



State of Oregon Department of Environmental Quality

Response to Comments

Oregon Re-Refining Company: Standard Air Quality Permit renewal and new solid waste draft permit.

This document summarizes comments and questions DEQ received during the public hearing and comment period for ORRSCO's Standard Air Quality permit renewal and modification and the new solid waste draft permit.

Questions and comments

1. DEQ received four comments in support of renewing ORRSCO's permit.

DEQ Response:

DEQ thanks the commenters for taking time to participate in person at DEQ's public hearing, or submitting their comments online.

2. One commenter states that ORRSCO has failed to address the black and orange smoke billowing from the building.

DEQ Response:

DEQ has not observed plumes of black and orange smoke emitted from ORRSCO. A potential source of observable emissions may have been ORRSCO's wastewater evaporation process, which DEQ required ORRSCO to discontinue in 2016.

In 2016, DEQ required ORRSCO to cease operating the evaporation system, as it contained detectable amounts of hazardous air pollutants and was likely a source of odor.

3. DEQ received several comments from the community stating their dissatisfaction with ORRSCO conducting self-reporting of emission data to DEQ.

DEQ Response:

Self-reporting and monitoring is expected of sources and outlined in regulation. Reporting information other than what the source monitors and records is a violation of the air quality permit.

As is the case across the United States, DEQ's rules require self-reporting from all permitted facilities in Oregon. DEQ reviews annual reports and stack test submittals to verify

information provided. Additionally, DEQ conducts onsite inspections, announced and unannounced, and reviews production and emission reports.

4. Several comments addressed ORRRCO's past usage of PCB containing used oil. Commenters want DEQ to conduct testing of ORRRCO's stacks to ensure all previous PCB containing residue was properly removed. Additionally, commenters want to ensure PCB containing material is not allowed on site.

DEQ Response

EPA oversaw ORRRCO's clean up and disposal efforts of used oil with detectable levels of PCBs. The cleanup effort was completed in accordance with EPA guidance in October 2016.

DEQ has no evidence indicating ORRRCO is burning or has burned PCB contaminated fuel. ORRRCO is required to test all plant site fuel for sulfur, PCBs, and metals prior to burning. Laboratory records collected and reviewed from ORRRCO as part of an EPA/DEQ joint 114-letter issuance in 2016 did not indicate ORRRCO was burning fuel with detectable (2 ppm or greater) amount of PCBs.

ORRRCO's renewed air quality permit restricts burning fuels with detectable levels of PCBs (2 ppm or greater). ORRRCO must comply with used oil regulation and burning standards outlined in 40 CFR 279.11, Table 1.

5. Commenters are concerned with ORRRCO's emissions of air toxics into the ambient air. Some believe the current control devices are inadequate to capture and retain toxics emitted from the re-refining process. Others identified that ORRRCO emits over 300 air toxics, some of which DEQ does not monitor.

DEQ Response:

The used oil re-refining process creates ambient air emissions containing air toxics. DEQ does not currently monitor for ambient air toxics as no current limits have been established.

However, the intent of the Cleaner Air Oregon draft regulations is to reduce the localized public health impacts of air toxics from industrial facilities. DEQ continues to update and edit the Cleaner Air Oregon draft regulations and intends to issue the final rules in 2018.

ORRRCO controls VOC emissions from the cooking process with a bubble condenser. Emissions are routed from the cook tanks to the condenser where VOCs are removed from the emission stream and are retained in the condenser medium.

6. Many recorded comments want DEQ to require ORRRCO to install full spectrum, real time, 24 hours a day, 7 days a week, monitoring of ORRRCO stacks.

DEQ Response:

Continuous full spectrum monitoring is not practicable to implement and is not required at any facility in Oregon. In lieu of this type of monitoring, the permit requires ORRRCO to

conduct stack testing to verify emissions and fence line monitoring to identify odors from operational process equipment. Stack testing will be completed by a third party testing company in accordance with EPA reference methods. The testing company will draft and submit a stack-test plan to DEQ for review and approval prior to testing. DEQ representative(s) will attend the stack test to verify the proper EPA test methods are used.

Stack testing is completed under representative conditions, meaning the testing will be conducted under the worst case operating conditions. Representative testing will challenge the thermal oxidizer's control efficiency. If the thermal oxidizer can meet the destruction efficiency required under that operating scenario, it will be able to under any future scenario. Operating parameters, like contaminant concentration in the used oil, flow rate, process temperature, etc., are included as monitoring conditions in the permit. ORRSCO's renewed air quality permit requires periodic stack testing to verify continued control efficiency.

