Questions & Answers Sheet

AmeriTies-West

ODOR REDUCTION STRATEGY AGREEMENT

Q. Are odors covered under the current air quality permit?

Yes. Permit condition 1.5 states AmeriTies must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be

verified by DEQ. Condition 6.3 of the Permit requires AmeriTies to evaluate odors at its facility and develop a plan for additional technology and practices to reduce odors. However, the permit does not require that AmeriTies implement the plan. Although many of the strategies listed are consistent with the odor action plan identified within the enforceable agreement, they are two separate documents. Failure to do so could result in DEQ assessing civil penalties to AmeriTies in accordance with OAR 340, division 12. Questions about nuisance are found in DEQ's Nuisance Strategy.

Q. How long will the enforceable agreement remain in effect?

The agreement remains in effect until DEQ either renews the permit at the end of its cycle (in 2020) or upon DEQ-modifying the permit. DEQ would modify the permit if both AmeriTies and DEQ agree to end the agreement before the permit is up for renewal. The requirements under the agreement, including any updates of new or additional odor reduction actions, would then be included in the modified or renewed permit and the agreement would terminate when the permit is issued.

Q. What if AmeriTies violates the agreement?

The agreement is a final order of the Environmental Quality Commission. As such, violations of the agreement are subject to civil penalties in accordance with Oregon Administrative Rules (OAR) Chapter 340, division 12.

Q. Under what circumstances would DEQ end the agreement?

Three different circumstances could occur:

- 1. The first is that the permit term has ended and the permit needs to be renewed. DEQ would add the odor reduction actions in the agreement into the renewed permit. The agreement would end when the permit is issued.
- 2. The second circumstance would be if the current odor reduction actions in the agreement do not adequately reduce odors and AmeriTies and DEQ cannot agree on additional actions AmeriTies must take. DEQ and AmeriTies could mutually agree to end the agreement. In that case, DEQ would add the odor reduction actions in the agreement into the AmeriTies current permit and the agreement would end when DEQ issues the modified permit.
- 3. The third circumstance would be if AmeriTies were to change their operation in a manner that dramatically reduces or eliminates odors and the agreement is no longer necessary or relevant.

Q. What happens if AmeriTies complies with the agreement and odors are not sufficiently reduced?

Under the agreement, DEQ will continue to conduct odor surveys to determine whether odors are sufficiently reduced. In the event odors are not sufficiently reduced, the agreement requires the company to submit new odor reduction actions for DEQ approval and then to implement the updated actions. Failure to submit approvable updates would be a violation of the agreement and could result in DEQ assessing civil penalties.

The only caveat to this is if AmeriTies and DEQ cannot agree on what additional odor reduction actions should occur. In that case, both parties could agree to different odor reduction actions or



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Last Updated: xx/xx/xx By: Jane Doe to end the agreement after the current odor reduction actions are added into the permit. In the event the agreement is ended but the current odor reduction actions are not sufficiently reducing odor, DEQ will continue to conduct odor surveys and may eventually collect enough data to determine that AmeriTies odors are causing a nuisance. Causing or allowing nuisance odors is a violation of DEQ rules and DEQ could assess civil penalties and issue an order to AmeriTies requiring that AmeriTies sufficiently reduce its odors.

Q. So why not just declare AmeriTies' odors a nuisance now and issue a penalty and order?

AmeriTies is not currently in violation of Oregon environmental law unless, or until, DEQ determines that the facility is causing or allowing nuisance odors. This determination takes a significant amount of data collection and documentation by DEQ to be able to support that determination. At this time, DEQ does not have enough data to support a nuisance determination. This is why the agreement is important. Rather than waiting for DEQ to collect enough data to prove its case, the agreement requires that AmeriTies take steps now to reduce odor and to continue working on odor reduction until odors are sufficiently reduced.

NAPHTHALENE MONITORING

Q: What is naphthalene?

Naphthalene is a white solid that evaporates easily. Chemically, it is a polycyclic aromatic hydrocarbon (PAH) and a volatile organic compound (VOC). Naphthalene is made from crude oil or coal tar. Fossil fuels, such as petroleum and coal, naturally contain naphthalene. Most of the naphthalene entering the environment is from residential wood burning and vehicle exhaust. Other sources include gasoline and diesel exhaust, cigarette smoke, moth and pest repellants (moth balls or crystals) and toilet deodorant blocks. There are many industrial sources of naphthalene emissions including its use in making *other chemicals* (such as the making of polyvinyl chloride (PVC) plastics). It is also used in wood preservative treatments for railroad ties.

Q: What causes naphthalene emissions to come from AmeriTies?

