Technical Support Document for Portable and Stationary Rock Crushing Operations
General Order Approval Order No. 26AQ-GO-01
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1. Project Summary

General Orders are a subset of Ecology's Notice of Construction (NOC) permitting under the minor New Source Review program. This General Order modification continues the practice of combining the options for either portable or stationary rock crushing operations similar to the 2011 rock crusher general order modification (General Order of Approval No. 11AQ-GO-01). Prior to the 2011 general order, Ecology had separate general orders for portable and stationary rock crushing operations. The original stationary and portable rock crusher general orders were used as a template for creating the combined 2011 General Order.

Because the 2011 combined general order options made it difficult for Ecology to track when a portable facility became a stationary facility and vice versa, this new combined general order has added features to help Ecology staff better track the status of rock crushing operations covered under this general order.

This General Order of Approval was updated to address more recent toxic air pollutant (TAP) rules of Chapter 173-460 WAC than were in effect at the time of the 2011 General Order. This General Order also continues to satisfy requirements for relocation of portable sources in WAC 173-400-036 and the requirements for issuing a General Order of Approval as discussed in WAC 173-400-560.

Based on updated modeling, this general order has a more restrictive rock crushing production limit for single pits than previous Ecology general orders. The 2011 general order reduced the maximum allowed annual production allowed in the 2007 general order from 1.5 million tons of material per year to 1 million tons per year. This current general has an annual production total limit of 600,000 tons per year but is applied to operations in a single pit. The daily production limit has also been reduced from 14,400 tons per day to 4,320 tons per day. The new annual and daily limits are all production limits for operations in a single pit.

Another update to this general order is for San Juan County. Ecology has given jurisdiction for San Juan County air permitting to the Northwest Clean Air Agency as of July 1, 2025. For this reason, San Juan County no longer is listed with the Ecology Counties that can apply for coverage under this general order.

Previous rock crusher general orders remain in effect for rock crushers covered under a valid order for their sources. However, after the issuance date of this general order, rock crusher applicants, who are not already covered, and who wish to obtain coverage for a general

order instead of applying for a full NOC permit, must apply for and comply with the requirements of this General Order.

2. Application Processing

a. General Order application process options

Based on WAC 173-400-560(5), "each general order of approval shall include a section on how an applicant is to request coverage and how the permitting authority will grant coverage. The section of the general order of approval will include either the method in (a) or (b) of this subsection to describe the process for the applicant to be granted coverage."

i. "(a) Within thirty days of receipt of an application for coverage under a general order of approval, the permitting authority shall notify an applicant in writing that the application is incomplete, approved, or denied. If an application is incomplete, the permitting authority shall notify an applicant of the information needed to complete the application. If an application is denied, the permitting authority shall notify an applicant of the reasons why the application is denied. Coverage under a general order of approval is effective as of the date of issuance of approval by the permitting authority."

ii. "(b) The applicant is approved for coverage under the general order of approval thirty-one days after an application for coverage is received by the permitting authority, unless the owner or operator receives a letter from the permitting authority, postmarked within thirty days of when the application for coverage was received by the permitting authority, notifying the owner or operator that the emissions unit or source does not qualify for coverage under the general order of approval. The letter denying coverage shall notify the applicant of the disqualification and the reasons why coverage is denied."

Ecology has chosen option (a) for this rock crusher general order and these steps are listed in the general order

a. Public Notice

Based on WAC 173-400-560(2) Compliance with WAC 173-400-171 (Public notice and opportunity for public comment) is required for a modification of an existing general order of approval. Therefore, Ecology held a mandatory 30-day public comment period on June 2, 2026 through July 12, 2026, and held a hearing on July 8, 2026. A summary of comments by topic and Ecology responses to those topics are provided in Appendix A. A complete set of comments received is provided in Appendix E.

b. State Environmental Policy Act (SEPA)

Ecology issued a determination of non-significance (DNS) on May 4, 2026. However, site specific requirements cannot be performed for as part of this generic general order process because the location of the facilities that will use this general order is not yet known. SEPA Compliance is addressed as part of the application process once an applying facility's location is known.

An environmental checklist will be submitted with the General Order Application which considered environmental impacts of the project as required by Chapter 43.21C RCW, also known as the State Environmental Policy Act (SEPA). Ecology will review the checklist, make a Determination of Significance or Non-significance and make available for public comment at the same time as a Coverage Approval Order issued for this general order.

3. Applicable Regulations

a. State Regulations

i. Minor New Source Review Applicability

Per WAC 173-400-110, an NOC application and an order of approval must be issued by the permitting authority prior to the establishment of a new source or modification. However, WAC 173-400-560 allows that "In lieu of filing a notice of construction [NOC] application under WAC 173-400-110, the owner or operator may apply for coverage under a general order of approval issued under this section. Coverage under a general order of approval satisfies the requirement for new source review under RCW 70.94.152."

As stated in the general order application and consistent with Ecology's review, the general types of rock crushing emission sources are subject to minor new source review (NSR) via this general order process.

A. Exempt Equipment

Rock crushers sometimes share a pit with other sources such as hot mix asphalt plants or concrete batch plants. While those other sources are exempt from this general order, they will need coverage under their own specific general orders unless they choose to go through the full NOC process.

B. Potential to Emit (Potential Emissions)

The potential emissions from the project are greater than the exemption levels listed under WAC 173-400-110(5) as shown below in Tables 1 and 2. See Appendix C for more information about emissions.

Table 1. Potential emissions for pollutants listed under WAC 173-400-110(5)

Pollutant	(tons/year)	Minor NSR Exemption (tons/year)
$PM_{2.5}$	1.8 – 4.4	0.5
PM_{10}	13.2 – 38.8	0.75
Total Suspended Particulates (TSP)	38.2 – 129	1.25

Ecology is providing a range of values in this table due to emission factor uncertainties. Specifically, based on modeling, and after multiple internal discussions, discussions with local clean air agencies, and EPA, Ecology believes that the available emission factors for haul roads are unreliable because they are too conservative. For further discussions, see Section 5.a.

Ecology does not consider total suspended particulates (or TSP or total PM) a regulated pollutant for Title V applicability purposes. Per EPA guidance, fugitives from rock crushers do not trigger Title V permitting because rock crushing is not in a listed source category and because NSPS OOO was not implemented as a final rule until August 1, 1985 which is after the August 7, 1980 threshold guidance for fugitives.

For Toxic Air Pollutants (TAPs), Ecology found emission factors for 1 TAP with estimated emissions above de minimis values in WAC 173-460-150.

Table 2. Potential Toxic Air Pollutant (TAP) emissions and de minimis emission values

Pollutant	Potential Emissions from Project (lbs)	De Minimis Emission Values (lbs)	Averaging Period
Silica, crystalline (respirable)	15.8 – 43.2 lbs/day	0.011	24-hour

ii. Prevention of Significant Deterioration (PSD)

Based on WAC 173-400-560(4)(a)(iii) General Orders cannot be "part of a new major stationary source or major modification of a major stationary source subject to the [PSD] requirements of …WAC 173-400-700 through 173-400-750…"

iii. Other Applicable Requirements

In accordance with WAC 173-400-113/-112, the proposed source must comply with all applicable emission standards adopted under Chapter 70A.15 RCW. The following applicable emission standards are associated with the proposed project:

A. Applicable emission standards.

- WAC 173-400-040 (General standards for maximum emissions).
- WAC 173-400-050 (Emission standards for combustion and incineration units).

- WAC 173-400-060 (Emission standards for general process units).
- WAC 173-400-070 (Emission standards for certain source categories).
- WAC 173-400-075 (Emission standards for sources emitting hazardous air pollutants).
- WAC 173-400-115 (Standards of performance for new sources).
- WAC 173-400-560 (General Order of Approval).

b. Federal Regulations

In accordance with WAC 173-400-113/-112, the proposed source must comply with all applicable new source performance standards (NSPS) included in 40 C.F.R. Part 60, national emission standards for hazardous air pollutants (NESHAPs) included in 40 C.F.R. Part 61, and NESHAPs for source categories included in 40 C.F.R. Part 63. The following applicable emission standards are associated with the proposed project:

i. Standards of Performance for New Stationary Sources

See Appendix B

ii. National Emission Standards for Hazardous Air Pollutants

Not Applicable

iii. National Emission Standards for Hazardous Air Pollutants for Source Categories

Not Applicable

4. Emissions

a. Emission estimate Information.

See Appendix C for information about emission estimates.

b. Best Available Control Technology (BACT) and Best Available Control Technology for Toxics (tBACT)

BACT is defined in Washington Administrative Code (WAC) 173-400-030(13) as “an mission limitation based on the maximum degree of reduction....from any new or modified stationary source...which the permitting authority, on a case-by-case basis...taking into account energy, environmental, and economic impacts and other costs ...”

Therefore, in Washington State, BACT is required not only for major new source review but also for minor new source review.

Ecology's preferred first option for BACT is to implement a presumed or presumptive BACT. The term presumptive BACT is used to convey situations where BACT is determined without explicitly going through (or repeating) the full 5-step top-down approach as listed in the October 1990 EPA Draft New Source Review Workshop Manual (or Puzzlebook). It conveys the intent of implementing a review of what similar sources have achieved in practice.

BACT is presumed by Ecology to be the control technology that provides the assumed controlled emission factors listed in EPA AP-42 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing."

i. All rock crushers that use this general order are required to use wet suppression to achieve these controlled emission factors. Wet suppression technology utilizes water spray nozzles or fog bars that result in reduced emissions
ii. BACT for fugitive particulate matter from haul roads, is to maintain adequately moist haul roads such that no visible dust is observed leaving the property boundary. However, the absence of visible dust at the property boundary does not excuse the facility from meeting NSPS Subpart OOO requirements. Such federal requirements are enforceable whether they are listed in the permit or not.
iii. BACT for toxic air pollutants (tBACT) is presumed to be the same controls as required for BACT.

c. Allowable Emissions

The allowable emissions from the project, considering all emission controls and operational limits specified by the approval order, are shown in the tables below.

Table 4. Rock crushing allowable emissions for pollutants listed under WAC 173-400-110(5)

Pollutant	Tons/year
$PM_{2.5}$	0.3
PM_{10}	2.2
Total Suspended Particulates (TSP)	5.3

Table 5. Allowable TAP emissions

Pollutant	lbs/day	Averaging Period
Silica, crystalline (respirable)	1.9	24-hour

As described in the General Order, the terms of WAC 173-400-560 limit the ability to use a General Order for equipment if it is located at a facility that has a Title V permit. If the unit is temporary (365 days or less), the Permittee may be classified as a Title V source. If the unit will be in place for more than 365 days, the Permittee cannot use this General Order if it is a Title V source. The table below presents the total potential emissions and allowable emissions for facilities that use choose to use this general order.

Table 6. Potential and Allowable Emissions for Total Source (tons per year).

Pollutant	Total Source Potential Emissions	Total Source Allowable Emissions
$PM_{2.5}$	1.8 – 4.4	0.3
PM_{10}	13.2 – 38.8	2.2
Total Suspended Particulates (TSP)	38.2 – 129	5.3

5. Ambient Air Quality Standards

As specified in WAC 173-400-113, the proposed new or modified source(s) must not cause or contribute to a violation of any ambient air quality standard. This includes the ambient air quality standards for both criteria and toxic air pollutants.

a. Pollutants Listed Under WAC 173-400-110 (Except TAPs)

For PM10 and PM2.5, modeling was performed to satisfy the requirements of Chapter 173-400-113(3). The modeling demonstrates that the emissions increase as a result of the project will not exceed the ambient air quality standards. The modeling results are included in the table below.

For this modeling analysis, Ecology performed an extensive survey of rock crusher data, interviews with Ecology rock crusher inspectors, multiple rock crushing pit site visits, and the inclusion of haul road emissions. This initially included modeling haul road emissions not only from rock crusher trucks, and multiple size loaders, but also modeling scenarios that include similar haul road vehicle traffic operating concurrently from other potential operations in the same pit (hot mix asphalt and concrete batch). Ecology used EPA AP-42 haul road emission factor considerations.

Based on modeling, and after multiple internal discussions, and discussion with EPA, Ecology believes that the only available emission factors for haul roads are unreliable because they are too conservative. Therefore, Ecology decided not to include haul roads modeling results for PM10 and PM2.5. Rather, Ecology has chosen to better address haul road emissions by requiring that haul roads be adequately moist at all times to avoid dust emissions from leaving the property boundary. This approach allows Ecology inspectors discretion by implementing EPA Method 22 and applying it to the property boundary. This approach is also consistent with current Ecology inspector practices and EPA has acknowledged the reasonableness of this approach.

Ecology performed modeling at seven pits, each with different ambient impacts. Appendix D Modeling Analysis Summary contains the ambient impact levels and other details for all 7 pits, and therefore they are not repeated here. Table 7 summarizes the Appendix D Modeling Analysis which demonstrates that impacts

with the general order buffer limits in place will comply with ambient air quality standards.

Table 7. Criteria Pollutant Modeling Results (ug/m3)

Criteria Pollutant	Averaging Period	Background Concentrations	Are Maximum Modeled Concentration plus Background below Ambient Air Quality Standards (Yes/No)	Ambient Air Quality Standard
$PM_{2.5}$	24-hr	Varies between pits (see Appendix D)	Yes	35
$PM_{2.5}$	Annual	Varies between pits (see Appendix D)	Yes	9.0
PM_{10}	24-hr	Varies between pits (see Appendix D)	Yes	150

b. Toxic Air Pollutants (TAPs)

In accordance with WAC 173-460-040, TAP sources must meet the requirements of Chapter 173-460 WAC, unless they are exempt by WAC 173-400-110(5).

As shown in Table 2, minor NSR is required for Silica, crystalline (respirable) emitted by rock crushing activities. As such, the rock crusher must comply with WAC 173-460-070 (ambient impact requirement). The source may demonstrate compliance with the ambient impact requirement by either showing that the emissions increase is less than the small quantity emissions rates (SQER) or through dispersion modeling. Table 8 below includes the estimated emissions increases associated with rock crushing activities and the applicable SQER in pounds (lbs) per averaging period.

Table 8. TAP Analysis

TAP	Estimated Increase	SQER	Modeling Required?
Silica, crystalline (respirable)	1.9	0.22	Yes

For Silica, crystalline (respirable), modeling was performed to satisfy the requirements of Washington's state toxics rule in Chapter 173-460 WAC. The modeling demonstrates that the emissions increases as a result of the project will not exceed the acceptable source impact level (ASIL) screening thresholds. The modeling results are included in Table 9 below.

Table 9. TAP Modeling Results

TAP	Averaging Period	Maximum Modeled Concentration ($\mu g/m^3$)	ASIL ($\mu g/m^3$)	Percent of ASIL
Silica, crystalline (respirable)	24-hr	0.2 – 2.8	3.0E+00	7% – 93%

Table 9 summarizes the Appendix D Modeling Analysis which demonstrates that impacts with the general order buffer limits in place are below the associated ASIL. A Second Tier Health Impact Assessment (HIA) was therefore not conducted. Appendix D Modeling Analysis Summary contains the ambient impact levels and other details for all 7 pits, and therefore they are not repeated here.

Americans with Disabilities Act Information

Accommodation Requests

To request an ADA accommodation, email aqpubs@ecy.wa.gov, call (360) 407-6800, or dial 711 to call through the Washington Telecommunications Relay for services like text telephone (TTY). Visit Ecology.wa.gov/ADA for more accessibility information.

Appendix A – Response to Comments

Ecology received approximately 84 comments. The full comments are provided in Appendix E (Comments Received) based on the order they were received during the public comment period from June 2, 2026 through July 12, 2026, including those received orally during the public hearing on July 8, 2026.

Some comments contain multiple topics. For efficient review, Ecology grouped the comments and responses by topics. Under each topic heading, there are the comment number(s) relevant to the topic, a summary of the comment(s) received, and a response.

Comments regarding specific general orders are included below. However, because most topics applied in some way to all three 3 general orders, those responses are also combined into this appendix similar to how all three general orders are also addressed in Appendix D (Modeling Analysis Summary) and Appendix E (Comments Received).

Comment Topics

Topic A: Public Hearing Request

Topic B: Concerns about Reclaimed Asphalt Pavement (RAP) and crumb rubber

Topic C: Concerns about reporting complaints/odors etc.

Topic D: Concerns about 12-month basis

Topic E: Concerns about compliance for haul roads/stockpiles/fugitive dust compliance or related modeling

Topic F: Concerns about production limits, setback distances and how they were determined.

Topic G: Concerns about Hourly criteria pollutant emission limits

Topic H: Clarification of "Single Location" Provisions

Topic I: Grandfathering and triggers for new applications

Topic J: Request to define "credible evidence," “discontinue operations,” and "change in operation"

Topic K: Concerns about cumulative effects of revising 3 GOs

Topic L: Concerns about the consequences of NOC permitting approach (time, consultant costs, emergency response projects)

Topic M: Purpose of general orders/eligible facilities now vs proposed

Topic N: Request for permitting flexibility/site specific vs general

Topic O: How to demonstrate compliance with varying site specific situations

Topic P: Concerns about SEPA (if already complete/review time, etc.)

Topic Q: Questions SEPA – reduced production/trucks

Topic R: Have GOs been a source of community concern in the past?

Topic S: Administrative burden for compliance

Topic T: Concern about administrative burden for compliance for portables (greater than previous GOs)

Topic U: Concerns about how Ecology evaluated production rates vs emission rates.

Topic V: TAPs analysis and modeling assumptions

Topic W: Coordination with WSDOT

Topic X: Testing/additional material analyses – request for additional implementation guidance

Topic A: Public Hearing Request

Comment: 1
Summary: Commenter requested that a public hearing be held for the project so that testimony could be given.

Response to comments: Ecology's Air Quality Program held a virtual public hearing on July 8, 2026.

Topic B: Concerns about Reclaimed Asphalt Pavement (RAP) and crumb rubber

Comments: 9, 20, 23, 29, 39, 50, 65
Summary: Commenters are concerned with limitations on RAP and crumb rubber. A commenter suggested that a 30% RAP limit is not consistent with the common industry standard and requested that Ecology keep the same RAP demonstration approach used in the previous general order. Another suggested that "excluding crumb-rubber-modified asphalt, unnecessarily restricts operational flexibility and may discourage the continued use of recycled materials."

Response to comments: RAP above 30% is generally not observed in Ecology hot mix asphalt general orders. Most RAP content observed for Ecology general orders is in the low 20s, (around 22% RAP content). General orders are not intended to capture facilities with very large daily or annual production, or outlier RAP content.

However, Ecology has agreed to allow the RAP test-verification demonstration approach used in the previous asphalt general order to also be used in the proposed general order for RAP content greater than 30%.

With regard to recycled materials, the use of recycled materials alone does not necessarily justify allowing them in a general order. Ecology will retain the exclusion of crumb rubber due to the odors it causes. Other commenters have concerns that the revised general orders are already too much of an "administrative burden" (see Ecology response to Topic S: "Administrative burden for compliance"). General orders are not intended to be complex permits with the additional administrative burden of enforcing a requirement for the chemical binder additives that would be needed to address crumb rubber odors.

The NOC process is the appropriate permitting route for facilities that are outside of average facility parameters who seek more flexible permits.

Topic C: Concerns about reporting complaints/odors etc.

Comments: 10, 16, 17, 24, 32, 40, 43, 69, 75
Summary: Commenters are concerned with odor complaint requirements as well as the "one business day" complaint reporting requirement. One commenter requests that the odor restriction should be removed from the concrete batch plant general order. Specifically, there were concerns that the requirement to report complaints to Ecology within one business day adds excessive administrative burden without any benefit to air quality or additional oversight.

Response to comments: When Ecology permit writers believe there may be issues with odor, this is the standard permit template language that all minor New Source Review air permits (general orders and NOCs) use.

However, because complaints about odor have been from hot mix asphalt plants, Ecology agrees to remove the odor requirement language from the rock crusher and concrete batch general orders, but to keep it only within the hot mix asphalt general order.

Because dust complaints from rock crushers, hot mix asphalt plants and concrete batch plants are not uncommon, reporting complaints to Ecology is reasonable. However, Ecology agrees to allow complaints to be reported to Ecology within 2 business days.

Topic D: Concerns about 12-month basis

Comments: 5, 12, 26, 42, 61
Summary: Commenters have concerns about the 12-month rolling basis for all three general order revisions. Some expressed concerns that two seasons of production for some facilities would be captured in one 12-month period. Once commenter suggests that the proposed General Order "introduces a rolling 12-month production limitation" suggesting that is not in previous general orders. They note that such requirements are a concern because "asphalt production is inherently seasonal."

Response to comments: All three general order revisions are based on how much production a single pit/location can accommodate in a 12-month period regardless of operational seasons, and still meet current air requirements.

The 12-month rolling total production limit and recordkeeping requirement are not new requirements. Similar language for production limits is found in the previous concrete batch general order ("in any consecutive 12-month period."). They are also in the previous general order for hot mix asphalt proposed limits and recordkeeping sections. Both the previous and current hot mix asphalt general order language addressing 12-month rolling values are listed below for comparison:

Previous hot mix asphalt sections 1.1 and 8.1:
Total asphalt production is listed as occurring "in any consecutive rolling 12-month period."
"Daily asphalt production records summed and calculated as a 12-month rolling total showing actual hours of operation of the asphalt plant, amount of asphalt produced, and percentage of RAP in the feed material."

Proposed hot mix asphalt limit sections 2.a.i and 4:
Total asphalt production maximum rates table are listed as occurring "in any consecutive rolling 12-month period."
"Daily asphalt production records summed and calculated as a 12-month rolling total showing amount of asphalt produced, and percentage of RAP in the feed material."

Topic E: Concerns about compliance for haul roads/stockpiles/fugitive dust compliance or related modeling

Comments: 6, 14, 15, 18, 35, 44

Summary: Commenters are concerned with how fugitive emissions from haul roads and stockpiles were addressed, and if Ecology assumed non-compliance for model inputs (worst case emission estimates), yet require compliance as part of the permit. One comment requested flexibility for the water truck requirement and a performance-based approach to fugitive dust control that prioritizes maintaining compliance with visible emission limits as opposed to prescribing specific dust suppression practices.

Response to comments: The water truck requirements are similar to Ecology's previous general order. For haul roads, Ecology disagrees that "lower control percentages were used in modeling." Ecology assumed the highest control percentage possible for haul roads, by excluding all haul road emissions in the final modeling analysis provided in Appendix D of the Technical Support Document (TSD). If Ecology included haul road emissions in modeling, either the allowed production rates would be significantly lower, or buffer setbacks would be significantly higher.

The proposed general orders do not require haul roads be wetted at all times. Rather, "haul roads must be maintained in an adequately moist/wet condition at all times so that dust is not visible leaving the property boundary." In other words, if dust is not seen leaving the property boundary, the roads will be assumed to be adequately moist. This is not only a performance-based approach to fugitive dust, but it is the only way Ecology could justify not including haul road emissions in the final modeling and still assume compliance with the general orders.

Similarly for stockpiles, during approximately 10 Ecology site visits to pits in dry weather, only 1 pit was observed to be keeping stockpiles wet. Ecology's moisture assumptions are justified and consistent with other local agency assumptions for similar sources.

Appendix D of the TSD lists the specific pits used in the modeling which included much more accurate emission inputs and meteorological conditions (and terrain) than what the previous general order modeling was based on. The model used for these revisions (AERMOD), with its more detailed input capability, provides a more accurate approach than previous general orders issued by Ecology.

Topic F: Concerns about production limits, setback distances and how they were determined.

Comments: 2, 3, 5, 6, 8, 14, 15, 20, 26, 27, 30, 33, 35, 38, 45, 48, 49, 55, 60, 62, 71, 78, 80
Summary: Commenters have concerns about production limits, setback distances and how they were determined. They request that previous general order limits be retained and that setback distances be no more than 150 feet. Some asked if actual production rates, emission performance, and demonstrated compliance history were considered when setting these proposed limits. Others are concerned that "facilities unable to satisfy these criteria would no longer qualify for coverage under the General Order and would instead be required to pursue an individual Notice of Construction (NOC) permit."

Another commenter expressed concerns about an unintended consequence for projects such as airports and highways, suggesting that the limits will cause "additional hours on highway with traffic next to them to meet this limit" and that facilities will be restricted to artificially pave "at half speed."

Some commenters are "concerned that the proposed daily production limits are unnecessarily restrictive and do not reflect how construction-material facilities operate in practice…" and that "Ecology has not demonstrated why new daily production restrictions are necessary for facilities with established compliance records…" This comment also "recommends retaining annual production limits

as the primary throughput limitation. If daily limits are retained, Ecology should ensure that the supporting modeling assumes compliance with all required dust-control measures rather than reduced control efficiencies."

Response to comments: Ecology had to revise the general orders because when we issue coverage for permits such as general orders, we must show that they meet current air requirements.

These requirements include the Washington Ambient Air Quality Standards (WAAQS) found in WAC 173-476-900 which are mostly similar to the National Ambient Air Quality Standards (NAAQS). However, because Ecology interprets compliance with NAAQS as indication of compliance with WAAQS, it is usually only the NAAQS which are referred to (and for the remainder of these responses). Other requirements include Toxic Air Pollutants (TAPs) found in WAC 173-460-150.

These regulations are the driving force for the proposed revisions. The number of historical General Order facilities that would have or not have qualified under the revised eligibility criteria are not considered when addressing NAAQS and TAPs. Ecology must only issue coverage for such permits that meet these regulations at the time that they are issued (for NAAQS, see Title I of the Clean Air Act, Part A, Section 109; for TAPs see Five Corners vs Ecology; PCHB 09-106).

Ecology disagrees with the commenter that facilities "unable to satisfy these criteria would no longer qualify for coverage under the General Order…" Facilities that are already covered would continue to qualify for the coverage they already have. Only new applicants who cannot meet these limits would be required to pursue an individual Notice of Construction (NOC) permit (see also Ecology response to Topic I about replacement of units titled "Grandfathering and triggers for new applications"). The NOC process has always been the preferred and necessary permit process for facilities that need more flexibility than what a general order can offer.

The updated general orders cannot be based solely on the criteria from the previous general orders and the past NAAQS and TAPs compliance history of covered sources.. While past production amounts and approximately two dozen source tests (for hot mix asphalt plants) were a part of how Ecology developed the revised permit limits, for new applicants Ecology also must consider compliance with current NAAQS and TAPs.

Regarding hourly production limits: the hourly production limit in the previous hot mix asphalt general order has been removed so that there are no longer any hourly production limits in any of the three revised general orders.

Regarding daily production limits, it is the NAAQS (specifically the PM_{10} daily NAAQS) which determine the need for these daily limits for all three general orders (rock crushers, hot mix asphalt, and concrete batch). Other local clean air agencies also have daily limits. For example, Ecology's proposed rock crusher daily limit of 4,320 tons per day is similar to one of the local clean air agency's daily limit of 4,500 tons per day.

Regarding setback distances, Ecology borrowed the approach from a local clean air agency because it allows Ecology to offer greater throughput than without the buffer setbacks, and yet still meet the NAAQS and TAPs. The local agency that has a similar daily limit to Ecology's daily limit, also has a similar setback distance (500 ft) to Ecology's (550 ft). Higher production would require even greater buffer distance requirements. And shorter buffer setback distances would reduce allowed production.

Regarding annual limits: by removing the generic total annual limits in all 3 general orders, the proposed pit (single location) limit approach allows portable facilities to have unlimited annual production. Portable facilities that meet the limit in 1 pit are welcome to move to another pit, which restarts the production pit limit assessment for that facility. This was illustrated in the example Ecology presented at the public hearing on July 8, 2026. Ecology showed the actual production totals of a portable rock crushing facility in 2020 that operated in eight different pits that year. Production ranged from 30,000 tons in the Gotham quarry to up to 450,000 tons in the Westgate pit for a total 973,000 tons in all eight pits combined. This was in compliance with the rock crusher general order annual limit at that time of 1,000,000 tons per year.

As a comparison to show how that facility would comply with the new rock crusher general order limits, Ecology lined up the reported production for all eight pits compared to the new pit limit of 600,000 tons per year. The facility not only would comply with all eight pit limit totals, but the new approach allows such a facility operating in eight pits to exceed the old annual limit of 1,000,000 per year. In fact, such a facility could produce up to 4.8 million tons in 1 year (eight pits times 600,000 tons per year) and still be in compliance with the new general order. The new hot mix asphalt and concrete batch general orders have the same pit location approach as the rock crusher general order, allowing unlimited annual production as long as individual pit limits are met.

Regarding modeling, Appendix D of the TSD lists the specific pits used in the modeling, which included much more accurate emission inputs and meteorological conditions (and terrain) than what previous general order modeling was based on. The model used for these revisions (AERMOD), with its more detailed input capability, also provides a more accurate model than what previous Ecology general order models were based on. Appendix D also provides the modeling inputs and basis for results, as well as which pollutants trigger the setback distances. As shown in Appendix D, the limiting factor is the daily 24-hour PM-10 NAAQS compliance requirement. By including the revised production limits (including daily limits), combined with the setback distances, Ecology fulfils its requirement to demonstrate compliance with NAAQS and TAPs and allows Ecology to continue issuing general order coverage for these types of facilities. Whereas, the evaluation on which the previous general orders were based is now out of date.

Regarding dust control measures and modeling for dust related emissions, please see Ecology response to Topic E: “Concerns about compliance for haul roads/stockpiles/fugitive dust compliance or related modeling.”

Topic G: Concerns about Hourly criteria pollutant emission limits

Comments: 28, 53, 64
Summary: Commenters are concerned about hourly criteria pollutant limits in the proposed hot mix asphalt plant general order, suggesting it is fundamental change from the 80 ton per year limits in the previous general order. Commenters requested justification for the change. Others requested that there be no proposed hourly limits.

Response to comments: The 80 tons per year emission limit for listed pollutants in the previous hot mix asphalt general order is an unsatisfactory compliance approach for facilities that operate on a very short-term basis but do so very inefficiently. Specifically, a facility may easily meet the 80 tons per year emission limit by operating for a short period of time within a year, but it may be very inefficient on a

short-term basis (unwarranted excess short-term emissions). In a survey of approximately 24 hot mix asphalt source tests over multiple decades, all facilities covered under Ecology's asphalt general order would meet the proposed hourly criteria pollutant emission limits except for 1 facility which would have exceeded the CO limit.

Based on inspector input, that specific facility was operating very inefficiently but the previous general order had no mechanism of enforcement leading to improved efficiency, and more reasonable emissions. The new limit is intended to bring such an outlier facility (in terms of emissions) to operate in line with the approximately other 96% of facilities that are able to meet these hourly emission limits. From a public health and safety air exposure point of view, a defendable permitting approach that includes both long-term and short-term emission limits is a more common and fundamentally reasonable approach than permits with only long-term emission limits.

Regarding hourly production limits: the hourly production limit in the previous hot mix asphalt general order has been removed so that there are no longer any hourly production limits in any of the three revised general order.

Topic H: Clarification of "Single Location" Provisions

Comments: 7, 36
Summary: Commenters request clarification of the single location provisions and how to address multiple facilities operating at the same site.

Response to comments: Previous general orders did not require a facility covered under a general order to consider production of other facilities covered under separate general orders.

In the same way all the limits in the proposed general order, including the "single location limits" are listed as applying to "the facility" not to multiple facilities. From the permit: "The facility is limited to the following production/operating limitations." Each facility covered under a general order is therefore only responsible for the production of that facility. It is not responsible for the production of other facilities.

Topic I: Grandfathering and triggers for new applications

Comments: 2, 11, 19, 28, 38, 41, 51, 57, 66
Summary: Commenters concerned about whether facilities with existing coverage will continue to have coverage (grandfathering) or if they will lose coverage. Commenters request guidance or clarification of what would trigger the need for a new general order.

Response to comments: Grandfathering occurs because a facility was permitted under different rules. Over time, NAAQS and TAPs requirements change and the basis on which that facility was permitted become out of date. Yet, once a permit is issued, it is valid into perpetuity. As long as that facility does not trigger a modification (hourly increase in emissions) that also cause emissions above the emission thresholds in WAC 173-400-110(5), it legally does not need to seek a new permit unless they make certain equipment replacements (discussed further below).

It is the same with general orders, as stated within each general order just before the approval conditions, as follows:

> "According to WAC 173-400-560(3) Modifications to general orders of approval 'only take effect prospectively.' … plants that were covered under previous versions of this General Order are still in effect. However, new applications for coverage … starting with the issuance date on this General Order, must apply for coverage under this General Order using the application that was updated specifically for it."

In other words, once a facility is covered by a general order, the same grandfathering approach applies. The problem with the previous general orders is that they became outdated and we can no longer issue coverage under them to "new" applicants. That is why Ecology is updating them. But facilities already covered by outdated general orders stay covered in the same way an NOC permit allows continued coverage. Only a modification as described above, or a replacement as described below would trigger the need for new coverage under a general order.
The equipment replacement triggers that would cause an existing facility to need to apply for a new general order or NOC are as follows:

- For rock crushers: replacement of the primary jaw crusher
- For hot mix asphalt plants: replacement of the rotary drum/dryer, or rotary dryer burner.
- For concrete batch plants: cement/supplement weigh hopper

[Note: These triggers are not a new requirement for general orders. These triggers apply to all minor New Source Review air permits including NOC permits as stated above]

Topic J: Request to define "credible evidence," "discontinue operations," and "change in operation"

Comments: 13, 47
Summary: Commenters request that Ecology provide "clear definitions and objective criteria for these provisions to promote consistent implementation and enforcement across the state" noting that "several provisions within the draft General Orders rely on terms that are not clearly defined, including 'credible evidence' and 'change in operation.'" Another requests the same for "discontinue operations." The request is for Ecology to clearly identify the types of information that constitute credible evidence and explain how such evidence will be evaluated and applied for compliance determinations. For "discontinue operations", the request is that Ecology provide additional clarity regarding what constitutes a satisfactory demonstration that an extension is justified and to "identify the information required to support an extension request and establish clear criteria for approval. Providing objective standards would improve consistency and predictability for permittees. NWCAA Regulation 300.11(A) provides a useful example of this approach."

Response to comments:
Washington State has other local clean air agencies which may have differing implementation and enforcement approaches than Ecology. The following information is intended to provide some clarity on the use of these terms:

- "Credible evidence:" The intention of this phrase is to convey that an enforcement action may be based on any information available. Enforcement is not limited to applicable test methods or other specifications in the general order. The general language addressing the use of credible evidence is necessary to make it clear that despite any other language contained in the general

order, credible evidence can be used to show compliance or noncompliance with applicable requirements. Permit provisions containing testing or monitoring requirements sometimes represent instances where a regulated entity could construe the language to mean that the methods for demonstrating compliance specified in the permit are the only methods admissible to demonstrate violation of the permit terms. It is important that the general orders not lend themselves to this improper construction. It is also important to note that it is common to consider information other than data from reference test methods in assessing source compliance.

- "Change in operation": This phrase is meant to reference changes that result in a net emissions increase of a regulated pollutant or extend the useful life of the emissions unit/plant. See also Ecology response to Topic I: "Grandfathering and triggers for new applications."

- "Discontinue operations:" : Listed in the general conditions of the permit as one of the criteria to determine "change in operations". It is also listed as a requirement in the permit that the Permittee must notify Ecology within 30 days "if construction or operation has been discontinued for more than 18 months."

Topic K: Concerns about cumulative effects of revising 3 GOs

Comments: 4, 20, 46, 54, 59, 67, 69, 70, 75, 76, 83, 84
Summary: Commenters are concerned with both the cumulative effect of limits within each proposed general order, as well as the cumulative effect of revising all three general orders at the same time. Specifically, one commenter is concerned that "while each proposal has been evaluated independently, the practical impacts experienced by Washington's construction materials industry will be cumulative. Collectively, these General Order proposals introduce revised production limitations, expanded eligibility criteria, additional administrative responsibilities, increased reliance on individual Notice of Construction permits, new operational requirements, expanded recordkeeping obligations, and additional permitting uncertainties. While many of these individual requirements are reasonable and consistent with sound environmental stewardship, collectively they represent a significant increase in the administrative responsibilities…"

Response to comments: Because of the related nature of all three types of general orders, Ecology revised them at the same time. All three have portable and stationary options and all three often operate in the same pit or location simultaneously. Therefore, Ecology modeled their estimated impacts from the same pit/locations. All three general orders were also addressed simultaneously during the previous revisions (2011).

