## State of Oregon Department of Environmental Quality

Date:	March 18, 2021	
To:	Environmental Quality Commission	
From:	Richard Whitman, Director	
Subject:	Item E: Oregon Environmental Protection Act (Informational) March 25-26, 2021, EQC meeting	
Purpose of item	The commission will have an opportunity to ask questions or provide feedback on the recommendations by DEQ regarding several recent federal regulatory actions.	
Background	House Bill 2250 (2019 Oregon Legislative Session) requires DEQ to regularly assess final changes to federal environmental law to determine whether it results or will result in federal standards or requirements that are significantly less protective of public health, the environment or natural resources than baseline federal standards. When that occurs, DEQ must promptly inform the Environmental Quality Commission and recommend actions necessary to continue state implementation of standards and requirements that are at least as protective of public health, the environment or natural resources as the baseline standards.	
	EPA has finalized amendments to the Clean Air Act regulations for certain hazardous air pollutants and New Source Review emissions accounting, and Clean Water Act regulations for effluent from power plants. In each case, the amendments would be less protective of human health and the environment than the Clean Air Act and Clean Water Act requirements previously in place at the baseline date of Jan. 19, 2017.	
Recommendation	<b>s</b> For each of the federal regulatory changes outlined in the attachments, listed below, DEQ is recommending that the commission take no action at this time. DEQ may recommend rulemaking or other policy action at a later date. Specific details about the recommendations are included in each report.	
Attachments	<ul><li>A. Report and recommendations: Hazardous Air Pollutants</li><li>B. Report and recommendations: New Source Review</li><li>C. Report and recommendations: Power Plant Effluent Limits</li></ul>	

Report compiled from program information

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# **Oregon Environmental Protection Act Report to EQC: Hazardous Air Pollutants in Oregon**

Environmental Quality

### **Brief Summary**

For many years, EPA's policy was that a major source remains subject to major source requirements even if it reduces its emissions after the Maximum Achievable Control Technology (MACT) is applied. This is known as "Once In, Always In."

On November 19, 2020, EPA published a final rule replacing this policy to allow a major source to reclassify as an area source after it reduces its potential to emit to below the gualifying threshold.

### Background

Title V (TV) of the Clean Air Act (CAA) is designed to regulate major sources of air pollution according to established standards that are equivalent to the maximum achievable (MACT); EPA's long-standing policy regarding the TV program has been one of 'Once In, Always In' (OIAI). In other words, a source that met the applicability criteria of a major source as of a specific date would be subject to those requirements for the life of the source, regardless of future emissions reductions. The OIAI determination was formalized via memo in 1995 by the director of Air Quality Planning and Standards, John S. Seitz. The 1995 memo and OIAI interpretation have been consistently implemented in Oregon for over two decades.

Under the 1995 memo, a source which met the major source threshold (MST) of 10 tons of a single hazardous air pollutant (HAP) or 25 tons of combined hazardous air pollutant emissions was subject to the MACT standard and would continue to be subject to the standard even if compliance with the MACT standard reduced emissions to below MST levels. In some instances, sources would have reduced PTE to below major source levels by simply complying with the applicable requirements.

On January 25, 2018, the EPA published a revised memo essentially withdrawing the 1995 memo and establishing a memo that formed the basis for the November 19, 2020 final rulemaking. The 2018 memorandum was optional for states to follow and was not a codification of EPA's revised perspective. This EPA rulemaking represents a complete reversal of policy implementing this aspect of the CAA. While the CAA does not specify that a source remains subject to major source regulations once potential to emit (PTE) is reduced to below major source levels, the overall intent of the CAA and MACT standards to apply more stringent standards to major sources is significantly undermined by this interpretative rule. EPA's prior rules allowed for a source to reduce its emissions before a MACT standard was proposed for that sector in order to avoid being subject to major source requirements. This rollback could allow a source to run its already installed controls less efficiently, revert back to using more toxic formulations and thus increase its emissions of hazardous air pollutants. This revised interpretation of the CAA codified into federal regulation represents a significant rollback from the long-standing interpretation of the CAA and applicability of MACT standards.

### **Final Action**

EPA's final rulemaking was titled the 'reclassification of major sources to area sources under Section 112 of the CAA' (AKA MM2A, or 'Major MACT To Area source) and was published in the federal register on November 19, 2020. The rulemaking updated 40 C.F.R. part 63 subpart A which establishes the general provisions applicable in a variety of ways to many sources, as specified in the applicable regulation. The rulemaking also revised 104 area source (non-major) standards to refer back to the changes made to part 63

This report is prepared as required by HB 2250 of 2019.