In 2015 and 2016, EPA and DEQ conducted area wide monitoring near ORRSCO and on Hayden Island. The results were similar to background air pollutant levels.

Additionally, through an EPA and DEQ issued 114-letter to ORRSCO, EPA and DEQ required ORRSCO to conduct stack sampling of the following pollutants: Benzene, Chlorine, Dioxane, Hydrogen Sulfide, Sulfur Dioxide, Chloroform, Naphthalene, Mercaptans, Carbon Monoxide, Nitrogen Oxides, General Hydrocarbons, Carbonyl Sulfide, Ethyl Mercaptan, Methyl Mercaptan, and Carbon Disulfide.

7. Some commenters want DEQ to develop a special operational permit to ensure they are protected from ORRSCO's emissions.

DEQ Response:

The proposed draft permit for ORRSCO is a special operating permit. DEQ drafted ORRSCO's permit site specifically, incorporating adopted regulations applicable to their operations.

8. A portion of commenters request DEQ require ORRSCO to install BACT level control device(s) to minimize emissions and odors.

DEQ Response:

By rule, facilities may be subject to Best Available Control Technology (BACT) only if they make a major modification (with an increase in emissions above the significant emission rate) to the facility. ORRSCO has not proposed such a modification. DEQ cannot require more stringent standards in permits than are required by current rule.

9. Some commenters request that DEQ require ORRSCO install a scrubber to capture particulates from the exhaust stream exiting the thermal oxidizer.

DEQ Response:

In 2017, ORRRCO emitted 6.2 tons of particulate matter (PM) and 4.2 tons of PM-10. ORRRCO's generic plant site emission limits for PM and PM-10 are 24 tons per year and 14 tons per year, respectively. ORRRCO's PM emissions are below the generic regulatory cap in current rule so DEQ cannot require ORRRCO to install a scrubber.

10. Many comments focused on the concern for ORRRCO to use a "clean" fuel source and not the light end fuel source recovered from the cooking process.

DEQ Response:

Under federal regulation, 40 CFR 279.11 Table 1, ORRRCO is authorized to burn distillate fuel as plant site fuel if the distillate meets the on-specification requirements outlined in Table 1.

11. One commenter suggested modifying the permit duration from five years to one year.

DEQ Response:

In the event EPA or DEQ adopt additional regulations applicable to ORRRCO, ORRRCO must comply with the regulation by the applicability date, or the date the regulation is effective, regardless if the permit was issued for one year, or five years.

Facilities may choose to modify their existing permit during the five year permitting term, but any additional regulations created by the modification will be incorporated into the existing permit at the time of approval or installation of additional equipment.

12. One commenter requested that DEQ incorporate the review report into the operating permit.

DEQ Response:

The intent of the review report is to clarify why certain regulations are included in the permit and why others are not. It also outlines the plant site emission detail sheet, listing all emissions, control devices, and operational equipment. The review report is a tool for the reviewer to understand facility operations and applicable regulations.

The review report is not an enforceable document; it is a supporting document. Incorporating the review report in the permit will not place additional regulations on the facility.

13. One comment received requested DEQ require ORRRCO to cease operating on Friday, Saturday, Sunday, and all other times DEQ is closed.

DEQ Response:

DEQ does not have authority to modify, or request ORRSCO to amend their operating schedule.

14. One commenter suggested including ORRSCO's phone number in the permit.

DEQ Response:

A phone number is not an enforceable requirement and may change during the permit term and will not be included in the permit. ORRSCO's telephone number is available at their website: <http://www.orrcorescycles.com/>.

15. One commenter requested to have ORRSCO's financial documents available to DEQ staff.

DEQ Response:

Financial records have no bearing on permit conditions or regulations and will not be included as a condition of the permit.

16. One commenter stated that ORRSCO's PSEL is too high.

DEQ Response:

ORRSCO's PSEL is set according to OAR 340-222: Stationary Source Plant Site Emission Limits.

ORRSCO's PSEL is set to the generic level for all regulated pollutants. In 2017, ORRSCO's plant site emissions, as compared to the regulatory limit, were:

Pollutant	Regulatory Limit	2017 Emissions
PM	24	6.2
PM10	14	4.9
SO2	39	8.8
NOx	39	2.3
CO	99	0.6
VOC	39	9

17. One comment states that DEQ refuses to fully monitor VOC and PM emissions from the stack.

DEQ Response:

In 2015 and 2016, EPA and DEQ conducted separate air-monitoring activities near ORRCO. The monitoring effort included commissioning portable Viper monitoring systems, Summa canisters, a meteorological station monitor, and other monitoring devices. Results from all monitoring efforts concluded that the air quality near and around ORRCO and Hayden Island was consistent with background air pollutant levels.