Regarding the limits within each general order, see Ecology responses to Topics F: "Concerns about production limits, setback distances and how they were determined" and G: "Concerns about Hourly criteria pollutant emission limits."

Topic L: Concerns about the consequences of NOC permitting approach (time, consultant costs, emergency response projects)

Comments: 21, 25, 27, 30, 33, 37, 52, 58, 63, 72, 81

Summary: Commenters are concerned that the NOC permitting process takes longer and costs more with a possible need to hire consultants to perform modeling. Commenters ask "whether Ecology evaluated the cumulative economic impacts associated with increased reliance on individual permitting;" and "Whether Ecology evaluated the effects that longer permitting timelines may have on public infrastructure delivery, emergency response projects, seasonal paving operations, and contract completion schedules."

Response to comments: While it is true that the NOC process is not as streamlined as a general order, it provides the flexibility that the commenters are requesting in other comments. If a potential applicant wants more flexibility than what is provided in a general order, then they must apply for an individual NOC permit.

Ecology cannot grant exceptions to NAAQS and TAPs compliance so that very large facilities can utilize these general orders. Both NOC permits and general order permits must show compliance with NAAQS and TAPs (WAC 173-400-113(3)) when issued regardless of the issues listed in the comment. .

See also Ecology responses to Topic F: "Concerns about production limits, setback distances and how they were determined" and Topic W: "Coordination with WSDOT."

Topic M: Purpose of general orders/eligible facilities now vs proposed

Comments: 22, 49, 62, 64, 67, 71, 73, 77, 80
Summary: Commenters have concerns that the proposed general orders deviate from the purpose of general orders and will cause less facilities to be eligible to use them. Commenter notes: "general orders exist to provide an efficient, predictable, and technically supported permitting pathway for facilities with similar operating characteristics and emissions profiles. The value of a General Order lies not only in protecting public health and the environment, but also in providing regulatory certainty for both applicants and the Department. As proposed, the revised eligibility criteria may substantially reduce the number of future facilities able to utilize that permitting pathway while shifting a greater number of projects toward individual Notice of Construction permits."

Response to comments: Ecology agrees that general orders are intended to provide an efficient and predictable permitting pathway, as well as a level of regulatory certainty. Unfortunately, regulations are not certain to remain the same over multiple decades. The last permit revisions for these general orders were in 2011. Since then, there have been changes to regulations that have caused the previous general orders to become outdated and non-compliant with current regulations.

Facilities with larger than average annual or daily production may have been able to comply with the previous general order limits. If these larger facilities will not be able to comply with the proposed general orders, it is likely due to changes in allowed pollutant thresholds and a more accurate modeling approach. But it is important to keep in mind that general orders are not intended to capture facilities with very large daily or annual production. General orders are intended for smaller production facilities. Yet, the proposed general orders are derived from annual productions amounts which Ecology found to be at the higher end of what facilities have reported to us.

Topic N: Request for permitting flexibility/site specific vs general

Comments: 14, 22, 56, 58, 62, 71, 80, 82
Summary: Commenters requested more permit flexibility for large-scale projects. One commenter noted that "model control efficiency inputs for rock crushers and concrete batch plants are more conservative than warranted, resulting in proposed daily production limits that are overly restrictive for minor sources in attainment areas and reduce a facility's flexibility to service large-scale, seasonal projects while adhering to annual production limits and visible emissions standards. The model inputs do not accurately reflect actual site conditions and are inconsistent with the General Order conditions."

Response to comments: Compared to the process used in 2011 to revise the previous general orders, the proposed modeling process (including inputs and the model itself) better address actual site conditions in terms of terrain, meteorology, and sources of emissions.

Large-scale projects and irregular parameters are not what general orders are intended to address. General orders are intended for smaller size production facilities with typical parameters. The NOC process is the appropriate permitting route for facilities seeking site-specific flexibility when they are outside of typical facility parameters.

See also Ecology's response to Topic E "Concerns about compliance for haul roads/stockpiles/fugitive dust compliance or related modeling," Ecology also provides a comparison of Ecology's daily rock crusher production limit and setback distance to other local clean air agency's daily limit and setback distances in Ecology's response to Topic F: "Concerns about production limits, setback distances and how they were determined."

Topic O: How to demonstrate compliance with varying site-specific situations

Comments: 68, 74
Summary: Commenters note that "while the proposal and accompanying Technical Support Document explain the pollutants evaluated, the modeling assumptions employed, and the resulting production limits, setback requirements, and emission standards, they provide comparatively little guidance regarding how future applicants are expected to demonstrate compliance under varying site-specific conditions or when actual operating conditions differ from the representative scenarios used during development of the General Order…"

Response to comments: Ecology recognizes that each facility may vary, yet for purposes of calculating emission estimates and modeling, Ecology had to make certain assumptions. For example, Ecology assumed approximately 3.1 crushers when estimating emissions for rock crushers. Clearly, facilities do not operate with exactly 3.1 crushers and there is no limit in the general order to use 3.1 crushers (or less)A facility that can meet all the limits in the general order is welcome to apply for it regardless of how it compares to the assumptions used in the development of the general order

Buffer setback limits are assessed for the pit that the facility wants to operate in at the time of application (application form) through the issuance of the coverage order, and when portables move to new sites (notification form).

If there is a pre-existing school, residence or other sensitive receptor within the buffer distance of a pit, the facility cannot apply to use the general order and cannot be allowed to move to such a pit as a

portable operation. Facilities might still be able to operate in such a pit via the NOC process if they can demonstrate that ambient impacts are acceptable (NAAQS and TAPs considerations, etc.).

Topic P: Concerns about SEPA (if already complete/review time, etc)

Comments: 31, 34, 52, 67, 82
Summary: Commenters ask if a new SEPA review is required for a site if a SEPA review has been previously conducted, whether relocation of an existing portable asphalt plant to another project location will require additional SEPA review under the proposed General Order, and whether Ecology evaluated the effects that additional SEPA review timelines may have on emergency transportation projects, airport closures, utility work, and other time-sensitive public infrastructure projects.

Response to comments: Ecology's approach to SEPA considerations for applicants will remain the same for the proposed general orders as the previous general orders. Ecology has historically accepted SEPA determinations already completed for a pit/location, and will continue to do so with the proposed general orders. (Note: In 2025, Ecology's notification form was updated to require that SEPA be addressed the same for rock crushers and concrete batch plants as for hot mix asphalt plants).

Topic Q: Questions SEPA – reduced production/trucks

Comments: 79
Summary: Comment about the SEPA documentation indicating that the proposed General Order is expected to reduce annual rock production within individual pits. Commenter requests additional information regarding the analyses supporting these conclusions, the broader impacts on Washington's construction materials supply chain, the technical analyses supporting the conclusion, individual pits effects overall environmental impacts, effect on other aggregate operations, wider transportation concerns beyond the pit, including fuel consumption, transportation costs, associated emissions, and related concerns. Among these types of concerns the commenter asks for the "assumptions supporting the proposed General Order and evaluate whether the anticipated environmental benefits have been considered alongside the practical realities of supplying aggregate materials for Washington's growing infrastructure needs."

Response to comments: Ecology acknowledged within the SEPA documents that "future rock crushing operations may increase local truck traffic but site-specific impacts are unknown at this time." Therefore, the broad request for statewide impacts can only be addressed as "unknown" because site specific information is also "unknown".

However, comparing a pit location under the previous general order to a pit location under the proposed general order with lower annual production limits, the assumption of less traffic occurring per pit is justified.

Ecology disagrees with the commenter's suggestion that Ecology's general order revisions (required to address compliance with NAAQS and TAPs requirements), will have a negative effect on statewide supply chains and the environment. Ecology's technical support documents provide a defendable basis for how environmental regulations will be adhered to under the proposed general orders. The commenter's assumptions about supply chain disruptions are also unproven because facilities that cannot meet the production limits of a general order, can apply for an NOC permit within these same pit locations.

Topic R: Have GOs been a source of community concern in the past?

Comments: 49
Summary: Commenter asks if GO permitted asphalt plants have been "a serious source of community concern in the past?"

Response to comments: Ecology has received complaints from certain facilities covered under general orders, such as dust from rock crushers and odors from hot mix asphalt plants. However, the revision for these general orders was triggered primarily because they are out of date with current NAAQS and TAP regulatory standards.

For example, the modeling for the previous hot mix asphalt general order was based on the previous TAP Acceptable Source Impact Levels (ASILs). One of the local clean air agencies voiced concern that under the 2019 TAPs update, the modeled hexavalent chromium VI (Cr VI) level in Ecology's previous hot mix asphalt general order would not have been permittable.

That is, the modeled Cr VI value of 5.7E-06 µg/m3 was below the previous Cr VI ASIL of 6.7E-06 µg/m3 before 2019. But it would be above the 2019 Cr VI ASIL of 4.0E-06 µg/m3. In the Pollution Control Hearings Board ruling for Five Corners vs Ecology (PCHB 09-106), and also in the Ecology policy created from it, it was determined that "an approval order must reflect the emission standards in WAC 173-460-150 that are in effect when the order is issued. "

Topic S: Administrative burden for compliance

Comments: 54, 59, 69, 75, 83
Summary: Commenters suggest that the proposed General Order introduces numerous new and expanded administrative, operational, monitoring, and recordkeeping requirements to support the revised permitting framework. While many of these individual requirements are reasonable and consistent with sound environmental stewardship, collectively they represent a significant increase in the administrative responsibilities associated with operating stationary and portable asphalt plants under the General Order. The proposal expands requirements related to production tracking, emissions documentation, portable plant notifications, maintenance records, fuel usage, operating records, compliance demonstrations, complaint reporting, and other recordkeeping obligations.

Response to comments: Ecology used the current minor New Source Review (NSR) NOC permit template and revised it for general order purposes. It was streamlined to be as straightforward as possible. However, the general order, the application for coverage, and the notification form still needed to be updated to provide inspectors with sufficient information for compliance purposes.

Topic T: Concern about administrative burden for compliance for portables (greater than previous GOs)

Comments: 67, 73, 82
Summary: Commenters have specific comments about the administrative burden for portable facilities: "Portable rock crushers, hot mix asphalt plants, and concrete batch plants play a critical role in Washington's construction industry. They provide temporary concrete production for transportation projects, bridge construction, utility installations, airports, emergency repairs, commercial

developments, and other projects where producing concrete near the point of use is essential to maintaining product quality, construction schedules, and overall project efficiency.

Unlike permanent facilities, portable plants are intentionally designed to move from project to project as construction demands change throughout the year. Their locations are largely dictated by the needs of individual projects, available staging areas, site constraints, project sequencing, and the availability of suitable land within reasonable proximity to construction activities…."

"The proposed General Order introduces additional notification requirements, administrative obligations, and eligibility criteria that appear to place greater emphasis on portable operations than previous versions of the General Order."

"While we understand Ecology's interest in maintaining accurate records regarding portable facilities, we respectfully request additional clarification regarding the practical implementation of these requirements and their potential impacts on future projects.

Specifically, we request Ecology identify: whether the proposed notification and administrative requirements were evaluated for their potential impacts on project mobilization and construction schedules."

Response to comments: Ecology considered ways to streamline administrative requirements for portable operations while at the same time, having to update the general orders to meet current NAAQS/TAPs requirements. Compared to previous general orders, the proposed general orders all allow the potential for increased annual production for portable operations. By removing the administrative tracking of generic total annual limits in all 3 general orders, the proposed pit (single location) limit approach allows portable facilities to have unlimited annual production. For an example of this, see Ecology response to Topic F: "Concerns about production limits, setback distances and how they were determined."

Topic U: Concerns about how Ecology evaluated production rates vs emission rates.

Comments: 64
Summary: Commenter requests that "Ecology identify whether it evaluated the relationship between production rates and emission rates to determine whether lower hourly emissions could reasonably support increased production flexibility while maintaining compliance with applicable air quality standards.

Providing this information would allow stakeholders to better understand both the technical rationale supporting the revised emission standards and the practical consequences associated with transitioning from an annual compliance framework to hourly stack emission limits.

Because this represents a fundamental change in how General Order compliance is demonstrated, additional transparency regarding the supporting analyses, implementation expectations, and anticipated impacts would significantly improve stakeholders' ability to evaluate the proposal and prepare for future compliance obligations."

Response to comment: Ecology looked at a multiple year survey of production data and started at the higher ends of annual production data reported to us. Ecology was prepared to increase or decrease these amounts based on modeling. Based on modeling, and by adding the setback buffer distances, Ecology was able to propose the listed production rates. Ecology also looked at hourly source test information for approximately two dozen facilities over multiple decades. Ecology establishes general orders for the typical or general type of facility for that industry. By nature, a general order is then less flexible towards non-typical facility operations.

If Ecology's proposed general order allowed lower hourly emissions as proposed in the comment, then less facilities would qualify to use it. However, if a facility believes it can operate more efficiently than the proposed general orders hourly limits, and feels hemmed in by the proposed production limits, it can pursue the more flexible NOC permit option.

It is possible that such a facility may be able to demonstrate to Ecology through the NOC process, that it has lower hourly emissions or improved dispersion characteristics sufficient to maintain compliance with applicable air quality standards, and therefore may warrant production flexibility.

Topic V: TAPs analysis and modeling assumptions

Comments: 68, 74
Summary: Commenters note that "the proposed General Order and accompanying Technical Support Document place significant emphasis on Toxic Air Pollutants (TAPs), including respirable crystalline silica, Chromium VI, manganese, and other pollutants evaluated through Ecology's air dispersion modeling. We recognize Ecology's responsibility to evaluate these pollutants and to ensure compliance with applicable state and federal air quality requirements. We also support the use of sound science and appropriate technical analyses when developing permitting criteria intended to protect public health."

Response to comments: Ecology acknowledges the commenters understanding.

Topic W: Coordination with WSDOT

Comments: 4, 59, 70
Summary: Commenters suggest that Ecology coordinate with the Washington State Department of Transportation (WSDOT) and local governments, industry organizations and individual permit holders. One commenter suggests that "the proposed GO changes are so profound that it would serve all parties to engage in discussions to refine/revise the most problematic changes in this process before attempting to institute the changes. It does not serve the public interest to knowingly impose permit conditions that the agency knows will be officially contested. We would welcome an industry/DOE/WSDOT et. al. review and discussion forum or taskforce so as to fully evaluate the unintended consequences of the proposed GO restrictions."

Response to comments: When Ecology issues permits, it follows a process which allows for public engagement and appeals. Ecology had to update these general order permits that were out of date with NAAQS and TAPs in order to bring them into compliance with current NAAQS and TAPs.

For facilities that qualify, they can apply for coverage under the general order option. For those that do not qualify for coverage, they have the option to apply for an NOC permit.

Regarding outreach during the development of these revised general orders, Ecology had extensive input from multiple local clean air agencies. Ecology also visited individual permit holders onsite at approximately 10 different pit locations. Ecology also met with WSDOT on July 7 and July 9, 2026.

Ecology acknowledges the concern about the public interest and that some in the public would benefit from less stringent limits while others in the public would benefit from more stringent limits. Regardless, Ecology must issue permits that demonstrate compliance with current NAAQS and TAPs regulations.

An analogy would be to the WSDOT Materials Manual (M 46-01.48, dated January 2026) which is primarily focused on specifications and testing method requirements for aggregate, asphalt and concrete pavement, but has no mention of air pollution, odor, or other ambient impacts.

In a similar way, NAAQS and TAPs primary focus is on air regulations, but not how they affect paving projects and schedules. Ecology must follow NAAQS and TAPs regulations as a mandatory requirement to issue permits in the same way WSDOT must follow the WSDOT Materials Manual.

Yet, Ecology has tried to develop general order limits that meet NAAQS and TAP limits and still allow maximum production for applicants. For example, Ecology proposes setback distances (similar to local clean air agencies) as a way to come as close to NAAQS and TAPs limits as possible but still demonstrate compliance with those limits. For a defense of how Ecology's proposed setback distances are both justified and serve the public interest, please see Ecology response to Topic F: "Concerns about production limits, setback distances and how they were determined."

The public has also expressed interest in the form of complaints when these types of facilities are not operated satisfactorily leading to dust and odor complaints. Ecology must also ensure compliance with NAAQS and TAPs regardless of who contests such changes. In Five Corners Family Farmers vs Ecology and Easterday Ranches, Inc., Ecology was contested from the public for being too lenient in addressing which TAP regulations are in effect at the time a permit is issued. Ecology lost that appeal, which is one of the reasons these general orders are being revised. In the Pollution Control Hearings Board ruling (PCHB 09-106), and also in Ecology policy created from it, it was determined that "an approval order must reflect the emission standards in WAC 173-460-150 that are in effect when the order is issued." An example of how the hot mix asphalt mix plant general order is out of date with current TAPs is provided in Ecology's response to Topic R: "Have GOs been a source of community concern in the past?"

See also Ecology response to Topic L: "Concerns about the consequences of NOC permitting approach (time, consultant costs, emergency response projects)."

Topic X: Testing/additional material analyses – request for additional implementation guidance

Comments: 68, 74
Summary: Commenters note that "the proposal also reserves Ecology's authority to require additional material analyses, emissions testing, or other technical evaluations under certain circumstances. While we understand that such authority may be appropriate where warranted, the proposal provides limited discussion regarding the situations in which additional testing would be required, the criteria

that would trigger such requests, or the expectations placed upon permit holders if additional evaluations become necessary.

Additional clarity regarding these issues would improve regulatory certainty and allow applicants to better understand the circumstances under which additional technical analyses may be required.

We also note that asphalt facilities have historically demonstrated compliance through production limitations, emissions controls, burner technology, baghouse systems, maintenance requirements, operating restrictions, and recordkeeping obligations established under existing permits.

As additional Toxic Air Pollutant considerations become incorporated into General Order permitting, we respectfully request Ecology ensure that compliance expectations remain transparent, technically supported, and reasonably implementable by operators throughout Washington.

Providing additional implementation guidance would improve consistency, reduce uncertainty, and better achieve the shared objective of protecting public health while maintaining an efficient, predictable, and practical permitting framework."

Response to comments: These requirements are consistent with Ecology's authority under WAC 173-400-105. In our site-specific NOC approval orders, the following exists as a general condition:

> "When information obtained by Ecology indicates the need to quantify emissions, Ecology may require the Permittee to conduct material analysis or air emission testing under WAC 173-400-105. This testing requirement is in addition to any testing required by Ecology in this Order, other permits, or other state or federal requirements."

The requirements do not exist to impose undue burden on applicants. They exist due to the infeasibility of knowing every potential variable, site condition, or operational reality that may play a role in the compliance outcome for the facility. Ecology rarely exercises its authority under WAC 173-400-105, so it's not expected to cause significant uncertainty for applicants.

Appendix B – Federal Rule Applicability

40 C.F.R. Part 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants

Note: The following requirements are listed as statements of fact because they are relevant to this permit. They are already enforceable independent of this permit.

New Source Performance Standard (NSPS) Subpart OOO applies to the following rock crushing operations, with key portions of the rule partially listed below. This is only a partial list of key requirements. For the full list of requirements see link for NSPS OOO.

Citation	Subject	Notes
60.670	Applicability	Specifies that this Subpart applies to the following nonmetallic mineral processing plant types: "fixed" crushed stone plants with capacities greater than 25 tons per hour (23 megagrams per hour) and "portable" crushed stone plants with capacities greater than 150 tons per hour (136 megagrams per hour). Also, note that 60.670(d) replacement requirements are different than Ecology replacement policy. NSPS OOO allows exemptions from some sections of NSPS OOO for replacement of similar or smaller equipment (referred to as "facility") if emissions do not increase [unless "all" equipment (referred to as "all existing facilities") is being replaced]. Whereas, Ecology replacement policy requires that "beyond the 18 months following installation of an emission unit, a replacement emission unit shall be treated as a new stationary source."
60.671	Definitions	Provides key definitions such as: "Fixed plant ..is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock." "Portable plant is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit." "Fugitive emission means particulate matter that is not

Citation	Subject	Notes
		collected by a capture system and is released to the atmosphere at the point of generation."
60.672	PM Standards	Refers to standards in Tables 2 below.
60.673	Reconstruction	Addresses requirement for considering fixed capital costs
60.674	Monitoring of Operations	Addresses requirements for wet scrubbers, wet suppression, and baghouses. A key requirement for facilities that rely on wet suppression to control emissions is listed in 60.674(b): "The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b)."
60.675	Test Methods and Procedures	• Method 5, Method 17 or allowed alternates as listed. For opacity, EPA Method 9.
60.676	Reporting and Recordkeeping	• Requires reporting of: ➢ equipment replacement ➢ performance tests including opacity ➢ facilities that change from saturated material processing unsaturated material processing ➢ actual date of initial startup (including home office and current address or location for portable aggregate processing plants) • Requires recordkeeping of: ➢ inspections for affected facilities commenced on or after April 22, 2008. ➢ bag leak detection systems ➢ visible emissions. ➢ Wet scrubber initial performance test parameters
Table 1 to Subpart	Exceptions to Applicability of	Explains which parts of NSPS Subpart A (General Provisions) apply to Subpart OOO.

Citation	Subject	Notes
OOO of Part 60	Subpart A to Subpart OOO	
Table 2 to Subpart OOO of Part 60	Stack Emission Limits for Affected Facilities With Capture Systems	As noted in 60.672: "The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device." Link to Table 2
Table 3 to Subpart OOO of Part 60	Fugitive Emission Limits	As noted in 60.672: "The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems." Plants constructed, modified or reconstructed after August 31, 1983 but before April 22, 2008: • Crusher[1] fugitives: 15% opacity • Other[2] fugitives: 10% opacity Initial performance test required (see Table 3 of this subpart) Plants constructed, modified or reconstructed after April 22, 2008: • Crusher fugitives: 12% opacity • Other fugitives: 7% opacity Initial performance test required (see Table 3 of this subpart) [Note: Ecology does not list these opacity requirements in the general permit but chooses to implement method 22 at the boundary. However, as stated at the beginning of this appendix, these NSPS OOO requirements "are listed as statements of fact because they are relevant to this permit. Ecology is not making them enforceable as part of this permit because they are already enforceable independent of this permit."

[1] "Crusher fugitives" refers to the "fugitive emissions limit for crushers at which a capture system is not used."
[2] "Other fugitives" refers to the "fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility." Includes fugitives escaping capture systems per NSPS OOO 60.672(b).

Appendix C – Rock Crusher Inputs Summary

1. **Emission Factors:** [Many of the emission factors referenced below are readily available by the EPA AP-42 "Compilation of Air Emissions Factors from Stationary Sources" website and are therefore not repeated here.]
    a. Transfers:
    Ecology used the controlled scenario emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Conveyor Transfer Point Table 11.19.2-2 (SCC 3-05-020-06).

    b. Crushing:
    Ecology used the controlled scenario emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2. Ecology used tertiary crushing (SCC 3-05-020-03) in place of missing primary crushing (SCC 3-05-020-01) and secondary crushing (SCC 3-05-020-02) emission factors.

    c. Fines crushing:
    Ecology used the controlled scenario emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2 fines crushing (SCC 3-05-020-05).

    d. Screening:

    Ecology used the controlled scenario emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2 screening (SCC 3-05-020-02, 03).

    e. Fines screening:
    Ecology used the controlled scenario emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2 fines screening (SCC 3-05-020-21). Assumed the same control efficiency for PM/PM10 (96.9%) as for PM2.5.

    f. Truck unloading:
    Ecology used the emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2 Truck Unloading -Fragmented Stone (SCC 3-05-020-31)

    g. Truck loading:
    Ecology used the emission factors from EPA AP-42 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2 Truck Loading - Conveyor, crushed stone (SCC 3-05-020-32).

h. Unpaved haul road estimates:

i. Silt content percent: Ecology used EPA AP-42 values from 13.2.2 Unpaved Roads. Ecology chose the mean value of 8.3 based on AP-42 Table 13.2.2-1 “Stone quarrying and processing” for the “Haul road to/from pit” option.

ii. Constant values a, b, and k: Ecology used the values from EPA AP-42 'Table 13.2.2-2. Values vary based on pollutant.

iii. Weighted fleet average factor of 29 tons: Ecology followed EPA AP-42 13.2.2 for unpaved roads and EPA AP-42 13.2.1.3 for paved roads: "only one emission factor should be calculated that represents the 'fleet.'" Both empty and full weights of a fleet vehicle, a big loader, and a smaller loader were taken into consideration for the weighted factor.

iv. Emission factor calculated from equation 1 of EPA AP-42 13.2.2. Values vary based on pollutant.

v. Rain factor of 90 days based on inspector input of counties regulated by Ecology in eastern and central Washington, taken from EPA AP-42; 13.2.2 Figure 13.2.2-1 “Mean number of days with 0.01 inch or more of precipitation in United States.” Rain credit only applied for annual emission estimate scenarios. Assumed no rain for max hourly and daily emission estimates.

vi. Gravel, water, and gravel water combination percent control credit of 29/80/86 % respectively based on inspector input: The gravel value assumes near 100% (95%) of gravel control credit. Background documents provided by Olympia Regional Clean Air Agency (ORCAA), OOEPA RACM Table 2.1.1-3 (Ohio), 1980. Ecology assumed a controlled water rate of 80% for unpaved roads (every 2 hours); calculated by ORCAA using equation from EPA/625/5-87/022EPA/625/5-87/022. The combined gravel and water factor equation used is 1-(1-gravel%)*(1-water%).

i. Paved haul road estimates:

i. Silt loading of 8.2 grams per meter squared taken from EPA AP-42 13.2.1 table 13.2.1-3 for stone quarry as the mean value provided. “The term silt loading (sL) refers to the mass of silt-size material (equal to or less than 75 micrometers [µm] in physical diameter) per unit area of the travel surface.

ii. Constant value k: Ecology used the values from EPA AP-42 13.2.1 for Paved Roads, Table 13.2.1-1: "The multiplier k includes unit conversions to produce emission factors in the units shown for the indicated size range from the mixed units required." Values vary based on pollutant.

iii. Weighted fleet average factor of 36 tons: Ecology followed EPA AP-42 13.2.1.3 for paved roads: "only one emission factor should be calculated that represents the 'fleet.'" Both empty and full weights of a fleet vehicle were taken into consideration for the weighted factor.

iv. Emission factor calculated from equation 2 of EPA AP-42 13.2.1.3. Values vary based on pollutant.

v. Rain factor of 90 days based on inspector input of counties regulated by Ecology in eastern and central Washington, taken from EPA AP-42; 13.2.1 Figure 13.2.1-2 "Mean number of days with 0.01 inch or more of precipitation in United States." Rain credit only applied for annual emission estimate scenarios. Assumed no rain for max hourly and daily emission estimates.

vi. Water control of 75 percent is assumed based on input from Ecology inspectors and ORCAA data for periodic vacuum sweeping.

J. Stockpiles

i. Particle size multiplier constant k value: Ecology used the value from EPA AP-42 13-2-4 Aggregate Handling And Storage Piles. Values vary based on pollutant.

ii. Mean wind speed from Moses Lake Airport (avg mean wind is 7.64 mph) https://weatherspark.com/y/1588/Average-Weather-in-Moses-Lake-Washington-United-States-Year-Round.

iii. Moisture content of 2.5 %. Ecology used the average value from EPA AP-42 13-2-4 Aggregate Handling And Storage Piles for a "Ranges Of Sources."

iv. Emission factor calculated from equation 1 of EPA AP42 13-2-4 Aggregate Handling And Storage Piles. Values vary based on pollutant.

v. Controls:

Ecology assumes that material initially brought to the crusher is assumed to be dry and assumes zero percent control removal (except that Ecology assumes rain control for annual est). Piles might come directly from pit-site or brought next to crusher, or to avoid overfilling rock crusher, excess feeder piles are sometimes located directly adjacent to crusher.

For post crushed/screened storage, Ecology site visits found some but not all facilities apply water to storage piles. Therefore, Ecology assumes 75 percent controls for storage piles, instead of 90 percent control. Ecology assumes some level of water control as facilities need to keep a certain moisture level to avoid segregation of sellable product (per John Hellyer, Luck Stone presentation and video

"Plant I - Stockpile Management & Loader Operations": slide: "Proper moisture content is critical" [for segregation of material] https://www.youtube.com/watch?v=7qL3NU1bw0A.)

2. Throughputs:

a. Annual, daily and hourly assumptions:

Ecology assumed annual tonnage of 600,000 tons per year, 4,317 tons per day, and 480 tons per hour for primary crushing as a starting point for AERMOD modeling. Ecology was prepared to either increase or decrease these amounts depending on the modeling results in order to show compliance with the NAAQS. Only annual and daily limits were included in the permit based on modeling.

As shown in the modeling analysis in Appendix D, distances to NAAQS compliance became the limiting factor regarding siting requirements in the general order. After internal review, Ecology decided to add buffer distance limitations to the general order in order to allow the throughput values listed in the permit. Unless a facility is already covered under a previous Ecology General Order for rock crushing, they must apply for a full Notice of Construction permit if they are not able to meet all the limits in the general order. Facilities that can meet all the limits in this general order, are welcome to apply for coverage under this general order.

3. **Units:** Most of the unit value assumptions were based on a multiple year survey of data for Ecology region facilities from 2009-2021. While Ecology recognizes that each facility may vary, yet for purposes of calculating emission estimates, Ecology made the following assumptions. Facilities are not required to have the exact number of units below in order to apply for coverage under the general permit.

   a. Transfers:

      Ecology assumed 12 transfer or conveyor points based on 8.5 conveyer drop on/off point totals (average), multiplied by two for each end of conveyor. Then to avoid double counting, subtracting the drop-offs onto crushers and screens whose emissions are already accounted for in their own emission factors for material dropped onto them. Finally, taking that total and rounding up to the nearest whole number

   b. Crushing:

      Ecology assumed approximately three total crusher units per facility consisting (on average) of 1 primary jaw crusher, 1.4 secondary/tertiary cone crushers, 0.4 secondary/tertiary roller crushers, and 0.3 fines crushers.

   c. Screening:

      Ecology assumed approximately 2.6 total screening units per facility consisting (on average) of 2.3 screens and 0.3 fines screening units.

d. Stockpiles

Ecology assumes 2 stockpiles per site. Potential pile if rock not directly taken from side of pit. A second one after crushing/screening. Emissions are based on throughput instead of the number of stockpiles so that pits with more stockpiles are not ignored.

4. Emission rates:

Emission rates derived from the emission factors, throughput values, and number of units are listed within the tables of the main section of this TSD. They were also calculated for the purposes of modeling and are listed in the Appendix D Modeling Analysis Summary. The only toxic air pollutant identified from WAC 173-460-150 for rock crushing was Silica, crystalline (respirable). Because the emission factor for Crystalline Silica is based on total emissions PM10, it is listed here as 5.58 percent of total PM10 emissions. This is the mid-range of "...the crystalline silica PM4 emission factors range from 3.21 to 7.95 percent of the PM10 emission factors." Source: Richards, J. R., Brozell, T. T., Rea, C., Boraston, G., & Hayden, J. (2009). PM4 Crystalline Silica Emission Factors and Ambient Concentrations at Aggregate-Producing Sources in California. Journal of the Air & Waste Management Association, 59(11), 1287–1295. https://doi.org/10.3155/1047-3289.59.11.1287.

Appendix D – Modeling Analysis Summary

1. Ambient impact analysis to support development of general orders

Ecology conducted air dispersion modeling to estimate ambient impacts of criteria and toxic air pollutants emitted from:

a. Hot mix asphalt plants (HMA)
b. Concrete batch plants (CB)
    i. Central mix
    ii. Truck mix
c. Rock crushers (RC)

We modeled emissions from these source groups at seven pits in different areas of central and eastern WA. Modeling scenarios were based on emissions estimated from numerous activities that occur during the following throughput / production scenarios:

a. HMA plant load out – 310 tons/hour, 2790 tons/day, and 160,554 tons/year
b. CB central mix concrete production - - 500 yd3/hr, 4,500 yd3/day, 246,000 yd3/year
c. CB truck mix concrete production - 500 yd3/hour, 4,500 yd3/day, 74,500 yd3/year
d. RC - 480 tons/hour, 4317 tons/day, and 600,000 tons/year

We relied on our internal modeling guidelines and incorporated methods for modeling fugitive dust sources developed by National Stone, Sand and Gravel Association[3] Annual, daily, or hourly emissions were modeled to estimate ambient impacts relative to the National Ambient Air Quality Standards (NAAQS) and acceptable source impact levels (ASILs). The modeling results from seven locations in central and eastern Washington were used to determine a range of approximate distances from each source group's key emission units to ambient concentrations of criteria pollutants that meet the NAAQS and toxic air pollutants that meet ASILs (Table 1).

Distances to NAAQS compliance varied depending on pollutant and location. The range in distances for the various pit locations was partly due to meteorological differences and existing background levels. Relevant to NAAQS, the distances to PM10 compliance were farthest for each source group with the greatest distances of:

a. 100 meters for HMA,
b. 140 meters for CB-central mix,
c. 170 meters for CB-truck mix, and

[3] National Stone Sand and Gravel Association. Modeling Fugitive Dust Sources with AERMOD. – Revised January 2007

d. 170 meters for RC

For air toxics, crystalline silica impact distances to the ASIL compliance were even farther than PM10 compliance distances, but the average impacts would be much lower than acceptability criteria under WAC 173-460-090, therefore, distances to PM10 compliance become the limiting factor regarding siting requirements in the general order.

2. Pollutants and relevant standards and ASILs

We considered emissions of PM10, PM2.5, NOx and several toxic air pollutants emitted from hot mix asphalt plants, concrete batch plants, and rock crushers that typically operate within mining pits. We estimated ambient impacts from these pollutants (added to relevant background levels for criteria pollutants)[4] to determine the approximate distances from sources where NAAQS and ASIL compliance is met.

