

Request for Coverage under the General Air Quality Permit for New or Modified Minor Source Hot Mix Asphalt Plants in Indian Country

Technical Support Document

Permittee:	Central Manufacturing, LLC. PO Box 939 Moses Lake, Washington 98837
Project Name:	Central Manufacturing Hot Mix Asphalt Plant
Location:	Wapato Pit 250 Cowin Ln. Wapato, Washington Yakima County Yakama Reservation Latitude: 46.47205° N; Longitude: 120.51391° W
Source Contact:	Erik Zemke Pit Manager (509) 570-3305 <u>erik@shamrockpaving.us</u>
Date:	September 4, 2024
Permit #:	R10TNSR01900

Background

The Clean Air Act (CAA) provides the U.S. Environmental Protection Agency (EPA) with broad authority to protect air resources throughout the nation, including air resources in Indian Country. In 2011, the EPA finalized a program for the "Review of New Sources and Modifications in Indian Country" (the Tribal NSR Rule), codified at 40 CFR Part 49, as part of a Federal Implementation Plan in order to protect tribal air resources from impacts due to the construction of new or modified stationary sources of air pollutants where there is no EPA-approved NSR program. 76 Fed. Reg. 38748 (July 1, 2011). Among other requirements, the Tribal NSR Rule set forth procedures and terms under which the Agency would administer a minor NSR permitting program in Indian Country.

As part of the Tribal NSR Rule, the EPA adopted the option of developing general permits for certain categories of minor sources to which the Tribal NSR Rule would apply. See 40 CFR 49.156. The purpose of a general permit is to provide for the protection of air quality while simplifying the permit issuance process for similar facilities in order to minimize the burden on the reviewing authority and the regulated sources. The EPA finalized the General Air Quality Permit for New or Modified Minor Source

Hot Mix Asphalt Plants (HMA General Permit) in Indian Country effective June 1, 2015 (80 Fed. Reg. 25068 (May 1, 2015)). New and modified minor sources that are true minor sources or major sources seeking to become synthetic minor sources may apply for coverage under the HMA General Permit if the potential to emit for new, modified, and existing units is below major source thresholds and the source can meet the throughput limits and other terms and conditions set forth in the General Permit. Sources seeking coverage under this General Permit must also demonstrate that they meet certain additional eligibility criteria.

This Technical Support Document (TSD) describes Region 10's analysis of the Applicant's Request for Coverage for the Project and our determinations concerning this request.

Request for Coverage under HMA General Permit

On June 18, 2024, Region 10 received a modification for an existing permit that Requested for Coverage under the HMA General Permit from Central Manufacturing, LLC. (Central Manufacturing) to construct and operate a Hot Mix Asphalt (HMA) operation co-located with a Stone Quarrying, Crushing, and Screening (SQCS) plant synthetic minor source on the Yakama Reservation (the Project) at the Wapato Pit. The Request for Coverage was certified and signed as being true and accurate by Erik Zemke, Pit Manager, on June 18, 2024.

Central Manufacturing will co-locate the HMA plant with an existing SQCS plant. The SQCS plant may produce crushed rock prior to or during operation of the HMA plant. Central Manufacturing is considered the "Applicant" and the "Permittee" for the Project.

Approval of Request for General Permit Coverage

Based on a review of and reliance on all of the information and representations provided in the Request for Coverage and other relevant information, Region 10 has determined that the Project qualifies for coverage under the HMA General Permit because it meets all of the required criteria. In particular, and as further described below:

- The Project is for a synthetic minor HMA plant that only produces hot mix asphalt and is located within Indian Country.
- The Project is located in an attainment, unclassifiable or attainment/unclassifiable area for all National Ambient Air Quality Standards (NAAQS) pollutants.
- The plant will only use natural gas, propane or diesel fuels in the dryer and the auxiliary heater, and diesel fuel in the generators.
- The dryer mixer is controlled by a baghouse.
- No stationary engines or generators will be used.
- Each asphalt and fuel storage tank has a capacity less than 39,890 gallons.
- The Project will be co-located with a SQCS plant and will comply with conditions 17 and 20.b of the HMA General Permit to limit combined emissions of regulated NSR-regulated pollutants to less than 100 tons per year.
- The Applicant has met the eligibility criteria related to federally-listed species and has completed the screening process for historic properties.