ORRCO's renewal permit requires them to conduct stack testing on the thermal oxidizer and the bubble condenser and submit the results to DEQ.

18. One commenter wants DEQ to require ORRCO to conduct stack testing five days after the permit is issued.

DEQ Response:

It is not possible for ORRCO to stack test five days post permit issuance. ORRCO must first contract with a stack testing company to draft a source test plan and submit to DEQ for review and approval. The plan must be submitted to DEQ no less than 15 days prior to testing. Additional edits and reviews may delay the approval process. When DEQ approves the plan, the stack testing company and ORRCO will determine a test date, if not already confirmed, and conduct the testing. Once testing is completed, ORRCO must submit a finalized copy of the test results to DEQ for review.

19. One commenter wants to see the thermal oxidizer installed prior to the facility operating.

DEQ Response:

DEQ does not have the regulatory authority to require ORRCO to install a thermal oxidizer at this time. DEQ did not require ORRCO to install a thermal oxidizer for this permit renewal; however, ORRCO requested DEQ include oxidizer conditions in the permit to avoid submitting a permit modification for a future installation. ORRCO's renewal permit contains the appropriate monitoring, recordkeeping, and operational conditions to ensure the oxidizer operates in compliance with regulatory requirements outlined in the permit.

20. One commenter requests ORRCO provide emissions data to the public on a quarterly basis.

DEQ Response:

No state or federal regulation requires ORRCO to share this information with the public. The permit requires ORRCO to monitor parameters and calculate emissions on a monthly basis. The permit also requires annual reporting of these emission calculations.

Private citizens may request this data by submitting a public records request to DEQ at <https://www.oregon.gov/deq/about-us/Pages/Requesting-Public-Records-Form.aspx>.

21. One commenter asked what input did ORRCO have in drafting the permit.

DEQ response:

ORRCO's involvement in drafting the renewal permit was limited to providing information to DEQ upon request and submitting comments to DEQ based on their review of the final draft permit.

ORRCO had two weeks to review the draft permit and make comments and corrections as necessary. DEQ reviewed ORRCO's suggested modifications, implementing some and omitting others. This practice is consistent across many of DEQ's permitting programs.

ORRCO provided DEQ with the necessary documentation to draft the permit modification and renewal. DEQ staff consulted with ORRCO as necessary to obtain additional data or clarification on the draft conditions. After DEQ finalized the renewal permit, DEQ provided ORRCO a copy of the draft permit to review and comment on. DEQ reviewed ORRCO's input and determined the validity of any proposed changes. If ORRCO's comments were valid and based on existing rule, DEQ would modify the permit to reflect the comments.

22. Why wasn't the TO installed by June 5, 2017 as stated in the MAO?

DEQ response:

The ORRCO MAO did not have a time requirement for thermal oxidizer installation.

23. Why was ORRCO operating without polishing equipment and TO?

DEQ response:

The polishing equipment is a process device that emits pollutants. The polishing equipment is not a control device. Prior to installing the used oil polishing equipment, DEQ requires ORRCO to install a thermal oxidizer. The thermal oxidizer will capture and incinerate emissions from the polishing equipment.

Current state and federal regulation does not require that ORRCO operate with a thermal oxidizer.

24. What are ORRCO's emission limits?

DEQ response:

ORRCO's emission limits are as follows:

PM	24
PM10	14
PM2.5	9
NO _x	39
SO _x	39
CO	99
VOC	39
GHG	74,000
Single HAP	9
Combined HAPs	24

25. Will ORRCO operate under the SB 1541 emission limits?

DEQ Response:

The requirements from SB 1541 are being addressed by the Cleaner Air Oregon rules currently being developed. These rules have not been finalized. DEQ is unsure how the rules will affect ORRCO.

26. Will equipment installed before 4/16/15 be subject to SB 1541?

DEQ Response:

See question 5 and 25.

27. Will TO operate in accordance with SB 1541?

DEQ Response:

See question 5 and 25.

28. What emission standards must the polishing system adhere to?

DEQ Response:

ORRCO must operate the used oil polishing system in accordance with the operational permit conditions and in compliance with their plant site emission limits. ORRCO must install and operate a thermal oxidizer to capture emissions from the used oil polishing system prior to its operation.