Table 1. Pollutants included in refined air dispersion analysis and their relevant regulatory standards and screening levels

Pollutant	Source Group	Averaging Time	NAAQS Level	NAAQS Form	WA TAP ASIL level
PM2.5	HMA, CB, and RC	1 year	9.0	annual mean, averaged over 3 years	NA
PM2.5	HMA, CB, and RC	24-hr	35	98th percentile, averaged over 3 years	NA
PM10	HMA, CB, and RC	24-hr	150	Not to be exceeded more than once per year on average over 3 years	NA
NO2	HMA	1-hr	188	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years	NA
NO2	HMA	annual	100	annual mean	NA
NO2	HMA	1-hr	NA	NA	4.7E+02
Arsenic	HMA	1-year	NA	NA	3.0E-04
Cadmium	HMA	1-year	NA	NA	2.4E-04
Chromium VI	HMA and CB	1-year	NA	NA	4.0E-06
Nickel	HMA	1-year	NA	NA	3.8E-03
Mercury	HMA	24-hr	NA	NA	3.0E-02
Naphthalene	HMA	1-year	NA	NA	2.9E-02
Sulfur dioxide	HMA	1-hr	NA	NA	6.6E+02
Benzene	HMA	1-year	NA	NA	1.3E-01
Formaldehyde	HMA	1-year	NA	NA	1.7E-01

[4] https://idahodeq.maps.arcgis.com/apps/MapSeries/index.html?appid=0c8a006e11fe4ec5939804b873098dfe

Pollutant	Source Group	Averaging Time	NAAQS Level	NAAQS Form	WA TAP ASIL level
Carbon monoxide	HMA	1-hr	NA	NA	2.3E+04
Crystalline Silica	HMA, CB, and RC	24-hr	NA	NA	3.0E+00

3. Emissions Estimates

Ecology used EPA's Compilation of Air Pollutant Emissions Factors from Stationary Sources (AP-42) to estimate emissions from each source group. The following AP-42 Chapters.

a. 11.1 – Hot mix asphalt plants
b. 11.12 – Concrete batching
c. 11.19 – Crushed stone processing and pulverized mineral processing,

The assumptions and methods to estimate emissions specific to the development of the general orders are described in the General Order TSD. Emission rates for each source group and activity were converted to units of grams per second (g/s) or grams per second per square meter ($g/s/m^2$) for use in the AERMOD modeling system. Emission rates for each source group are shown in:

d. Table 2 (HMA)
e. Tabel 3 (CB- Central mix)
f. Table 4 (CB- Truck mix)
g. Table 5 (RC)

Table 2. Hot Mix Asphalt emission rates for modeling – $PM_{2.5}$, PM_{10}, and NO_x and crystalline silica

Source Group	Source ID	Source Description	Source type	$PM_{2.5}$ (Annual)	$PM_{2.5}$ (24-hr)	PM_{10} (24-hr)	NO_x	Silica (24-hr)	Units
Hot mix asphalt	A-BGHS	Baghouse	Point	8.14E-04	5.16E-03	2.16E-02	9.01E-01	1.2E-03	g/s
Hot mix asphalt	A-HTR	Heater	Point	1.46E-05	9.28E-05	2.67E-04	3.27E-02	1.5E-05	g/s
Hot mix asphalt	AR-ADGS	Aggregate and RAP Delivery to Ground	Volume	3.10E-06	1.96E-05	1.36E-02	NA	7.6E-04	g/s
Hot mix asphalt	AR-SP1	Aggregate and RAP Storage Pile	Area	0.0	0.0	7.62E-06	NA	4.3E-07	$g/s/m^2$
Hot mix asphalt	A-Transfers	Combined Transfers	Volume	1.73E-04	1.10E-03	3.79E-03	NA	2.1E-04	g/s
Hot mix asphalt	A-PLO	Asphalt drop into trucks	Volume	1.21E-03	7.65E-03	7.65E-03	NA	NA	g/s
Hot mix asphalt	A-SF	Asphalt silo storage	Point	1.35E-03	8.58E-03	8.58E-03	NA	NA	g/s
Hot mix asphalt	A-RCR	Asphalt RAP Crushing	Volume	6.93E-06	4.39E-05	2.37E-04	NA	1.3E-05	g/s
Hot mix asphalt	A-ASCR	Aggregate scalping screen	Volume	9.42E-04	5.97E-03	8.72E-02	NA	4.9E-03	g/s

Table 3. Central Mix Concrete Batch Plant emission rates for modeling – $PM_{2.5}$ and PM_{10} and crystalline silica

Source Group	Source ID	Source Description	Source type	$PM_{2.5}$ (Annual)	$PM_{2.5}$ (24-hr)	PM_{10} (24-hr)	Silica (24-hr)	Units
Concrete Batch – Central Mix	CB_SILO	Cement Supplement Transfer	Point	2.18E-04	1.46E-03	3.88E-03	2.2E-04	g/s
Concrete Batch – Central Mix	CB_TRAN23_24	Sand and Aggregate Transfer to Conveyor	Volume	7.57E-05	5.06E-04	1.75E-03	9.8E-05	g/s
Concrete Batch – Central Mix	CB_TRAN04_05	Aggregate and Sand Transfer to Elevation Bins	Volume	7.57E-05	5.06E-04	1.75E-03	9.8E-05	g/s
Concrete Batch – Central Mix	CB_WH	Weigh Hopper Loading	Volume	1.24E-03	8.26E-03	5.46E-02	3.0E-03	g/s
Concrete Batch – Central Mix	CB_CM09	Central Mix Loading	Volume	2.97E-03	1.98E-02	3.84E-02	2.1E-03	g/s
Concrete Batch – Central Mix	CB_ASP	Aggregate and Sand Pile	Area Circle	9.84E-07	6.59E-06	4.33E-05	7.6E-04	$g/s/m^2$
Concrete Batch – Central Mix	CB_AGG_UL	Aggregate and Sand Delivery to Ground Storage	Volume	2.69E-05	1.80E-04	6.22E-04	3.5E-05	g/s

Table 4. Truck Mix Concrete Batch Plant emission rates for modeling – $PM_{2.5}$ and PM_{10} and crystalline silica

Source Group	Source ID	Source Description	Source type	$PM_{2.5}$ (Annual)	$PM_{2.5}$ (24-hr)	PM_{10} (24-hr)	Silica (24-hr)	Units
Concrete Batch – Truck Mix	CB_SILO	Cement Supplement Transfer	Point	6.60E-05	1.46E-03	3.88E-03	2.2E-04	g/s
Concrete Batch – Truck Mix	CB_TRAN23_24	Sand and Aggregate Transfer to Conveyor	Volume	2.29E-05	5.06E-04	1.75E-03	9.8E-05	g/s
Concrete Batch – Truck Mix	CB_TRAN04_05	Aggregate and Sand Transfer to Elevation Bins	Volume	2.29E-05	5.06E-04	1.75E-03	9.8E-05	g/s
Concrete Batch – Truck Mix	CB_WH	Weigh Hopper Loading	Volume	3.75E-04	8.26E-03	5.46E-02	3.0E-03	g/s
Concrete Batch – Truck Mix	CB_TM	Truck Mix Loading	Volume	1.19E-03	2.61E-02	7.0 E-02	3.9E-03	g/s
Concrete Batch – Truck Mix	CB_ASP	Aggregate and Sand Pile	Area Circle	2.98E-07	6.59-05	4.33E-05	7.6E-04	$g/s/m^2$
Concrete Batch – Truck Mix	CB_AGG_UL	Aggregate and Sand Delivery to Ground Storage	Volume	8.16E-06	1.80E-04	6.22E-04	3.5E-05	g/s

Table 5. Rock Crusher emission rates for modeling – $PM_{2.5}$ and PM_{10} and crystalline silica

Source Group	Source ID	Source Description	Source type	$PM_{2.5}$ (Annual)	$PM_{2.5}$ (24-hr)	PM_{10} (24-hr)	Silica (24-hr)	Units
Rock Crusher	RC_PRCRSH	Primary Crusher	Volume	8.34E-04	2.19E-03	1.18E-02	6.6E-04	g/s
Rock Crusher	RC_SCR1	Screen 1	Volume	4.63E-04	1.22E-03	1.78E-02	9.9E-04	g/s
Rock Crusher	RC_SCR2	Screen 2	Volume	4.63E-04	1.22E-03	1.78E-02	9.9E-04	g/s
Rock Crusher	RC_SCRF	Fine Screen	Volume	1.72E-04	9.04E-04	1.32E-02	7.36E-04	g/s
Rock Crusher	RC_SCRSH	Secondary Crusher	Volume	1.15E-03	2.05E-03	1.09E-02	6.1E-04	g/s
Rock Crusher	RC_TCRSH	Tertiary Crusher	Volume	1.15E-03	2.05E-03	1.09E-02	6.1E-04	g/s
Rock Crusher	RC_SP1	Pre crush/screen storage pile	Area	4.10E-07	1.43E-06	9.45E-06	5.3E-07	$g/s/m^2$
Rock Crusher	RC_SP2	Post crush/screen storage pile	Area	1.95E-08	6.78E-08	4.49E-07	2.5E-08	$g/s/m^2$
Rock Crusher	RC_TRANS	Transfer/load/drop points	Area	6.55E-07	2.02E-06	1.04E-05	5.8E-07	$g/s/m^2$
Rock Crusher	RC_FCRSH	Fines Crusher	Volume	1.98E-04	5.21E-04	8.93E-03	4.98E-04	g/s

Table 6. Emission unit-specific emission rates for TAPs with emissions that exceed SQERs (excluding crystalline silica).

Pollutant	Averaging Time	A-BGHS Emission rate (g/s)	A-HTR Emission rate (g/s)	A-PLO Emission rate (g/s)	A-SFS Emission rate (g/s)	Central Mix CB-SiLO Emission rate (g/s)	Central Mix CB-CM09 Emission rate (g/s)	Truck Mix CB-SiLO Emission rate (g/s)	Truck Mix CB-TM10 Emission rate (g/s)
Arsenic and arsenic inorganic compounds	1-year	1.29E-06	NA	NA	NA	NA	NA	NA	NA
Benzene	1-year	9.01E-04	NA	4.99E-06	9.01E-06	NA	NA	NA	NA
Cadmium and compounds	1-year	9.47E-07	NA	NA	NA	NA	NA	NA	NA
Carbon monoxide	1-hr	4.99E+00	2.98E-03	NA	NA	NA	NA	NA	NA
Chromium (VI) and compounds	1-year	1.04E-06	NA	NA	NA	2.52E-09	1.75E-09	7.64E-10	1.71E-08
Formaldehyde	1-year	7.16E-03	8.69E-06	8.45E-06	1.94E-04	NA	NA	NA	NA
Mercury, elemental	24-hr	3.81E-05	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1-year	1.50E-03	4.22E-05	9.84E-06	1.07E-05	NA	NA	NA	NA
Nickel and compounds	1-year	1.45E-04	NA	NA	NA	NA	NA	NA	NA
Nitrogen dioxide	1-hr	9.0E-01	3.27E-02	NA	NA	NA	NA	NA	NA
Sulfur dioxide	1-hr	1.73E-01	6.33E-05	NA	NA	NA	NA	NA	NA

4. Modeling Methods and Assumptions

We used Lakes Environmental AERMOD View 12.0.0 which incorporates the 23132 version of the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) modeling system. AERMOD is the EPA's dispersion modeling system typically used to determine impacts from new sources of air pollution. The AERMOD modeling system includes the following key components:

a. AERMOD: the dispersion model;

b. AERMAP: the terrain processor for AERMOD;

c. AERMET: the meteorological data processor for AERMOD;

d. AERMINUTE: pre-processor to AERMET used to calculate hourly average winds from 1-minute ASOS data.

e. AERSURFACE: Land cover data used in AERMET

5. Site Selection and Source layout

Ecology's inspectors identified numerous existing pits/mining areas in central and eastern Washington as settings for conducting ambient impact analyses. Ecology chose the following locations to capture different terrain and meteorology:

a. Hiawatha Pit – near Moses Lake

b. Hutchison Pit – near Ellensburg

c. Chelan Sand and Gravel – near Chelan

d. American Rock – near Pasco

e. Ritzville Pit – near Ritzville

f. Okanogan Valley Concrete – near Okanogan

g. Smith – Dallesport Pit – near Dallesport

The goal of selecting multiple different pits in different areas of the state was to evaluate how different meteorology and terrain affects ambient impacts of sources with similar emissions and physical parameters.

The layout of each of the source groups (hot mix asphalt, concrete batch plant, and rock crushing) was chosen to reflect that of an actual pit in which all three activities occur (the Hiawatha Pit near Moses Lake, WA). This source configuration was kept consistent between each modeled location so that appropriate comparisons could be made.

UTM coordinates are used in the AERMOD system to denote geographic location of sources and receptors. Ecology determined the UTM coordinates (NAD83 Zones 10 and 11 depending on location in central or eastern WA) at the approximate center of each of the pits that we identified for modeling.

6. Source / Stack Parameters

Ecology identified physical parameters for each of the key emission sources. These parameters were based on existing source test data and best professional judgment and are shown in:

a. Table 7 (HMA)

b. Table 8 (CB)

c. Table 9 (RC)

Table 7. Physical modeling parameters for Hot Mix Asphalt sources

Source Group	Source ID	Source Description	Source type	Release Height (m)	Length of side (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension (m)	Exhaust Temperature (C)	Stack Inside Diameter (m)	Gas exit velocity (m/sec)
Hot mix asphalt	A-ASCR	Aggregate scalping screen	Volume	5.79	1.7	0.4	2.68	NA	NA	NA
Hot mix asphalt	A-BGHS	Baghouse	Point	11.23	NA	NA	NA	93.85	1.44	36.63
Hot mix asphalt	A-HTR	Heater	Point	3.66	NA	NA	NA	175.83	0.25	3.54
Hot mix asphalt	AR-ADGS	Aggregate and RAP Delivery to Ground	Volume	6.17	6.9	1.6	2.2	NA	NA	NA
Hot mix asphalt	AR-SP1	Aggregate and RAP Storage Pile	Area	1.8	60.96 x 60.96 oriented at 0 deg from north	NA	NA	NA	NA	NA
Hot mix asphalt	A-Transfers	Combined Transfers	Volume	4.46	1.38	0.32	1.85	NA	NA	NA
Hot mix asphalt	A-PLO	Asphalt drop into trucks	Volume	7.5	1.85	0.43	0.14	NA	NA	NA
Hot mix asphalt	A-SF	Asphalt silo storage	Point	19.51	NA	NA	NA	180.78	0.3	0.001

Source Group	Source ID	Source Description	Source type	Release Height (m)	Length of side (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension (m)	Exhaust Temperature (C)	Stack Inside Diameter (m)	Gas exit velocity (m/sec)
Hot mix asphalt	A-RCR	Asphalt RAP Crushing	Volume	1.52	1.85	0.43	0.35	NA	NA	NA

Table 8. Physical modeling parameters for Concrete Batch Plant sources

Source Group	Source ID	Source Description	Source type	Release Height (m)	Length of side (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension (m)	Exhaust Temperature (C)	Stack Inside Diameter (m)	Gas exit velocity (m/sec)
Concrete Batch	CB_AGG_UL	Aggregate and Sand Delivery to Ground Storage	Volume	6.2	6.9	1.6	2.2	NA	NA	NA
Concrete Batch	CB_ASP	Aggregate and Sand Pile	Area Circle	3.8	10 m radius of circle	NA	NA	NA	NA	NA
Concrete Batch	CB_CM09	Central Mix Loading	Volume	3.75	1.95	0.45	0.93	NA	NA	NA
Concrete Batch	CB_SILO	Cement Supplement Transfer	Point	12.2	NA	NA	NA	Ambient	0.32	4.0
Concrete Batch	CB_TM	Truck Mix Loading	Volume	3.75	1.95	0.45	0.93	NA	NA	NA
Concrete Batch	CB_TRAN 04_05	Aggregate and Sand	Volume	8.1	3.05	0.71	0.43	NA	NA	NA

Source Group	Source ID	Source Description	Source type	Release Height (m)	Length of side (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension (m)	Exhaust Temperature (C)	Stack Inside Diameter (m)	Gas exit velocity (m/sec)
		Transfer to Elevation Bins								
Concrete Batch	CB_TRAN 23_24	Sand and Aggregate Transfer to Conveyor	Volume	3.5	3.65	0.85	0.43	NA	NA	NA
Concrete Batch	CB_WH	Weigh Hopper Loading	Volume	4.72	3.65	0.85	0.14	NA	NA	NA

Table 9. Physical modeling parameters for Rock Crusher sources

Source Group	Source ID	Source Description	Source type	Release Height (m)	Length of side (m)	Initial Vertical Dimension (m)
Rock Crusher	RC_PRCRSH	Primary Crusher	Volume	4.3	1.66	1.0
Rock Crusher	RC_SCR1	Screen 1	Volume	5.0	2.0	1.16
Rock Crusher	RC_SCR2	Screen 2	Volume	5.0	2.0	1.16
Rock Crusher	RC_SCRF	Fine Screen	Volume	5.0	2.0	1.16
Rock Crusher	RC_SCRSH	Secondary Crusher	Volume	4.3	1.7	1.0
Rock Crusher	RC_TCRSH	Tertiary Crusher	Volume	4.3	1.7	1.0
Rock Crusher	RC_SP1	Pre-crush / screen storage pile	Area	3.0	58	NA
Rock Crusher	RC_SP2	Post-crush / screen storage pile	Area	3	133	NA
Rock Crusher	RC_Trans	Transfer / load/ drop points	Area	1.5	67	NA
Rock Crusher	RC_FCRSH	Fines Crusher	Volume	4.3	1.7	1.0

7. Receptor Grid

Ecology use a multi-tiered receptor grid consistent with that required of applicants conducting analyses for new sources of air pollution (Table 10).[5] One exception is that the receptor grid was constrained to a six km by six km domain instead of a 10 km by 10 km grid. This was done to reduce model run times and because we anticipated ambient impacts to be at levels of concern in areas relatively close to the sources as they mostly emit pollutants at low release heights. The receptor grid consisted of 4400 receptors, each with a unique UTM coordinate. We set the flagpole height of each receptor at 1.5 meters to approximate the breathing zone of people. Figure 1 shows the receptor grid relative to the Hutchison Pit near Ellensburg.

Table 10. Multi-tiered receptor grid used in dispersion model

[5] https://apps.ecology.wa.gov/publications/documents/0802025.pdf

Distance from center (m)	Grid spacing (m)
0- 150	12.5
150- 400	25
400 - 900	50
900 - 2000	100
2000 - 3000	300

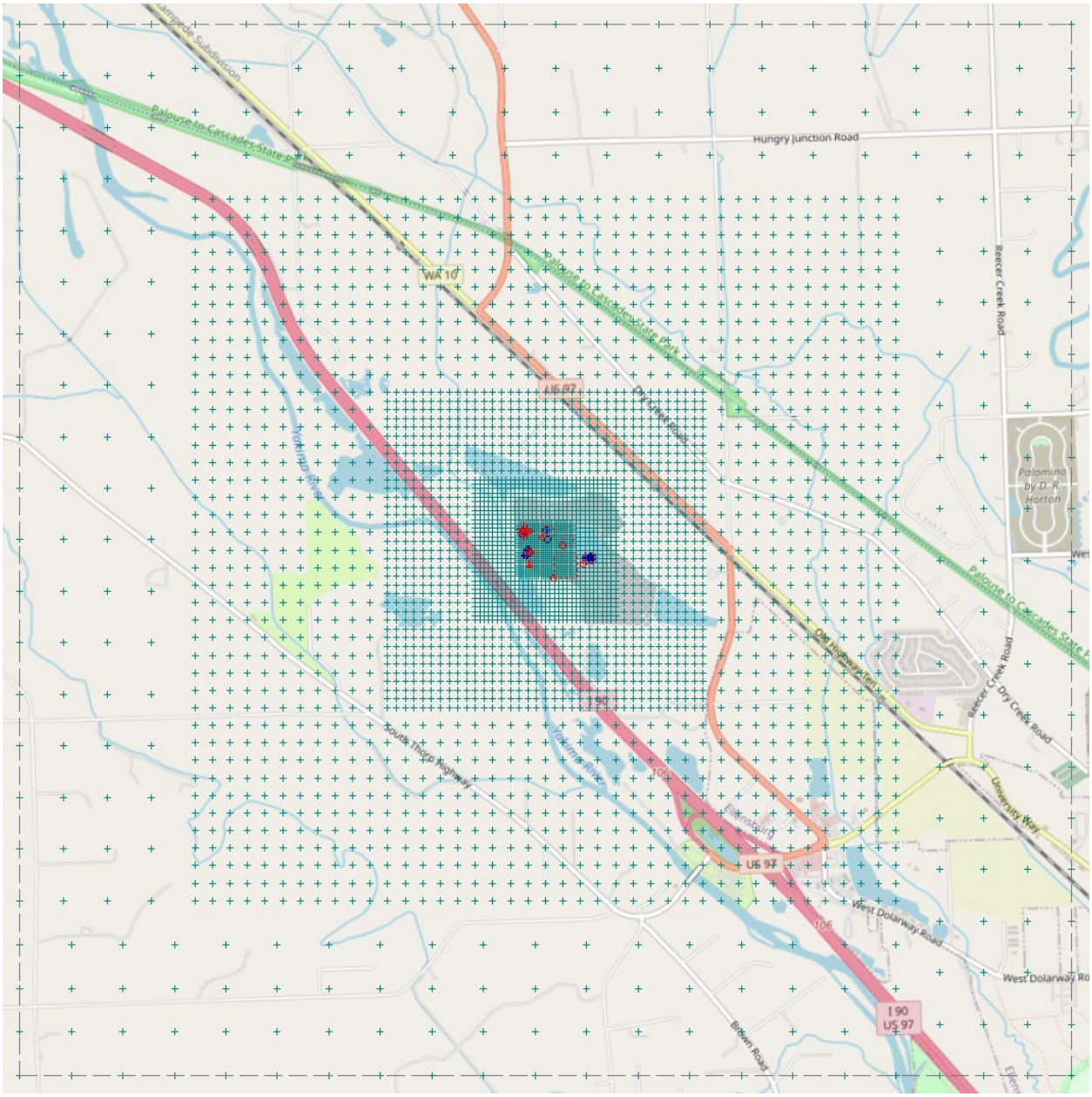


Figure 1. Example of receptor grid layout – Hutchison Pit near Ellensburg

8. Terrain

Terrain was processed in AERMAP using National Elevation Datasets supplied by the United State Geological Survey (USGS). AERMAP uses topographic data to estimate surface elevations of sources and receptors within the modeling domain.

9. Meteorology

AERMET version 23132 was used to process five years of meteorological data (2017 through 2021) from seven sites in central and eastern WA. Meteorological data consist of hourly surface observations such as wind speed, wind direction, and temperature. Generally, we selected five years of consecutive meteorological data from a representative National Weather Service (NWS) Automated Surface Observing System (ASOS) site.

We processed meteorology from ASOS sites nearest the pit locations of interest. 1-min ASOS data using AERMINUTE were also processed to minimize calm hours. Table 11 shows the meteorological stations and the corresponding percent of calm conditions and missing data. Our minimum requirement for data sufficiency is that the meteorological data set contains less than 10 percent calm hours with over 90 percent data completeness.

Upper air data from Spokane during the same time (2017-2021) were also processed through AERMET. These twice-daily upper air sounding measurements provide information regarding meteorological parameters at various elevations above ground.

Surface characteristics based on land used data were obtained using 2016 USGS National Land Cover Data. These data were processed using AERSURFACE to identify surface roughness, Bowen ratio, and albedo within 12- 30 degree sectors surrounding the meteorological observation site.

Table 11. Meteorological stations used in dispersion modeling and the percentage of calm and missing data.

Location	Hours Missing Data 2017 – 2021 (%)	Hours Calm Data 2017 – 2021 (%)
Dallesport - The Dalles - Columbia Gorge Regional/The Dalles Municipal Airport,	420 (0.96%)	681 (1.55%)
Ellensburg – Bowers Field Airport	768 (1.75%)	697 (1.59%)
Moses Lake – Grant County International Airport	435 (0.99%)	763 (1.73%)
Omak – Omak Airport	621 (1.42%)	1246 (2.84%)
Pasco – Tri Cities Airport	366 (0.88%)	499 (1.14%)
Spokane - Spokane International Airport	364 (0.83%)	309 (0.70%)
Wenatchee (East) – Pangborn Memorial Airport	513 (1.17%)	802 (1.83%)

10. Background Concentrations

Ecology used the NW AIRQUEST criteria pollutant background concentration lookup tool to determine background concentrations relevant to different areas of central and eastern WA.[6] The background concentration lookup tool relies on model and monitoring data from July 2014 through June 2017 to estimate background concentrations of criteria pollutant design values for use in air permitting decisions. We selected background levels at coordinates relevant to each of the pit site locations (Table 12).

Table 12. Background $PM_{2.5}$, PM_{10}, and NO_2 levels (mg/m^3) at each site.

Pit Name	City or nearest city	Background Level Lat/Long Coordinates	$PM_{2.5}$ Annual Background Level (mg/m^3)	$PM_{2.5}$ 24-hr Background Level (mg/m^3)	PM_{10} 24-hr Background Level (mg/m^3)	NO_2 Annual Background Level (mg/m^3)	NO_2 1 hr Background Level (mg/m^3)
Hiawatha	Moses Lake	47.13, -119.47	5.7	18.4	82.9	4.1	21.1
American Rock	Pasco	46.27, -119.28	6.6	19.6	81.1	16.4	76.3
Chelan Sand and Gravel	Chelan	47.88, -119.95	4.5	11.9	70.3	2.4	10.9
Hutchison	Ellensburg	47.03, -120.62	5.7	25.5	62.4	11.1	61.2
Ritzville	Ritzville	47.15, -118.32	5.3	15.4	89.7	6.4	32.2
Okanogan Valley Concrete	Okanogan	48.36, -119.60	6.6	26.2	78.6	2.4	11.5
Smith	Dallesport	45.61, -121.16	6.3	20.2	75.0	11.7	51.2

11. Modeling Results

For each source group and emissions scenario, we determined the ambient impact concentration that would meet the NAAQS (considering background concentrations) or ASILs. Then we modeled to determine the area in which the NAAQS or ASIL would be met. We used the AERMOD results to determine approximate distances from the key emission units at hot mix asphalt plants, concrete batch plants, and rock crushers to the locations where relevant NAAQS and ASILs would be met for each scenario. Using the measurement tool in AERMOD View, we estimated the distance from the key emission units to the isopleth

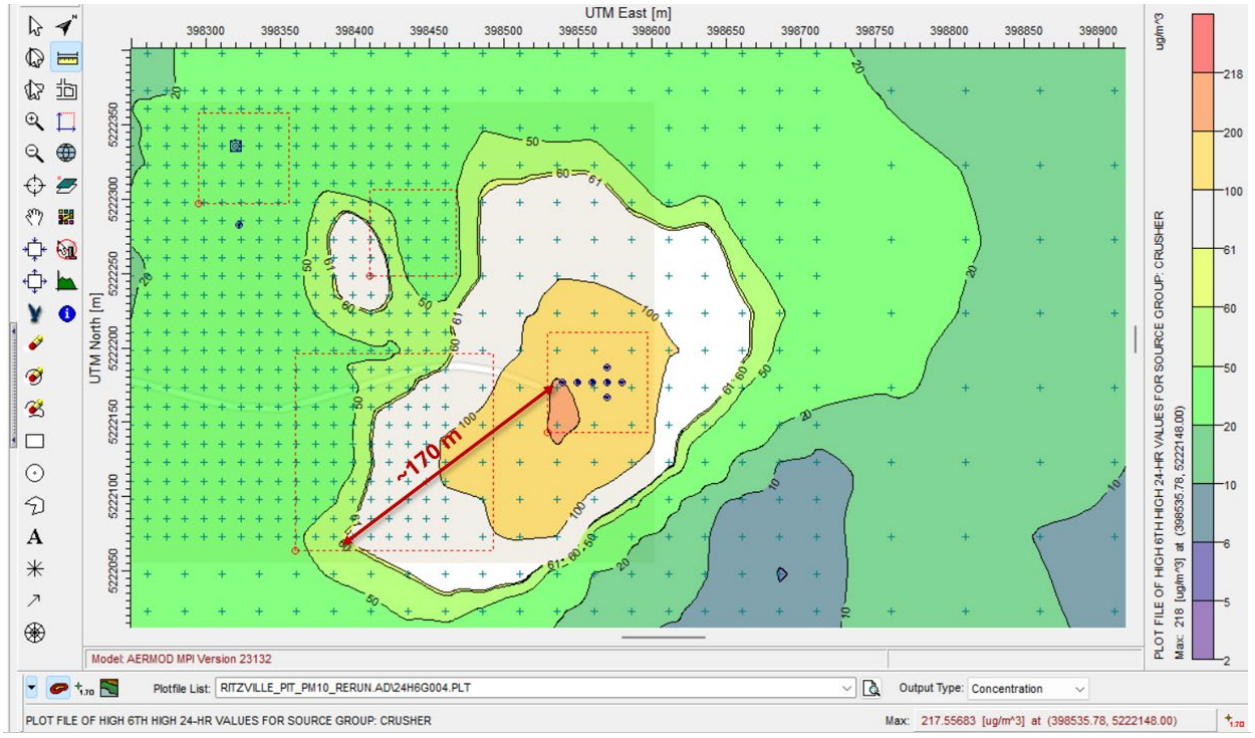
[6] https://lar.wsu.edu/nw-airquest/

at which NAAQS or ASIL compliance was achieved. These measurements are intended to inform the distance that emission units should be sited from the ambient boundary or sensitive receptors. Figure 2 shows an example of how these measurements were made.

Table 13. Model output vaues used for comparison with NAAQS or ASILs

Pollutant	Model output value used for comparison to NAAQS
PM_{10}	6th highest PM_{10} 24-hr concentration over five year period
$PM_{2.5}$	average 8th high 24-hr concentration over three year period
$PM_{2.5}$	annual mean, averaged over three years
NO_2	annual mean
NO_2	Maximum one hour as a worst-case comparison. If screening values failed NAAQS compliance, then the model was rerun to obtain the 8th high maximum daily one hour concentration averaged over three years for direct comparison to the NAAQS
Air toxics	Maximum concentration at toxic air pollutant specific averaging time in WAC 173-460-150

Figure 2. Example – determining distance to compliance with NAAQS or ASILs



12. Hot mix asphalt – modeling results

Tables 14 to 19 show the modeling results and distances to relevant NAAQS or ASIL compliance for HMA plants at each location. The farthest distance to NAAQS compliance is

100 m for PM_{10} at the Ritzville Pit. Distances to crystalline silica ASIL compliance were even greater (up to 280 m) but the average impacts would meet approvability criteria under WAC 173-460-090. The following ranges of distances to NAAQS or ASIL compliance are shown below:

PM_{10} –50 to 100 m

Daily $PM_{2.5}$ – 0 to 30 m

Annual $PM_{2.5}$ – 0 m

1hr NO_2 – 0 m

Annual NO_2 – 0 m

a. Air Toxics

i. Arsenic - 0 m
ii. Benzene - 0 m
iii. Cadmium - 0 m
iv. Chromium (VI) and compounds - 0 m
v. Mercury, elemental - 0 m
vi. Naphthalene - 0 m
vii. Nickel and Compounds - 0 m
viii. Nitrogen Dioxide - 0 m
ix. Sulfur Dioxide - 0 m
x. Crystalline Silica
    A. (first-tier review) – 90 to 280 m
    B. (second tier review) – 0 m

Table 14. Summary of modeled PM_{10} concentrations , background levels, and distance from key hot mix asphalt emission units to point of NAAQS compliance

HMA - PM_{10}	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
PM_{10} (N+1 highest) 24-hr PM concentration (mg/m^3) – point of maximum impact	216.6	203.8	195.3	350.3	355.5	694.6	273.3
PM_{10} background design value (mg/m^3)	81.1	70.3	82.9	62.4	78.6	89.7	75.0
PM_{10} (sum of project and background) (mg/m^3)	297.7	274.1	278.2	412.7	434.1	784.3	348.3
PM_{10} NAAQS (mg/m^3)	150	150	150	150	150	150	150
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No
PM_{10} impact level to meet NAAQS (mg/m^3)	68.9	79.7	67.1	87.6	71.4	60.3	75.0
Distance from key emission units to NAAQS compliance (m)	70	50	60	50	60	100	70

Table 15. Summary of modeled daily $PM_{2.5}$ concentrations , background levels, and distance from key hot mix asphalt emission units to point of NAAQS compliance

HMA – Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ 24-hr (8th high) (mg/m^3)– point of maximum impact	12.1	11.8	8.5	20.1	16.4	28.9	14.9
$PM_{2.5}$ background design value (mg/m^3)	19.6	11.9	18.4	25.5	26.2	15.6	20.2
$PM_{2.5}$ (sum of project and background) (mg/m^3)	32	24	27	46	43	45	35
$PM_{2.5}$ NAAQS (mg/m^3)	35	35	35	35	35	35	35
NAAQS met at point of maximum impact?	Yes	Yes	Yes	No	No	No	Yes
$PM_{2.5}$ impact level to meet NAAQS (mg/m^3)	15.4	23.1	16.6	9.5	8.9	19.4	14.8
Distance from key emission units to NAAQS compliance (m)	0	0	0	30	20	10	0

Table 16. Summary of modeled annual $PM_{2.5}$ concentrations , background levels, and distance from key hot mix asphalt emission units to point of NAAQS compliance

HMA – Annual $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ annual concentration (mg/m^3)– point of maximum impact	0.7	1.0	0.6	0.7	0.9	0.8	0.7
$PM_{2.5}$ background design value (mg/m^3)	6.6	4.5	5.7	5.7	6.6	5.3	6.3
$PM_{2.5}$ (sum of project and background) (mg/m^3)	7.3	5.4	6.3	6.4	7.4	6.1	7.0
$PM_{2.5}$ NAAQS (mg/m^3)	9.0	9.0	9.0	9.0	9.0	9.0	9.0
NAAQS met at point of maximum impact?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 17. Summary of modeled 1-hr NO_2 concentrations, background levels, and total concentrations relative to the NAAQS - hot mix asphalt

HMA – 1-hr NO_2	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
NO_2 maximum 1-hr concentration (mg/m^3) assuming 100% Nox = NO_2	147	169	97.8	48.8	77.0	64.0	126

HMA – 1-hr NO_2	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
NO_2 1-hr (8th high) concentration (mg/m^3) – point of maximum impact ARM2	80.2	NA	NA	NA	NA	NA	NA
NO_2 background design value (mg/m^3)	76.3	10.9	21.1	61.2	11.5	32.2	51.2
NO_2 (sum of project and background) (mg/m^3)	156.5	179.9	118.9	100	88.5	96.2	177.2
NO_2 1-hr NAAQS (mg/m^3)	188	188	188	188	188	188	188
NAAQS met at point of maximum impact?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 18. Summary of modeled annual NO_2 concentrations, background levels, and total concentrations relative to the NAAQS - hot mix asphalt

HMA – annual NO_2	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
NO_2 maximum annual average concentration (mg/m^3) 100% NO_x = NO_2	0.23				0.58	0.31	0.45

HMA – annual NO_2	**American Rock**	**Chelan Sand and Gravel**	**Hiawatha**	**Huthison Pit**	**Okanogan Valley Concrete**	**Ritzville Pit**	**Smith-Dallesport**
NO_2 background design value (mg/m^3)	4.1	16.4	2.4	11.1	6.4	2.4	11.7
NO_2 (sum of project and background) (mg/m^3)	4.3				7.0	2.7	12.2
NO_2 annual NAAQS (mg/m^3)	100	100	100	100	100	100	100
NAAQS met at point of maximum impact?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 19. Summary of modeled air toxics concentrations and distance from key hot mix asphalt emission units to ASIL compliance

HMA – air toxics	Avg Time	ASIL (mg/m^3)	American Rock (mg/m^3)	Chelan Sand and Gravel (mg/m^3)	Hiawatha (mg/m^3)	Huthison Pit (mg/m^3)	Okanogan Valley Concrete (mg/m^3)	Ritzville Pit (mg/m^3)	Smith-Dallesport (mg/m^3)
Arsenic	yr	3.0E-04	5.5E-07	1.8E-06	4.9E-07	3.1E-06	6.8E-07	6.7E-07	1.1E-06
Benzene	yr	1.3E-01	9.0E-04	1.3E-03	7.6E-04	2.3E-03	7.9E-04	5.8E-04	9.5E-04
Cadmium	yr	2.4E-04	4.1E-07	1.3E-06	3.6E-07	2.3E-06	5.0E-07	4.9E-07	8.3E-07
Chromium (VI) and compounds	yr	4.0E-06	4.5E-07	1.4E-06	4.0E-07	2.5E-06	5.5E-07	5.4E-07	9.1E-07
Mercury, elemental	24-hr	3.0E-02	2.6E-04	8.2E-04	4.4E-04	5.3E-04	4.4E-04	3.3E-04	3.1E-04
Naphthalene	yr	2.9E-02	5.6E-03	1.0E-02	7.2E-03	1.6E-02	1.3E-02	6.7E-03	1.0E-02
Nickel and Compounds	yr	3.8E-03	6.2E-05	2.0E-04	5.6E-05	3.5E-04	7.6E-05	7.6E-05	1.3E-04
Nitrogen Dioxide	1-hr	4.70E+02	1.5E+02	1.7E+02	9.8E+01	4.9E+01	7.7E+01	6.4E+01	1.3E+02
Sulfur Dioxide	1-hr	6.60E+02	5.8E+00	3.1E+01	5.0E+00	5.4E+00	1.1E+01	4.0E+00	7.0E+00
Crystalline Silica	24-hr	3.0E+00	1.8E+01	1.8E+01	2.1E+01	1.8E+01	3.1E+01	5.2E+01	2.5E+01
Distance from key emission units to Crystalline Silica ASIL compliance (m)	-	-	280	90	120	110	120	150	120