This Approval and the HMA General Permit authorize the Permittee to operate the Project within the exterior boundaries of the Yakama Reservation at the location described on page 1 of this TSD. Region 10's review with respect to the criteria is discussed in more detail below.

Project Description

The Wapato Pit is an active quarry owned by the Wheeler Rock Products company (note that Wheeler refers to the quarry as Wheeler Pit). EPA issuance of the initial HMA plant general permit to Central Manufacturing to operate the HMA at this site was approved on May 21, 2019. The issuance of this modification to the existing permit will allow the company to continue operating the HMA equipment.

Wheeler operates a rock crushing operation and a concrete batch plant at the quarry. Both of Wheeler's operations have been approved for coverage under EPA's general permits: the rock crushing operation is under the SQCS General Permit (Permit # R10TNSR00600) and the concrete batch plant is under Concrete Batch Plant (CBP) General Permit (Permit # R10TNSR00500). Wheeler's concrete batch plant operates independent of Central Manufacturing's HMA plant. Wheeler's rock crushing operation supplies aggregate for Wheeler's concrete batch plant and Central Manufacturing's HMA plant. Central Manufacturing and Wheeler do not share ownership and are not owned by a common company. Central Manufacturing has requested to be subject to the co-location requirements in the HMA General Permit.

ID #	Description of Affected Emission Units	Controls
1	HMA Drum Dryer/Mixer: I.D. #PDB963F; counterflow design drum; 350 tons/hour capacity; 130 mmBtu/hr burner, fueled with natural gas; manufactured 2006	Baghouse
2	Aggregate Handling: aggregate to piles via trucks; from piles to drum dryer via loader; 350 tons/hour capacity; Construction year 2024	None
3	Silo Filling: asphalt to silo from drum dryer via Drag Conveyor	None
4	Truck Loading and Fumes: asphalt load-out from silos to trucks and fumes from loaded truck bed while in plant	None
5	Vehicle Traffic: asphalt, aggregate and RAP trucks; diesel tanker trucks; loader for aggregate and RAP handling; passenger vehicles	None
6	Aggregate Storage Piles and Open Areas	None
7	Asphalt Oil Storage Tanks: I.D. #AT-1; 30,000 gallons asphalt oil; Installation date 1/2024; I.D	None
8	Asphalt Oil Storage Tank: I.D. #AT-2; 30,000 gallons asphalt oil; Installation date 1/2024	None
9	Diesel Storage Tank: I.D. #FT-1; 4,500 gallons diesel; Installation date 1/2024	None

Central Manufacturing HMA Plant List of Affected Emission Units Covered by this Approval

Ambient Air Quality

The geographic area where the Project will be located is designated attainment or attainment/unclassifiable under the CAA for all criteria pollutants. The HMA General Permit contains limits on emissions and operations sufficient to ensure that the HMA plant is not a major source and to ensure that emissions would not cause or contribute to a violation of any NAAQS (80 Fed. Reg. at 25085, under typical conditions). Generally, the EPA recognizes operations in compliance with the general permits would not cause or contribute to a NAAQS or PSD increment violation. Region 10 therefore believes that the HMA General Permit is appropriately protective of the NAAQS.

Analysis of regionally representative background concentrations was conducted. A survey of current air monitoring records in the vicinity of these projects revealed several active representative monitors in the immediate area of the quarry. A regulatory PM₁₀ monitor is located in Yakima, about 8 miles north of the Project site and a regulatory PM_{2.5} monitor is located in Toppenish about 10 miles southeast of the Project site. However, the particulate matter monitoring records at these sites have been significantly impacted by wildfire smoke events the past few years. Analysis and modification of the record would be required to remove the days of wildfire smoke influence to determine a representative background concentration. As an alternative, the NW-AIRQUEST Regional Background Lookup Tool¹ can be used to determine representative background concentrations of all criteria air pollutants. The tool was used to identify representative background concentrations at the Project site. The tool predicts current background air pollutant concentrations using both monitored and modeled concentrations interpolated to a 4-km horizontal grid across the Pacific Northwest. Modeled concentrations are predicted by the AIRPACT regional air quality forecast model. Use of such a tool is allowed under 40 CFR Part 51, Appendix W, §8.3.2(f) to determine representative background concentrations. The representative concentrations are listed in the following table.