29. How many nuisance odor complaints will it take DEQ to verify the nuisance?

DEQ Response:

If DEQ receives 10 nuisance odor complaints from 10 unique addresses, they will evaluate the need for a nuisance odor investigation. Not all facilities receiving 10 complaints from 10 unique addresses are investigated. Staff availability and funding are also considered when making the determination.

30. Once a nuisance is verified, what enforcement actions are available to eliminate the nuisance?

DEQ Response:

DEQ would require the source to take appropriate action to mitigate the nuisance odor conditions.

31. Why doesn't DEQ require burner tune-ups more often than every 2 years?

DEQ Response:

The two-year tune-up requirement is based on the NESHAP JJJJJ (6J) requirements applicable to ORRCO.

32. Did ORRCO submit a NOC for the TO, Rocket, WFE, tube and shell condenser?

DEQ Response:

ORRCO submitted an updated permit renewal and modification package to DEQ in 2017, which included the thermal oxidizer, Rocket, wiped film evaporator, and tube and shell condensers. An NOC is not required if a permit modification application is submitted.

33. What incentive is available to insure that the permittee will comply with notification requirements (referencing condition 8.1)?

DEQ Response:

DEQ does not offer incentives for facilities to comply with their permit conditions. By maintaining compliance with their permit, ORRCO reduces the probability of being subject to enforcement action by DEQ's Office of Compliance Enforcement.

34. What situation would cause DEQ to provide a written approval to ORRCO based on repairing equipment? How would DEQ learn about the issue (referencing condition 8.1.c)?

DEQ Response:

DEQ may provide a facility written approval to extend a repair timeline if replacement parts are not available when needed, or the parts must be custom made. Other instances may arise where DEQ extends the repair timeframe for equipment, but the repair delay must be out of the permittee's control.

35. How would someone obtain previous stack test results?

DEQ Response:

If a facility previously conducted stack testing and submitted the report to DEQ, a copy of the report is obtainable by submitting a public records request form found at <http://www.oregon.gov/DEQ/about-us/Pages/Request-Public-Record.aspx>.

36. What procedures are in place to protect public health?

DEQ Response:

DEQ protects public health by ensuring permits contain all substantive applicable requirements, conducting on and off site inspections, responding to complaints, and reviewing annual reports. In some cases, DEQ will consult with the local health authority or other organizations to determine if facility operations are causing harm to human health.

37. Why is ORRCO operating on an expired permit without polishing equipment or TO?

DEQ Response:

ORRCO is operating on an expired permit because DEQ did not renew the permit in a timely manner and the permit was administratively extended. All conditions of the existing permit remain in effect until the renewed permit is issued.

ORRCO is not operating the polishing equipment because DEQ has not authorized them to do so. The polishing equipment is a point emission source and creates VOC emissions that will be controlled by the thermal oxidizer. The polishing system is not an emission control device.

38. Did ORRCO submit a timely application prior to the 2013 renewal deadline?

DEQ Response:

ORRCO submitted a timely permit renewal application to DEQ on 1/25/2013.

39. Who monitors ORRCO's oil water separator?

DEQ Response:

The oil water separator is a collection tank for the oily water evaporated off during the cooking process. The oil and water are gravitationally separated and the water is drained from the bottom of the containment unit. ORRCO monitors the amount and type of liquid collected and removed from the separator. The light products are burned on site for facility processing and operations and the wastewater is discharged to the public water system.

ORRCO holds a current water discharge permit through the City of Portland, which contains additional standards ORRCO must comply with.

40. Does ORRCO currently use a scrubber for their PM and/or does the proposed permit require them to use one?

DEQ Response:

ORRCO does not use a scrubber and the draft permit does not require them to do so. ORRCO's PM emissions are below their plant site emission limits and they are not required by rule to install a scrubber.

41. Regarding ORRCO's proposed thermal oxidizer: It's likely designed to destroy VOCs, however, given that the new TACT thermal oxidizer at APES/ ELR is clearly not working, we are concerned that ORRCO's proposed thermal oxidizer will be equally

ineffective. Please explain what is better about ORRSCO's proposed thermal oxidizer. If it is not BACT (Best Available Control Technology), it should not be allowed.

DEQ Response:

DEQ is unable to compare APES/ELR's thermal oxidizer to ORRSCO's thermal oxidizer, which has not been purchased or installed. Thermal oxidation is an effective method of reducing VOCs from emission streams. Many VOC compounds are odor causing and removing 95-97% of VOCs will likely yield a reduction in odors.

42. In addition, given that the president of ELR, Joe Stanaway, is no longer with the company, who is accountable now?

DEQ Response:

This question is unrelated to ORRSCO; please contact ELR to obtain personnel information.