13. Central Mix Concrete Batch Plant – modeling results

Tables 20 to 23 show the modeling results and distances to relevant NAAQS or ASIL compliance for Central Mix Concrete Batch Plants at each location. The farthest distance to NAAQS compliance is 140 m for PM_{10} at the Ritzville Pit. Distances to crystalline silica ASIL compliance were even greater (up to 190 m) but the average impacts would meet approvability criteria under WAC 173-460-090. The following ranges of distances to NAAQS or ASIL compliance are shown below:

PM_{10} –70 to 140 m

Daily $PM_{2.5}$ – 60 to 120 m

Annual $PM_{2.5}$ – 0 to 20 m

a. Air Toxics

   i. Chromium (VI) and compounds -0 m

   ii. Crystalline Silica

      A. (first-tier review - 120 to 190 m

      B. (second tier review) – 0 m

Table 20. Summary of modeled PM_{10} concentrations, background levels, and distance from key central mix concrete batch plant emission units to point of NAAQS compliance

CB – Central Mix: PM_{10}	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
PM_{10} (N+1 highest) 24-hr PM concentration (mg/m^3) – point of maximum impact	316.2	289.8	164.7	527.4	664.6	508.7	190.5
PM_{10} background design value (mg/m^3)	81.1	70.3	82.9	62.4	78.6	89.7	75.0
PM_{10} (sum of project and background) (mg/m^3)	397.3	360.1	247.6	589.8	743.2	598.4	265.5
PM_{10} NAAQS (mg/m^3)	150	150	150	150	150	150	150
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No

CB – Central Mix: PM_{10}	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
PM_{10} impact level to meet NAAQS (mg/m^3)	68.9	79.7	67.1	87.6	71.4	60.3	75.0
Distance from key emission units to NAAQS compliance	140	80	120	70	80	140	100

Table 21. Summary of modeled daily $PM_{2.5}$ concentrations , background levels,and distance from key central mix concrete batch plant emission units to point of NAAQS compliance

CB – Central Mix: Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ Maximum impact 24-hr (8th high) (mg/m^3) – point of maximum impact	127.9	85.2	33.0	194.0	102.6	187.5	67.1
$PM_{2.5}$ background design value (mg/m^3)	19.6	11.9	18.4	25.5	26.2	15.6	20.2
$PM_{2.5}$ (sum of project and background) (mg/m^3)	148	97	51	220	129	203	87
$PM_{2.5}$ NAAQS (mg/m^3)	35	35	35	35	35	35	35

CB – Central Mix: Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No
$PM_{2.5}$ impact level to meet NAAQS (mg/m^3)	15.4	23.1	16.6	9.5	8.9	19.4	14.8
Distance from key emission units to NAAQS compliance	120	60	70	50	110	100	100

Table 22. Summary of modeled annual $PM_{2.5}$ concentrations , background levels,and distance from key central mix concrete batch plant emission units to point of NAAQS compliance

CB – Central Mix: Annual $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ Maximum impact annual concentration (mg/m^3) – point of maximum impact	6.1	5.9	2.6	4.5	6.2	2.8	4.2
$PM_{2.5}$ background design value (mg/m^3)	6.6	4.5	5.7	5.7	6.6	5.3	6.3
$PM_{2.5}$ (sum of project and background) (mg/m^3)	12.8	10.4	8.2	10.1	12.7	8.1	10.5

CB – Central Mix: Annual $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ NAAQS (mg/m^3)	9.0	9.0	9.0	9.0	9.0	9.0	9.0
NAAQS met at point of maximum impact?	No	No	Yes	No	No	Yes	No
$PM_{2.5}$ impact level to meet NAAQS (mg/m^3)	2.4	4.5	3.3	3.3	2.4	3.8	2.7
Distance from key emission units to NAAQS compliance	20	20	0	20	20	0	20

Table 23. Summary of modeled air toxics concentrations , background levels, and distance from key central mix concrete batch plant emission units to point of ASIL compliance

CB – Central Mix: Air Toxics	Avg Time	ASIL (mg/m^3)	American Rock (mg/m^3)	Chelan Sand and Gravel (mg/m^3)	Hiawatha (mg/m^3)	Huthison Pit (mg/m^3)	Okanogan Valley Concrete (mg/m^3)	Ritzville Pit (mg/m^3)	Smith-Dallesport (mg/m^3)
Chromium (VI) and compounds	yr	4.0E-06	1.3E-06	1.4E-06	8.3E-07	8.4E-07	1.4E-06	8.8E-07	1.3E-06
Crystalline Silica	24-hr	3.0E+00	2.5E+01	2.5E+01	2.0E+01	2.1E+01	5.0E+01	3.9E+01	1.8E+01
Distance from key emission units to Crystalline Silica ASIL compliance	-	-	180	160	190	120	150	190	130

14. Truck Mix Concrete Batch Plant – modeling results

Tables 24to 27 show the modeling results and distances to relevant NAAQS or ASIL compliance for Truck Mix Concrete Batch Plants at each location. The farthest distance to NAAQS compliance is 170 m for PM_{10} at the Ritzville Pit. Distances to crystalline silica ASIL compliance were even greater (up to 240 m) but the average impacts would meet approvability criteria under WAC 173-460-090. The following ranges of distances to NAAQS or ASIL compliance are shown below:

PM_{10} –80 to 170 m

Daily $PM_{2.5}$ – 70 to 160 m

Annual $PM_{2.5}$ – 0 m

a. Air Toxics

   i. Chromium (VI) and compounds 30 m to 60 m

   ii. Crystalline Silica

      A. (first-tier review -130 to 240 m

      B. (second tier review) – 0 m

Table 24. Summary of modeled PM_{10} concentrations , background levels, and distance from key truck mix concrete batch plant emission units to point of NAAQS compliance

CB – Truck Mix: PM_{10}	**American Rock**	**Chelan Sand and Gravel**	**Hiawatha**	**Huthison Pit**	**Okanogan Valley Concrete**	**Ritzville Pit**	**Smith-Dallesport**
PM_{10} (N+1 highest) 24-hr PM concentration (ug/m3) – point of maximum impact	1262.9	557.8	257.9	2916.3	1386.2	1577.0	483.0
PM_{10} background design value (ug/m3)	81.1	70.3	82.9	62.4	78.6	89.7	75.0
PM_{10} (sum of project and background) (ug/m3)	1344.0	628.1	340.8	2978.7	1464.8	1666.7	558.0
PM_{10} NAAQS	150.0	150.0	150.0	150.0	150.0	150.0	150.0
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No
PM_{10} impact level to meet NAAQS	68.9	79.7	67.1	87.6	71.4	60.3	75.0
Distance from key emission units to NAAQS compliance	160	100	140	80	100	170	120

Table 25. Summary of modeled daily $PM_{2.5}$ concentrations , background levels, and distance from key truck mix concrete batch plant emission units to point of NAAQS compliance

CB – Truck Mix: Daily $PM_{2.5}$	**American Rock**	**Chelan Sand and Gravel**	**Hiawatha**	**Huthison Pit**	**Okanogan Valley Concrete**	**Ritzville Pit**	**Smith-Dallesport**
$PM_{2.5}$ Maximum impact 24-hr (8th high) ug/m3 – point of maximum impact	144.9	129.0	39.9	887.8	316.5	550.9	119.7
$PM_{2.5}$ background design value (ug/m3)	19.6	11.9	18.4	25.5	26.2	15.6	20.2
$PM_{2.5}$ (sum of project and background) (ug/m3)	165	141	58	913	343	566	140

CB – Truck Mix: Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ NAAQS	35	35	35	35	35	35	35
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No
$PM_{2.5}$ impact level to meet NAAQS	15.4	23.1	16.6	9.5	8.9	19.4	14.8
Distance from key emission units to NAAQS compliance	150	80	100	65	120	160	120

Table 26. Summary of modeled annual $PM_{2.5}$ concentrations , background levels, and distance from key truck mix concrete batch plant emission units to point of NAAQS compliance

CB – Truck Mix: Annual $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ Maximum impact 24-hr (8th high) ug/m3 – point of maximum impact	2.0	3.2	1.2	2.1	2.0	1.2	1.5
$PM_{2.5}$ background design value (ug/m3)	6.6	4.5	5.7	5.7	6.6	5.3	6.3
$PM_{2.5}$ (sum of project and background) (ug/m3)	8.7	7.6	6.8	7.8	8.5	6.5	7.8
$PM_{2.5}$ NAAQS	9.0	9.0	9.0	9.0	9.0	9.0	9.0
NAAQS met at point of maximum impact?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 27. Summary of modeled air toxics concentrations , background levels, and distance from key truck mix concrete batch plant emission units to point of ASIL compliance

CB – Truck Mix: Air Toxics	**Avg Time**	**ASIL** (mg/m^3)	**American Rock** (mg/m^3)	**Chelan Sand and Gravel** (mg/m^3)	**Hiawatha** (mg/m^3)	**Huthison Pit** (mg/m^3)	**Okanogan Valley Concrete** (mg/m^3)	**Ritzville Pit** (mg/m^3)	**Smith-Dallesport** (mg/m^3)
Chromium (VI) and compounds	yr	4.0E-06	1.9E-05	1.4E-05	8.9E-06	8.3E-06	2.0E-05	7.8E-06	1.2E-05
Crystalline Silica	24-hr	3.0E+00	4.5E+01	4.2E+01	2.6E+01	4.0E+01	1.3E+02	1.3E+02	3.7+01
Distance from key emission units to Chromium (VI) and compounds ASIL compliance	-	-	60	60	50	50	40	30	50
Distance from key emission units to Crystalline Silica ASIL compliance	-	-	220	130	200	150	130	240	170

15. Rock Crusher – modeling results

Tables 28 to 31 show the modeling results and distances to relevant NAAQS or ASIL compliance for Central Mix Concrete Batch Plants at each location. The farthest distance to NAAQS compliance is 170 m for PM_{10} at the Ritzville Pit. Distances to crystalline silica ASIL compliance were even greater (up to 260 m) but the average impacts would meet approvability criteria under WAC 173-460-090. The following ranges of distances to NAAQS or ASIL compliance are shown below:

PM_{10} –70 to 170 m

Daily $PM_{2.5}$ – 0 to 80 m

Annual $PM_{2.5}$ – 20 to 60 m

a. Air Toxics

i. Crystalline Silica

A. (first-tier review) -110 to 260 m

B. (second tier review) – 0 m

Table 28. Summary of modeled PM_{10} concentrations , background levels, and distance from key rock crusher emission units to point of NAAQS compliance

RC- PM_{10}	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
PM_{10} (N+1 highest) 24-hr PM concentration (ug/m3) – point of maximum impact	335.6	183.9	229.0	291.7	286.0	217.6	373.2
PM_{10} background design value (ug/m3)	81.1	70.3	82.9	62.4	78.6	89.7	75.0
PM_{10} (sum of project and background) (ug/m3)	416.7	254.2	311.9	354.1	364.6	307.3	448.2
PM_{10} NAAQS	150.0	150.0	150.0	150.0	150.0	150.0	150.0
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No
PM_{10} impact level to meet NAAQS	68.9	79.7	67.1	87.6	71.4	60.3	75.0
Distance from key emission units to NAAQS compliance	140	70	120	70	110	170	100

Table 29. Summary of modeled daily $PM_{2.5}$ concentrations , background levels, and distance from key rock crusher emission units to point of NAAQS compliance

RC- Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ Maximum impact 24-hr (8th high) ug/m3 – point of maximum impact	41.2	19.8	34.3	43.9	36.7	29.9	52.3
$PM_{2.5}$ background design value (ug/m3)	19.6	11.9	18.4	25.5	26.2	15.6	20.2
$PM_{2.5}$ (sum of project and background) (ug/m3)	61	32	53	69	63	46	72
$PM_{2.5}$ NAAQS	35	35	35	35	35	35	35
NAAQS met at point of maximum impact?	No	Yes	No	No	No	No	No
$PM_{2.5}$ impact level to meet NAAQS	15.4	23.1	16.6	9.5	8.9	19.4	14.8
Distance from key emission units to NAAQS compliance	80	0	50	40	80	60	60

Table 30. Summary of modeled annual $PM_{2.5}$ concentrations , background levels, and distance from key rock crusher emission units to point of NAAQS compliance

RC- Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
$PM_{2.5}$ Maximum impact annual concentration (ug/m3) – point of maximum impact	6.9	5.1	6.9	6.9	6.6	4.8	8.0
$PM_{2.5}$ background design value (ug/m3)	6.6	4.5	5.7	5.7	6.6	5.3	6.3
$PM_{2.5}$ (sum of project and background) (ug/m3)	13.5	9.5	12.5	12.6	13.2	10.1	14.3
$PM_{2.5}$ NAAQS	9.0	9.0	9.0	9.0	9.0	9.0	9.0

RC- Daily $PM_{2.5}$	American Rock	Chelan Sand and Gravel	Hiawatha	Huthison Pit	Okanogan Valley Concrete	Ritzville Pit	Smith-Dallesport
NAAQS met at point of maximum impact?	No	No	No	No	No	No	No
$PM_{2.5}$ impact level to meet NAAQS	2.4	4.5	3.3	3.3	2.4	3.8	2.7
Distance from key emission units to NAAQS compliance	60	20	40	40	40	20	50

Table 31. Summary of modeled crystalline silica concentrations and distance from key rock crusher emission units to point of ASIL compliance

RC- Air Toxics	Avg Time	ASIL (mg/m^3)	American Rock (mg/m^3)	Chelan Sand and Gravel (mg/m^3)	Hiawatha (mg/m^3)	Huthison Pit (mg/m^3)	Okanogan Valley Concrete (mg/m^3)	Ritzville Pit (mg/m^3)	Smith-Dallesport (mg/m^3)
Crystalline Silica	24-hr	3.0E+00	2.7E+01	1.5E+01	2.7E+01	3.0E+01	2.4E+01	1.9E+01	3.5E+01
Distance from key emission units to Crystalline Silica ASIL compliance	-	-	200	110	200	130	130	260	190

16. Crystalline Silica – discussion regarding ASIL exceedances

Dispersion modeling showed crystalline silica levels above the ASIL for all source groups. Distances to the ASIL may be challenging for some processes within pits to comply. The ASIL, however, is a screening level intended to be very conservative. The ASIL value (3 mg/m^3) is based on California OEHHA's chronic reference exposure level (REL). This level is considered protective of adverse health effects after long-term exposure. Chronic RELs are designed to address continuous exposures for up to a lifetime, and therefore the annual average concentration is metric that represents continuous exposure. In other words, an annual average exposure to a concentration less than 3 mg/m^3 is not expected to cause adverse effects.

Ecology modeled the annual average concentration of crystalline silica and compared the results to the chronic REL. In all cases, the average concentration at all locations within the modeling domain (including those very near emission units) were less than chronic REL (3 ug/m^3). Therefore, crystalline silica impacts are not likely to pose unacceptable noncancer hazards to offsite receptors.

Table 32. Annual average crystalline silica concentration at each location's point of maximum impact within the modeling domain

Source Group	American Rock (mg/m^3)	Chelan Sand and Gravel (mg/m^3)	Hiawatha (mg/m^3)	Huthison Pit (mg/m^3)	Okanogan Valley Concrete (mg/m^3)	Ritzville Pit (mg/m^3)	Smith-Dallesport (mg/m^3)
HMA	0.6	0.6	0.4	0.5	0.6	1.0	0.6
CB – Central Mix	0.7	0.7	0.5	0.8	0.7	0.8	0.5
CB – Truck Mix	0.4	0.3	0.2	0.3	0.6	0.7	0.2
RC	2.5	1.0	2.5	2.8	1.7	1.6	2.9

Appendix E - Comments Received

Appendix E includes the following table with a list of commenters based on the chronological order that they provided comments during the public comment period from June 2, 2026 through July 12, 2026, including those received orally during a public hearing on July 8, 2026. All comments in their entirety are provided below the table.

Some comments contain multiple topics. For efficient review, Ecology grouped the comments by 84 Ecology comment numbers. The 24 topics identified by letter in the table below are described and addressed in Appendix A (Ecology Response to Comments).

Because most topics applied in some way to all three 3 general orders, comments are combined in this appendix similar to how all three general orders are also addressed in Appendix A (Ecology Response to Comments) and Appendix D (Modeling Analysis Summary).

Ecology Comment Number	Topic(s) ID	List of Commenters	Comment Submittal Method	Date
1	A	Dave Gent: Washington Asphalt & Pavement Association (WAPA)	Email	6/10/2026 9:37:57 AM
2	F, I	Kim Schofield, Washington Asphalt Pavement Association (WAPA)	Public Hearing	7/8/2026 1st oral comment
3	F	Dave Gent: Washington Asphalt Pavement Association (WAPA)	Public Hearing	7/8/2026 2nd oral comment
4	K, W	Raquel Elorza	Public Hearing	7/8/2026 3rdt oral comment
5	D, F	Dave Gent: Washington Asphalt Pavement Association (WAPA)	Public Hearing	7/8/2026 4th oral comment
6	F, E	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
7	H	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
8	F	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
9	B	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
10	C	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
11	I	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
12	D	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM

13	J	Luke Pischedda - Heidelberg Materials	Online	7/10/26 10:37 AM
14	F, E	Annie Livengood - CalPortland	Online	7/10/26 2:45 PM
15	E, F	Annie Livengood - CalPortland	Online	7/10/26 2:45 PM
16	C	Annie Livengood - CalPortland	Online	7/10/26 2:45 PM
17	C	Annie Livengood - CalPortland	Online	7/10/26 2:45 PM
18	E	Annie Livengood - CalPortland	Online	7/10/26 2:45 PM
19	I	Annie Livengood - CalPortland	Online	7/10/26 2:45 PM
20	K, F, B	Austin Neeson - Granite Construction Company	Online	7/10/26 3:17 PM
21	L	Austin Neeson - Granite Construction Company	Online	7/10/26 3:17 PM
22	M, N	Austin Neeson - Granite Construction Company	Online	7/10/26 3:17 PM
23	B	Austin Neeson - Granite Construction Company	Online	7/10/26 3:17 PM
24	C	Austin Neeson - Granite Construction Company	Online	7/10/26 3:17 PM
25	L	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
26	F	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
27	F, L	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
28	I, G	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
29	B	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
30	F, L	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
31	P	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
32	C	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
33	F, L	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
34	P	Garrett Sullivan - CPM Development Corp. (CRH)	Online	7/10/26 3:45 PM
35	F, E	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online	7/11/26 12:12 PM

			(Email)	(12:20 PM)
36	H	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
37	L	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
38	F, I	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
39	B	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
40	C	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
41	I	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
42	D	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
43	C	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
44	E	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
45	F	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
46	K	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
47	J	Cory Shaw - WA Aggregates and Concrete Association (WACA)	Online (Email)	7/11/26 12:12 PM (12:20 PM)
48	F	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 1 (HMA)	7/11/26 2:03 PM
49	F, R, M	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 1 (HMA)	7/11/26 2:03 PM
50	B	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 1 (HMA)	7/11/26 2:03 PM

51	I	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 1 (HMA)	7/11/26 2:03 PM
52	L, P	Kim Schofield - Washington Asphalt 53Pavement Association (W54APA)	Online – Document 1 (HMA)	7/11/26 2:03 PM
53	G	Kim S55chofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 1 (HMA)	7/11/26 2:03 PM
54	S, K	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 1 (HMA)	7/11/26 2:03 PM
55	F	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 2 (RC)	7/11/26 2:03 PM
56	N	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 2 (RC)	7/11/26 2:03 PM
57	I	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 2 (RC)	7/11/26 2:03 PM
58	L, N	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 2 (RC)	7/11/26 2:03 PM
59	S, K, W	Kim Schofield - Washington Asphalt Pavement Association (WAPA)	Online – Document 2 (RC)	7/11/26 2:03 PM
60	F	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
61	C	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
62	F, M, N	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
63	L	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
64	G, M, U	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
65	B	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
66	I	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
67	T, K, M, P	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
68	V, O, X	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
69	S, K, C	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
70	K, W	Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc.	Online	7/12/26 4:42 PM
71	F, M, N	Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.	Online	7/12/26 4:44 PM

72	L	Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.	Online	7/12/26 4:44 PM
73	T, M	Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.	Online	7/12/26 4:44 PM
74	V, O, X	Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.	Online	7/12/26 4:44 PM
75	S, C, K	Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.	Online	7/12/26 4:44 PM
76	K	Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.	Online	7/12/26 4:44 PM
77	M	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
78	F	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
79	Q	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
80	F, M, N	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
81	L	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
82	T, P, N	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
83	S, K	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM
84	K	Raquel Elorza - North Central Construction, Inc.	Online	7/12/26 4:46 PM

Ecology Comment #1 - Dave Gent (received by email on June 10, 2026)

Good morning,
Please accept this email as the Washington Asphalt Pavement Association's (WAPA's) request for a public meeting related to the proposed revisions of the Air Quality General Orders. This request is made as instructed in the DOE's bulletin dated 06/02/2026.
WAPA is directly interested in the hot mix asphalt and rock crushing General Orders, but I'm confident that our members would also like to hear about the proposed changes in the concrete batch plants General Order.

Ecology Comment #2 – Kim Schofield, Washington Asphalt Pavement Association (WAPA) (transcribed from July 8, 2026 public hearing)

Hi my name is Kim Schofield with the Washington Asphalt Pavement Association. I'll start it off with some of the new limits for annual and daily rates for all of three of these general orders are pretty restrictive. I understand what we talked about and everything. It would be nice to be able to know what would qualify to need a new general order. We talked about it a little bit but it would be nice to have a full list of what those things those triggers would be. So if people already have a general order what would trigger a new general order if something is being replaced or something like that. The other thing that would be nice to know it is um. I don't remember what I was going to say. I'll leave it at that and maybe someone else has the next one. Thanks.

Ecology Comment #3 – Dave Gent, Washington Asphalt Pavement Association (WAPA) (transcribed from July 8, 2026 public hearing)

Thank you. For the record I support some of what Kim has said. I'm David Gent with the Washington Asphalt Pavement Association. I think one of our biggest concerns are in the daily limits for the asphalt plants. The consequence of using the GO process is that there are many kind of critical public works projects that run 12 hour days run on public streets and public. Airports that have critical timelines, often short timelines. Because of the heat of the day or the closing down of the airport, or whatever. And our big concern is that if the plant is under a GO and under these kinds limits we are physically restricted from being able to do this public works project in a timely manner. We're going to expose both the public and our work force, which we are very concerned about to additional hours on highway with traffic next to them to meet this limit that is by your own testimony earlier Is conservative limits the tonnage would be the same the annual issue would be the same. But we can't be restricted to artificially pave at half speed. And that is basically what's being proposed here. And that's literally the unintended consequence. For airports sometimes we only have shutdowns, complete shutdowns, we have to pave 24 hours a day. We can't live with low daily limits when that is the process. For highways again we're exposed to traffic, the faster we can pave, the faster we can get off the

highway. And these artificial limits are going to be a great concern to us and we will be putting those comments in our written comments. Thank you.

Ecology Comment #4 – Raquel Elorza (transcribed from July 8, 2026 public hearing)

First, I wanted to thank Ecology for the work that's gone into updating this general orders. We recognize that protecting our air quality and public health is really an important responsibility. We do support that mission, My request is simply that before these rules are finalized Ecology continue to evaluate not only the environmental objectives of the proposals but also they're practical Implementation and their cumulative impacts across Washington State. These general orders do not operate independently. Aggregate, asphalt and concrete are part of one interconnected supply chain that supports the highways bridges and airports as Dave said, utilities, housing, emergency repairs and virtually every public infrastructure project In our state. Changes to one industry inevitably will affect the others. Throughout these proposals, I do believe there are opportunities for additional transparency regarding technical analysis assumptions and implementation strategies to the proposed revisions and I just really encourage Ecology to continue working closely with WSDOT and local governments, industry organizations and individual permit holders as we move forward. Thank you.

Ecology Comment #5 – Dave Gent, Washington Asphalt Pavement Association (WAPA) (transcribed from July 8, 2026 public hearing)

I guess I'll just add to my comments another observation. The public works environment is currently having difficulty with funding through the legislature. So we are in the unenviable position of having later and later bid procedures and smaller and smaller construction seasons basically. Less time to do the work because of funding. So I think we really need to look at this rolling 12 issue. The way the process is working now, a rolling 12 limit basically will count for two seasons of work so it's really a two year restriction for the type of work that we do. We will propose that any limits, hopefully adjusted limits, go to annual limits because the construction season is truncated on the east side both by weather and by funding and by heat now. So again unintended consequences of using a rolling 12 measurement really is a two year restriction for us. Thank you.

Ecology Comment #s 6 – 13 [Luke Pischedda - Heidelberg Materials]

Dear Mr. Huitsing:

Heidelberg Materials appreciates the opportunity to comment on the Washington Department of Ecology's proposed revisions to the General Orders for rock crushers, hot mix asphalt plants, and concrete batch plants.
Heidelberg Materials operates aggregate, asphalt, and concrete facilities throughout Washington and is commited to maintaining compliance with applicable air quality requirements while supplying essential construction materials for public and private infrastructure projects. While we support Ecology's goal of maintaining consistency with current air quality standards, several proposed revisions could significantly

reduce operational flexibility for facilities that have a long history of compliant operation under existing permits. Below are detailed comments.

Ecology Comment #6

Daily Production Limits
Heidelberg Materials is concerned that the proposed daily production limits are unnecessarily restrictive and do not reflect how construction-material facilities operate in practice.
Production demand is often driven by weather conditions, project schedules, and limited construction windows. Facilities frequently need to increase production for short periods to support paving projects, concrete placements, highway work, utility projects, and emergency repairs while remaining well within annual production limits.
Existing facilities are already subject to annual throughput limits, emissions limitations, and pollution-control requirements. Ecology has not demonstrated why new daily production restrictions are necessary for facilities with established compliance records.
Accordingly, Heidelberg Materials recommends retaining annual production limits as the primary throughput limitation. If daily limits are retained, Ecology should ensure that the supporting modeling assumes compliance with all required dust-control measures rather than reduced control efficiencies.

Ecology Comment #7

Clarification of "Single Location" Provisions
The draft language addressing operations at a "single location" is ambiguous and may be interpreted to apply production limits collectively to multiple facilities operating at the same site, including equipment covered under different General Orders.
Heidelberg Materials requests that Ecology clarify how production limits are intended to apply where multiple permited operations are co-located to avoid inconsistent interpretation and implementation.

Ecology Comment #8

General Order Eligibility and Setbacks
The proposed setback requirements raise concerns because they may exclude existing or future facilities from General Order eligibility despite long histories of compliant operation.
The proposed distances appear to function as siting restrictions rather than emission-based eligibility criteria. Facilities could become ineligible based solely on proximity to receptors, even where they have demonstrated compliance with permit conditions and air quality requirements.
Heidelberg Materials encourages Ecology to reconsider the proposed setbacks and place greater emphasis on demonstrated compliance history and actual emissions performance.

Ecology Comment #9

RAP and Crumb Rubber Restrictions
Heidelberg Materials is concerned with the proposed limitation of recycled asphalt pavement (RAP) to 30 percent and the exclusion of crumb-rubber-modified asphalt from General Order eligibility.
Many facilities have successfully incorporated RAP at levels above 30 percent while maintaining compliance with applicable permit requirements. These materials support resource conservation and sustainable construction practices.
Rather than imposing categorical restrictions, Ecology should allow facilities to demonstrate compliance through emissions evaluations, testing, or other technically supported methods.

Ecology Comment #10

Odor Requirements
The proposed odor condition introduces uncertainty because compliance is based on subjective determinations of what constitutes an unreasonable interference with neighboring properties.
Heidelberg Materials requests additional clarification regarding how Ecology intends to evaluate compliance and what objective criteria will be used during inspections and complaint investigations.

Ecology Comment #11

Equipment Replacement Flexibility
Routine replacement of major equipment is a normal part of facility maintenance and o□en results in improved reliability and environmental performance.
Heidelberg Materials encourages Ecology to include clear provisions confirming that like-for-like replacement of equipment does not require facilities to obtain new General Order coverage or become subject to more restrictive requirements, provided there is no material increase in emissions or production capacity.

Ecology Comment #12

Rolling Twelve-Month Limits
The proposed rolling twelve-month production limits create challenges for industries that operate seasonally.
Construction activity o□en occurs during concentrated periods of favorable weather. Rolling limits can effectively capture production from two peak construction seasons and reduce operational flexibility even when annual production levels remain relatively consistent.
Calendar-year limits would provide a more predictable and practical compliance framework for both permitees and regulators.

Ecology Comment #13

Need for Clear and Objective Permit Language
Several provisions within the dra□ General Orders rely on terms that are not clearly defined, including "credible evidence" and "change in operation."
Heidelberg Materials requests that Ecology provide clear definitions and objective criteria for these provisions to promote consistent implementation and enforcement across the state.
Conclusion
Heidelberg Materials respec□ully requests that Ecology:
• Remove the proposed daily production limits and continue relying on annual production limits;
• Clarify the proposed "single location" provisions;
• Reevaluate the proposed setback requirements;
• Reconsider the proposed RAP and crumb-rubber restrictions;
• Clarify the proposed odor condition;
• Provide flexibility for like-for-like equipment replacements; and
• Consider calendar-year production limits in place of rolling twelve-month limits.
We appreciate Ecology's consideration of these comments and look forward to continued engagement as the General Orders are finalized.

Sincerely,
Luke Pischedda

Ecology Comment #s 14 –19 [Annie Livengood – CalPortland]

Dear Mr. Huitsing,
CalPortland thanks the Washington Department of Ecology for the opportunity to provide formal comments on the Draft Air Quality General Orders for Rock Crushers (26AQ-GO-01) and Concrete Batch Plants (26AQ-GO-03).

CalPortland supports Ecology's objective of updating the General Orders to remain consistent with current air quality standards. However, CalPortland believes that several of the proposed updates contain overly prescriptive restrictions that reduce operational flexibility and mirror conditions of an individual permit rather than a General Order, which could impose significant impacts on industry and downstream stakeholders. Below are expanded comments.

Ecology Comment #14

1. 26AQ-GO-01 and 26AQ-GO-03 Condition 2.A.i – Proposed Daily Production Limits Rely on Unreasonable Model Inputs and Reduce Operational Flexibility

The model control efficiency inputs for rock crushers and concrete batch plants are more conservative than warranted, resulting in proposed daily production limits that are overly restrictive for minor sources in attainment areas and reduce a facility's flexibility to service large-scale, seasonal projects while adhering to annual production limits and visible emissions standards.

The model inputs do not accurately reflect actual site conditions and are inconsistent with the General Order conditions. The Technical Support Documents (TSDs) for rock crushers and concrete batch plants indicate that lower control percentages were used in modeling due to assumed lower application rates for stockpiles and haul roads, yet General Orders 26AQ-GO-01 and 26AQ-GO-03 require compliance with stockpile and haul road watering conditions.

Specifically, General Order 26AQ-GO-01 lists stockpiles as an emission source and Condition 2.b.iv states that any onsite emission source must be controlled by water.
Conversely, Appendix C.g of the Technical Support Document (TSD) for rock crushers states not all stockpiles are watered and assumes only a 75% control rather than a 90% control. Similarly, the General Orders require haul roads be wetted at all times, yet the TSD for rock crushers and concrete batch plants exclude haul road controls from air pollutant modeling. A model input that assumes a lower control percentage than the minimum required control in the General Order overrepresents emissions from stockpiles and haul roads and results in an unnecessarily reduced daily throughput limit. Ecology should not assume noncompliance with the General Orders when selecting control percentages for modeling inputs.

Additionally, the proposed daily production limits listed do not accurately reflect actual operating conditions. Rather than remaining constant throughout a calendar year, concrete and aggregate production typically varies depending on project availability, seasonal construction windows, and favorable weather conditions. Large-scale public works and commercial projects require increased production volumes over a short time period that could exceed the proposed daily limits. It is essential for high-capacity plants and crushers to have the

flexibility to extend operational hours during peak construction season to accommodate the demands of large-scale jobs while still remaining under the annual production limit. Hindering concrete suppliers' ability to timely deliver concrete and aggregates will cause project delays, decrease contractor efficiency, and raise overall construction costs.

Compliance with the General Order includes operating and maintaining high-efficiency pollution control equipment and controlling fugitive dust such that a facility meets visible emission and annual production limits. CalPortland requests that Ecology reexamine the models and select reasonable inputs consistent with General Order conditions.

Ecology Comment #15

2. 26AQ-GO-01 Condition 2.b.i and 26AQ-GO-03 Conditions 2.b.i-ii – Proposed Siting Requirements Rely on Unreasonable Model Inputs and Cause Operational Burden

Like the proposed daily production limits, the proposed siting restrictions for rock crushers and concrete batch plants rely on modeling results derived from unreasonable inputs. The model inputs used to calculate air pollutant emissions assume lower control percentages for stockpiles and haul roads than what is required in the General Order conditions. These calculations result in a greater distance from key emission units to NAAQS compliance and overly conservative setback requirements and buffer distance limitations. Please see the discussion in Comment No. 1 for additional information regarding model inputs.

Inadequately justified setback requirements will force operators with a long history of compliance with the General Orders to apply for individual permits, significantly increasing costs, permit processing timelines, and overall placing excess burden on permittees and Ecology without a benefit to air quality. Additionally, the proposed setback requirements potentially put previously compliant existing facilities at risk of immediate enforcement if the facility requires new or amended coverage for another reason.

In addition to increasing permitting complexity, excessive setbacks create operational challenges. Existing facilities, particularly portable facilities, are often small footprint areas zoned for industrial use. The proposed setbacks will force operations into an even more limited footprint and restricts space for equipment and vehicle traffic routes and loading zones, creating potential safety and access concerns.

CalPortland requests that Ecology reevaluate the modeling and select inputs consistent with the General Order conditions.

Ecology Comment #16

3. 26AQ-GO-01 and 26AQ-GO-03 Condition 7.h – Proposed Odor Condition Creates Compliance Uncertainty

The proposed language prohibiting the generation of any odor that "unreasonably interferes with a property owner's use or enjoyment of their property" is reliant on subjective interpretations with no measurable compliance criteria.

Requirements without clear standards for evaluating compliance creates regulatory

uncertainty for permittees and neighbors. It is also challenging for Permittees to investigate claims and determine whether corrective actions are warranted with no objective criteria.

CalPortland requests additional clarification regarding what objective criteria will be used to investigate complaints and assess compliance.

Ecology Comment #17

4. 26AQ-GO-01 and 26AQ-GO-03 Condition 6.b – Complaint Reporting Requirements Create Unnecessary
Administrative Burden

CalPortland supports the implementation of the complaint investigation, response, and documentation procedures outlined in Conditions 3.c and 4.c of the General Orders, and appreciates the consistency with current regulations in other air quality jurisdictions.
However, CalPortland believes the proposed complaint reporting procedure, particularly within one business day, to be an unnecessary administrative burden.

If the Permittee initiates corrective action and response to a complaint within three calendar days of complaint receipt and maintains records on site and available for Ecology review upon request detailing the complaint, actions taken to assess complaint validity, any corrective actions performed and their effectiveness, then reporting complaints to
Ecology within one business day adds excessive administrative burden without any benefit to air quality or additional oversight.

Furthermore, Permittees may receive occasional complaints that are unsubstantiated, duplicative, or unrelated to the facility operations and may take more than one business
day to confirm validity. To avoid unnecessary workload for both Permittees and Ecology, a more practical approach is to report complaints to Ecology if a release or upset condition is confirmed. This change promotes accountability and transparency while allowing
Permittees to focus their efforts on investigations and effective corrective actions rather than administrative reporting burdens.