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subpart A, thereby 'completing the loop' in explicitly allowing major sources to reclassify under these area source regulations.

§63.1, the applicability section of the general provisions, was altered to explicitly state (see (c)(6)) that a major source may become an area source at any time upon reducing its emissions or PTE to below MST. This section also clarifies that sources may move from major to area source, then back to major again.

§63.2, the definitions section of the general provisions, redefined what 'potential to emit' means. The previous definition clarified that PTE may include control equipment, physical, and operational limits on the capacity of the source as long as the limits were 'federally enforceable'. The revised definition removes the word 'federally' and leaves only 'enforceable'.

§63.6, §63.9, and §63.10 further specify compliance dates, existing versus new source classification, notification, and recordkeeping and reporting requirements that generally needed to be clarified with a rulemaking of this nature.

Including the general provisions of 40 C.F.R. part 61, there are fourteen MACT standards for which DEQ has been delegated. Additionally, there are 133 area source standards in 40 C.F.R. part 63 for which DEQ has been delegated.

### **Key Considerations**

There are four main issues that DEQ recommends the EQC consider:

- 1. Overall, as described below in 'Impacts to Oregon', hazardous air pollutant emissions could increase across the state as a result of this change.
- 2. An array of Air Contaminant Discharge Permit (ACDP) applications being submitted by sources that wish to reclassify as area sources would negatively affect the permit backlog reduction efforts.
- 3. Oregon DOJ has joined both a petition for review by the DC Circuit Court of Appeals as well as a motion for reconsideration submitted to EPA.
- 4. Presidential Executive Order 13990 (EO 13990) signed on January 20, 2021 directs the heads of all agencies (including EPA) to immediately review 'all existing regulations, orders, guidance documents, policies, and any other similar agency actions' promulgated or issued between January 20, 2017 and January 20, 2021 that are inconsistent with the policy stated in the EO. A list of actions for consideration is to be submitted to the Office of Management and Budget by April 20, 2021.

### Impacts to Oregon

The new rule represents a potentially significant rollback in regards to reducing emissions of hazardous air pollutants in Oregon. For example, a source that has the potential to emit 100 tons of a single HAP, but complies with a MACT standard to control these emissions by 99% is actually emitting one ton of HAP. If the source reclassifies as an area source, the HAP emission limits are again 10 tons of a single HAP and 25 tons combined HAP. This could represent a tenfold increase of the actual emissions before compliance with the MACT standard would again be required.

The revised rules allows reclassification of sources with potential increase in emissions or relaxed control requirements without any environmental impact analysis or review. This could potentially increase local impacts to the community where the source is located. Cleaner Air Oregon considers sources subject to MACT to be controlled by Best Available Technology which this rule change will directly impact.

This change by EPA also modified the definition of 'potential to emit' in 40 C.F.R. part 63. The term used to indicate that PTE limits must be 'federally and practicably enforceable'. The term 'federally' within this definition *This report is prepared as required by HB 2250 of 2019.* 

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ensured that DEQ was able to utilize an array of permitting concepts that are tied to federal regulations and requirements to set limits. The definition now only states that the PTE limits must be 'enforceable', which creates enforcement and compliance ambiguity.

### **Recommendation for EQC Consideration:** □ Guidance □ Legislative □ Rulemaking □ Litigation <u>X Other</u>

DEQ recommends that the EQC not adopt the changes made by EPA.

DEQ recommends that the EQC await the list of agency actions submitted to the OMB according to Presidential EO 13990. EPA may rescind or reverse this rulemaking, conduct a subsequent rulemaking, or address these issues via another avenue. DEQ recommends that the EQC also await the result of both the petition for review and the motion for reconsideration that are being conducted by the Oregon DOJ.

Pending the results and final determinations from the three processes above, DEQ may propose changes to Oregon Administrative Rules (OAR) to remain protective of human health, the environment, and natural resources. DEQ will update the EQC at the July 2021 meeting.

This report is prepared as required by HB 2250 of 2019.

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## Oregon Environmental Protection Act

## Report to EQC: New Source Review (NSR) Project Emissions Accounting and Begin Actual Construction

**Brief Summary** 

The previous New Source Review accounting process studied whether a modification by itself would result in significant emissions increases at Step 1, with no consideration of other decreases. On Oct 22, 2020, EPA issued a final rule allowing companies to consider decreases and increases together in Step 1 when assessing whether a proposed project would result in a "significant emissions increase" of a regulated pollutant, known as project emissions accounting.