Naphthalene is a component of the creosote mixture used to treat railroad ties. Creosote is the main smell associated with operations at AmeriTies. The human nose can detect this smell at small levels. The odors happen when wood is pressure-treated and when the treated ties are left outside to dry. Odors also happen when some equipment (such as the pressure treating cylinders) are opened.

Q: Is AmeriTies the only source of naphthalene in The Dalles?

No. There are numerous sources of naphthalene in the environment. Naphthalene emissions come primarily from fuel combustion, in particular gas and diesel exhaust and wood burning. Wildfires, too, contribute naphthalene emissions to our air.

Q: When did the first monitoring for naphthalene in The Dalles happen and what did it show?

Two rounds of air quality monitoring were conducted in September 2011 and February 2012. Naphthalene levels were found in residential areas to be between 0.88 and 13 micrograms per cubic meter ($\mu g/m3$), and between 53 and 290 $\mu g/m3$ at the plant. The highest numbers were detected at the facility, right next to the drip pad where the treated ties first go after leaving the treatment tanks. These numbers mean that there may be different naphthalene levels in The Dalles from one day to the next and one location to another. Longer term monitoring is needed to understand average levels to get a better understanding of what long-term cancer risk this may pose to the community.

Q: What is the monitoring plan for The Dalles?

The air quality monitoring plan for The Dalles was devised in collaboration with the Oregon Health Authority and is designed to give us the information needed to make a long-term health analysis regarding naphthalene exposures. The plan is to place three specialized monitors in separate strategic locations around the city. We'll review the monitoring data at regular intervals and make adjustments to the plan based on what the data is telling us. The plan dedicates the monitors for 90 days, which is the sampling duration needed for Oregon Health Authority toxicologists to provide a long-term health assessment.

Q: What will happen when the monitoring is completed?

Data will be analyzed by chemists and then shared with the Oregon Health Authority to make a health risk analysis. The information will be summarized and put in a sharable form and made available to the public. Depending on what is found different actions may be taken. Decisions on what those actions are will be based on regulatory authority and made in the interest of the community's health.

HEALTH-RELATED QUESTIONS

Q: What are Ambient Benchmark Concentrations (ABCs) and how do they relate to health concerns?

ABCs are conservative health-based air quality goals, and should not/are not used as part of actual risk assessment, except as a preliminary screen. If a concentration is measured below an ABC, we can be confident there is no health concern. If a measurement screens above an ABC, that does not mean there is actual health risk, but it may trigger a more in-depth analysis of risk.

Q: What are the ABCs for naphthalene? Are there other measurements or standards?

Oregon's ambient benchmark concentration for naphthalene is 0.03 micrograms per cubic meter $(0.03 \,\mu\text{g/m}3)$. This benchmark sets a risk of getting cancer over a 70 year period of exposure to naphthalene to 1 person out of 1 million people.

Q: Is there is a standard specific to naphthalene exposure other than the cancer benchmark?

Health affects other than cancer, such as hemolytic anemia, nausea, and vomiting occur at concentrations many times higher than this benchmark concentration. The next lowest toxicity screening level is 3.7 µg/m3 which is associated with sores in the nose.

Q: Some children have experienced health impacts their parents attribute to emissions from the plant. Why do we have to wait for monitoring in order to take action on the emissions?

Nausea and vomiting are common symptoms of many different diseases. None of the naphthalene monitoring results we've seen so far are high enough to cause the symptoms that have been described. If there are times when naphthalene concentrations are much higher, the monitoring planned by DEQ will tell us that.

Q: What does it take to determine that the AmeriTies plant is a public health threat?

It would take much higher naphthalene concentrations than what has been measured so far in residential areas. Also, measured concentrations of naphthalene in residential areas of The Dalles are mostly consistent with what are typically found in urban areas (1µg/m3 is the median measurement in urban areas across the country). Measured levels so far are above Oregon's long-term benchmark concentration, but it is not appropriate to compare single-day grab samples against an annual benchmark. Monitoring will most likely find that The Dalles is not achieving Oregon's health-based air quality goals as defined by the ambient benchmark concentrations (0.03 µg/m3), but whether or not it is all because of AmeriTies and whether or not levels are high

enough to pose an urgent or substantial public health threat can't yet be answered with the available information.

ONGOING ENVIRONMENTAL CLEANUP FROM PREVIOUS OPERATORS

Q: How and when did the site become contaminated?

Past operating practices of former operators, between the years of 1926 and 1980's, resulted in the contamination of ground water and soil. Activities contributing to the contamination included discharge of wastewaters to unlined ponds, other on-site disposal, spills, and uncontrolled drippage.