Ecology Comment #18

5. 26AQ-GO-01 Condition 2.b.iv and 26AQ-GO-03 Condition 2.b.xi – Proposed Dust Control Requirements
are Overly Prescriptive

The proposed additional fugitive dust control requirements are overly prescriptive and restrict a facility's ability to adjust control measures as needed based on site-specific conditions.

Fugitive dust generation is dependent on factors such as facility size, traffic rates,
production capacity, industrial activities being performed, and weather conditions. Thus, operators should be allowed the flexibility to assess site conditions and implement
practices that are appropriate to control the generation of dust to comply with visible emission limits. Requiring all facilities to meet excessively specific dust suppression

conditions places undue operational burden on Permittees and would often result in a

waste of water and increased operational costs without adding protections to air quality.

For instance, the proposed language requiring haul roads be wetted at all times may be unnecessary when a facility is operating only for maintenance and haul roads are being minimally used and therefore not generating fugitive dust. More practical language consistent with BACT would be “Haul roads and other surfaces that have the potential to create airborne dust must be controlled with the application of water such that dust is not visible leaving the property boundary.” Similarly, fugitive dust can be controlled through various water application methods including water truck, wet vacuum sweeper truck, spray hose, or other equivalent methods. Requiring a water truck be on site during all operations is overly burdensome, as the target dust control objectives can be readily met by multiple, less costly alternatives. For instance, it is common practice for small operations to share a water truck, contract third-party watering, or manage dust with sprinklers.

CalPortland recommends Ecology maintain a performance-based approach to fugitive dust control that prioritizes maintaining compliance with visible emission limits as opposed to prescribing specific dust suppression practices.

Ecology Comment #19

6. 26AQ-GO-01 and 26AQ-GO-03 Condition 7.l – Changes in Operation Triggering New or Updated Coverage is Overly Vague and Creates Compliance Uncertainty

CalPortland appreciates Ecology's clarification that facilities operating under existing General Orders are not automatically required to obtain coverage under the revised General Orders. However, the General Condition addressing changes in operations is ambiguous. Lacking a clear definition creates a risk for inconsistent permit interpretation and enforcement across facilities and regions. CalPortland requests Ecology more clearly define what constitutes a "change in operation" that would trigger the need for new or amended coverage. Without additional guidance, Permittees may face uncertainty that routine equipment maintenance, like-for-like equipment replacements, operational adjustments, process improvements, or other common business practices that do not increase a facility’s production capacity could require permit modification.

Conclusion

The General Orders have historically provided an efficient permitting pathway for low-risk facilities while maintaining protections to air quality. Several of the proposed provisions are overly prescriptive and go beyond the scope of a General Order. CalPortland recommends

Ecology revert to existing language with minor revisions to reflect current regulatory requirements.
The modeling inputs underrepresent site emission controls and are inconsistent General Order compliance criteria, particularly for stockpiles and haul roads, creating overly conservative daily production and setback limitations that would significantly limit operational flexibility and adversely impact the construction industry. CalPortland strongly urges Ecology reevaluate the models and select more reasonable inputs, as well as give greater consideration for the infrastructure and economic impacts of the proposed changes before final

adoption.

Finally, several proposed conditions are overly ambiguous and create uncertainty for inconsistent permit interpretation and enforcement. CalPortland recommends Ecology provide further clarification to ensure transparency and consistent understanding.

Thank you for your consideration of these comments.
Sincerely,
Annie Livengood

Ecology Comment #s 20 – 24 [Austin Neeson - Granite Construction Company]

To whom it concerns,
Granite Construction Company (Granite) owns and operates several hot mix asphalt plants & rock crushing operations in the state of Washington overseen by the Washington Dept. Of Ecology. Below is Granite Construction Co.'s list of comments/concerns that Ecology should consider before executing the proposed General Orders for Stationary and portable asphalt plants, Concrete batch plants, and Rock crushers.

Ecology Comment #20

Permit Sections: Section 2.a.i – Production/Operation Limits; Section 2.b.i.A–C – Setback Requirements; Section 2.b.x – RAP and Crumb Rubber Restrictions
Specific Permit Language: "160,000 tons per year in any consecutive rolling 12-month period and 2,800 tons per calendar day"; "Must be at least 150 feet from the pit property boundary line"; "Must be at least 325 feet from any residence, occupied commercial building, school, hospital, nursing home or other sensitive receptor"; "If the hot mix asphalt plant cannot meet the 150 feet and 325 feet distance limits … it cannot use this general order and must apply for a full Notice of Construction (NOC) minor NSR permit"; and "The percentage of Recycled Asphalt Pavement (RAP) used in the asphalt cement mix under this approval order must be no greater than 30% … no crumb rubber is allowed. Facilities that use crumb rubber cannot use this general order."

Comment #1:
Granite is concerned that the cumulative effect of the proposed General Order revisions may significantly reduce operational flexibility and limit the ability of facilities to efficiently supply materials for transportation projects, public infrastructure, housing, utility work, and emergency repairs throughout Washington. The reduction in production limits, expanded setback requirements, RAP restrictions, and categorical exclusion of crumb rubber may have consequences extending beyond individual facilities.

These changes could reduce material availability in certain regions, increase project costs, and require materials to be hauled from more distant locations to meet construction demands.
Granite is also concerned that the proposed revisions may lead to unintended environmental consequences. Limiting the use of RAP and crumb rubber reduces opportunities to beneficially reuse recycled materials, while longer haul distances may increase fuel consumption, truck traffic, greenhouse gas emissions, and reliance on newly mined aggregate and asphalt binder. This may also result in additional waste materials being directed to landfills rather than being reused in construction applications.

Granite encourages Ecology to evaluate not only the direct air quality benefits of the proposed changes, but also the broader infrastructure, supply-chain, resource-conservation, and environmental impacts associated with these revisions prior to final adoption.
Proposed Solution/Language:

- Conduct and publish an evaluation of the cumulative impacts associated with the proposed production limits, setback requirements, RAP limitations, and crumb rubber prohibition prior to final adoption.
- Consider modifications that preserve operational flexibility while maintaining compliance with applicable air quality requirements.

Ecology Comment #21

Permit Section: Project Summary / Application Processing
Specific Permit Language: "Within 30 days of receipt of an application for coverage under a General Order, Ecology shall notify the applicant in writing that the application is incomplete, approved, or denied."

Comment #2:
Granite understands that facilities unable to meet the revised General Order requirements may apply for a site-specific Notice of Construction (NOC) permit. However, we are concerned that this option may not provide sufficient flexibility to meet the timelines associated with construction and paving projects. Also, due to NOC permits being more complex and unique to each site, we anticipate a higher cost for each permit application due to higher permitting fees and consultant costs. Ecology should evaluate the potential increase in NOC permit applications resulting from the proposed changes and consider whether the agency has sufficient resources to process those applications in a timely manner.
We request that Ecology provide an estimate of the anticipated increase in permit applications, the expected permit processing timelines, and an assessment of whether those timelines could adversely affect a facility's ability to mobilize and operate in support of public and private construction projects.
Proposed Solution/Language:

- Evaluate and disclose the anticipated increase in NOC permit applications resulting from the proposed General Order revisions.
- Evaluate and estimate the potential increase cost burden for NOC permit vs. General Order permit
- Publish estimated NOC permit processing timelines and assess potential impacts to construction and paving project schedules

Ecology Comment #22

Permit Section: 2.b.i.A–C – Equipment/Activity Restrictions
Specific Permit Language: "Must be at least 150 feet from the pit property boundary line" and "Must be at least 325 feet from any residence, occupied commercial building, school, hospital, nursing home or other sensitive receptor." Facilities unable to meet these setbacks "cannot use this general order and must apply for a full Notice of Construction (NOC) minor NSR permit."

Comment #3:

Granite is concerned that facilities that have historically operated in compliance with air quality requirements may become ineligible for General Order coverage solely due to fixed setback criteria, regardless of their compliance history or demonstrated environmental performance. If these facilities are forced to pursue individual Notice of Construction (NOC) permits, Ecology may experience a significant increase in permit applications. Increased permitting demand and associated review timelines could affect a facility's ability to mobilize and operate within the short construction seasons and project schedules common to transportation and infrastructure projects.
Granite requests that Ecology allows facilities that cannot meet the setback criteria to remain eligible under the General Order if they can demonstrate compliance through modeling, source testing, or site-specific controls. Granite suggests utilizing a performance-based approach that focuses on actual emissions and impacts rather than fixed distance requirements.
Proposed Solution/Language:

- Reevaluate the proposed 150-foot property boundary and 325-foot sensitive receptor setback requirements.
- Allow facilities to demonstrate compliance through modeling, source testing, or site-specific controls in lieu of fixed setback criteria.

Ecology Comment #23

Permit Section: Section 2.b.x – Equipment/Activity Restrictions
Specific Permit Language: "The percentage of Recycled Asphalt Pavement (RAP) used in the asphalt cement mix under this approval order must be no greater than 30%. RAP is limited to Reclaimed or recycled Asphalt Pavement (no crumb rubber is allowed). Facilities that use crumb rubber cannot use this general order."

Comment #4:
Granite appreciates Ecology's proposal to allow the use of reclaimed asphalt pavement (RAP) at levels up to 30% under the General Order. Establishing a flat-rate eligibility threshold at 30% RAP provides a practical and streamlined compliance pathway for many facilities. However, Granite is concerned that limiting General Order eligibility exclusively to facilities using 30% RAP or less, and categorically excluding crumb-rubber-modified asphalt, unnecessarily restricts operational flexibility and may discourage the continued use of recycled materials. RAP and crumb rubber have been successfully incorporated into asphalt production for decades, providing well-established environmental and economic benefits through the beneficial reuse of materials, conservation of natural resources, and reduction of waste streams.
Granite is not aware of a technical basis demonstrating that facilities utilizing RAP percentages greater than 30% or producing crumb-rubber-modified asphalt are inherently unable to comply with applicable air quality requirements. Many facilities have successfully demonstrated compliance through source testing, emissions calculations, and other engineering analyses. As a result, Granite believes facilities should retain the option to qualify for General Order coverage by demonstrating compliance through technically supported methods, even when RAP content exceeds 30% or crumb-rubber-modified asphalt is produced. A performance-based approach would maintain environmental protection while preserving operational flexibility, supporting innovation, and encouraging the continued beneficial reuse of recycled materials.
Proposed Solution/Language:

- Allow facilities utilizing greater than 30% RAP to demonstrate compliance through source testing, emissions calculations, or other technically supported methods.
- Remove the categorical prohibition on crumb-rubber-modified asphalt and allow facilities to demonstrate compliance using the same performance-based approach.
- Maintain General Order eligibility for facilities that can demonstrate compliance with applicable air quality requirements, regardless of RAP percentage or use of crumb-rubber-modified asphalt.

Ecology Comment #24

Permit Section: Section 6.b.i – Reporting
Specific Permit Language: "The Permittee must notify Ecology within one business day of any of the following events occurring: The receipt of any complaint."

Comment #5:
Granite believes it has a strong responsibility to operate its facilities in a manner that they do not pose a nuisance to the general public. Our facilities will always ensure compliance with permit conditions and air quality requirements during operation activities.
However, the proposed requirement to report all complaints within one business day may be counterproductive. Facilities need adequate time to investigate complaints, evaluate site conditions, determine whether the complaint is substantiated, and develop appropriate corrective actions. Reporting every complaint before a reasonable review can be completed may result in incomplete or inaccurate information being provided to Ecology while creating additional administrative burden without improving environmental performance.
Proposed Solution/Language:

- Revise the reporting requirement to allow facilities adequate time to investigate and evaluate complaints prior to notifying Ecology.
- Consider modifications that preserve operational flexibility while maintaining compliance with applicable air quality requirements

Thank you for taking into consideration Granite Construction Co.’s efforts to collaborate on the proposed 2026 General Order Permits. Granite Construction highly values seamless and consistent compliance. We look forward to working with Ecology on continuing to protect Washington State air quality.

Ecology Comment #s 25 – 34 [Garrett Sullivan - CPM Development Corp. (CRH)]

Re: Comments for 2026 Draft Air Permit General Orders
Dear Mr. Huitsing,
After reviewing the draft general orders for asphalt plants, concrete plants and crushers proposed by Ecology, CPM Development Corp. (CRH) submits these comments and concerns we believe need to be addressed. CRH is a proponent of environmental stewardship and sustainable practices; however, the more restrictive general orders push toward a system that is not generally used for portable

construction projects. Therefore, the new general orders provide minimal environmental benefit while increasing greenhouse gas emissions from construction projects and will create an unnecessary additional burden on the permittee. These comments are intended to support Ecology in refining the general orders to comply with regulations while maintaining workable standards for the construction industry.

Ecology Comment #25

General Comments

Ecology was clear on the public hearing that they believe the remedy for presumptive issues with the general order is to seek coverage under an NOC permit under the minor NSR program. The NOC permit is not well adapted to the needs of portable operations which represent a large portion of plants currently operating under general orders. The NOC permit takes too long to receive coverage; Ecology's website states that the average NOC permit takes 132 days to complete and receive a decision. The contractor's decision to seek coverage under an NOC permit, at a location which may only host a plant for a single limited duration project, will not be made until a bid has been awarded. The time needed to apply for an NOC permit and the restrictions of the general orders will result in pressure to utilize stationary sources further from construction projects. This jeopardizes state and industry decarbonization goals, increases costs which impact state budgets, and lengthens job completion time through extended hauls or production stoppages.

In calculations produced for a 2023 study for the Washington Aggregate and Concrete Association, the cost increase associated with hauling aggregates to support construction of one lane-mile of highway an extra 25 miles is $190,000 (this cost has since increased ~50% due to fuel prices) and the increase in greenhouse gas emissions is 169.7 tons. A robust general order program should support an efficient state infrastructure program; the proposed general orders do not.

Ecology Comment #26

Comments for Asphalt Plant General Order

1. Production Limits as a Hindrance to the Timely Completion of Projects

The reduced tonnage for yearly and daily production limits can hinder the ability to meet project requirements (2.a.i.). A 54% reduction in daily HMA production and a 47% reduction in annual HMA production is too restrictive. The construction materials industry often operates within condensed seasonal windows governed by weather constraints and project deadlines. Utilizing a rolling 12-month evaluation framework inadvertently captures segments of two distinct operational seasons, resulting in regulatory restrictions that misrepresent actual annual productivity. The daily limits will affect construction timelines and are not sufficient for production paving on state highway or airport projects.

CRH Proposed Change/Recommendation: CRH suggests that the new production limits are a and that the current limits are retained.

Ecology Comment #27

2. Property Line Setback Requirements Fail to Provide Sufficient Flexibility in Site Selection

The new minimum setback requirements (2.b.i.) don't account for plants setting up on project sites as dictated by WSDOT. Obtaining an individual permit for these is most likely to impact public projects. While increasing the minimum distance from property boundaries and sensitive receptors reduce emissions by moving the portable further away, this leads to an increase in transportation and, consequentially, an increase in emissions and costs. This requirement limits the number of locations where an asphalt plant can be placed under a general order. For example, assuming that an asphalt

plant has a footprint diameter of 100 ft and must be 150 ft from the property line, the smallest sized lot for a plant this size would be nearly 3 acres (125,600 ft2). This is not even considering the 325 ft distance from any sensitive receptor.
Furthermore, obtaining an NSR for a portable is unreasonable because they can take between 6 months and a year to be issued. An alternative would be to provide a previous source test. These constraints apply pressure on companies to utilize stationary plants operating under NOC permits which drive up costs such as transportation.
CRH Proposed Change/Recommendation: CRH recommends that the minimum distance from the property boundary to any emission unit be 150 feet for portable asphalt plants. This ensures that portables can be operated on project sites while also complying with environmental safety standards, lowering the time and costs that would otherwise be associated with obtaining an NOC.

Ecology Comment #28

3. Baghouse Emission Limits May Exclude Older Plants from Operating
Baghouse emission limits have been changed from tons/year to pounds/hour (2.c.). Annual limits from the previous general order allowed plants to meet the threshold by limiting production. However, these new limits potentially bar older plants from operation under the general order.
CRH Proposed Change/Recommendation: The hourly limits for baghouse emissions should be reverted to the annual limits as listed in the current general order to allow flexibility for older plants to operate while still protecting the environment.

Ecology Comment #29

4. RAP Limitations are not Consistent with Industry Standards
The percentage of RAP used is limited to 30% under the draft (2.b.x), which is not consistent with the common industry standard.
CRH Proposed Change/Recommendation: CRH proposes that the percentage of Recycled Asphalt Pavement (RAP) used in the asphalt cement mix under this approval is limited to 30% or to the percentage of RAP used during the most recent source test demonstrating compliance under this General Order of Approval, whichever is higher (1.10).

Ecology Comment #30

Comments for Concrete Plant General Order
1. Property Line Setback Requirements Fail to Provide Sufficient Flexibility in Site Selection
The new minimum setback requirements (2.b.ii) don't account for plants setting up on project sites as dictated by WSDOT. Obtaining an individual permit for these is most likely to impact public projects which operate on short timelines after a bid is awarded.
While increasing the minimum distance from property boundaries and sensitive receptors reduce modelled emissions by moving the portable further away, this leads to an increase in transportation and, consequentially, an increase in emissions and costs. This requirement limits the number of locations where a concrete plant can be placed. The minimum site size, as calculated above, is approximately 3 acres, with much larger distances required for sensitive receptors (including vaguely defined "occupied commercial buildings").
Furthermore, obtaining an NOC for a portable is unreasonable because they can take between 6 months and a year to be issued. These constraints apply pressure on companies to utilize stationary plants operating under NOC permits which drive up costs such as transportation.

CRH Proposed Change/Recommendation: CRH recommends that the minimum distance from the property boundary to any emission unit be 150 feet for portable concrete plants. This ensures that portables can be operated on project sites while also complying with environmental safety standards, lowering the time and costs that would otherwise be associated with obtaining an NOC.

Ecology Comment #31

2. Clarification on the SEPA Review

2.b.xiii: "SEPA review must be conducted for each site where the concrete batch plant will be operated and environmental impacts of concrete batch processing at the site must be analyzed as part of that review." The draft is unclear about whether a new SEPA review is required for a site if a SEPA review has been previously conducted.

CRH Proposed Change/Recommendation: A clarification should be included that states that a SEPA review is necessary only if there is new activity to a site.

Ecology Comment #32

3. Insufficient Reason to Include Odor Restriction

The mention of odor language in the concrete general order draft is perplexing because concrete plants do not generally produce odors of any kind (7.h.).

CRH Proposed Change/Recommendation: The odor restriction should be removed from the concrete general order.

Ecology Comment #33

Comments for Crusher General Order

1. Property Line Setback Requirements Fail to Provide Sufficient Flexibility in Site Selection

The new minimum setback requirements (2.b.i.) don't account for plants setting up on project sites as dictated by WSDOT. Obtaining an individual permit for these is most likely to impact public projects. Ecology did not consult with WSDOT prior to including these changes.

While increasing the minimum distance from property boundaries and sensitive receptors reduce emissions by moving the portable further away, this leads to an increase in transportation and, consequentially, an increase in emissions and costs. This requirement limits the number of locations that an asphalt plant can be placed. The minimum site size, as calculated above, is approximately 3 acres, with much larger distances required for sensitive receptors.

Furthermore, obtaining an NSR for a portable is unreasonable because they can take between 6 months and a year to be issued. These constraints apply pressure on companies to utilize stationary plants operating under NOC permits which drive up costs such as transportation.

CRH Proposed Change/Recommendation: CRH recommends that the minimum distance from the property boundary to any emission unit be 150 feet for portable crushers. This ensures that portables can be operated on project sites while also complying with environmental safety standards, lowering the time and costs that would otherwise be associated with obtaining an NOC.

Ecology Comment #34

2. Clarification on the SEPA Review

2.b.v: "SEPA review must be conducted for each site where the concrete batch plant will be operated and environmental impacts of concrete batch processing at the site must be analyzed as part of that review." The draft is unclear about whether a new SEPA review is required for a site if a SEPA review has been previously conducted.

CRH Proposed Change/Recommendation: A clarification should be included that states that a SEPA review is necessary only if there is new activity to a site.

Conclusion

The Air Permit General Order Drafts are too restrictive, too expensive, and do not fully consider the jobs that a portable typically serves. The draft documents institute numerous conditions that come with great cost and little benefit that jeopardize business operations and state construction projects timelines, budgets, and sustainability goals.

CRH requests that the comments in this letter are thoughtfully considered and welcomes opportunities to work with Ecology in drafting general orders that foster a healthy environment where businesses and communities can thrive.

Sincerely,

CPM Development Corp.

Ecology Comment #s 35 – 47 [Cory Shaw - Washington Aggregates & Concrete Association (WACA)]

These comments are submitted on behalf of the Washington Aggregates & Concrete Association ("WACA"). WACA is a non-profit industry trade association representing a broad spectrum of businesses across Washington State, including sand, gravel, quarry rock, cement, ready-mix concrete, suppliers, and other industry-related entities. Collectively, WACA's four hundred and twenty-six (426) members contribute over $4 billion annually to the state's economy, provide more than $1 billion in wages, and employ over 16,000 Washingtonians. WACA's members and partners will be directly and significantly impacted by the proposed changes in the draft General Orders for Rock Crushers (26AQ-GO-01), Hot Mix Asphalt Plants (26AQ-GO-02) and Concrete Batch Plants (26AQ-GO-03).

WACA thanks the Washington Department of Ecology for the opportunity to provide formal comments on the Draft Air Quality General Orders and supports Ecology's objective of maintaining consistency with current air quality standards. Many facilities currently operating under General Order coverage have done so successfully for years while maintaining compliance with applicable permit requirements and air quality standards. WACA is concerned that several proposed changes would substantially restrict operational flexibility without a demonstrated need based on facility compliance history, observed impacts, or documented air quality violations. However, several proposed revisions may significantly reduce the usefulness of the General Order program and create operational and permitting challenges for facilities that have historically operated successfully under General Order coverage. WACA strongly urges Ecology to reexamine the proposed language and revert to existing language with minor revisions to provide clarity and ensure consistent regulatory enforcement. Below are detailed comments.

Ecology Comment #35

1. Proposed Daily Production Limits Are the Primary Concern

WACA's primary concern is the proposed daily production limits for rock crushers, asphalt plants, and concrete batch plants.

These limits appear to be based on conservative modeling assumptions rather than actual operating conditions. While facilities may remain well below their annual production limits, they often need flexibility to increase production during limited construction windows, favorable weather conditions,

and time-sensitive projects. Major highway, airport, utility, housing, and emergency repair projects frequently require short-term production rates that exceed the proposed daily limits.

The proposed daily limits would also significantly reduce operational flexibility by limiting a facility's ability to utilize extended work schedules or double-shift operations to meet project demands. During peak construction periods, producers often need to increase daily output over a limited number of days rather than spread production evenly throughout the year. The proposed limits would effectively prevent facilities from responding to these short-term demands even when they remain well within their annual production limits.

These restrictions are particularly problematic for asphalt plants and concrete batch plants. Large paving projects and concrete pours require significant volumes of material to be produced and delivered continuously over a short period of time. High-capacity facilities must be able to accommodate these temporary production spikes to support critical infrastructure and construction projects. Limiting daily production could delay project schedules, increase construction costs, reduce contractor efficiency, and hinder the timely delivery of public infrastructure projects.

Facilities operating under the General Orders are already subject to annual production limits, emission limits, and pollution control requirements. Ecology has not demonstrated why additional daily limits are necessary for facilities with a long history of compliant operation.

WACA recommends removing the proposed daily production limits and retaining the existing approach based on annual production limits.

If Ecology must require daily production limits, WACA recommends that modelling assumes the maximum possible control percentage for stockpiles and roads. The technical support documents outline that lower control percentages were used in modelling due to assumed lower application rates for stockpiles and roads; however, the general order requires compliance with stockpile and road watering provisions. Ecology should not assume noncompliance when choosing what percentage of control to apply to modelling rates.

Ecology Comment #36

2. Language on Single Locations Require Clarity to Avoid Confusion

The new language describing facilities operating in a single location is unclear. WACA interprets this language as a facility operating anywhere on the property dedicated to the given operation (i.e. a crusher operating at multiple pits within one mine site) is subject to the production limits, and if the permitted facility leaves and returns to this property within the same consecutive 12-month period, the production limits do not reset. However, as written, it can be interpreted that the production limits apply to multiple facilities (i.e. multiple crushers or batch plants) operating in a single location, and the production of one facility is limited by the presence of another. WACA requests Ecology to reexamine this language to potentially provide additional clarification to avoid the condition being misconstrued.

Ecology Comment #37

3. Individual Permitting Is Not a Practical Alternative

Ecology has indicated that facilities unable to meet General Order limitations may pursue an individual Notice of Construction (NOC) permit.
While this option technically exists, it is often not practical for the construction materials industry. Projects are frequently awarded on short timelines and may require production increases almost immediately. The time required to prepare, submit, review, and approve an individual permit may exceed the timeframe available between project award and project startup.
WACA requests that Ecology provide information regarding:
Expected processing timelines for individual permits versus General Order coverage;

- Ecology's anticipated permitting workload following adoption of the revised General Orders;
- Ecology's capacity to process an increased number of individual permit applications if more facilities become ineligible for General Order coverage; and
- Cost of individual permit application and requirements vs General Order permit applications. [side comment includes the following:] Individual permits will also likely requiring modeling which increases the timeline and cost to develop the application

Ecology Comment #38

4. Proposed Setback Requirements May Unnecessarily Exclude Existing and Future Operations

WACA is concerned that the proposed setback and buffer requirements will function as de facto siting restrictions that unnecessarily eliminate otherwise compliant facilities from General Order eligibility. Many aggregate, concrete, and asphalt facilities have operated for decades under existing permits while successfully implementing dust controls, operational best practices, and other requirements designed to protect air quality. The proposal does not demonstrate that these facilities have caused ambient air quality violations or other impacts that would justify imposing substantially larger setback requirements. The proposed setbacks appear to be based on conservative modeling assumptions rather than demonstrated field conditions or facility compliance history. As a result, facilities may become ineligible for General Order coverage solely because of their proximity to certain receptors, even when they have a long history of operating without documented air quality concerns.
In effect, the proposed setbacks function as siting criteria rather than emission-based eligibility criteria. Facilities could become ineligible for General Order coverage based solely on their location relative to surrounding land uses, regardless of their demonstrated compliance history, actual emissions, or ability to meet applicable air quality standards through operational controls and permit requirements.
More importantly, these setback requirements undermine the fundamental purpose of the General Order program. General Orders are intended to provide a streamlined permitting pathway for categories of similar sources. If otherwise compliant facilities are excluded from coverage based primarily on fixed separation distances, many operators will be forced into individual permitting, increasing costs, permitting complexity, and agency workload without a corresponding environmental benefit.
WACA requests that Ecology reconsider the proposed setback requirements and give greater weight to demonstrated compliance history, existing permit performance, and the industry's longstanding record of operating successfully under previous General Orders.

Ecology Comment #39

5. RAP Limitations and Crumb Rubber Prohibition Reduce Operational Flexibility

WACA is concerned with the proposed limitation of recycled asphalt pavement (RAP) to 30 percent and the categorical exclusion of crumb-rubber-modified asphalt from General Order eligibility.
Both RAP and crumb rubber are established materials that have been successfully incorporated into asphalt production for many years. Many facilities have utilized RAP percentages above 30 percent while demonstrating compliance with applicable emission limits and permit requirements through source testing, emissions evaluations, and operational controls. The proposed restrictions remove operational flexibility without clearly demonstrating that higher RAP percentages or crumb-rubber-modified asphalt cannot be operated in compliance with applicable air quality requirements. The proposed restrictions may also discourage the use of recycled materials that support resource conservation and sustainability objectives.
Rather than imposing categorical restrictions, WACA encourages Ecology to retain a compliance-based approach. Facilities that can demonstrate compliance while utilizing RAP percentages above 30 percent through source testing, emissions calculations, or other technically supported methods should remain eligible for General Order coverage regardless of RAP percentage or use of crumb-rubber-modified asphalt.
At a minimum, Ecology should provide the technical basis supporting the proposed RAP limitation and crumb rubber exclusion and explain why demonstrated compliance through testing and operational controls is no longer an acceptable basis for General Order eligibility.

Ecology Comment #40

6. Proposed Odor Condition Creates Compliance Uncertainty for Asphalt Plants

The proposed odor condition, “The permittee must not cause or allow the generation of any odor which unreasonably interferes with any other property owner's use and enjoyment of their property.", raises concerns because compliance appears to depend on subjective interpretations of what constitutes an unreasonable odor impact.
Unlike production limits, opacity standards, or other measurable permit requirements, the proposed odor language lacks objective compliance criteria. Facilities may face uncertainty regarding how compliance will be evaluated and whether complaints alone could trigger enforcement concerns despite otherwise compliant operations.
WACA requests additional clarification regarding how Ecology intends to assess compliance with this requirement and what objective factors will be considered during inspections or complaint investigations.

Ecology Comment #41

7. Routine Equipment Replacements Should Not Trigger Loss of Operational Flexibility

We appreciate Ecology's clarification that facilities operating under existing permits are not automatically required to obtain coverage under the revised General Orders.
However, Ecology has also indicated that replacement of primary equipment, such as crushers, drums, burners, or baghouses, could require a facility to seek coverage under the revised General Orders. Routine replacement of equipment is a normal business practice and often results in improved environmental performance.
Facilities should not lose long-standing operational flexibility solely because they replace existing equipment with functionally equivalent equipment of comparable capacity and emissions characteristics. WACA encourages Ecology to include clear "like-for-like" replacement provisions in the General Orders specifying that routine replacement of existing equipment with equivalent equipment

does not require a facility to obtain coverage under a revised General Order or become subject to more restrictive operating requirements, provided there is no material increase in production capacity or emissions.

Ecology Comment #42

8. Rolling Twelve-Month Limits Create Challenges for Seasonal Industries

WACA believes the use of rolling twelve-month production limits will create significant challenges for seasonal industries such as aggregate production, asphalt manufacturing, and concrete production. The construction materials industry frequently operates within limited construction seasons driven by weather, paving schedules, and project delivery timelines. Rolling twelve-month limits can effectively capture production from two peak construction seasons within a single compliance period, potentially restricting operations even when a facility's overall annual production remains consistent from year to year.

Unlike calendar-year limits, rolling twelve-month limits can make compliance more difficult to predict and manage because production decisions made during one construction season may affect operational flexibility well into the following year. This may unnecessarily constrain facilities during periods of high demand despite continued compliance with overall annual production expectations.

Calendar-year limits would provide a more predictable, transparent, and practical framework for both permittees and regulators while still allowing Ecology to track and enforce annual production limitations

Ecology Comment #43

9. Complaint Reporting Requirements Create Unnecessary Administrative Burden

WACA supports the concept of a complaint response program and associated recordkeeping requirements, as these are common elements of air quality permits in many jurisdictions. Permittees should appropriately document complaints, investigate potential issues, maintain records of findings and corrective actions, and respond to complainants when warranted.

However, the proposed requirement to notify Ecology of each complaint within one business day is unnecessary and may create administrative burdens without providing a corresponding environmental benefit. Operators need sufficient time to evaluate the circumstances of a complaint, determine whether any operational issues exist, and identify whether corrective actions are warranted. Immediate reporting requirements may result in the submission of incomplete, duplicative, or unsubstantiated information, increasing workload for both permittees and Ecology.

WACA believes a more practical approach is to require facilities to maintain a complaint log documenting complaints received, investigations conducted, corrective actions taken, and responses provided to complainants. These records should be retained on site and made available to Ecology upon request. This approach ensures accountability and transparency while allowing facilities to focus on meaningful investigation and resolution of concerns rather than meeting arbitrary reporting deadlines.

Ecology Comment #44

10. Dust Control Requirements Should Remain Performance-Based

WACA supports effective fugitive dust control but is concerned that several proposed requirements are overly prescriptive and limit a facility's ability to adjust control measures based on actual site conditions and operations.

Dust generation varies based on production activity, weather, traffic levels, and facility size. Operators should be allowed to implement dust control measures, including the application of water, that are appropriate for their specific operations, provided they comply with applicable visible emission and fugitive dust requirements.
For example, requiring haul roads to be wetted during all operating periods may be unnecessary when a facility is conducting maintenance activities or otherwise generating minimal traffic. Similarly, facilities should retain flexibility to use the most effective dust suppression method for site conditions, including water trucks, fixed spray systems, hoses, wet-vacuum sweepers, or other equivalent measures.
WACA encourages Ecology to maintain a performance-based approach focused on achieving compliance rather than prescribing specific dust control methods, such as requiring water trucks to be on-site. This would provide flexibility for facilities of varying sizes and operating conditions while continuing to protect air quality.

Ecology Comment #45

11. Existing Compliance History Should Be Given Greater Weight

The aggregate, concrete, and asphalt industries have successfully operated under Washington's General Order program for many years. Existing facilities have demonstrated compliance while providing essential materials for public and private construction projects throughout the state.
WACA encourages Ecology to place greater weight on this demonstrated compliance history when evaluating the necessity of significant new restrictions, throughput reductions, and eligibility requirements.

Ecology Comment #46

12. Infrastructure and Economic Impacts Should Be Evaluated

Aggregate producers, asphalt plants, and concrete batch plants supply materials essential to transportation infrastructure, housing development, schools, airports, utilities, commercial construction, and emergency repairs.
The cumulative effect of reduced production limits, expanded setbacks, increased permitting requirements, RAP restrictions, and other operational limitations may reduce operational flexibility, increase project costs, constrain material availability, and create delays for both public and private construction projects.
WACA encourages Ecology to evaluate and disclose the infrastructure, economic, and supply-chain impacts associated with the proposed revisions before final adoption.

Ecology Comment #47

13. Overly Vague General Conditions Create Compliance and Enforcement Uncertainty

WACA is concerned that several new general conditions included in the draft General Orders rely on terms that are not clearly defined. Ambiguous permit language creates uncertainty for permittees and increases the potential for inconsistent interpretation and enforcement across facilities and regions.

- **Credible Evidence:** The draft General Orders reference the use of "credible evidence" to establish the start date of a violation or a return to compliance. However, the term is not defined. WACA requests that Ecology clearly identify the types of information that constitute

credible evidence and explain how such evidence will be evaluated and applied for compliance determinations.

- **Discontinuation of Construction:** The draft provisions addressing discontinued construction should provide additional clarity regarding what constitutes a satisfactory demonstration that an extension is justified. WACA requests that Ecology identify the information required to support an extension request and establish clear criteria for approval. Providing objective standards would improve consistency and predictability for permittees. NWCAA Regulation 300.11(A) provides a useful example of this approach.
- **Changes in Operation:** The draft General Orders should more clearly define what constitutes a "change in operation" that would trigger the need for new or amended General Order coverage. Without additional guidance, permittees may face uncertainty regarding whether routine operational adjustments, equipment maintenance activities, process improvements, equipment upgrades, or other common business practices require agency review or permit modifications.

WACA encourages Ecology to provide clear definitions and objective criteria for these provisions so that permittees have a consistent understanding of compliance obligations and can effectively plan and manage their operations.

Conclusion

WACA respectfully requests that Ecology:

- Eliminate the proposed daily production limits and continue relying on annual production limits,
- Provide clarity on the single location language as it relates to production limitations;
- Provide additional transparency regarding the modeling assumptions and technical basis supporting the daily limits;
- Evaluate the practical implications of directing facilities into individual permitting;
- Reconsider proposed setback requirements;
- Reevaluate RAP limitations and the crumb rubber prohibition;
- Remove or substantially clarify the proposed odor condition;
- Provide flexibility for routine equipment replacement projects;
- Reconsider vague language and provide clear definitions; and
- Consider the infrastructure and economic impacts associated with the proposed revisions.

The General Order program has historically provided an efficient permitting pathway for low-risk facilities while maintaining protection of public health and the environment. WACA encourages Ecology to preserve that functionality while updating the program to address current regulatory requirements.

Thank you for your consideration of these comments.