### Background

EPA's New Source Review (NSR) permitting program protects air quality when factories, industrial boilers and power plants are newly built or modified. NSR permitting also assures that new or modified industries are as clean as possible, and advances in pollution control occur concurrently with industrial expansion.

DEQ's NSR program was approved by EPA in the early 1980's. This program regulates construction and modification of larger or major sources in the state. It is a unique program that utilizes Plant Site Emissions Limits (PSEL) and Baseline Emission Rates for regulating source emissions, as well as determining when new and modified sources are subject to NSR. Initially, sources that were operating during the baseline period of 1977 or 1978 were granted a PSEL equal to the actual emissions during the baseline period (i.e., the baseline emission rate). If a source owner or operator requested an increase in their PSEL by more than a significant emission rate above the baseline emission rate, the source would be subject to NSR. If the increase involved a "major modification," the source owner or operator was required to install Best Available Control Technology or Lowest Achievable Emission Rate control technology, depending on the location, and to submit an evaluation of the air quality impacts from the construction. A major modification was defined as physical changes or changes in the method of operation at a source that result in accumulated emission increases equal to or more than a significant emission rate since the baseline period.

Under EPA's NSR program, an existing source owner or operator proposing a physical change or a change in its method of operation must determine whether that project is a major modification subject to the NSR preconstruction permitting requirements by following a two-step test. The first step is to determine if there is a "significant emission increase" of a regulated NSR pollutant from the proposed modification. If there is, the second step is to determine if there is a "significant net emission increase" of that pollutant. This final rule revises the NSR applicability regulations that apply to projects that include a combination of new and existing units and makes it clear that project emissions accounting, both increases and decreases, is allowed as part of Step 1 of the two-step NSR major applicability test.

### **Final Action**

On Oct 22, 2020, EPA issued a final rule allowing companies to consider increases and decreases together in Step 1 when assessing whether a proposed project would result in a "significant emissions increase" of a regulated pollutant. The rule was published November 24, 2020 and was effective 60 days after it was published in the federal register.

### **Key Considerations**

The following is an example that illustrates the difference in applicability of EPA's and DEQ's NSR programs:

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Company A was permitted in 1977 with actual emissions of 100 tons/year but with potential to emit 500 tons/year.

- Under EPA's NSR program, Company A could increase emissions gradually over time up 500 tons/year without being subject to NSR. Company A proposes to construct a new piece of equipment that would increase emissions by more than a significant emission rate but reduces emissions back down to 300 tons/year by reducing production at the same time. That new construction would not be subject to NSR because Company A can use the decrease in emissions in Step 1 of the NSR major modification applicability test to avoid NSR applicability.
- Under Oregon's NSR program, the baseline emission rate for Company A is 100 tons/year. Company A could increase emissions gradually over time up 500 tons/year without being subject to NSR but the baseline emission rate would not change. Company A proposes to construct a new piece of equipment that would increase emissions by more than a significant emission rate but reduces emissions back down to 300 tons/year by reducing production at the same time. That new construction would be subject to NSR because Company A cannot use the decrease in emissions to avoid NSR applicability.

### Impacts to Oregon

The new rule represents a significant rollback in the applicability of NSR to source owners or operators that propose major modifications at their facilities. A project that would require installation of pollution control technology and analysis of air quality impacts under DEQ's existing rules may not be required to do so under EPA's final rule.

**Recommendation for EQC Consideration:** 
□ Guidance □ Legislative □ Rulemaking □ Litigation ■ Other DEQ is recommending that the EQC not undertake rulemaking to adopt EPA's final rule allowing companies to consider decreases and increases together in Step 1 when assessing whether a proposed project would result in a "significant emissions increase" of a regulated pollutant.

In the fact sheet that accompanied the Project Emissions Accounting - Final Rule, EPA states that state and local air agencies that implement the NSR program through EPA-approved State Implementation Plans (SIPs), are not required to modify their programs to account for this final rule and may continue to implement their current program without change. EPA has concluded that permitting authorities that do not allow for project emissions accounting have at least as stringent applicability requirements as those required by the Act or EPA's implementing regulations and, therefore, are not required to submit SIP revisions or stringency determinations to EPA as a result of this action. Therefore, EPA does not require DEQ to adopt similar rules to allow for project emissions accounting.

### **Begin Actual Construction**

### Brief Summary

In March 2020, EPA released a draft guidance memo updating the definition of "begin actual construction" for the NSR regulations to allow construction of physical on-site activities, provided that those activities do not constitute physical construction on an emissions unit.