Q: What has been the timeline for cleanup?

DEQ's Water Quality Division began investigating the Union Pacific Rail Road (UPRR) tietreating plant site in 1984. Creosote components, pentachlorophenol, fuel oil, ammonia, volatile organic compounds (VOCs) and arsenic were found in soil and groundwater near the plant. Contamination was also found in soils and sediments in Riverfront Park and along the shoreline of the Columbia River to the north of the plant. This latter contamination is believed to have come from a US Army Corps of Engineers' underground pipe that carried storm water runoff from the plant to the river from 1937 to 1971.

In May 1989, UPRR entered into a consent agreement with DEQ's Environmental Cleanup Division to conduct a Remedial Investigation and Feasibility Study at the site. A separate study was later conducted for the Riverfront Park/Columbia River sediments unit. The U.S. EPA listed the site on the National Priorities List in 1990, and DEQ remains the lead agency for the project. A Record of Decision for the site was issued in 1996 which identified remedial actions to cleanup groundwater, soils and sediments at the site. The selected remedy focuses on removing wood treating oils, controlling groundwater in the area through engineering controls (pumping), soil removals, maintaining a sediment cap in the Columbia River, protecting existing site workers and institutional controls prohibiting groundwater use in the area. Remedial performance at the site is measured through daily operation and testing of the treatment system, monitoring of site wells, and long term monitoring, maintenance and review of the engineering and institutional controls in place.

Q: Are there current environmental or health risks from the contamination?

There are no current environmental or health risks identified at the site from historical contamination. All remedial actions are operating effectively and are protective. Daily operations and maintenance are summarized in an annual report and the remedy is reviewed on a five year basis. The next scheduled remedy review (4th Five-Year Review) is scheduled to be completed in 2016.

Q: How long will cleanup continue?

Active cleanup is in its eighteenth year and will continue until all risks have been addressed or reduced to the point when active remediation is not required or recommended. Long-term control and maintenance of the site will still be required and continue into the future.

Q: How does DEQ know that AmeriTies is not currently polluting soils and ground water?

Remedial performance measured through routine operation and testing of the treatment system and monitoring of site wells ensure that active conditions at AmeriTies do not contribute or exacerbate conditions at the Site. The responsible party, UPRR is ultimately responsible for all cleanup responsibilities. UPRR provides an annual financial assurance document for closure or post-closure care.

In addition, regular compliance inspections help ensure that day to day operations are not creating additional problems.

COMPLIANCE AND INSPECTION HISTORY

Hazardous waste compliance

DEQ conducts hazardous waste compliance inspections at all large and small quantity generators every three years. AmeriTies West LLC is considered a large quantity generator of hazardous waste because they generate more than 2200 pounds of hazardous waste per month. AmeriTies generates the following types of hazardous waste:

- Storm and wash waters from the drip pad which are pretreated and then discharged to the sewer; average 19,000 gallons (161,000 pounds) per month, discharged to the sewer under a Pretreatment Program permit issued by the City of the Dalles.
- Process residuals and debris; average 4300 pounds per month, sent to a permitted treatment, storage and disposal facility in Missouri.
- Less than 30 pounds per month of Universal Wastes (fluorescent light tubes, spent rechargeable batteries).

DEQ last inspected AmeriTies for hazardous waste compliance on May 11, 2016. At that time, AmeriTies was found to be in compliance with hazardous waste requirements. Prior to that, DEQ and EPA inspected the facility on June 11, 2013. As a result of the inspection, DEQ issued a notice of violation related to storage of fluorescent lamps, failure to properly maintain the drip pad coating and for cracks in the drip pad. According to the facility, these violations were remedied on or shortly after the day of the inspection. Previous inspections and site visits since 2002 did not show any significant hazardous waste violations.

Air Quality Compliance

The facility was last inspected in January 2015 and found to be in compliance with permit conditions. The most recent site visit to AmeriTies was on May 4, 2016 and the company was found to be fulfilling mutual agreement and order requirements.

Water quality compliance

DEQ conducts regulatory compliance inspections at DEQ-permitted facilities and for environmental complaints. AmeriTies' process and wash water is not subject to a wastewater permit because the water is contained and conveyed to the city sewer system. Accordingly, the site is not generally inspected for water quality issues, though the company is covered under the city's pre-treatment program for wastewater.

Based on community concerns, DEQ made a site visit May 3, 2016 to determine if there are other water quality issues not already being addressed under the clean-up program. Based on the recent site visit and follow-up reviews of the site history, DEQ believes that AmeriTies does not require wastewater or other water quality permits other than that occurring through the pre-treatment program and the DEQ cleanup program.

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