Ecology Comments 48 – 54 [Kim Schofield, Washington Asphalt Pavement Association (WAPA); Comments for Hot Mix Asphalt Plant General Order]

The Washington Asphalt Pavement Association (WAPA) appreciates the opportunity to comment on the Washington State Department of Ecology's proposed revisions to the General Order (GO) of Approval for Stationary and Portable Hot Mix Asphalt Plants. WAPA represents approximately 98% of all asphalt mixture production in Washington state through our member companies and it is the collective voice of the asphalt industry.
Our member companies have both stationary and portable hot mix asphalt plants throughout Washington State and have decades of experience producing asphalt for highways and local agencies, as well as airports, utility infrastructure, and commercial and residential construction. It is important to note that we support safe and efficient delivery of our product throughout Washington and understand environmental concerns, requirements and regulations.
General Orders provide an efficient, predictable, and streamlined permitting pathways for our industry (both stationary and portable). This dynamic benefits both regulators and permit holders by reducing unnecessary administrative burdens and critical public works project timelines while maintaining appropriate environmental protections.
After reviewing the proposed General Order, Technical Support Document, and associated SEPA documentation, we are providing our comments below. They are not intended to oppose environmental protection or the modernization of General Order requirements, but to ensure the end result reflects ensuring we meet environmental standards and the operational realities of Washington's asphalt industry. The practical implications of the currently proposed revisions have multiple unintended consequences that are of great concern to the industry that we would like the DOE to be fully aware of before it moves forward. WAPA stands ready to engage with the DOE and other stakeholders to work toward a mutually beneficial updated GO.
The following comments identify several areas of concern.

Ecology Comment #48

1. Proposed Production Limits
The proposed General Order significantly reduces the allowable annual production to 160,000 tons per year and establishes a new daily production limit of 2,800 tons. In addition, the annual production limits are set to a “rolling 12-month” limit, which effectively makes this limit a two-year restriction when considering how the paving season is limited to seasonal weather windows. The proposed GO production limits represent substantial changes to the existing operational flexibility historically provided under the General Order program and will directly influence the ability of future asphalt plants to support transportation infrastructure construction throughout Washington. Modern asphalt plants routinely operate at production capacities ranging from approximately 350 to 450 tons per hour. During paving season, ten-to-twelve-hour production shifts are common and are often necessary to support highway and road construction projects operating under seasonal paving windows, traffic restrictions, contract completion dates, liquidated damages provisions, weather and wildfire delays, and nighttime paving schedules.

A facility producing just 350 tons per hour can reasonably produce approximately 4,200 tons during a 12-hour production run, exceeding the proposed limit. Add to this that in some instances, a two-shift paving schedule may be necessary. Although the same number of tons are produced in the end, the proposed GO daily production levels would make constructing high-production projects impossible. The practical realities of supplying asphalt for Washington's most demanding transportation infrastructure projects during a seasonal paving window require maintaining the current GO daily production limits.
Limiting one location to impractical/restrictive daily (and annual) production limits is counter to the public interest. The reality is that construction projects still need to be completed (the industry does not create the need for asphalt paving). Being artificially required to introduce hot mix from an alternate location increases costs and inefficiencies, almost certainly increases environmental impacts and public inconvenience. In practice, asphalt production is highly variable and driven by owner construction schedules and requirements and seasonal weather conditions. The ability to increase production during favorable construction windows is not simply an operational preference; it is essential to successfully delivering public infrastructure projects throughout Washington State. It protects the public interest, decreases public inconvenience and, most importantly, it decreases the time crews spend on the road, decreasing exposure to dangerous traffic in work zones.

Ecology Comment #49

2. Proposed Setback Requirements
The proposed General Order establishes minimum setback requirements of 150 feet from property boundaries and 325 feet from residences, occupied commercial buildings, schools, hospitals and nursing homes. Facilities unable to satisfy these criteria would no longer qualify for coverage under the General Order and would instead be required to pursue an individual Notice of Construction (NOC) permit.
We recognize Ecology's responsibility to establish permitting criteria that protect public health and comply with applicable air quality standards. However, these proposed setback requirements represent one of the most significant revisions contained within the proposal because they directly determine whether future asphalt plants qualify for the streamlined General Order permitting process. As you know, asphalt plants have long been considered, and are, in fact, minor sources of concern. We believe that the setback limits are overly conservative.
We respectfully request Ecology provide additional information regarding the modeling assumptions and technical analyses used to establish the 150-foot and 325-foot setback requirements and whether alternative setback distances or compliance approaches were evaluated during development of the proposal. We would also like to review the history of complaints or conflicts related to plants with existing GO permits to understand the need for the additional restrictions proposed. Have GO permitted asphalt plants been a serious source of community concern in the past?
We also request an evaluation of the number of historical General Order facilities that would not have qualified under the revised eligibility criteria and the estimated number of future facilities expected to require individual Notice of Construction permits as a result of the revised setbacks.

Ecology Comment #50

3. Use of Reclaimed Asphalt Pavement (RAP)

The proposed General Order limits the percentage of Reclaimed Asphalt Pavement (RAP) used in asphalt mixtures to no more than 30 percent under General Order coverage. The Technical Support Document further states that Ecology assumed up to 30 percent RAP as part of its emissions modeling and identifies a 2011 Federal Highway Administration (FHWA) publication as the basis for that assumption.
We recognize that increasing RAP usage may influence certain emissions associated with asphalt production and that Ecology must account for those emissions when developing a General Order. However, the proposal provides comparatively little explanation regarding the technical basis for selecting 30 percent as a statewide operational limit. Utilizing RAP in hot mix asphalt is a sustainable solution. There may be alternative operating conditions, emissions controls, burner technologies, or plant configurations that may allow greater RAP utilization while continuing to achieve applicable air quality standards. Indeed, there are multiple plants in Clean Air Agency jurisdictions successfully producing hot mix asphalt at 40% RAP. In addition, the Washington State Department of Transportation (WSDOT) specifications allows RAP mixes up to 40% and the basis of that incentive is lowering overall emissions, increased recycling efforts and supporting Washington state's overall sustainability goals. The interface between approved WSDOT HMA mix designs and the need to modify those designs to comply with a more restrictive GO limiting RAP content is of concern to WAPA members. There is currently no streamlined process to easily modify approved mix designs.

Ecology Comment #51

4. Future General Order Eligibility
During the Public Hearing held on July 8th, we heard that if an asphalt plant or rock crusher currently has a General Order, they can continue operating under that General Order. It was mentioned that replacement of certain major pieces of equipment may trigger needing a new GO, but we request an itemized list of what would trigger needing a new GO. What if the equipment being replaced is more modern and energy-efficient and exceeds environmental compliance standards? Would this trigger the need for a new GO? Do permit renewals or reauthorizations require a new GO?
Request Ecology to publish additional implementation guidance identifying the specific events and/or equipment that would trigger compliance with the revised General Order. Providing this additional guidance would benefit both permit holders and the Department by promoting consistent implementation, reducing uncertainty, and minimizing unnecessary permitting disputes. For example, if an existing GO permitted plant replaces its baghouse with an equal capacity baghouse, would a new GO be required? Updated burners, new drums and new flighting, added storage bins etc. are all incremental changes that can modernize a plant. Would the new GO rules require a new permit for such updates or enhancements?

Ecology Comment #52

5. Practical Implementation of the Individual Notice of Construction (NOC) Permitting Pathway
Throughout the proposed General Order, Technical Support Document, and associated SEPA documentation, Ecology repeatedly identifies an individual Notice of Construction (NOC) permit as the alternative permitting pathway for facilities that cannot satisfy the revised General Order eligibility criteria.

While an individual NOC may be an appropriate permitting option for certain facilities, the proposal provides very little discussion regarding the practical implications of requiring future applicants to pursue that pathway. There are significant cost and time considerations with requesting an individual NOC permit that will impact project delivery. We are hoping that Ecology has enough staff to sufficiently provide permit reviews so that limited seasonal paving windows, project timelines from state and local agencies, and liquidated damage timelines are not affected. We request Ecology to establish an expected timeline for individual Notice of Construction applications. In recent years, timelines of WSDOT projects have been more difficult to meet with state funding concerns (late ad/award, shrinking the time available for a project in light of seasonal weather limitations), so it is especially concerning to add additional timelines for the permitting process. In addition, there are many situations where portable plants are set up near a project to reduce haul times, increase efficiency, lower emissions, etc. In many instances, asphalt production cannot simply be postponed until a later date. Public agencies frequently require paving operations to occur during nighttime hours, weekends, or narrowly defined construction windows to minimize impacts to the traveling public. Delays in permitting may therefore affect not only individual contractors, but also project owners, public agencies, and the communities those projects are intended to serve. The nature of the GO system is ideal for addressing the need for siting asphalt plants where and when the asphalt is needed, especially in remote locations unserved by a local asphalt plant. One of the goals of the new GO should be to maintain the flexibility that these permits currently provide. Substituting an NOC process is not a practical solution in many instances.
Portable asphalt plants play an essential role in Washington's transportation and public infrastructure system. Unlike permanent facilities, portable plants are specifically designed to relocate in response to changing project demands, including critical short/seasonal timelines associated with favorable weather and environmental concerns, allowing asphalt production to occur near the point of placement while supporting projects throughout the state. These facilities routinely support state highways, county roads, municipal streets, airports, utility installations, commercial developments, emergency repairs, and other infrastructure projects where project schedules, hauling distances, and material quality make temporary on-site production both practical and necessary. They can help to reduce haul distances, minimize traffic congestion, reduce fuel consumption, and improve overall project efficiency. Producing asphalt closer to the point of placement not only benefits contractors and project owners but may also reduce transportation-related emissions compared to hauling asphalt over significantly longer distances.
The proposed General Order introduces additional eligibility criteria, notification requirements, operational restrictions, and permitting considerations that may substantially affect future portable asphalt plant operations. It is currently unclear if a SEPA review would be required with every move. Does the SEPA review/approval stay with the site or the plant?
Providing this additional information would improve regulatory certainty, reduce implementation challenges, and better achieve the shared objective of protecting public health while maintaining the efficient delivery of essential public infrastructure.

Ecology Comment #53

6. Conversion from Annual Emission Limits to Hourly Stack Emission Limits
Historically, asphalt facilities operating under Ecology-issued General Orders have demonstrated compliance through annual emission limitations and associated operating restrictions. The proposed General Order instead establishes hourly stack emission limits for key pollutants,

including nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO_2), and volatile organic compounds (VOCs). Hourly stack emission testing is not feasible at an HMA plant.
This represents a fundamental change in how compliance is evaluated under the General Order program and the change does not alter the final minor emissions loads related to asphalt production.
While we recognize Ecology's responsibility to establish emission standards that protect public health and comply with applicable air quality regulations, the proposal provides comparatively little explanation regarding the technical basis for this transition or the practical implications it may have for existing and future asphalt facilities. Therefore, we request Ecology provide additional information regarding the establishment of the proposed hourly stack emission limits and the implications of switching to hourly stack testing.

Ecology Comment #54

7. Administrative Burden and Cumulative Compliance Requirements
The proposed General Order introduces numerous new and expanded administrative, operational, monitoring, and recordkeeping requirements to support the revised permitting framework. While many of these individual requirements are reasonable and consistent with sound environmental stewardship, collectively they represent a significant increase in the administrative responsibilities associated with operating stationary and portable asphalt plants under the General Order.
The proposal expands requirements related to production tracking, emissions documentation, portable plant notifications, maintenance records, fuel usage, operating records, compliance demonstrations, complaint reporting, and other recordkeeping obligations. Although each requirement may appear modest on its own, their cumulative effect could substantially increase the administrative workload for permit holders, particularly companies operating multiple facilities or portable plants that relocate throughout the construction season.
Administrative requirements are an important part of environmental compliance, but compliance programs are most effective when reporting obligations are clearly defined, consistently applied, and appropriately balanced with operational realities. We respectfully encourage Ecology to consider not only the benefit of each individual requirement, but also the cumulative compliance burden these obligations create across multiple facilities, project locations, and portable operations throughout Washington State.
Conclusions
WAPA appreciates Ecology's efforts to modernize the Hot Mix Asphalt General Order and shares the Department's commitment to protecting air quality while maintaining a practical, predictable, and technically sound permitting program. We respectfully request that Ecology consider the following before finalizing the proposed General Order:

- Production Limits: Restore the proposed annual and daily production limits to match the current GO parameters until the industry has had an opportunity to review Ecology's supporting analyses and work collaboratively to develop limits that recognize the seasonal nature and work zone exposure concerns of paving operations and the production needs of Washington's transportation infrastructure.
- Technical Basis for Production Limits: Provide the technical analyses, emissions calculations, and compliance data used to establish the proposed annual and daily production limits, including the basis for the approximately 47 percent reduction in annual production and the impractical, highly restrictive daily limits. We believe that the daily production limits, in particular, are

counterproductive with respect to public safety, public convenience and cost to the public with respect to the necessity to complete public works projects in accordance with current practices where plants operate to match the capacity of the paving season and operation and often operate for extended hours.

- Setback Requirements: Provide the modeling assumptions, risk analyses, and technical justification supporting the proposed 150-foot and 325-foot setback requirements, identify any alternative setback scenarios that were evaluated, and disclose how many existing and future facilities would no longer qualify for General Order coverage as a result. A history of complaints or conflicts related to asphalt plants operating under GO permitting would also be instructive.
- Reclaimed Asphalt Pavement (RAP): Reevaluate the proposed 30 percent RAP limitation and provide the technical basis for this threshold, including consideration of modern plant technologies, emissions controls, the positive environmental and public works cost advantages of using higher RAP, and current WSDOT specifications that allow higher RAP percentages.
- Future General Order Eligibility: Publish clear implementation guidance identifying the equipment replacements, plant modifications, permit renewals, or other events that would require compliance with the revised General Order, and provide reasonable grandfathering or transition provisions for existing permit holders.
- Notice of Construction (NOC) Permitting: Establish predictable review timelines for individual Notice of Construction permits, clarify when SEPA review would be required, and evaluate the impacts that increased reliance on individual permits may have on seasonal construction schedules, portable plant operations, and public infrastructure delivery. Some expedited method to respond to the realities of the time constraints related to the paving season are needed if the GO's become more restrictive.
- Emission Standards and Compliance Demonstration: Provide the technical basis for replacing annual emission limits with hourly stack emission limits, justify the updated emission factors using representative data from modern Washington asphalt plants, and allow flexibility where modeled emissions increase but demonstrated actual emissions remain compliant.
- Administrative and Recordkeeping Requirements: Evaluate the cumulative administrative burden created by the expanded monitoring, reporting, notification, and recordkeeping requirements and ensure these obligations are clearly defined, consistently applied, and appropriately balanced with operational realities.
- Cumulative Impacts: Evaluate and disclose the cumulative impacts of the proposed revisions to the Hot Mix Asphalt, Concrete Batch Plant, and Rock Crusher General Orders on infrastructure delivery, construction material availability, hauling distances, project costs, permitting workload, workforce utilization, and Washington's construction materials industry.
- Industry/Other Agency Engagement: We suggest that the proposed GO changes are so profound that it would serve all parties to engage in discussions to refine/revise the most problematic changes in this process before attempting to institute the changes. It does not serve the public interest to knowingly impose permit conditions that the agency knows will be officially contested. We would welcome an industry/DOE/WSDOT et. al. review and discussion forum or taskforce so as to fully evaluate the unintended consequences of the proposed GO restrictions.

We believe these additional analyses and clarifications will strengthen the final General Order by improving technical transparency, regulatory certainty, and practical implementation while continuing to achieve Ecology's environmental objectives. Partnering to better understand all the consequences of the new GO before it is implemented will conserve resources by avoiding future

challenges to the implementation of the GO as it is now written. The recent stay of the Sand and Gravel General Permit (dated July 9, 2026) is a good example of the process we hope to avoid. Thank you for the opportunity to provide these comments. We appreciate Ecology's consideration and look forward to working collaboratively to develop a General Order that protects air quality while supporting the efficient delivery of Washington's transportation infrastructure and public works projects.

Ecology Comment #s 55 – 59 [Kim Schofield, Washington Asphalt Pavement Association (WAPA); Comments for Rock Crusher General Order]

Comments on Draft General Order of Approval No. 26AQ-GO-01
Stationary and Portable Rock Crushers

Provided by the Washington Asphalt Pavement Association (WAPA)

The Washington Asphalt Pavement Association (WAPA) appreciates the opportunity to comment on the Washington State Department of Ecology's proposed revisions to the General Order (GO) of Approval for Stationary and Portable Rock Crushers. WAPA represents approximately 98% of all asphalt mixture production in Washington through its member companies and it is the collective voice of the asphalt industry. Our members also produce and/or rely on a dependable supply of locally produced aggregate from stationary and portable rock crushing operations. They have decades of experience in the construction industry and it is important to note that we support safe and efficient delivery of our product throughout Washington and understand environmental concerns, requirements and regulations.
General Orders have historically provided an efficient, predictable permitting pathway while maintaining environmental protection. This dynamic benefits both regulators and permit holders by reducing unnecessary administrative burdens and critical public works project timelines while maintaining appropriate environmental protections.
WAPA supports modernization of the GO but believes several proposed revisions could unintentionally affect aggregate availability, infrastructure delivery, and the asphalt industry's ability to serve Washington's transportation needs. After reviewing the proposed General Order, Technical Support Document, and associated SEPA documentation, we are providing our comments below. They are not intended to oppose environmental protection or the modernization of General Order requirements, but to ensure the end result is that we meet both environmental standards and the operational realities of Washington's asphalt and aggregate industry. The practical implications of the currently proposed revisions have multiple unintended consequences that are of great concern to the industry that we would like the DOE to be fully aware of before it moves forward. WAPA stands ready to engage with the DOE and other stakeholders to work toward a mutually beneficial updated GO.
The following comments identify WAPA's principal concerns and recommendations.

Ecology Comment #55

1. Proposed Production Limits

The proposed General Order establishes revised annual production limits for facilities operating under General Order coverage. The proposed production limits substantially reduce operational flexibility for aggregate producers, and consequentially, asphalt producers. Unlike many manufacturing industries, aggregate production is not driven by steady consumer demand or continuous manufacturing schedules. Aggregate demand is driven by seasonal construction, emergency repairs, and infrastructure needs rather than uniform annual production. The ability to increase production during favorable operating conditions is often essential to maintaining project schedules, supplying construction materials, and meeting the demands of public infrastructure throughout Washington State. Consequently, reductions in production at one facility do not necessarily reduce overall demand for aggregate materials. Rather, production may simply shift to other facilities, potentially increasing hauling distances, transportation costs, fuel consumption, truck traffic, and associated emissions.
Because aggregate is the foundational material used to produce asphalt, concrete, and countless other construction products, revisions affecting aggregate production may also influence multiple downstream industries that depend upon a reliable and predictable supply of construction materials. We respectfully request Ecology identify whether these broader supply chain impacts were evaluated as part of the proposed rulemaking. Understanding these broader system-wide impacts is important because the environmental benefits associated with reduced production at one location may differ from the overall impacts.
We request Ecology provide the technical basis, emissions modeling, production data, and evaluation of seasonal and statewide operations supporting the proposed limits.

Ecology Comment #56

2. Proposed Setback Requirements
Rock crushing operations occur in a wide variety of settings, including permanent quarries, temporary construction projects, public infrastructure improvements, reclamation activities, and portable aggregate processing sites. Existing topography, pit site operator screening enhancements, prevailing wind conditions, production rates, natural screening, surrounding land uses, and operational configurations vary considerably among these locations.

Given this variability, we respectfully request Ecology explain how these site-specific factors were evaluated when developing standardized eligibility criteria intended to apply uniformly throughout Washington State.
We further encourage Ecology to preserve a pathway allowing applicants to demonstrate compliance through site-specific air quality analyses where appropriate rather than automatically requiring individual Notice of Construction permitting solely because standardized eligibility criteria cannot be satisfied.

Ecology Comment #57

3. Future General Order Eligibility
During the Public Hearing held on July 8th, we heard that if an asphalt plant or rock crusher currently has a General Order, they can continue operating under that General Order. It was mentioned that replacement of certain major pieces of equipment may trigger needing a new GO, but we request an itemized list of what would trigger needing a new GO. What if the equipment being replaced is more modern and energy-efficient and exceeds environmental compliance

standards? Would this trigger the need for a new GO? Do permit renewals or reauthorizations require a new GO?
We request that Ecology publish additional implementation guidance identifying the specific events and/or equipment that would trigger compliance with the revised General Order. Ideally, this guidance development would involve discussions with industry representatives. Providing this additional guidance would benefit both permit holders and the Department by promoting consistent implementation, reducing uncertainty, and minimizing unnecessary permitting disputes. Ecology should clearly identify which equipment replacements, modifications, permit renewals, relocations, or operational changes would trigger compliance with the revised GO and provide reasonable transition provisions.

Ecology Comment #58

4. Portable Rock Crushing Operations and Practical Implementation of the NOC Permitting Pathway
Throughout the proposed General Order, Technical Support Document, and associated SEPA documentation, Ecology repeatedly identifies an individual Notice of Construction (NOC) permit as the alternative permitting pathway for facilities that cannot satisfy the revised General Order eligibility criteria.
While an individual NOC may be an appropriate permitting option for certain facilities, the proposal provides very little discussion regarding the practical implications of requiring future applicants to pursue that pathway. There are significant cost and time considerations when requesting an individual NOC. These factors will likely impact project delivery. Permit applicants may be left with uncertainty regarding whether Ecology has enough staff to sufficiently provide timely (rapid) permit reviews so that limited seasonal windows, project timelines from state and local agencies, and liquidated damage timelines are not affected. We request Ecology to establish an expected timeline for individual Notice of Construction applications.
Portable crushing operations routinely support state highways, county roads, municipal infrastructure, airports, bridges, utility installations, commercial developments, residential construction, and emergency repairs. The flexibility to relocate allows contractors and public agencies to efficiently utilize locally available aggregate resources while reducing transportation distances and in order to comply with often stringent project schedules. Producing aggregate closer to the point of use almost certainly reduces haul distances, decreases fuel consumption, minimizes truck traffic over long distances, reduces wear on public roadways, improves construction efficiency, and lowers overall transportation-related emissions compared to hauling aggregate from more distant permanent facilities.
Delays in permitting may therefore affect not only individual contractors, but also project owners, public agencies, and the (often remote) communities those projects are intended to serve. The nature of the GO system is ideal for addressing the need for siting rock crushing equipment where and when the aggregate is needed, especially in remote locations. One of the goals of the new GO should be to maintain the flexibility that these permits currently provide. Substituting an NOC process is not a practical solution in many instances. The proposed General Order introduces revised eligibility criteria, notification requirements, operational restrictions, and permitting considerations that may substantially affect future portable crushing operations.

To reiterate, portable crushers reduce hauling distances, improve efficiency, and support transportation projects throughout Washington. Ecology should preserve flexibility for portable

operations and clarify relocation, notification, and SEPA requirements. If more facilities require individual NOC permits, Ecology should establish predictable review timelines, identify anticipated costs, evaluate staffing capacity, and assess impacts on seasonal infrastructure projects and emergency work.

Ecology Comment #59

5. Administrative Burden and Cumulative Compliance Requirements

Construction materials are not produced independently, transported independently, consumed independently, or regulated independently. Aggregate production is the foundation of Washington's construction materials industry. It supplies the raw materials necessary for hot mix asphalt, ready-mix concrete, public infrastructure, commercial development, residential construction, utility installations, airport improvements, and countless other public and private projects throughout the state. Accordingly, the regulatory framework governing these industries should likewise be evaluated as an interconnected system rather than as separate permitting programs. We note that Ecology is simultaneously proposing significant revisions to the General Orders governing rock crushers, hot mix asphalt plants, and concrete batch plants. While each proposal has been evaluated independently, the practical impacts experienced by Washington's construction materials industry will be cumulative.

Collectively, these General Order proposals introduce revised production limitations, expanded eligibility criteria, additional administrative responsibilities, increased reliance on individual Notice of Construction permits, new operational requirements, expanded recordkeeping obligations, and additional permitting uncertainties. While many of these individual requirements are reasonable and consistent with sound environmental stewardship, collectively they represent a significant increase in the administrative responsibilities associated with rock crushing operations as well as asphalt and concrete production.

Administrative requirements are an important part of environmental compliance, but compliance programs are most effective when reporting obligations are clearly defined, consistently applied, and appropriately balanced with operational realities. We respectfully encourage Ecology to consider not only the benefit of each individual requirement, but also the cumulative compliance burden these obligations create across multiple facilities, project locations, and portable operations throughout Washington State.

Conclusions

WAPA appreciates Ecology's efforts to modernize the Rock Crusher General Order and shares the Department's commitment to protecting air quality while maintaining a practical, predictable, and technically sound permitting program. We respectfully request that Ecology consider the following before finalizing the proposed General Order:

- Production Limits: Restore current production limits, most critically the untenable daily limits, until the industry has had an opportunity to review Ecology's supporting analyses and work collaboratively to develop limits that recognize the seasonal nature and the production needs of Washington's transportation infrastructure.
- Setback Requirements: Provide the modeling assumptions, risk analyses, and technical justification supporting the proposed setback requirements, identify any alternative setback scenarios that were evaluated, and disclose how many existing and future facilities would no longer

qualify for General Order coverage as a result. A history of complaints or conflicts related to rock crushers operating under GO permitting would also be instructive.

- Future General Order Eligibility: Publish clear implementation guidance identifying the equipment replacements, plant modifications, permit renewals, or other events that would require compliance with the revised General Order, and provide reasonable grandfathering or transition provisions for existing permit holders.
- Portable Rock Crushing Operations and Practical Implementation of the NOC Permitting Pathway: Establish predictable review timelines for individual Notice of Construction permits, clarify when SEPA review would be required, and evaluate the impacts that increased reliance on individual permits may have on seasonal construction schedules, portable crusher operations, and public infrastructure delivery. Some expedited NOC method to respond to the realities of the time constraints related to the construction season are needed if the GO's become more restrictive.
- Administrative Requirements: Evaluate the cumulative administrative burden created by the expanded monitoring, reporting, notification, and recordkeeping requirements and ensure these obligations are clearly defined, consistently applied, and appropriately balanced with operational realities.
- Cumulative Impacts: Evaluate and disclose the cumulative impacts of the proposed revisions to the Hot Mix Asphalt, Concrete Batch Plant, and Rock Crusher General Orders on infrastructure delivery, construction material availability, hauling distances, project costs, permitting workload, workforce utilization, and Washington's construction materials industry.
- Industry Engagement: We suggest that the proposed GO changes are so profound that it would serve all parties to engage in discussions to refine/revise the most problematic changes in this process before attempting to institute the changes. It does not serve the public interest to knowingly impose permit conditions that the agency knows will be officially contested. We would welcome an industry/DOE/WSDOT et. al. review and discussion forum or taskforce so as to fully evaluate the unintended consequences of the proposed GO restrictions.

We believe these additional analyses and clarifications will strengthen the final General Order by improving technical transparency, regulatory certainty, and practical implementation while continuing to achieve Ecology's environmental objectives. Partnering to better understand all the consequences of the new GO before it is implemented will conserve resources by avoiding future challenges to the implementation of the GO as it is now written. The recent stay of the Sand and Gravel General Permit (dated July 9, 2026) is a good example of the process we hope to avoid. Thank you for the opportunity to provide these comments. We appreciate Ecology's consideration and look forward to working collaboratively to develop a General Order that protects air quality while supporting the efficient delivery of Washington's transportation infrastructure and public works projects.

Ecology Comment #s 60 – 70 [Raquel Elorza - Central Washington Asphalt, Inc. and Shamrock Paving, Inc]

Comments on Draft General Order of Approval No. 26AQ-GO-02
Stationary and Portable Hot Mix Asphalt Plants
Introduction

Central Washington Asphalt, Inc. and Shamrock Paving, Inc. appreciate the opportunity to comment on the Washington State Department of Ecology's proposed revisions to the General Order of Approval for Stationary and Portable Hot Mix Asphalt Plants.

Our companies operate both stationary and portable hot mix asphalt plants throughout Washington State and have decades of experience producing asphalt for highways, county roads, municipal streets, airports, utility infrastructure, commercial developments, residential construction, and emergency repair projects. Because our operations support projects in a wide variety of geographic settings and regulatory jurisdictions, we have a practical understanding of both the environmental responsibilities associated with asphalt production and the operational realities necessary to safely and efficiently deliver transportation infrastructure throughout Washington.

We also recognize the important role General Orders play within Washington's air permitting program. General Orders provide an efficient, predictable, and streamlined permitting pathway for facilities whose emissions and operating characteristics have been evaluated in advance. This framework benefits both regulators and permit holders by reducing unnecessary administrative burdens while maintaining appropriate environmental protections.

Our comments are not intended to oppose environmental protection or the modernization of General Order requirements. Rather, they are intended to ensure that the final General Order is technically supported, practically implementable, and reflective of the operational realities of Washington's asphalt industry.

Environmental protection and responsible infrastructure development are complementary objectives that are best achieved through regulations supported by sound science, transparent decision-making, and practical implementation.

After reviewing the proposed General Order, Technical Support Document, and associated SEPA documentation, we believe several significant revisions warrant additional explanation and evaluation before the proposal is finalized.

In particular, we are concerned that the proposal introduces new production limitations, setback requirements, emission standards, eligibility restrictions, and permitting pathways without fully evaluating or explaining the practical implications these revisions may have on asphalt production, portable operations, public infrastructure delivery, workforce utilization, and future General Order eligibility throughout Washington State.

Throughout the proposal, Ecology frequently relies upon representative modeling assumptions while acknowledging that future facility locations, surrounding land uses, operational configurations, and site-specific conditions are unknown. Nevertheless, the proposal establishes statewide production limits, setback requirements, and emission standards that will apply to future applicants operating under a wide range of conditions.

We respectfully request that Ecology provide additional technical justification, implementation guidance, and impact analyses supporting these revisions so stakeholders can fully understand both the environmental benefits and the practical consequences associated with the proposed General Order.

The following comments identify several areas where additional clarification, technical support, or evaluation would improve the proposal while preserving the intended purpose of the General Order program as an efficient, technically supported, and predictable permitting pathway for qualifying facilities.

Ecology Comment # 60

1. Proposed Production Limits

The proposed General Order reduces allowable annual production from 300,000 tons per year to 160,000 tons per year and establishes a new daily production limit of 2,800 tons.

These represent substantial changes to the operational flexibility historically provided under the General Order program and will directly influence the ability of future asphalt plants to support transportation infrastructure throughout Washington.

We recognize Ecology's responsibility to evaluate air quality impacts and establish production limits consistent with applicable environmental regulations. However, the proposal provides limited explanation regarding how the selected production thresholds reflect the operational realities of modern asphalt production.

Modern asphalt plants routinely operate at production capacities ranging from approximately 350 to 450 tons per hour. During paving season, ten-hour production shifts are common and are often necessary to support transportation projects operating under seasonal paving windows, traffic restrictions, contract completion dates, liquidated damages provisions, weather delays, and nighttime paving schedules.

A facility capable of producing 400 tons per hour can reasonably produce approximately 4,000 tons during a standard production day. Likewise, a 450-ton-per-hour facility may produce approximately 4,500 tons under normal operating conditions.

Under the proposed General Order, both facilities would exceed the proposed daily production limit during what would otherwise be considered a routine operating day.

These production levels do not represent extraordinary operating conditions. Rather, they reflect the practical realities of supplying asphalt for Washington's transportation infrastructure.

Accordingly, we respectfully request Ecology provide additional information regarding:

- The technical basis supporting both the proposed annual and daily production limits;
- The modeling assumptions used to establish these thresholds;
- Whether actual production data from Washington asphalt plants was evaluated during development of the proposal;
- Whether the proposed limits were evaluated against the production demands of public infrastructure projects;
- Whether Ecology evaluated the impacts of weather delays, equipment failures, emergency repairs, and accelerated construction schedules on production needs;
- Whether 24-hour paving operations and limited seasonal construction windows were considered during development of the proposed limits; and
- Whether alternative production thresholds were evaluated that would continue to achieve applicable air quality objectives while preserving greater operational flexibility.

The proposal appears to assume relatively uniform production throughout the year. In practice, asphalt production is highly variable and driven by construction schedules, seasonal weather conditions, project sequencing, owner requirements, equipment availability, and the need to recover from unforeseen delays.

The ability to increase production during favorable construction windows is not simply an operational preference; it is essential to successfully delivering public infrastructure projects throughout Washington State.

Ecology Comment # 61

2. Rolling 12-Month Production Limits
In addition to establishing revised annual and daily production limits, the proposed General Order introduces a rolling 12-month production limitation. While annual production thresholds have historically provided permit holders with flexibility to respond to seasonal construction demands, weather conditions, and project scheduling, a rolling 12-month limitation may significantly alter how asphalt plants are able to plan and manage production throughout the year.
Unlike many manufacturing industries, asphalt production is inherently seasonal. Production frequently occurs in concentrated periods during favorable weather conditions and may vary substantially from one construction season to the next depending upon project awards, transportation funding, emergency repairs, and regional demand.
A rolling 12-month production limitation may reduce an operator's ability to recover from weather delays, equipment failures, or other unforeseen circumstances by extending the operational impacts of one construction season well into the next.
Accordingly, we respectfully request Ecology provide additional information regarding:
• The technical basis supporting the use of a rolling 12-month production limitation rather than a calendar-year production limit;
• Whether Ecology evaluated the impacts of rolling production limits on Washington's seasonal paving industry;
• Whether actual production data from Washington asphalt plants was evaluated to determine how frequently facilities experience concentrated production periods;
• Whether Ecology evaluated the impacts of weather delays, emergency infrastructure repairs, accelerated project schedules, or owner-directed production increases on rolling production calculations; and
• Whether alternative approaches were considered that would continue to achieve applicable air quality objectives while providing greater operational flexibility for seasonal industries.
Providing additional information regarding the rationale for the rolling 12-month production limitation would allow stakeholders to better understand how Ecology expects this requirement to function under real-world operating conditions.

Ecology Comment # 62

3. General Order Eligibility and Setback Requirements
The proposed General Order establishes minimum setback requirements of 150 feet from property boundaries and 325 feet from residences, occupied commercial buildings, schools, hospitals, nursing homes, and other sensitive receptors. Facilities unable to satisfy these criteria would no longer qualify for coverage under the General Order and would instead be required to pursue an individual Notice of Construction (NOC) permit.
We recognize Ecology's responsibility to establish permitting criteria that protect public health and comply with applicable air quality standards. However, these proposed setback requirements represent one of the most significant revisions contained within the proposal because they directly determine whether future asphalt plants qualify for the streamlined General Order permitting process.
General Orders exist to provide an efficient, predictable, and technically supported permitting pathway for facilities with similar operating characteristics and emissions profiles. The value of a

General Order lies not only in protecting public health and the environment, but also in providing regulatory certainty for both applicants and the Department.
As proposed, the revised eligibility criteria may substantially reduce the number of future facilities able to utilize that permitting pathway while shifting a greater number of projects toward individual Notice of Construction permits.
Accordingly, we respectfully request Ecology provide additional information regarding the technical basis supporting these revisions, including:
• The pollutant or pollutants that ultimately governed the proposed setback distances;
• The modeling assumptions and technical analyses used to establish the 150-foot and 325-foot setback requirements;
• Whether alternative setback distances or compliance approaches were evaluated during development of the proposal;
• The number of historical General Order facilities that would not have qualified under the revised eligibility criteria;
• The estimated number of future facilities expected to require individual Notice of Construction permits as a result of the revised setbacks;
• Whether Ecology evaluated alternative compliance pathways that would allow applicants to demonstrate compliance through site-specific analysis while preserving General Order eligibility where appropriate; and
• Whether Ecology evaluated the cumulative impacts associated with reduced General Order eligibility on transportation projects, portable asphalt plants, and public infrastructure delivery.
The Technical Support Document acknowledges that future facility locations, surrounding land uses, topography, meteorological conditions, and site-specific operating characteristics are unknown at the time the General Order is developed. Despite this acknowledged uncertainty, the proposal establishes uniform statewide setback requirements that will govern future eligibility for facilities operating under widely varying conditions.
Asphalt plants frequently operate within active construction corridors, aggregate sites, industrial properties, temporary project locations, and other environments where natural terrain, existing development, prevailing winds, production rates, and operational configurations vary considerably from one location to another.
Given this variability, we respectfully request Ecology explain how these site-specific factors were evaluated when selecting setback distances intended to apply uniformly throughout Washington State.
We further encourage Ecology to preserve a pathway allowing applicants to demonstrate compliance through site-specific air quality analyses where appropriate rather than automatically requiring individual Notice of Construction permitting solely because standardized setback distances cannot be achieved.
Providing this additional information would allow stakeholders to better understand the technical basis supporting the proposed eligibility criteria and evaluate whether the revised General Order continues to fulfill its intended purpose as a streamlined permitting pathway while maintaining appropriate environmental protections.

