-9600 times the benchmark), will their permit be revoked? If not, why not?

DEQ and Oregon Health Authority will take appropriate action based on the monitoring results.

Are measurements being taken during times of inversion?

Monitoring will begin in June 2016 and last for 90 days.

How does "tighter stacking" reduce VOC emissions over loose stacking?

Tighter stacking reduces the air flow between treated ties, which reduces odors.

Why don't laws prohibit plants within city limits?

Questions about local land use decisions should be directed to the city of The Dalles.

After the Cleaner Air Oregon program is implemented, will companies like AmeriTies be responsible for paying for required monitoring as part of obtaining permits to operate and/or pay fines if emissions go past regulated benchmarks?

The regulatory reform known as Cleaner Air Oregon is an 18-20 month process and it is too early to know what the rules will look like.

Is the goal of the DEQ air permitting program to reduce air toxics overall, and not take into account the localized health impacts of air toxics from industrial sources?

DEQ's goal of the air permitting program is to minimize air pollution to the greatest extent possible under existing regulations. This means looking locally and across the state at air quality impacts.

Are all monitoring results combined and averaged throughout The Dalles? In this case, results could be low because homes and businesses are scattered far and wide.

Results from three monitors will be reviewed both individually and in the context of the larger airshed to determine air quality impacts from AmeriTies. It is likely that air quality in The Dalles varies considerably from one area to the next.

Will the amount of ties manufactured during the 90-day monitoring be compared to the 90 days previous to the monitoring and the 90 days after the monitoring?

Yes, production levels are looked at as part of the data analysis.

Why doesn't AmeriTies have to pay for the monitoring?

DEQ has no authority to require AmeriTies to pay for monitoring outside its property boundary.

Will the public be included (such as holding public hearings) on a regular basis throughout the year? If so, how will we be notified? If not, why?

DEQ will share monitoring data online and in person by meeting with residents of The Dalles. DEQ will provide information to local news media and by posting the information on DEQ's web site.

Will DEQ be publishing results of scientific monitoring?

Yes, the results will be published on the Cleaner Air Oregon web site.

Why were air monitors so hard to get?

DEQ was only able to fund two air quality monitors until the legislature's recent approval of additional monitoring equipment made available as part of Cleaner Air Oregon.

Do you feel monitoring is adequate?

The 90-day monitoring program is adequate for DEQ and Oregon Health Authority to determine if additional monitoring or measures should be performed to protect public health. DEQ also relies on information provided by modeling and plant site emission limits to inform decisions.

Will there be a monitor at each site or one that moves to the different locations?

DEQ will use three monitors, one at each of the three locations identified in the monitoring plan.

Why does the MAO include only two new odor reduction measures out of the six listed?

The two new measures are the scrubber evaluation and the change of formula to one that uses less naphthalene. Both of these could have a substantial impact on odor reduction. If these measures do not substantially reduce odors, DEQ can require additional actions.

Please describe in detail the emission control equipment currently in use at the facility?

The oil scrubber controls emissions off the retorts and the tanks that store the preservative. The second control equipment is the misting system at the retort doors. Both controls remove vapors from the air to control odors and emissions.

The MAO mentions clear and detailed steps to follow up with enforcement action if AmeriTies does not come into compliance. What steps are those? Isn't it time to apply them?

The agreement is enforceable, which means DEQ can issue civil penalties if AmeriTies does not comply with the agreements. The steps require DEQ to identify the violation, if any, and takes appropriate action. The company is currently complying with the terms of the enforceable agreement.

DEQ said AmeriTies was using copper naphthalene starting in November but when I called Jeff Thompson he said they have never used anything but creosote. Who is in charge of this and why wasn't their permit revoked if they didn't meet the requirements?

AmeriTies is using copper naphthenate on some products, including bridge supports. The product is not appropriate for use on railroad ties.

How are emissions measured?

AmeriTies uses emission calculation methods identified by permit conditions to determine compliance with emission standards. The calculation includes an inventory of emission release points, material usage, and length of time product is stored in the yard.

What data goes into modeling?

Modeling of emission impacts requires meteorological data, estimated emissions from sources of pollutants, and known pollutant characteristics.

How does DEQ define an "airshed"? In this case, does it include the north side of the Columbia River communities?

An airshed is a term to define an area enveloped by air that has similar characteristics and separated from other volumes of air by topography. In most cases, DEQ uses this term generally to define physical boundaries for areas that exceed, or are at risk of exceeding National Ambient Air Quality Standards. DEQ has not defined airshed boundaries for The Dalles area.

How many citizen odor forms from unique addresses have been received?

In 2014, DEQ received 50 complaints from 38 unique addresses. In 2015, DEQ received 225 complaints from 49 unique addresses. As of April 22, 2016, DEQ received 55 complaints from 21 unique addresses.

Regarding process improvements one and two on Mark Bailey's slides, does it take longer for the ties to process? Less odor equals longer processing time? But same amount of pollution?