### Background

The term "begin actual construction" is defined to mean "in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature." 40 CFR § 52.21(b)(11). In Oregon, the following activities have been allowed prior to obtaining an NSR permit:

- Planning and ordering of equipment and materials
- Dismantling existing equipment or structures
- Programs undertaken to locate underground utilities
- Installation of erosion control measures
- Site clearing

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- Ground moving
- Auxiliary structures, such as office space
- On-site storage of equipment and materials

Source owners or operators that go this extent of work do so at their own risk because there is no guarantee that DEQ will approve the proposed project (e.g., issue a permit).

The following activities are not allowed for sources subject to NSR in Oregon:

- Foundation work, such as footings, pilings and other materials needed to support the ultimate structures
- Laying of underground pipework
- Paving
- Construction of permanent storage structures
- Construction work on any emissions unit or on any installation designed to accommodate the new or modified emissions unit

Under EPA's current interpretation of the regulatory definition of "begin actual construction," the Agency considers almost every physical on-site construction activity that is of a permanent nature to constitute the beginning of "actual construction," even where that activity does not involve construction "on an emissions unit." Consequently, this interpretation tends to preclude source owners or operators from engaging in a wide range of preparatory activities they might otherwise desire to undertake for the purpose of ensuring the project is positioned to move forward in an expedient manner prior to obtaining an NSR permit.

Under EPA's revised interpretation, a source owner or operator may, prior to obtaining an NSR permit, undertake physical on-site activities – including activities that may be costly, that may significantly alter the site, and/or are permanent in nature – provided that those activities do not constitute physical construction on an emissions unit, as the term is defined in 40 CFR § 52.21(b)(7). Further, under this revised interpretation, an "installation necessary to accommodate" the emissions unit at issue is not considered part of that emissions unit, and those construction activities that may involve such "accommodating installations" may be undertaken in advance of the source owner or operator obtaining a major NSR permit.

### **Final Action**

In March 2020, EPA released a draft guidance memo updating the definition of "begin actual construction" for the NSR regulations.

### **Key Considerations**

DEQ allows for some construction activities to take place before a permit is issued for much smaller construction projects that are not subject to NSR. Because NSR applies to much larger construction projects, it is critical that DEQ be able to fully review the permit application before any construction begins. This provides assurance for source owners or operators that their project will be approved when they do start construction.

### Impacts to Oregon

The EPA draft guidance memo represents a significant rollback in the requirement to obtain an NSR permit before beginning construction and allows for all of the currently prohibited activities. Allowing such construction to begin before permitting puts the source in jeopardy of incurring expenses when the construction project may not receive approval through an NSR permit.

### **Recommendation for EQC Consideration:** □ Guidance □ Legislative □ Rulemaking □ Litigation <u>X Other</u>

DEQ is recommending that the EQC not recommend guidance or undertake rulemaking to implement EPA's draft guidance memo updating the definition of "begin actual construction" for the NSR regulations to allow construction of physical on-site activities, provided that those activities do not constitute physical construction on an emissions unit.

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The draft guidance states: "The guidance contained herein is an interpretation or "interpretive rule" not subject to notice-and-comment rulemaking requirements, and this memorandum does not itself create or alter any binding requirements on regulatory agencies, permit applicants, or the public. This revised interpretation is intended to be implemented by EPA Regional offices and by those air agencies to which EPA has delegated its authority to issue federal PSD permits under 40 CFR § 52.21(u). EPA is also making this memorandum available as guidance for consideration by air agencies with SIP-approved programs. Depending on the particular regulatory context and wording of the applicable SIP, air agencies implementing a SIP-approved program may be able to apply this revised interpretation as well." Therefore, EPA does not require DEQ to implement similar guidance to update the definition of "begin actual construction."

Attachment C: Power Plant Effluent Limits March 25-26, 2021, EQC meeting Page 1 of 2



# Oregon Environmental Protection Act Report to EQC: Power Plant Effluent Limits

**Brief Summary** 

Steam power plant wastewater discharges include arsenic, lead, mercury, selenium, chromium, and cadmium, but current regulations do not contemplate these toxic metals. EPA finalized effluent limitation guidelines (ELG's) in 2016, but there has been extensive litigation surrounding the rule and the later delayed implementation of the rule.

EPA proposed a reconsideration rule revising the 2015 technology-based ELG's and standards. This finalizes regulations to revise the technology based ELG's and standards for the steam electric power generating point source category applicable to flue gas desulfirzation (FGD) wastewater and bottom ash (BA) transport water.