Ecology Comment # 63

4. Practical Implementation of the Individual Notice of Construction (NOC) Permitting Pathway

Throughout the proposed General Order, Technical Support Document, and associated SEPA documentation, Ecology repeatedly identifies an individual Notice of Construction (NOC) permit as the alternative permitting pathway for facilities that cannot satisfy the revised General Order eligibility criteria.

While an individual NOC may be an appropriate permitting option for certain facilities, the proposal provides very little discussion regarding the practical implications of requiring future applicants to pursue that pathway.

The proposed revisions effectively shift a portion of future asphalt plant projects from a streamlined permitting process to an individualized permitting process without evaluating or explaining the associated regulatory, financial, and operational impacts.

Specifically, the proposal does not appear to discuss:

- The anticipated consultant costs associated with preparing an individual Notice of Construction application;
- Air dispersion modeling costs;
- Engineering and technical support costs;
- Additional permitting fees;
- Anticipated agency review timelines;
- Whether Ecology evaluated its own staffing capacity and anticipated permit review workload associated with an increase in individual Notice of Construction applications;
- Potential project delays resulting from longer permitting processes; or
- The cumulative economic impacts associated with requiring a greater number of applicants to pursue individual permits.

These considerations are particularly important for portable asphalt plants supporting state highways, county roads, municipal streets, airports, utility projects, emergency infrastructure repairs, and other transportation improvements where project schedules are often dictated by weather, contract completion dates, traffic restrictions, liquidated damages provisions, funding deadlines, and limited seasonal paving windows.

In many instances, asphalt production cannot simply be postponed until a later date. Public agencies frequently require paving operations to occur during nighttime hours, weekends, or narrowly defined construction windows to minimize impacts to the traveling public. Delays in permitting may therefore affect not only individual contractors, but also project owners, public agencies, and the communities those projects are intended to serve.

General Orders have historically provided a predictable and efficient permitting pathway for qualifying facilities. If future applicants are expected to transition to individual permitting with greater frequency, stakeholders should understand the practical consequences associated with that transition.

Accordingly, we respectfully request Ecology provide additional information regarding:

- The anticipated permitting timeline for individual Notice of Construction applications submitted by facilities that no longer qualify under the revised General Order;
- Typical consultant, engineering, and modeling costs associated with obtaining an individual permit;
- Whether Ecology evaluated the cumulative economic impacts associated with increased reliance on individual permitting;

• Whether Ecology evaluated the effects that longer permitting timelines may have on public infrastructure delivery, emergency response projects, seasonal paving operations, and contract completion schedules;
• Whether Ecology evaluated the impacts of individual permitting on portable asphalt plants that routinely relocate in response to project demands; and
• Whether alternative compliance pathways were considered that would preserve General Order eligibility while continuing to achieve the intended environmental objectives.
Providing this information would allow stakeholders to better understand whether the proposed revisions appropriately balance environmental protection with the General Order program's longstanding purpose of providing an efficient, predictable, and practical permitting process for qualifying facilities.

Ecology Comment # 64

5. Conversion from Annual Emission Limits to Hourly Stack Emission Limits
During our review of the proposed General Order, we identified a significant policy change that extends well beyond the revised production limits and setback requirements discussed elsewhere in the proposal.
Historically, asphalt facilities operating under Ecology-issued General Orders have demonstrated compliance through annual emission limitations and associated operating restrictions. The proposed General Order instead establishes hourly stack emission limits for key pollutants, including nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO_2), and volatile organic compounds (VOCs).
This represents a fundamental change in how compliance is evaluated under the General Order program.
While we recognize Ecology's responsibility to establish emission standards that protect public health and comply with applicable air quality regulations, the proposal provides comparatively little explanation regarding the technical basis for this transition or the practical implications it may have for existing and future asphalt facilities.
Specifically, we respectfully request Ecology provide additional information regarding:
• The technical basis used to establish the proposed hourly stack emission limits;
• Why hourly emission limits were selected in place of the previous annual emission framework;
• Whether existing General Order facilities throughout Washington were evaluated against the proposed hourly emission standards;
• Whether Ecology evaluated the number of existing facilities that may become noncompliant solely because the compliance methodology changed from annual emissions to hourly stack emission limits rather than because actual emissions increased;
• The number of existing facilities that may no longer qualify for future General Order coverage without equipment modifications or alternative permitting;
• Whether Ecology evaluated the anticipated costs associated with burner upgrades, equipment modifications, additional testing, stack testing, or site-specific permitting;
• Whether Ecology evaluated the operational impacts these revised standards may have on older facilities operating under existing General Orders;
• Whether transient operating conditions, including equipment startup, shutdown, and normal operational variability, were considered during development of the proposed hourly emission limits; and

• Whether Ecology evaluated alternative compliance pathways that would allow facilities demonstrating lower emission rates through cleaner technologies, such as ultra-low NOx burners or equivalent emission reduction technologies, to maintain greater operational flexibility while continuing to achieve applicable air quality objectives.
We also respectfully request Ecology identify whether it evaluated the relationship between production rates and emission rates to determine whether lower hourly emissions could reasonably support increased production flexibility while maintaining compliance with applicable air quality standards.
Providing this information would allow stakeholders to better understand both the technical rationale supporting the revised emission standards and the practical consequences associated with transitioning from an annual compliance framework to hourly stack emission limits.
Because this represents a fundamental change in how General Order compliance is demonstrated, additional transparency regarding the supporting analyses, implementation expectations, and anticipated impacts would significantly improve stakeholders' ability to evaluate the proposal and prepare for future compliance obligations.

Ecology Comment # 65

6. Use of Reclaimed Asphalt Pavement (RAP)
The proposed General Order limits the percentage of Reclaimed Asphalt Pavement (RAP) used in asphalt mixtures to no more than 30 percent under General Order coverage. The Technical Support Document further states that Ecology assumed up to 30 percent RAP as part of its emissions modeling and identifies a 2011 Federal Highway Administration (FHWA) publication as the basis for that assumption.
We recognize that increasing RAP usage may influence certain emissions associated with asphalt production and that Ecology must account for those emissions when developing a General Order. However, the proposal provides comparatively little explanation regarding the technical basis for selecting 30 percent as a statewide operational limit rather than as a modeling assumption used during permit development.
Accordingly, we respectfully request Ecology provide additional information regarding:
The technical basis supporting the proposed 30 percent RAP limitation;
Whether higher RAP percentages were evaluated during development of the General Order;
Whether the proposed limitation represents an air quality threshold identified through emissions modeling or simply reflects the assumptions selected for development of the General Order;
Which pollutants or emission sources become limiting as RAP percentages increase;
Whether alternative operating conditions, emissions controls, burner technologies, or plant configurations were evaluated that may allow greater RAP utilization while continuing to achieve applicable air quality standards;
Whether Ecology coordinated with the Washington State Department of Transportation (WSDOT) regarding the proposed RAP limitation and evaluated its potential impacts on asphalt mixtures that may utilize higher RAP percentages under project-specific mix designs and specifications; and
Whether the proposed RAP limitation is consistent with Washington's broader goals related to resource conservation, recycling, and sustainable use of construction materials.
The accompanying SEPA documentation identifies the use of RAP as a measure that conserves natural resources by reducing the demand for virgin aggregate and asphalt binder. Given these acknowledged environmental benefits, we respectfully request Ecology explain how the proposed

RAP limitation balances air quality objectives with the resource conservation benefits associated with increased recycling.
In addition, because RAP utilization is also governed by transportation specifications, we respectfully request Ecology explain how the proposed RAP limitation was coordinated with the Washington State Department of Transportation (WSDOT). WSDOT specifications establish allowable RAP percentages through project-specific mix designs and engineering evaluations that may differ depending upon pavement application and contract requirements. Additional information regarding coordination between Ecology and WSDOT would assist stakeholders in understanding how the proposed General Order is intended to function alongside existing transportation specifications and whether the proposed limitation may affect future use of recycled asphalt materials on public infrastructure projects.
We also respectfully request Ecology evaluate whether the proposed RAP limitation may unintentionally discourage future investment in technologies capable of safely utilizing higher recycled material content while continuing to meet applicable air quality standards. Environmental regulations are often most successful when they encourage innovation that advances both environmental protection and resource conservation. Greater transparency regarding how this limitation supports those objectives would help stakeholders better understand the long-term policy direction intended by the proposed General Order.
Providing additional information regarding the technical basis for the proposed RAP limitation would allow stakeholders to better understand whether 30 percent represents an appropriate statewide operational standard or whether additional flexibility may be appropriate for facilities capable of demonstrating equivalent environmental performance through modern equipment, cleaner combustion technologies, or site-specific analyses.

Ecology Comment # 66

7. Grandfathering and Future General Order Eligibility
Throughout the proposed General Order, it remains unclear how existing facilities currently operating under prior versions of Ecology's General Order will be treated over time.
While existing facilities may initially remain authorized to operate under their current approvals, the proposal provides limited guidance regarding the circumstances that may require an existing facility to comply with the revised General Order or pursue alternative permitting.
Regulatory certainty is an important component of any permitting program. Existing permit holders should be able to reasonably understand the circumstances under which future operational changes may affect continued General Order eligibility.
Accordingly, we respectfully request Ecology provide additional clarification regarding:
• Whether permit renewals or reauthorizations will require compliance with the revised General Order;
• Whether replacement of burners, baghouses, control equipment, or other major process equipment would affect continued General Order eligibility;
• Whether equipment modernization projects intended to improve environmental performance could inadvertently require facilities to comply with the revised standards;
• Whether increases or decreases in production capacity would affect grandfathered status;
• Whether relocation of portable asphalt plants to future project locations would require compliance with the revised eligibility criteria;

• Whether modifications to plant configurations, emissions controls, or fuel systems would require reevaluation under the revised General Order;
• Whether changes in ownership, corporate structure, or facility transfers would affect continued General Order coverage; and
• Whether Ecology intends to publish additional implementation guidance identifying the specific events that would trigger compliance with the revised General Order.
These questions are particularly important for portable asphalt plants that routinely relocate in support of transportation projects, municipal improvements, airport paving, utility work, and emergency infrastructure repairs throughout Washington State.
Likewise, stationary facilities routinely undergo equipment replacement, modernization, maintenance, and operational improvements over the course of their service life. Facilities should not be discouraged from investing in newer, cleaner, or more efficient technologies because of uncertainty regarding future permitting consequences.
We respectfully encourage Ecology to provide greater regulatory certainty by clearly identifying the circumstances under which existing facilities may retain General Order coverage and those circumstances that would require compliance with the revised standards.
Providing this additional guidance would benefit both permit holders and the Department by promoting consistent implementation, reducing uncertainty, and minimizing unnecessary permitting disputes.

Ecology Comment # 67

8. Portable Asphalt Plant Operations
Portable asphalt plants play an essential role in Washington's transportation and public infrastructure system. Unlike permanent facilities, portable plants are specifically designed to relocate in response to changing project demands, allowing asphalt production to occur near the point of placement while supporting projects throughout the state.
These facilities routinely support state highways, county roads, municipal streets, airports, utility installations, commercial developments, emergency repairs, and other infrastructure projects where project schedules, hauling distances, and material quality make temporary on-site production both practical and necessary.
Portable asphalt plants are often established specifically to reduce haul distances, maintain asphalt quality, minimize traffic congestion, reduce fuel consumption, and improve overall project efficiency. Producing asphalt closer to the point of placement not only benefits contractors and project owners, but may also reduce transportation-related emissions compared to hauling asphalt over significantly longer distances.
The proposed General Order introduces additional eligibility criteria, notification requirements, operational restrictions, and permitting considerations that may substantially affect future portable asphalt plant operations.
While we understand Ecology's responsibility to maintain accurate records and ensure compliance with applicable air quality regulations, we respectfully request additional clarification regarding the practical implementation of these requirements and the potential impacts they may have on future transportation projects.
Specifically, we respectfully request Ecology identify:
• Whether the proposed requirements were evaluated using actual portable asphalt plant operations throughout Washington State;

• Whether Ecology evaluated the cumulative impacts these revisions may have on portable plants supporting transportation infrastructure, airports, utility work, emergency repairs, and municipal projects;
• Whether the proposed notification and administrative requirements were evaluated for their potential impacts on project mobilization and construction schedules;
• Whether Ecology evaluated the practical challenges associated with locating portable asphalt plants within active transportation corridors, construction staging areas, aggregate sites, and temporary project locations;
• Whether Ecology evaluated how reduced General Order eligibility may affect future portable operations; and
• Whether relocation of an existing portable asphalt plant to another project location will require additional SEPA review under the proposed General Order;
• Whether Ecology evaluated the effects that additional SEPA review timelines may have on emergency transportation projects, airport closures, utility work, and other time-sensitive public infrastructure projects; and
• Whether additional flexibility could be incorporated into the General Order while continuing to achieve the intended environmental objectives.
Portable asphalt plants frequently operate under conditions that provide little flexibility for permitting delays. Transportation agencies routinely schedule paving operations during nighttime hours, weekends, or narrowly defined construction windows to minimize impacts to the traveling public. Emergency repair projects likewise require rapid mobilization to restore critical infrastructure following unexpected failures or natural disasters.
The proposal also raises questions regarding the relationship between portable plant relocations and environmental review requirements. Portable asphalt plants are routinely relocated in response to changing project locations, often as part of transportation projects that have already undergone broader environmental review. Additional clarification regarding when
SEPA review would be required for portable relocations would improve regulatory certainty and help prevent unnecessary project delays while maintaining appropriate environmental oversight.
The proposal appears to evaluate individual facility emissions without fully considering the operational role portable asphalt plants serve in delivering transportation infrastructure throughout Washington.
Accordingly, we respectfully request Ecology provide additional information regarding how these practical considerations were evaluated during development of the proposed General Order and whether alternative approaches were considered that would maintain environmental protections while preserving the operational flexibility necessary for portable asphalt plants to continue supporting Washington's transportation system.
Providing this additional information would improve regulatory certainty, reduce implementation challenges, and better achieve the shared objective of protecting public health while maintaining the efficient delivery of essential public infrastructure.

Ecology Comment # 68

9. Practical Implementation of Toxic Air Pollutant Requirements
The proposed General Order and accompanying Technical Support Document place significant emphasis on Toxic Air Pollutants (TAPs), including emissions associated with asphalt production that were evaluated through Ecology's air dispersion modeling.

We recognize Ecology's responsibility to evaluate Toxic Air Pollutants and ensure compliance with applicable state and federal air quality regulations. We also support the use of sound science and appropriate technical analyses when developing permitting criteria intended to protect public health.
While the proposal and accompanying Technical Support Document explain the pollutants evaluated, the modeling assumptions employed, and the resulting production limits, setback requirements, and emission standards, they provide comparatively little guidance regarding how future applicants are expected to demonstrate compliance under varying site-specific conditions or when actual operating conditions differ from the representative scenarios used during development of the General Order.
In particular, we respectfully request Ecology provide additional clarification regarding:
• The pollutants that ultimately governed the proposed production limits, setback distances, and hourly emission standards;
• The specific modeling assumptions used to establish these requirements;
• How applicants are expected to demonstrate compliance when actual site conditions differ from the representative modeling scenarios;
• The circumstances under which additional site-specific air dispersion modeling may be required;
• The anticipated costs associated with additional modeling, engineering analyses, and permitting;
• Whether Ecology evaluated practical compliance pathways for facilities that cannot satisfy the standardized General Order criteria;
• Whether Ecology intends to develop additional implementation guidance to assist applicants in understanding these requirements; and
• Whether Ecology evaluated alternative compliance pathways that would allow facilities demonstrating equivalent environmental performance through site-specific analyses or cleaner technologies to maintain General Order eligibility.
The proposal also reserves Ecology's authority to require additional material analyses, emissions testing, or other technical evaluations under certain circumstances.
While we understand that such authority may be appropriate where warranted, the proposal provides limited discussion regarding the situations in which additional testing would be required, the criteria that would trigger such requests, or the expectations placed upon permit holders if additional evaluations become necessary.
Additional clarity regarding these issues would improve regulatory certainty and allow applicants to better understand the circumstances under which additional technical analyses may be required.
We also note that asphalt facilities have historically demonstrated compliance through production limitations, emissions controls, burner technology, baghouse systems, maintenance requirements, operating restrictions, and recordkeeping obligations established under existing permits.
As additional Toxic Air Pollutant considerations become incorporated into General Order permitting, we respectfully request Ecology ensure that compliance expectations remain transparent, technically supported, and reasonably implementable by operators throughout Washington.
Providing additional implementation guidance would improve consistency, reduce uncertainty, and better achieve the shared objective of protecting public health while maintaining an efficient, predictable, and practical permitting framework.

Ecology Comment # 69

10. Administrative Burden and Cumulative Compliance Requirements
The proposed General Order introduces or expands numerous administrative, operational, monitoring, and recordkeeping requirements intended to support compliance with the revised permitting framework. Individually, many of these requirements appear reasonable and are consistent with good environmental stewardship and responsible operational practices.
However, when considered collectively, these revisions represent a meaningful expansion of the ongoing administrative responsibilities associated with operating both stationary and portable asphalt plants under the General Order program.
Among other things, the proposal expands or modifies production tracking, emissions documentation, portable plant notifications, maintenance records, fuel usage documentation, operating records, compliance demonstrations, complaint reporting, and other recordkeeping obligations associated with General Order compliance.
While each individual requirement may appear relatively minor when evaluated independently, the cumulative effect of these obligations may result in a significant increase in administrative workload for permit holders, particularly for companies operating multiple facilities or portable asphalt plants that relocate throughout the construction season.
Accordingly, we respectfully request Ecology clarify whether it evaluated the cumulative administrative impacts associated with the proposed revisions, including:
• Additional labor hours required to maintain compliance;
• Increased administrative staffing requirements;
• Additional training necessary for operations personnel;
• Additional compliance responsibilities for companies operating multiple facilities under a single environmental compliance program;
• Increased compliance management responsibilities associated with portable asphalt plants that routinely relocate between projects;
• The cumulative costs associated with expanded recordkeeping, monitoring, reporting, and documentation requirements; and
• Whether less burdensome alternatives were considered that would achieve the same environmental objectives while reducing unnecessary administrative complexity.
• The resilience of Washington's construction material supply chain during emergency response, disaster recovery, and accelerated public infrastructure projects.
We also respectfully request clarification regarding the proposed complaint reporting requirements. The proposal appears to require notification to Ecology following receipt of complaints while other portions of the General Order reference complaints specifically related to air quality impacts. Additional clarification regarding the scope of this requirement would promote consistent implementation and reduce uncertainty regarding reporting expectations.
Specifically, we respectfully request Ecology clarify:
• Whether the reporting requirement applies only to complaints alleging air quality impacts;
• Whether complaints must be substantiated prior to reporting;
• Whether anonymous complaints are subject to the reporting requirement;
• Whether complaints unrelated to air quality must also be reported; and
• Whether Ecology intends to publish additional implementation guidance regarding complaint reporting expectations.
Administrative requirements are an essential component of environmental compliance. However, compliance programs are most effective when reporting obligations are clearly defined,

consistently applied, and appropriately balanced with the operational realities of the industries they regulate.
We respectfully encourage Ecology to consider not only the value of each individual administrative requirement, but also the cumulative compliance burden created when these obligations are implemented collectively across multiple facilities, multiple project locations, and portable operations throughout Washington State.
Providing this additional analysis would improve transparency, promote consistent implementation, and better support the long-term success of the General Order program.

Ecology Comment # 70

11. Cumulative Impacts on Washington's Construction Materials Industry
Hot mix asphalt plants do not operate in isolation.
Construction materials are not produced independently, transported independently, consumed independently, or regulated independently. Accordingly, the regulatory framework governing these industries should likewise be evaluated as an interconnected system rather than as three separate permitting programs.
Asphalt production is one component of a construction materials supply chain that includes aggregate production, rock crushing operations, concrete batch plants, transportation providers, contractors, utility companies, public agencies, and countless public and private construction projects throughout Washington State.
The materials produced by these industries are fundamental to constructing and maintaining highways, county roads, municipal streets, airports, bridges, utilities, commercial developments, residential housing, emergency infrastructure repairs, and numerous other public works projects.
As such, revisions affecting one segment of the construction materials industry inevitably affect the others.
We note that Ecology is simultaneously proposing significant revisions to the General Orders governing hot mix asphalt plants, concrete batch plants, and rock crushers.
While each proposal has been evaluated independently, the practical impacts experienced by Washington's construction materials industry will be cumulative.
Collectively, these proposals introduce additional production restrictions, new eligibility criteria, expanded administrative responsibilities, revised setback requirements, increased reliance on individual Notice of Construction permits, additional modeling considerations, and expanded compliance obligations.
Accordingly, we respectfully request Ecology identify whether it evaluated the cumulative impacts associated with implementing these revisions across multiple General Orders simultaneously.
Specifically, we respectfully request clarification regarding whether Ecology evaluated potential impacts on:
• Transportation infrastructure delivery;
• Public works projects;
• Highway preservation and rehabilitation programs;
• County and municipal paving programs;
• Airport construction and maintenance;
• Utility construction and emergency repairs;
• Housing development;
• Construction material availability;

- Aggregate supply chains;
- Seasonal construction scheduling;
- Workforce utilization and employment;
- Construction costs; and
- Overall permitting demands placed upon both applicants and the Department.

We further request Ecology identify whether it evaluated the potential for these revisions to increase hauling distances between asphalt plants and project sites if fewer facilities qualify for General Order coverage.

Longer transportation distances may increase fuel consumption, truck traffic, construction costs, project durations, and associated emissions while reducing many of the operational efficiencies that portable asphalt plants are specifically intended to provide.

Likewise, reduced production flexibility may limit contractors' ability to recover from weather delays, equipment failures, emergency infrastructure needs, and accelerated construction schedules, all of which are common realities of Washington's transportation program.

Environmental regulations are most effective when they are developed with an understanding of the industries they regulate and the interconnected nature of the activities they affect.

While each individual revision contained within the proposed General Order may appear reasonable when evaluated independently, their cumulative effect may be substantially greater than the sum of their individual parts.

We respectfully encourage Ecology to evaluate these broader impacts before finalizing the proposed revisions to ensure that environmental objectives are achieved without creating unintended consequences for Washington's transportation system, construction materials industry, public infrastructure programs, and the communities that depend upon them.

12. Conclusion

Central Washington Asphalt, Inc. and Shamrock Paving, Inc. appreciate the opportunity to provide comments regarding the proposed revisions to the General Order of Approval for Stationary and Portable Hot Mix Asphalt Plants.

We recognize and support Ecology's responsibility to protect air quality and public health while ensuring compliance with applicable environmental regulations. We also appreciate the significant effort required to modernize a permitting framework that serves a diverse industry operating under a wide range of geographic, operational, and environmental conditions throughout Washington State.

Our comments are not intended to oppose environmental protection or the modernization of the General Order program. Rather, they are intended to encourage additional transparency regarding the technical analyses, assumptions, and implementation strategies supporting the proposed revisions so stakeholders can better understand both the environmental benefits and the practical implications associated with these changes. We also respectfully encourage continued coordination between Ecology, WSDOT, local agencies, and industry stakeholders during development of the final General Order to ensure environmental objectives are achieved while preserving the timely delivery of Washington's transportation infrastructure.

Throughout our review, we identified several areas where additional clarification would strengthen the proposal, including the technical basis supporting the proposed production limits, setback requirements, hourly stack emission standards, RAP limitations, General Order eligibility criteria, Toxic Air Pollutant implementation, portable asphalt plant operations, administrative requirements,

and the cumulative impacts associated with simultaneously revising multiple General Orders affecting Washington's construction materials industry.
We respectfully request Ecology provide additional information regarding these issues before finalizing the proposed General Order to ensure that the final permitting framework remains technically supported, practically implementable, and appropriately balanced with the operational realities of Washington's transportation infrastructure.
Environmental regulations are most effective when they provide clear expectations, encourage innovation, promote environmental stewardship, and allow regulated industries to invest confidently in cleaner technologies and operational improvements. Regulatory certainty benefits not only permit holders, but also the Department, public agencies, contractors, and the communities that depend upon reliable infrastructure delivery.
Environmental protection and responsible infrastructure development should not be viewed as competing objectives. When regulations are supported by sound science, transparent decision-making, practical implementation, and opportunities for technological advancement, they strengthen both environmental stewardship and Washington's ability to construct, maintain, and improve the infrastructure upon which its communities depend. Thank you for the opportunity to provide these comments and for your consideration during development of the final General Order. Good environmental policy should also be practical public policy.

Ecology Comment #s 71 – 76 [Raquel Elorza - AAA Ready Mix, Inc. and AAA Concrete, Inc.]

Comments on Draft General Order of Approval No. 26AQ-GO-03 Concrete Batch Plants
AAA Ready Mix, Inc. and AAA Concrete, Inc. appreciate the opportunity to comment on the Washington State Department of Ecology's proposed revisions to the Concrete Batch Plant General Order of Approval.
Our companies operate both portable and stationary concrete batch plants throughout Washington and have decades of experience supplying concrete for public infrastructure, transportation, utility, commercial, residential, and emergency construction projects. Because our operations support projects in a wide variety of geographic settings and regulatory jurisdictions, we have a practical understanding of both the environmental responsibilities associated with concrete production and the operational realities necessary to safely and efficiently deliver construction materials throughout the state.
We also recognize the important role General Orders play within Washington's air permitting program. General Orders provide an efficient, predictable, and streamlined permitting pathway for facilities whose emissions and operating characteristics have been evaluated in advance. This framework benefits both regulators and permit holders by reducing unnecessary administrative burdens while maintaining appropriate environmental protections.
Our comments are not intended to oppose environmental protection or the modernization of General Order requirements. Rather, they are intended to ensure that the final General Order is technically supported, practically implementable, and reflective of the operational realities of Washington's concrete production industry.

After reviewing the proposed General Order, Technical Support Document, and associated SEPA documentation, we believe several significant revisions warrant additional explanation and evaluation before the proposal is finalized.
In particular, we are concerned that the proposal introduces new eligibility restrictions, setback requirements, administrative obligations, and permitting pathways without fully evaluating or explaining the practical implications these revisions may have on future concrete batch plant operations, portable facilities, project delivery, infrastructure development, and construction material availability throughout Washington State.
Throughout the proposal, Ecology frequently relies upon generalized modeling assumptions and acknowledges that future facility locations, surrounding land uses, and site-specific operating conditions are unknown. Nevertheless, the proposal establishes statewide eligibility criteria and setback requirements that will apply to future applicants across a wide range of operating environments.
We respectfully request that Ecology provide additional technical justification, implementation guidance, and impact analyses supporting these revisions so that stakeholders can fully understand both the environmental benefits and the practical consequences associated with the proposed General Order.
The following comments identify several areas where additional clarification, technical support, or evaluation would improve the proposal while preserving the intended purpose of the General Order program as an efficient and predictable permitting pathway for qualifying facilities.

Ecology Comment # 71

1. General Order Eligibility and New Setback Requirements
The proposed General Order introduces new eligibility criteria requiring concrete batch plants to maintain minimum separation distances from both property boundaries and designated sensitive receptors. Specifically, the proposal establishes minimum setback requirements of 450 feet for Central Mix concrete batch plants and 550 feet for Truck Mix concrete batch plants. Facilities unable to satisfy these criteria would no longer qualify for coverage under the General Order and would instead be required to pursue an individual Notice of Construction (NOC) permit.
We recognize Ecology's responsibility to establish permitting criteria that protect public health and comply with applicable air quality standards. However, these proposed setback requirements represent one of the most significant revisions contained within the proposal because they directly determine whether future facilities qualify for the streamlined General Order permitting process. General Orders exist to provide an efficient, predictable, and technically supported permitting pathway for facilities with similar operating characteristics and emissions profiles. The value of a General Order lies not only in environmental protection, but also in providing regulatory certainty for both applicants and the Department. As proposed, the revised eligibility criteria may substantially reduce the number of facilities able to utilize that pathway while shifting additional projects toward individual permitting.
Accordingly, we respectfully request that Ecology provide additional information regarding the technical basis supporting these revisions, including:
• The pollutant or pollutants that ultimately governed the proposed 450-foot and 550-foot setback distances;
• The modeling assumptions and technical analyses used to establish those distances;

• The basis for requiring an additional 100-foot setback for Truck Mix concrete batch plants compared to Central Mix plants;
• Whether alternative setback distances or compliance approaches were evaluated during development of the proposal;
• The number of historical General Order facilities that would not have qualified under the revised eligibility criteria;
• The estimated number of future facilities expected to require individual Notice of Construction permits as a result of the revised setbacks; and
• Whether Ecology evaluated alternative compliance pathways that would allow applicants to demonstrate compliance through site-specific analysis while preserving General Order eligibility where appropriate.
The Technical Support Document acknowledges that future facility locations, surrounding land uses, operating conditions, and site-specific characteristics are unknown at the time the General Order is developed. Despite this acknowledged uncertainty, the proposal establishes uniform statewide setback requirements that will govern future eligibility.
Given the diversity of Washington's geography, topography, meteorological conditions, existing industrial land uses, and portable construction operations, we respectfully request Ecology explain how these site-specific variables were considered when selecting setback distances intended to apply statewide.
Providing this additional information would allow stakeholders to better understand the technical basis for the proposed eligibility criteria and evaluate whether the revised General Order continues to fulfill its intended role as a streamlined permitting pathway while maintaining appropriate environmental protections.

Ecology Comment # 72

2. Practical Implementation of the Individual Notice of Construction (NOC) Permitting Pathway
Throughout the proposed General Order, Technical Support Document, and associated SEPA documentation, Ecology repeatedly identifies an individual Notice of Construction (NOC) permit as the alternative permitting pathway for facilities that cannot satisfy the revised General Order eligibility criteria.
While an individual NOC may be an appropriate permitting option for certain facilities, the proposal provides very little discussion regarding the practical implications of requiring future applicants to pursue that pathway.
The proposed revisions effectively shift a portion of future concrete batch plant projects from a streamlined permitting process to an individualized permitting process without evaluating or explaining the associated regulatory, financial, and operational impacts.
Specifically, the proposal does not appear to discuss:
• The anticipated consultant costs associated with preparing an individual Notice of Construction application;
• Air dispersion modeling costs;
• Engineering and technical support costs;
• Additional permitting fees;
• Anticipated agency review timelines;
• Potential project delays resulting from longer permitting processes; or

• The cumulative economic impacts associated with requiring a greater number of applicants to pursue individual permits.
These considerations are particularly important for portable concrete batch plants supporting transportation projects, emergency infrastructure repairs, utility work, and seasonal construction activities where project schedules are often dictated by weather, contract requirements, funding deadlines, and limited construction windows.
General Orders have historically provided a predictable and efficient permitting pathway for qualifying facilities. If future applicants are expected to transition to individual permitting with greater frequency, stakeholders should understand the practical consequences associated with that transition.
Accordingly, we respectfully request Ecology provide additional information regarding:
• The anticipated permitting timeline for individual Notice of Construction applications submitted by facilities that no longer qualify under the revised General Order;
• Typical consultant, engineering, and modeling costs associated with obtaining an individual permit;
 Whether Ecology evaluated its own staffing capacity and anticipated permit review workload associated with an increase in individual Notice of Construction applications;
• Whether Ecology evaluated the cumulative economic impacts associated with increased reliance on individual permitting;
• Whether Ecology evaluated the effects that longer permitting timelines may have on public infrastructure delivery, emergency response projects, and seasonal construction schedules; and
• Whether alternative compliance pathways were considered that would preserve General Order eligibility while still achieving the intended environmental objectives.
Providing this information would allow stakeholders to better understand whether the proposed revisions appropriately balance environmental protection with the General Order program's longstanding purpose of providing an efficient, predictable, and practical permitting process for qualifying facilities.

Ecology Comment # 73

3. Portable Concrete Batch Plant Operations
Portable concrete batch plants play a critical role in Washington's construction industry. They provide temporary concrete production for transportation projects, bridge construction, utility installations, airports, emergency repairs, commercial developments, and other projects where producing concrete near the point of use is essential to maintaining product quality, construction schedules, and overall project efficiency.
Unlike permanent facilities, portable concrete batch plants are intentionally designed to move from project to project as construction demands change throughout the year. Their locations are largely dictated by the needs of individual projects, available staging areas, site constraints, project sequencing, and the availability of suitable land within reasonable proximity to construction activities.
Portable concrete batch plants are often established specifically to reduce haul distances, maintain concrete quality, minimize traffic congestion, and improve overall project efficiency. These operational considerations not only benefit contractors and project owners, but may also reduce fuel consumption and associated emissions compared to transporting ready-mix concrete over significantly longer distances.

The proposed General Order introduces additional notification requirements, administrative obligations, and eligibility criteria that appear to place greater emphasis on portable operations than previous versions of the General Order.
While we understand Ecology's interest in maintaining accurate records regarding portable facilities, we respectfully request additional clarification regarding the practical implementation of these requirements and their potential impacts on future projects.
Specifically, we request Ecology identify:
• Whether the proposed notification and administrative requirements were evaluated for their potential impacts on project mobilization and construction schedules;
• Whether Ecology evaluated the cumulative administrative burden associated with repeated notifications, site relocations, extensions, and portable plant tracking requirements;
• Whether the proposed requirements were developed using information from actual portable concrete batch plant operations throughout Washington;
• Whether Ecology evaluated the practical challenges associated with locating portable batch plants on transportation projects, emergency response projects, utility work, and other temporary construction sites where available staging areas may be limited;
• Whether Ecology evaluated the number of portable projects that may no longer qualify for General Order coverage under the revised eligibility criteria; and
• Whether additional flexibility could be incorporated into the General Order while continuing to achieve the intended environmental objectives.
Portable concrete batch plants frequently support projects with fixed contract completion dates, weather-dependent construction windows, emergency response needs, and public infrastructure schedules that allow little flexibility for permitting delays or repeated administrative processes. Accordingly, any revisions that increase permitting complexity, reduce General Order eligibility, or extend project mobilization timelines may have consequences that extend beyond individual operators and affect contractors, project owners, public agencies, utility providers, and the communities those projects are intended to serve.
We respectfully request Ecology provide additional information regarding how these practical considerations were evaluated during development of the proposed General Order and whether alternative approaches were considered that would maintain environmental protections while preserving the operational flexibility necessary for portable concrete batch plants to continue supporting Washington's infrastructure needs.