By staggering the ties on the drip pad, the production is the same although there are fewer ties drying at any given time. The amount of emissions is the same though the maximum emission concentration is less.

By what percent has plant production increased during the last five years?

Although there is variability in production from year to year, in general over the last five years, the number of charges has increased while the number of ties in storage has decreased. In 2015 the number of charges increased by 47% over 2014 levels, while the number of ties in storage decreased by 40% over 2014 levels.

What are the health risks associated with the other formulas to be experimented with? Do they have other heavy metals in them?

DEQ does not yet know what pollutants other formulas contain. AmeriTies will provide that information to DEQ before experimenting with alternative formulas with less naphthalene.

Will the VOC monitors be used to detect the other hazardous air pollutants that are emitted by the facility such as arsenic, chromium and cadmium?

The monitors will collect data on Polycyclic Aromatic Hydrocarbons, or PAHs. Naphthalene is a PAH. Arsenic, chromium, and cadmium are metal compounds and DEQ will not measure metals during this study.

Will monitors be located at area schools? I don't want my five-year-old outside on the days of worst releases. Will schools keep kids inside or be made aware when readings are high?

The readings are not instantaneous, meaning DEQ will not know what the readings are until after the data is collected. The monitoring plan includes the locations of the monitors, which includes one school at St. Mary's Academy. Parents concerned with the health of children should contact their primary care physician or health professional.

Is DEQ fully staffed and funded?

The legislature provides and approves funding for DEQ. DEQ is operating within its operating budget.

Why hasn't OHA ever done a cancer cluster study (in The Dalles)? Are they planning one?

Cancer is a complex and often deadly disease that has no single cause or simple cure. As a state, we currently address cancer through a variety of approaches that include cancer prevention, early detection and survivorship. For more information on criteria for a cancer case inquiry, please visit:

<http://public.health.oregon.gov/DiseasesConditions/ChronicDisease/Cancer/oscar/Documents/Understanding%20Cancer%20Rate%20Analyses.pdf>

Why hasn't OHA assessed public health among residents that live in close proximity to the plant emitting 1,000 times the benchmark for long-term exposure of naphthalene?

The Oregon State Cancer Registry tracks cancer trends over time at the state and county levels. Cancer data like these offer broad overview information about cancers in specific geographic areas, but cannot determine the reasons why specific cancer cases occur. This is due to:

- Personal health exposures and other factors known to be associated with cancer type (e.g., smoking).
- Lag time between possible exposures and occurrence of cancer.
- In-migration and out-migration for population of interest.

Residents' concern regarding possible environmental contamination needs to be addressed; however, neighborhood cancer rate analyses contribute little to protecting public health when contaminants of concern have already been identified.

Do benchmarks consider people with G6PD?

No. G6PD deficiency makes people more sensitive to hemolytic anemia from any cause, including exposure to naphthalene. Hemolytic anemia occurs when the bone marrow can't replace red blood cells that are being destroyed. There is not enough scientific information about how much naphthalene it takes

to cause hemolytic anemia in people with G6PD. Without this kind of information, it is not possible to set a benchmark specific to people with G6PD. In cases where naphthalene were reported to cause hemolytic anemia in children with G6PD, there was no measurement of air concentrations at the time of exposure. In those cases, babies were wrapped in blankets that had been stored in moth balls (naphthalene is the active ingredient in moth balls). Health benchmarks for naphthalene in air are based on increased cancer risk.

Why hasn't OHA assessed the fatal risk of creosote to people of color with G6PD vulnerability?

Fatalities related to G6PD deficiency and naphthalene have not been documented when the source of naphthalene was inhalation from creosote. Rather, these cases have been from exposure to blankets that had been stored in moth balls or from swallowing moth balls directly. There isn't enough information available about how much inhaled naphthalene it takes to cause hemolytic anemia in people generally or specifically in individuals with G6PD deficiency.

Over the next year or two, does the DEQ plan to complete an air quality study throughout the city in The Dalles for creosote, and for other harmful elements such as chromium and other heavy metals and VOC's, etc? If so, when would this take place, for how long, and who would collect the data and administer the study?

The current monitoring plan measures for naphthalene and other volatile organic compounds. AmeriTies is not a significant source of metal emissions.

In Lane County a regional air pollution authority (LRAPA) has been established to monitor among other things creosote emissions, for there is a creosote rail tie plant there as well as here. Has DEQ considered or had conversations with Wasco County to collaborate with them in order to establish a similar regional air pollution authority in Wasco County for the same purpose in The Dalles air shed?

Establishing a regional air quality regulatory agency is initiated by the local city and county.

Is the DEQ going to play a role in purchasing the necessary monitoring equipment and increase the personnel necessary to carry out a more rigorous data collection endeavor?

DEQ agrees that additional monitoring data is needed. In addition to the 90-day monitoring program already in place, DEQ is considering The Dalles as a location for a full service air toxics monitor. A decision on the placement of this monitor should be made by the end of the year.