### Background

Coal-fired plants are affected by several environmental regulations. One of these regulations, the Steam Electric Power Generating units (EGU's) ELGs, was promulgated in 2015 (80 FR 67838; November 3, 2015) and applies to the subset of the electric power industry in which "generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam-water system as the thermodynamic medium" (40 CFR 423.10). The 2015 rule addressed discharges from FGD wastewater, fly ash (FA) transport water, BA transport water, flue gas mercury control wastewater, gasification wastewater, combustion residual leachate, and non-chemical metal cleaning wastes.

### **Final Action**

Since the Steam Electric Power Generating ELGs were revised in 2015, steam electric power plants have installed more affordable technologies that can remove similar amounts of pollution as those operating in 2015. This final rule revises limitations and standards for two of the wastestreams (BA transport water and FGD wastewater) addressed in the 2015 rule and creates two new subcategories for high flow EGU's and low utilization EGU's:. This rule (FR Vol. 85, No. 198) does not revise the other wastestreams covered by the 2015 rule.

### **Key Considerations**

The reconsideration rule allows less costly FGD, and BA wastewater treatment technologies for the identified subcategories. The reconsideration also incorporates a two year extension of compliance for meeting FGD and BA wastewtater limitations, and creates subcategories for low utilization and high flow electric generating units (EGU's). The technology-based effluent limitations guidelines and standards that were modified on October 13, 2020 only applied to flue gas desulfurization (FGD) wastewater and Bottom Ash (BA) transport water for fossil fuel based power plants that fit into the two new subcategories. No further modifications were made to the 2015 technology-based effluent limitations guidelines and standards.

The reconsideration rule revises limits and standards for FGD and BA transport wastewater due to the implementation of more affordable, yet equally effective technologies. For high FGD and low use EGU plants the final rule establishes BAT limits as numeric effluent limits on mercury and arsenic. For low use EGU's the final rule establishes BAT limitations for BA transport water for TSS and also includes standards for implementing best management practices. For EGU's ceasing coal combustion by 2028, the reconsideration litem E 000009

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rule establishes BAT limits for TSS in FGD and BA transport wastewater. The reconsideration rule also creates a subcategory for high flow plants that amends the disproportionate costs on them by allowing for reduced recycled flows. The reconsideration rule also creates a subcategory that identifies alternate BAT limits for low utilization facilities based on capacity utilization rating (CUR) which addresses a disproportionate cost on implementation of BAT.

### Impacts to Oregon

This reconsideration rule specially updates the 2015 rule to set new limits for best available technology (BAT), best control technology (BCT), and Pretreatment standards for toxic pollutants associated with steam electric power generation for two new subcategories, high flow EGU's and low utilization EGU's. These new limits for FGD, Fly Ash, Bottom Transport, FGMC, Gasification, and Combustion Residual Leachate wastewater (see Table VIII-1, FR Vol 80 No. 212) are implemented under section 402 of the Clean Water Act.

In researching the type of power plants in Oregon via SIC code 4911 (which corresponds to NACIS codes 22111 and 221112), it does not appear that any existing power plants are coal or oil powered. There are some hydroelectric and natural gas power plants within the state, as shown below:

Legal Name	Common Name	Permit No.
PORT OF ST. HELENS	PORT OF ST. HELENS INDUSTRIAL OUTFALL	102650
USDOD; US ARMY CORPS OF ENGINEERS BONNEVILLE DAM	BONNEVILLE LOCK & DAM- USACOE	102768
EUGENE WATER & ELECTRIC BOARD	EWEB CARMEN-SMITH	101329
IDAHO POWER COMPANY	HELLS CANYON POWER PLANT	101287
IDAHO POWER COMPANY	OXBOW POWER PLANT	101275
PORTLAND GENERAL ELECTRIC COMPANY	PGE BEAVER	101209
PORTLAND GENERAL ELECTRIC COMPANY	PGE BOARDMAN PLANT	100189
HERMISTON GENERATING COMPANY, L.P. AND PACIFICORP	HERMISTON GENERATING CO.	102018
CO-GEN CO, LLC	CO-GEN CO.	101274

It is unknown, although possible, that FGD and BA type wastewaters are present at NG power plants and some Cogeneration plants that may use diesel fuel as a back up to natural gas, which could be covered by the new subcategory for low utilization EGU's, this will be evaluated by permit writers upon renewal of the permits listed above. Additionally, Oregon does not have any high flow plants that would be applicable to the new subcategory created by this reconsideration rule.

**Recommendation for EQC Consideration:** 
□ Guidance □ Legislative □ Rulemaking □ Litigation X Other

DEQ is recommending that the EQC not take action at this time as the potential effects of the ELGs will have to be compared to Water Quality Based Effluent Limits based upon effluent monitoring and ambient monitoring concentrations as well as any applicable wasteload allocations for the specific areas at the time of permit renewal.