43. We protest ORRSCO's permit request to process using their own contaminated fuel source because it is far dirtier than diesel and is the biggest reason we get off-gassed by poisons. While I am pro-business, I expect to be protected from these dangerous chemicals.

DEQ Response:

According to 40 CFR 279.11, Table 1, ORRSCO is authorized by EPA to burn the distillate fuel recovered from the cooking process if fuel meets the requirements in Table 1.

44. If these companies are allowed to expand their operations, will there be any better control of their toxic emissions, or will there simply be a greater volume?

DEQ Response:

ORRSCO is not expanding its operation; they will continue re-refining used oil at the same level as present. If ORRSCO requested to expand operations to process additional amounts of used oil, DEQ would review ORRSCO's proposed construction application and determine if the current facility arrangement and control device(s) are capable of handling additional loads. If DEQ determined this was not the case, DEQ would likely require additional control equipment be installed prior to increasing plant site throughput. However, ORRSCO is not proposing to expand facility operations.

Emissions from ORRSCO will be better controlled by installing the tube and shell condensers and thermal oxidizer.

45. We would like the license renewal to be contingent upon the elimination the noxious smell from their plant and any potential harmful emissions.

DEQ Response:

Since ORRCO removed the wastewater evaporator and solid waste kiln, there has been a decrease in odors and emissions from the facility. Further reductions in emissions and odors will likely occur upon the installation of the thermal oxidizer. It is not required by rule for DEQ to attach contingencies to the approval of ORRCO's renewal permit based on existing emissions and anticipated emission reduction devices. ORRCO's renewal permit meets regulatory requirements and, therefore, DEQ is required to issue the permit.

46. ORRCO does not have emission controls installed on the re-refinery.

DEQ Response:

The emissions from ORRCO's re-refining process are routed to a bubble condenser, which reduces the amount of emissions into the air.

47. Citizens do not want ORRCO to expand – via the install of new equipment.

DEQ Response:

ORRCO's permit renewal and modification application requests DEQ's approval to install and operate additional control equipment and emission units. The addition of new emission units is not an authorization for ORRCO to expand or increase operations.

ORRCO's plant site emission limits remain the same in this permit as in their administratively extended permit. ORRCO's permit allows them to emit pollutants up to generic plant site emission limits.

48. Commenters would like to see both plants shut down.

DEQ Response:

Under the current Oregon Administrative Rule, DEQ does not have the authority to shut a facility down unless an imminent and substantial health risk exists.

49. One commenter requested DEQ require ORRCO take the following actions in regards to facility operations and penalty assessments:

- Third party monitoring of all received materials,
- Online report availability of receiving records,
- Fines for violations ranging from \$50,000 - \$100,000, mandatory,
- Perform community services like tree planting or other restorative actions in addition to monetary penalties.

DEQ Response:

ORRSCO accepts and picks up used oil from multiple sources. Onsite personnel monitor the incoming loads, which is allowable according to used oil regulation. DEQ does not have the authority to require third party monitoring of all received materials.

DEQ does not post facility-monitoring information online. Reported information is available through a public records request at <https://www.oregon.gov/deq/about-us/Pages/Requesting-Public-Records-Form.aspx>.

See item 8 for questions relating to 24/7 stack monitoring.

DEQ's Office of Compliance and Enforcement determines fines on a case-by-case basis and are not stipulated in permits.

DEQ does not have the authority to require ORRSCO to conduct community service activities, including planting trees.

50. People want enforceable permit conditions.

DEQ Response:

DEQ drafted ORRSCO's permit according to state and federal regulation, incorporating adopted rules into permit conditions, resulting in enforceable permit conditions for facility operations.

51. ORRSCO is continuously operating in violation of their permit.

DEQ Response:

DEQ air quality and solid waste staff conducted an unannounced inspection of ORRSCO on 4/17/2018 and determined the facility was operating in compliance with all permit conditions. Future inspections, records, and annual report reviews will be conducted to evaluate ongoing compliance of the facility.

Alternative formats

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.

Hearing Officer's Report

Public hearing to receive verbal comments on the draft air quality and draft solid waste permits for ORRCO

Date: April 24, 2018

From: Edie McMorrine, Hearings Officer 

Subject: Hearing Officer's Report for public hearing on draft solid waste and air quality permits
Hearing Date and Time: April 24, 2018
Hearing Location: Red Lion Hotel, Hayden Island, Portland, Oregon

The public hearing started at 6:42 pm. 29 people attended the hearing. Thirteen people provided verbal comments.