Ecology Comment # 74

4. Practical Implementation of Toxic Air Pollutant Requirements
The proposed General Order and accompanying Technical Support Document place significant emphasis on Toxic Air Pollutants (TAPs), including respirable crystalline silica, Chromium VI, manganese, and other pollutants evaluated through Ecology's air dispersion modeling.
We recognize Ecology's responsibility to evaluate these pollutants and to ensure compliance with applicable state and federal air quality requirements. We also support the use of sound science and appropriate technical analyses when developing permitting criteria intended to protect public health.
While the proposal and accompanying Technical Support Document explain the pollutants evaluated, the modeling assumptions employed, and the resulting setback distances, they provide comparatively little guidance regarding how future applicants are expected to

demonstrate compliance under varying site-specific conditions or when actual operating conditions differ from the representative scenarios used during development of the General Order. In particular, we respectfully request Ecology provide additional clarification regarding:
• The pollutants that ultimately governed the proposed setback distances for both Central Mix and Truck Mix concrete batch plants;
• The specific modeling assumptions that determined compliance distances;
• How applicants are expected to demonstrate compliance when actual site conditions differ from the modeled assumptions;
• The circumstances under which additional site-specific air dispersion modeling may be required;
• The anticipated costs associated with additional modeling and technical analyses;
• Whether Ecology evaluated practical compliance pathways for facilities that cannot satisfy the standardized eligibility criteria; and
• Whether additional implementation guidance will be developed to assist applicants in understanding these requirements.
The proposal also reserves Ecology's authority to require additional material analyses or air emission testing under certain circumstances.
While we understand that such authority may be appropriate where warranted, the proposal provides limited discussion regarding the situations in which additional testing would be required, the criteria that would trigger such requests, or the expectations placed upon permit holders if additional testing becomes necessary.
Additional clarity regarding these issues would improve regulatory certainty and allow applicants to better understand the circumstances under which additional technical evaluations may be required.
We also note that many concrete batch plant operators have historically demonstrated compliance through production limitations, equipment standards, dust suppression practices, baghouse controls, maintenance requirements, and recordkeeping obligations established under existing permits.
As additional Toxic Air Pollutant considerations become incorporated into General Order permitting, we respectfully request Ecology ensure that compliance expectations remain transparent, technically supported, and reasonably implementable by operators throughout Washington.
Providing additional implementation guidance would improve consistency, reduce uncertainty, and better achieve the shared objective of protecting public health while maintaining an efficient and predictable permitting process.

Ecology Comment # 75

5. Administrative Burden and Cumulative Compliance Requirements
The proposed General Order introduces or expands several administrative, operational, and recordkeeping requirements intended to support compliance with the revised permitting framework. Individually, many of these requirements appear reasonable and are consistent with good environmental stewardship and sound operational practices.
However, when considered collectively, these requirements represent a meaningful expansion of the ongoing administrative responsibilities associated with operating a concrete batch plant under the General Order.
Among other things, the proposal requires additional notifications, expanded recordkeeping, production tracking, maintenance documentation, baghouse monitoring, fuel usage records, water

application records, complaint reporting, portable plant notifications, and documentation associated with temporary relocations and operational status.
While each requirement may appear relatively minor when evaluated independently, the cumulative effect of these obligations may result in a significant increase in administrative workload for permit holders, particularly for companies operating multiple facilities or portable batch plants that relocate throughout the construction season.
Accordingly, we respectfully request Ecology clarify whether it evaluated the cumulative administrative impacts associated with the proposed revisions, including:
• Additional labor hours required to maintain compliance;
• Increased administrative staffing requirements;
• Additional training necessary for operations personnel;
• Increased compliance management responsibilities for portable facilities;
 Additional compliance responsibilities for companies operating multiple facilities under a single environmental compliance program;
• The cumulative costs associated with expanded recordkeeping and reporting requirements; and
• Whether less burdensome alternatives were considered that would achieve the same environmental objectives while reducing unnecessary administrative complexity.
We also respectfully request clarification regarding the proposed complaint reporting requirements. The General Order appears to require notification to Ecology following receipt of complaints, while other portions of the proposal reference air-quality-related complaints. Additional clarification regarding the scope of this requirement would promote consistent implementation and reduce uncertainty regarding reporting expectations.
Specifically, we request Ecology clarify:
• Whether the reporting requirement applies only to complaints alleging air quality impacts;
• Whether complaints must be substantiated prior to reporting;
• Whether anonymous complaints are subject to the reporting requirement;
• Whether complaints unrelated to air quality must also be reported; and
• Whether Ecology intends to develop additional guidance regarding implementation of these reporting requirements.
Administrative requirements are an important component of environmental compliance. However, compliance programs are most effective when reporting obligations are clearly defined, consistently applied, and appropriately balanced with the operational realities of the industries they regulate.
We respectfully encourage Ecology to consider not only the value of each individual administrative requirement, but also the cumulative compliance burden created when these obligations are implemented collectively across multiple facilities and project locations.

Ecology Comment # 76

6. Cumulative Impacts on Washington's Construction Materials Industry
Concrete batch plants do not operate in isolation.
Construction materials are not produced independently, transported independently, consumed independently, or regulated independently. Accordingly, the regulatory framework governing these industries should likewise be evaluated as an interconnected system rather than as three separate permitting programs.

They are one component of an interconnected construction materials supply chain that includes aggregate production, rock crushing operations, asphalt production, transportation providers, contractors, utility companies, public agencies, and countless private development projects throughout Washington State.
The materials produced by these industries are fundamental to the construction and maintenance of roads, bridges, airports, schools, hospitals, utilities, housing developments, commercial facilities, emergency infrastructure repairs, and numerous other public and private construction projects.
As such, revisions affecting one segment of the construction materials industry inevitably influence the others.
We note that Ecology is simultaneously proposing significant revisions to the General Orders governing rock crushers, concrete batch plants, and hot mix asphalt plants.
While each proposal has been evaluated independently, the practical impacts experienced by industry will be cumulative.
Collectively, these proposals introduce additional permitting requirements, new eligibility criteria, expanded administrative responsibilities, increased modeling considerations, revised setback requirements, and greater reliance on individual Notice of Construction permits.
Accordingly, we respectfully request Ecology identify whether it evaluated the cumulative impacts associated with implementing these revisions across multiple General Orders simultaneously.
Specifically, we request clarification regarding whether Ecology evaluated potential impacts on:
• Construction material availability;
• Public infrastructure delivery;
• Housing development;
• Transportation projects;
• Utility construction and maintenance;
• Emergency response projects;
• Aggregate supply chains;
• Project scheduling and seasonal construction windows;
• Workforce utilization and employment;
• Construction costs; and
• Overall permitting demands placed upon both applicants and the Department.
We further request Ecology identify whether it evaluated the potential for these cumulative revisions to increase transportation distances between material sources and construction projects if fewer facilities qualify for General Order coverage.
Longer transportation distances may increase fuel consumption, truck traffic, project costs, and associated emissions while reducing many of the operational efficiencies that portable and strategically located concrete batch plants are intended to provide.
Environmental regulations are most effective when they are developed with an understanding of the industries they regulate and the interconnected nature of the activities they affect.
While each individual revision contained within the proposed General Order may appear reasonable when evaluated independently, their cumulative effect may be substantially greater than the sum of their individual parts.
We respectfully encourage Ecology to evaluate these broader impacts before finalizing the proposed revisions to ensure that environmental objectives are achieved without creating unintended consequences for Washington's construction materials industry, public infrastructure programs, and the communities that depend upon them.

Conclusion

AAA Ready Mix, Inc. and AAA Concrete, Inc. appreciate Ecology's efforts to update and modernize the Concrete Batch Plant General Order and recognize the importance of protecting air quality and public health throughout Washington State.

We also recognize that environmental regulations must evolve as scientific understanding, regulatory requirements, and available technologies continue to advance.

Our comments are not intended to discourage those efforts. Rather, they are intended to ensure that the final General Order is supported by transparent technical analyses, provides clear implementation guidance, and reflects the practical realities of concrete batch plant operations throughout Washington.

Throughout our review of the proposed General Order, Technical Support Document, and associated SEPA documentation, we identified several areas where additional clarification or analysis would improve both the proposal and stakeholders' understanding of its practical implications.

In particular, we respectfully request Ecology provide additional information regarding:

- The technical basis supporting the proposed setback requirements;
- The distinction between Central Mix and Truck Mix setback distances;
- The anticipated impacts on future General Order eligibility;
- The practical implementation of Toxic Air Pollutant compliance requirements;
- The costs, timelines, and operational implications associated with increased reliance on individual Notice of Construction permits;
- The cumulative administrative burden created by the expanded recordkeeping and reporting requirements;
- The impacts of the proposal on portable concrete batch plant operations; and
- The cumulative impacts associated with simultaneously revising the General Orders governing concrete batch plants, rock crushers, and hot mix asphalt plants.

We respectfully believe these additional analyses and explanations would improve the transparency of the rulemaking process while providing applicants with a clearer understanding of Ecology's expectations and the practical implementation of the proposed requirements.

The construction materials industry plays an essential role in building and maintaining the infrastructure upon which Washington's communities depend. Concrete batch plants supply the materials necessary to construct and maintain highways, bridges, airports, schools, hospitals, utilities, commercial developments, residential housing, and emergency infrastructure throughout the state.

For that reason, we respectfully encourage Ecology to continue working collaboratively with industry stakeholders to ensure that environmental regulations remain both scientifically sound and practically implementable.

Environmental protection and responsible resource development are not competing objectives. When supported by sound science, transparent decision-making, and practical implementation, they are complementary objectives that benefit both Washington's natural resources and the communities that depend upon them.

Ultimately, effective environmental regulations should not only establish protective standards, but also provide regulated industries with a clear, predictable, and achievable path toward compliance. Environmental protection and responsible resource development are not competing objectives; they are mutually dependent objectives. When regulations are supported by sound science,

transparent decision-making, and practical implementation, they strengthen both environmental stewardship and Washington's ability to build and maintain the infrastructure upon which its communities depend.
Thank you for the opportunity to provide these comments and for your consideration during development of the final General Order.
Good environmental policy should also be practical public policy.

Ecology Comment #s 77 – 84 [Raquel Elorza - North Central Construction, Inc.]

Comments on Draft General Order of Approval No. 26AQ-GO-01
Stationary and Portable Rock Crushers
Introduction
North Central Construction, Inc. appreciates the opportunity to comment on the Washington State Department of Ecology's proposed revisions to the General Order of Approval for Stationary and Portable Rock Crushers.
Our company owns and operates portable rock crushing and aggregate processing equipment throughout Washington State, supplying aggregate materials used in highways, bridges, airports, utility infrastructure, residential and commercial development, ready-mix concrete, hot mix asphalt, and numerous public works projects. Because our operations support projects across a wide variety of geographic locations and regulatory jurisdictions, we have extensive experience balancing environmental compliance with the practical realities of aggregate production and portable crushing operations.
We recognize the important role General Orders play within Washington's air permitting program. General Orders provide an efficient, predictable, and technically supported permitting pathway for facilities whose emissions and operating characteristics have been evaluated in advance. This framework benefits both regulators and permit holders by reducing unnecessary administrative burdens while maintaining appropriate environmental protections.
Our comments are not intended to oppose environmental protection or the modernization of General Order requirements. Rather, they are intended to ensure the final General Order is technically supported, practically implementable, and reflective of the operational realities of Washington's aggregate industry.
After reviewing the proposed General Order, Technical Support Document, and associated SEPA documentation, we believe several significant revisions warrant additional explanation and evaluation before the proposal is finalized.
In particular, we are concerned that the proposal introduces new production limitations, revised eligibility requirements, expanded administrative obligations, and increased reliance on individual Notice of Construction permits without fully explaining the technical analyses supporting those revisions or evaluating their practical impacts on aggregate production, portable crushing operations, public infrastructure delivery, and construction material availability throughout Washington State.
Throughout the proposal, Ecology frequently relies upon representative assumptions while acknowledging that future facility locations, production demands, surrounding land uses, and site-specific operating conditions are unknown. Nevertheless, the proposal establishes statewide production limitations and permitting criteria intended to apply across a diverse range of facilities operating under widely varying conditions.

We respectfully request Ecology provide additional technical justification, implementation guidance, and impact analyses supporting these revisions so stakeholders can fully understand both the environmental benefits and the practical consequences associated with the proposed General Order.
The following comments identify several areas where additional clarification, technical support, or evaluation would improve the proposal while preserving the intended purpose of the General Order program as an efficient, predictable, and practical permitting pathway for qualifying facilities.

Ecology Comment # 77

1. Purpose of the General Order Program
The General Order program has historically provided an efficient, predictable, and technically supported permitting pathway for facilities with similar operational characteristics and emissions profiles. By establishing standardized permitting criteria for qualifying facilities, General Orders reduce unnecessary administrative burdens while maintaining appropriate environmental protections and allowing both permit holders and regulators to operate within a consistent and predictable regulatory framework.
We recognize Ecology's responsibility to periodically review and update General Orders to reflect evolving scientific information, regulatory requirements, and environmental objectives. We support those efforts when they are supported by sound science, transparent decision-making, and practical implementation.
However, as General Order eligibility becomes increasingly restrictive through revised production limitations, setback requirements, permitting criteria, and operational standards, we respectfully request Ecology explain how these revisions continue to support the original purpose of the General Order program.
Specifically, we respectfully request Ecology provide additional information regarding:
Whether Ecology evaluated how many existing or future facilities are expected to remain eligible under the revised General Order;
Whether Ecology evaluated the cumulative increase in individual Notice of Construction (NOC) applications that may result from reduced General Order eligibility;
Whether Ecology evaluated the impacts of increased individual permitting on agency workload, permit review timelines, and project delivery;
Whether alternative approaches were considered that would preserve General Order eligibility while continuing to achieve applicable air quality objectives; and
How Ecology determined that the proposed revisions continue to fulfill the General Order program's intended purpose as an efficient, predictable, and practical permitting pathway.
Providing this additional information would assist stakeholders in understanding not only the environmental objectives of the proposed revisions, but also how Ecology envisions the future role of the General Order program within Washington's air permitting framework.

Ecology Comment # 78

2. Proposed Production Limits
The proposed General Order establishes revised annual production limits for facilities operating under General Order coverage.
We recognize Ecology's responsibility to establish production thresholds that are consistent with applicable air quality requirements. However, the proposal provides comparatively little explanation regarding the technical basis used to establish the proposed production limits or how those limits reflect the operational realities of aggregate production throughout Washington State.
Unlike many manufacturing industries, aggregate production is not driven by steady consumer demand or continuous manufacturing schedules. Production is driven by construction activity, public

infrastructure investments, emergency repairs, weather conditions, seasonal work windows, and the availability of projects requiring aggregate materials.
Demand for aggregate materials is largely determined by the needs of Washington's transportation system, utility infrastructure, residential construction, commercial development, and public works programs. Consequently, reductions in production at one facility do not necessarily reduce overall demand for aggregate materials. Rather, production may simply shift to other facilities, potentially increasing hauling distances, transportation costs, fuel consumption, truck traffic, and associated emissions.
Accordingly, we respectfully request Ecology provide additional information regarding:
The technical basis supporting the proposed annual production limits;
The emissions modeling and assumptions used to establish those limits;
Whether actual production data from Washington aggregate operations was evaluated during development of the proposal;
Whether Ecology evaluated seasonal production patterns common throughout Washington's construction industry;
Whether Ecology evaluated the impacts of weather delays, emergency infrastructure repairs, equipment failures, or accelerated construction schedules;
Whether Ecology evaluated the potential for production to shift to other facilities rather than decrease overall;
Whether Ecology evaluated the potential effects of increased haul distances on fuel consumption, transportation costs, truck traffic, and associated emissions; and
Whether alternative production thresholds were evaluated that would continue to achieve applicable air quality objectives while preserving operational flexibility.
Aggregate production frequently occurs in concentrated periods dictated by construction schedules rather than evenly throughout the calendar year. The ability to increase production during favorable operating conditions is often essential to maintaining project schedules, supplying construction materials, and meeting the demands of public infrastructure throughout Washington State.
Providing additional information regarding the technical basis supporting the proposed production limits would allow stakeholders to better understand how Ecology evaluated both the intended environmental benefits and the broader operational impacts associated with these revisions.

Ecology Comment # 79

3. Ecology's Stated Production Reduction Objectives
The accompanying SEPA documentation indicates that the proposed General Order is expected to reduce annual rock production within individual pits and reduce truck traffic associated with those operations. These statements suggest that reduced production and associated transportation activity are anticipated outcomes of the proposed revisions.
We recognize Ecology's responsibility to evaluate the environmental impacts associated with aggregate production and transportation. However, because aggregate materials are essential to virtually every public and private construction project throughout Washington State, we respectfully request additional information regarding the analyses supporting these conclusions and the broader impacts they may have on Washington's construction materials supply chain.
Demand for aggregate materials is largely driven by transportation infrastructure, residential and commercial development, utility construction, public works projects, and emergency repairs. These projects will continue to require aggregate regardless of where that material is produced.
Accordingly, we respectfully request Ecology provide additional information regarding:

The technical analyses supporting the conclusion that reduced production at individual pits will reduce overall environmental impacts;
Whether Ecology evaluated the potential for production to shift to other aggregate operations rather than decrease overall statewide production;
Whether Ecology evaluated the potential for longer hauling distances if production is redistributed among fewer qualifying facilities;
Whether Ecology evaluated the potential for increased truck traffic on regional transportation corridors if aggregate production is redistributed among fewer qualifying facilities rather than reduced overall;
Whether increased hauling distances may increase fuel consumption, truck traffic, transportation costs, and associated emissions;
Whether Ecology evaluated potential impacts on aggregate availability for public infrastructure, emergency response projects, housing development, and commercial construction;
Whether Ecology evaluated the cumulative economic impacts associated with reduced production flexibility throughout Washington's aggregate industry; and
Whether alternative regulatory approaches were evaluated that would achieve comparable environmental objectives while minimizing unintended impacts on material availability and infrastructure delivery.
The accompanying SEPA documentation also indicates that the proposal is expected to reduce truck traffic associated with individual pits. We respectfully request Ecology clarify whether this conclusion reflects an anticipated reduction in statewide truck traffic or whether truck trips may instead be redistributed among other aggregate sources if material demand remains unchanged.
Because aggregate is the foundational material used to produce asphalt, concrete, and countless other construction products, revisions affecting aggregate production may also influence multiple downstream industries that depend upon a reliable and predictable supply of construction materials. We respectfully request Ecology identify whether these broader supply chain impacts were evaluated as part of the proposed rulemaking.
Understanding these broader system-wide impacts is important because the environmental benefits associated with reduced production at one location may differ from the overall impacts experienced across Washington's aggregate supply chain if production is simply transferred to more distant facilities.
Providing additional information regarding these analyses would allow stakeholders to better understand the assumptions supporting the proposed General Order and evaluate whether the anticipated environmental benefits have been considered alongside the practical realities of supplying aggregate materials for Washington's growing infrastructure needs.

Ecology Comment # 80

4. General Order Eligibility and Setback Requirements
The proposed General Order establishes revised eligibility criteria, including setback requirements, that determine whether a facility may operate under General Order coverage or must instead pursue an individual Notice of Construction (NOC) permit.
We recognize Ecology's responsibility to establish permitting criteria that protect public health and comply with applicable air quality standards. However, these eligibility requirements represent one of the most significant revisions contained within the proposal because they directly determine whether future rock crushing operations qualify for the streamlined General Order permitting process.
General Orders exist to provide an efficient, predictable, and technically supported permitting pathway for facilities with similar operational characteristics and emissions profiles. The value of a General Order

lies not only in protecting public health and the environment, but also in providing regulatory certainty for both applicants and the Department.
As proposed, the revised eligibility criteria may substantially reduce the number of future aggregate operations able to utilize that permitting pathway while shifting a greater number of projects toward individual Notice of Construction permitting.
Accordingly, we respectfully request Ecology provide additional information regarding:
The technical basis supporting the proposed eligibility criteria and setback requirements;
The pollutant or pollutants that ultimately governed the proposed setback distances;
The modeling assumptions and technical analyses used to establish those setback requirements;
Whether alternative setback distances or alternative compliance approaches were evaluated during development of the proposal;
The number of historical General Order facilities that would not have qualified under the revised eligibility criteria;
The estimated number of future facilities expected to require individual Notice of Construction permits because of the revised eligibility standards;
Whether Ecology evaluated the potential impacts of reduced General Order eligibility on the availability of locally sourced aggregate materials for public infrastructure and emergency response projects;
Whether Ecology evaluated alternative compliance pathways that would allow applicants to demonstrate compliance through site-specific analyses while preserving General Order eligibility where appropriate; and
Whether Ecology evaluated the cumulative impacts associated with reduced General Order eligibility on aggregate production, portable crushing operations, transportation infrastructure, and public works projects.
The Technical Support Document acknowledges that future facility locations, surrounding land uses, topography, meteorological conditions, and site-specific operating characteristics are unknown when the General Order is developed. Despite this acknowledged variability, the proposal establishes standardized statewide eligibility criteria intended to apply across a diverse range of future aggregate operations.
Rock crushing operations occur in a wide variety of settings, including permanent quarries, temporary construction projects, public infrastructure improvements, reclamation activities, and portable aggregate processing sites. Existing topography, prevailing wind conditions, production rates, natural screening, surrounding land uses, and operational configurations vary considerably among these locations.
Given this variability, we respectfully request Ecology explain how these site-specific factors were evaluated when developing standardized eligibility criteria intended to apply uniformly throughout Washington State.
We further encourage Ecology to preserve a pathway allowing applicants to demonstrate compliance through site-specific air quality analyses where appropriate rather than automatically requiring individual Notice of Construction permitting solely because standardized eligibility criteria cannot be satisfied.
Providing additional information regarding the technical basis supporting these revisions would allow stakeholders to better understand how the proposed eligibility criteria continue to fulfill the intended purpose of the General Order program while maintaining appropriate environmental protections.

Ecology Comment # 81

5. Practical Implementation of the Individual Notice of Construction (NOC) Permitting Pathway

Throughout the proposed General Order, Technical Support Document, and associated SEPA documentation, Ecology repeatedly identifies an individual Notice of Construction (NOC) permit as the alternative permitting pathway for facilities that cannot satisfy the revised General Order eligibility criteria.

While an individual NOC may be an appropriate permitting option for certain facilities, the proposal provides comparatively little discussion regarding the practical implications of requiring additional aggregate operations to pursue that permitting pathway.

The proposed revisions effectively shift a portion of future rock crushing and aggregate production projects from a streamlined permitting process to an individualized permitting process without fully evaluating or explaining the associated regulatory, financial, and operational impacts.

Specifically, the proposal does not appear to discuss:

The anticipated consultant costs associated with preparing an individual Notice of Construction application;

Air dispersion modeling costs;

Engineering and technical support costs;

Additional permitting fees;

Anticipated agency review timelines;

Whether Ecology evaluated its own staffing capacity and anticipated permit review workload associated with an increase in individual Notice of Construction applications;

Potential project delays resulting from longer permitting processes; or

The cumulative economic impacts associated with requiring a greater number of applicants to pursue individual permits.

These considerations are particularly important for portable rock crushing operations supporting highway construction, bridge replacements, airport improvements, utility infrastructure, emergency repairs, quarry development, and other public works projects where project schedules are frequently dictated by weather, contract completion dates, funding cycles, environmental work windows, and seasonal construction demands.

Unlike permanent industrial facilities, portable crushing spreads are routinely mobilized to support specific construction projects and are often integral to maintaining efficient project sequencing. Delays in permitting may therefore affect not only aggregate producers, but also general contractors, public agencies, utility providers, and the communities those projects are intended to serve.

General Orders have historically provided a predictable and efficient permitting pathway for qualifying facilities. If future aggregate operations are expected to transition to individual permitting with greater frequency, stakeholders should understand the practical consequences associated with that transition.

Accordingly, we respectfully request Ecology provide additional information regarding:

The anticipated permitting timeline for individual Notice of Construction applications submitted by facilities that no longer qualify under the revised General Order;

Typical consultant, engineering, and modeling costs associated with obtaining an individual permit;

Whether Ecology evaluated the cumulative economic impacts associated with increased reliance on individual permitting;

Whether Ecology evaluated the effects that longer permitting timelines may have on public infrastructure delivery, emergency response projects, utility construction, quarry development, and seasonal construction schedules;

 Whether Ecology evaluated the impacts of increased individual permitting on portable rock crushing operations that routinely relocate in response to project demands;

Whether Ecology evaluated the potential impacts on aggregate availability during emergency response or disaster recovery efforts where rapid mobilization may be necessary; and

Whether alternative compliance pathways were considered that would preserve General Order eligibility while continuing to achieve applicable air quality objectives.
Providing this information would allow stakeholders to better understand whether the proposed revisions appropriately balance environmental protection with the General Order program's longstanding purpose of providing an efficient, predictable, and practical permitting process for qualifying facilities.

Ecology Comment # 82

6. Portable Rock Crushing Operations
Portable rock crushing operations play an essential role in Washington's construction materials industry. Unlike permanent processing facilities, portable crushers are specifically designed to relocate in response to changing project demands, allowing aggregate to be produced near the point of use while supporting transportation projects, utility construction, quarry development, emergency response activities, and other public infrastructure improvements throughout the state.
Portable crushing operations routinely support state highways, county roads, municipal infrastructure, airports, bridges, utility installations, commercial developments, residential construction, and emergency repairs. Their ability to relocate allows contractors and public agencies to efficiently utilize locally available aggregate resources while reducing transportation distances and supporting project schedules.
Producing aggregate closer to the point of use may reduce haul distances, decrease fuel consumption, minimize truck traffic over long distances, reduce wear on public roadways, improve construction efficiency, and lower overall transportation-related emissions compared to hauling aggregate from more distant permanent facilities.
The proposed General Order introduces revised eligibility criteria, notification requirements, operational restrictions, and permitting considerations that may substantially affect future portable crushing operations.
While we recognize Ecology's responsibility to maintain appropriate environmental oversight, we respectfully request additional clarification regarding how these requirements are intended to function for portable aggregate operations that routinely relocate throughout Washington.
Specifically, we respectfully request Ecology identify:
Whether the proposed requirements were evaluated using actual portable rock crushing operations located throughout Washington State;
Whether Ecology evaluated the cumulative impacts these revisions may have on transportation infrastructure, quarry development, utility construction, emergency response projects, and public works;
Whether the proposed notification and administrative requirements were evaluated for their potential impacts on project mobilization and construction schedules;
Whether Ecology evaluated the practical challenges associated with locating portable crushing equipment within active construction projects, temporary processing sites, quarry expansions, reclamation activities, and emergency response locations;
Whether Ecology evaluated how reduced General Order eligibility may affect the ability to rapidly mobilize portable crushing equipment when needed;
Whether relocation of an existing portable crusher to another project location will require additional SEPA review under the proposed General Order;
Whether Ecology evaluated the effects that additional SEPA review timelines may have on emergency infrastructure repairs, disaster recovery efforts, transportation projects, and other time-sensitive construction activities; and

Whether alternative approaches were considered that would preserve operational flexibility while continuing to achieve the intended environmental objectives.
Portable crushing operations frequently operate under conditions that provide little flexibility for permitting delays. Transportation projects, utility installations, emergency repairs, and seasonal construction activities often require aggregate production to begin within narrow construction windows established by project owners, environmental work periods, weather conditions, and contractual obligations.
The proposal also raises questions regarding the relationship between portable crusher relocations and environmental review requirements. Portable crushers are routinely relocated in response to changing project needs, many of which have already undergone broader environmental review as part of transportation, utility, or construction projects. Additional clarification regarding when SEPA review would be required for portable relocations would improve regulatory certainty while helping to avoid unnecessary project delays.
We also respectfully request Ecology clarify whether existing environmental documentation associated with a project site may satisfy portions of any required review for portable equipment relocations, thereby avoiding unnecessary duplication while maintaining appropriate environmental oversight.
The proposal appears to focus primarily on emissions associated with individual facilities without fully discussing the broader operational role portable crushing plays in efficiently supplying aggregate materials for projects throughout Washington.
Accordingly, we respectfully request Ecology provide additional information regarding how these practical considerations were evaluated during development of the proposed General Order and whether alternative approaches were considered that would maintain environmental protections while preserving the operational flexibility necessary to efficiently deliver aggregate materials to Washington's construction industry.
Providing this additional information would improve regulatory certainty, reduce implementation challenges, and better achieve the shared objective of protecting public health while maintaining the efficient delivery of essential public infrastructure.

Ecology Comment # 83

7. Administrative Burden and Cumulative Compliance Requirements
The proposed General Order introduces or expands numerous administrative, operational, monitoring, and recordkeeping requirements intended to support compliance with the revised permitting framework. Individually, many of these requirements appear reasonable and are consistent with responsible environmental stewardship and sound operational practices.
However, when considered collectively, these revisions represent a meaningful expansion of the ongoing administrative responsibilities associated with operating stationary and portable rock crushing facilities under the General Order program.
Among other things, the proposal expands or modifies production tracking, operating records, portable equipment notifications, maintenance documentation, water application records, fugitive dust control documentation, compliance demonstrations, complaint reporting, monitoring activities, and other recordkeeping obligations associated with General Order compliance.
While each individual requirement may appear relatively minor when evaluated independently, the cumulative effect of these obligations may result in a significant increase in administrative workload for permit holders, particularly for companies operating multiple facilities or portable crushing spreads that relocate throughout the construction season.
Accordingly, we respectfully request Ecology clarify whether it evaluated the cumulative administrative impacts associated with the proposed revisions, including:

Additional labor hours required to maintain compliance;
Increased administrative staffing requirements;
Additional training necessary for operations personnel;
Additional compliance responsibilities for companies operating multiple facilities under a single environmental compliance program;
Increased compliance management responsibilities associated with portable crushing operations that routinely relocate between project sites;
The cumulative costs associated with expanded recordkeeping, monitoring, reporting, and documentation requirements;
Whether Ecology evaluated the operational impacts associated with expanded daily water application logs, fugitive dust documentation, and related recordkeeping requirements; and
Whether less burdensome alternatives were considered that would achieve the same environmental objectives while reducing unnecessary administrative complexity.
We also respectfully request clarification regarding the proposed complaint reporting requirements. The proposal appears to require notification to Ecology following receipt of complaints while other portions of the General Order reference complaints specifically related to air quality impacts. Additional clarification regarding the scope of this requirement would promote consistent implementation and reduce uncertainty regarding reporting expectations.
Specifically, we respectfully request Ecology clarify:
Whether the reporting requirement applies only to complaints alleging air quality impacts;
Whether complaints must be substantiated prior to reporting;
Whether anonymous complaints are subject to the reporting requirement;
Whether complaints unrelated to air quality must also be reported; and
Whether Ecology intends to publish additional implementation guidance regarding complaint reporting expectations.
Administrative requirements are an essential component of environmental compliance. However, compliance programs are most effective when reporting obligations are clearly defined, consistently applied, and appropriately balanced with the operational realities of the industries they regulate.
We respectfully encourage Ecology to consider not only the value of each individual administrative requirement, but also the cumulative compliance burden created when these obligations are implemented collectively across multiple facilities, multiple project locations, and portable operations throughout Washington State.
Providing additional analysis regarding these cumulative impacts would improve transparency, promote consistent implementation, and better support the long-term success of the General Order program.

Ecology Comment # 84

8. Cumulative Impacts on Washington's Construction Materials Industry
Rock crushing operations do not operate in isolation.
Construction materials are not produced independently, transported independently, consumed independently, or regulated independently. Accordingly, the regulatory framework governing these industries should likewise be evaluated as an interconnected system rather than as separate permitting programs.
Aggregate production is the foundation of Washington's construction materials industry. It supplies the raw materials necessary for hot mix asphalt, ready-mix concrete, public infrastructure, commercial development, residential construction, utility installations, airport improvements, and countless other public and private projects throughout the state.

As such, revisions affecting aggregate production inevitably affect every downstream industry that depends upon a reliable supply of construction materials.
We note that Ecology is simultaneously proposing significant revisions to the General Orders governing rock crushers, hot mix asphalt plants, and concrete batch plants.
While each proposal has been evaluated independently, the practical impacts experienced by Washington's construction materials industry will be cumulative.
Collectively, these proposals introduce revised production limitations, expanded eligibility criteria, additional administrative responsibilities, increased reliance on individual Notice of Construction permits, new operational requirements, expanded recordkeeping obligations, and additional permitting uncertainties.
Accordingly, we respectfully request Ecology identify whether it evaluated the cumulative impacts associated with implementing these revisions across multiple General Orders simultaneously.
Specifically, we respectfully request clarification regarding whether Ecology evaluated potential impacts on:
Transportation infrastructure delivery;
Highway preservation and rehabilitation programs;
County and municipal public works projects;
Airport construction and maintenance;
Utility construction and emergency infrastructure repairs;
Residential housing and commercial development;
Construction material availability;
The availability of locally sourced aggregate for rural communities and infrastructure projects;
Aggregate supply chains;
Seasonal construction scheduling;
Workforce utilization and employment;
Construction costs;
Emergency response and disaster recovery activities;
The resilience of Washington's construction material supply chain during periods of increased infrastructure demand; and
Overall permitting demands placed upon both applicants and the Department.
We also respectfully request Ecology identify whether it evaluated the potential for revised production limitations and reduced General Order eligibility to redistribute aggregate production among fewer qualifying facilities rather than reduce overall statewide demand.
If aggregate production is redistributed rather than reduced, longer hauling distances may increase fuel consumption, truck traffic on regional transportation corridors, transportation costs, project durations, roadway wear, and associated emissions. We respectfully request Ecology identify whether these potential secondary impacts were evaluated as part of the proposed rulemaking.
Environmental regulations are most effective when they are developed with an understanding of the industries they regulate, the supply chains they influence, and the communities they ultimately serve. While each individual revision contained within the proposed General Order may appear reasonable when evaluated independently, their cumulative effect may be substantially greater than the sum of their individual parts.
We respectfully encourage Ecology to evaluate these broader impacts before finalizing the proposed revisions to ensure environmental objectives are achieved without creating unintended consequences for Washington's aggregate industry, construction materials supply chain, public infrastructure programs, and the communities that depend upon them.
9. Conclusion

North Central Construction, Inc. appreciates the opportunity to provide comments regarding the proposed revisions to the General Order of Approval for Stationary and Portable Rock Crushers.

We recognize and support Ecology's responsibility to protect air quality and public health while ensuring compliance with applicable environmental regulations. We also appreciate the significant effort required to modernize a permitting framework that serves a diverse industry operating under a wide range of geographic, operational, and environmental conditions throughout Washington State.

Our comments are not intended to oppose environmental protection or the modernization of the General Order program. Rather, they are intended to encourage additional transparency regarding the technical analyses, assumptions, and implementation strategies supporting the proposed revisions so stakeholders can better understand both the environmental benefits and the practical implications associated with these changes.

Throughout our review, we identified several areas where additional clarification would strengthen the proposal, including the technical basis supporting the proposed production limits, Ecology's stated production reduction objectives, General Order eligibility criteria, individual Notice of Construction permitting, portable rock crushing operations, administrative requirements, and the cumulative impacts associated with simultaneously revising multiple General Orders affecting Washington's construction materials industry.

We respectfully request Ecology provide additional information regarding these issues before finalizing the proposed General Order to ensure that the final permitting framework remains technically supported, practically implementable, and appropriately balanced with the operational realities of Washington's aggregate industry.

Aggregate is the foundational material upon which nearly every transportation, utility, commercial, residential, and public works project depends. Because aggregate production serves as the first link in Washington's construction materials supply chain, regulatory decisions affecting this industry extend well beyond individual rock crushing operations and ultimately influence the availability of materials needed to construct, maintain, and improve infrastructure throughout the state.

Environmental regulations are most effective when they provide clear expectations, encourage innovation, promote environmental stewardship, and allow regulated industries to invest confidently in cleaner technologies, improved operational practices, and long-term environmental compliance. Regulatory certainty benefits not only permit holders, but also the Department, public agencies, contractors, and the communities they collectively serve.

Environmental protection and responsible infrastructure development should not be viewed as competing objectives. When regulations are supported by sound science, transparent decision-making, practical implementation, and opportunities for technological advancement, they strengthen both environmental stewardship and Washington's ability to construct, maintain, and improve the infrastructure upon which its communities depend.

We also respectfully encourage continued coordination between Ecology, the Washington State Department of Transportation, local agencies, industry stakeholders, and permit holders during development of the final General Order to ensure environmental objectives are achieved while preserving a resilient and reliable construction materials supply chain.

Thank you for the opportunity to provide these comments and for your consideration during development of the final General Order.

Good environmental policy should also be practical public policy—supported by sound science, transparent decision-making, and thoughtful implementation.