U				
Air Pollutant	Averaging Time	NAAQS	Background Concentration	
PM10 (AIRPACT)	24-hr	150 μg/m³	74.3 μg/m³	
PM _{2.5} (AIRPACT)	24-hr	35 μg/m³	26.7 μg/m ³	
PIVI <u>2.5</u> (AIRPACT)	annual 12 µg/m ³		6.9 μg/m ³	
СО	1-hr	35 ppm	1.23 ppm	
60	8-hr	9 ppm	.84 ppm	
NO ₂	1-hr	100 ppb	25.3 ppb	
	annual	53 ppb	4.4 ppb	
SO2	1-hr	75 ppb	4.7 ppb	

Representative Background Concentrations as of May 2024.

^aProject site nearest AIRPACT representative grid cell at: 46.47°N, 120.51°W

The analysis found background concentrations of all criteria pollutants are below the NAAQS thresholds. Region 10 has no concern regarding the ambient impacts of emissions from the project.

¹ NW-AIRQUEST regional background concentration lookup tool located at: <u>http://lar.wsu.edu/nw-airquest</u> Central Manufacturing HMA Page 4 of 9 TSD for Approval of HMA General Permit Coverage

Emissions

A source in an attainment area must obtain a major source construction permit if its emissions of regulated NSR pollutants will be greater than 100 tons per year for listed source categories and 250 tons per year for non-listed categories. A source in an attainment area must obtain a major source operating permit if its emissions will be greater than 100 tons per year for regulated pollutants and 250 tons per year for PM. A source must obtain a minor NSR permit if its emissions are less than the major source construction permitting thresholds, but more than the minor NSR permitting thresholds in the table below. The minor NSR permitting thresholds are more restrictive (lower) for sources locating in a nonattainment area, as specified in the table. Permit limitations, also called synthetic minor limits, are considered in determining whether a source will be a major source.

Pollutant	Nonattainmen	Attainment
	t Areas	Areas
СО	5	10
NOx	5	10
SO2	5	10
VOC	2	5
PM	5	10
PM10	1	5
PM2.5	0.6	3
Lead	0.1	0.1
Fluorides	NA	1
Sulfuric acid mist	NA	2
Hydrogen sulfide	NA	2
Total reduced sulfur	NA	2
Reduced sulfur compounds	NA	2

Tribal Minor NSR Permitting Thresholds (tons per year)

A new or modified source that is required to obtain a minor NSR permit may qualify for coverage under a minor NSR general permit in lieu of obtaining a site-specific permit. To qualify for the General Permit, the new or modified source must meet the eligibility criteria in the Request for Approval (see the Approval of Request for General Permit Coverage section above) and be able to comply with the limitations in the General Permit. If a new or modified source does not meet the specified criteria or cannot comply with the limitations in the General Permit, the source does not qualify for coverage under the General Permit and must apply for a site-specific minor NSR permit or other applicable NSR permit.

The HMA General Permit includes enforceable physical or operational limitations on the maximum capacity of the source to emit air pollutants, including air pollution control equipment and restrictions

on the type or amount of material combusted, stored, or processed. The permit is designed to ensure emissions remain below the major source construction and operating permit thresholds.

When an HMA plant is co-located (two operations functioning as one source at the same location) with a SQCS facility, emissions from both sources must be totaled to determine the applicable permitting program. Both SQCS and HMA general permits include special limitations that apply to co-located sources to ensure that the total emissions from both operations are less than the major source permitting thresholds.

The potential emissions contained in the table below are based on the material throughput limits and fuel consumption limitations for co-located HMA plants and SQCS plants that are specified in the respective general permits and assume compliance with those limitations. For more information about how these emissions were calculated, please see the <u>Background Document: General Air Quality Permit</u> for New or Modified Minor Source Hot Mix Asphalt Plants in Indian Country (Final) (PDF)(25 pp, 857 K, 03/23/15) at https://www.epa.gov/sites/production/files/2016-05/documents/hotmixasphaltbackgrounddocument.pdf.

	Pollutant (tons/year)						
Process	РМ	PM ₁₀	PM2. 5	SO ₂	NO _x	СО	VOC
HMA Plant		26	14	18	71	80	28
SQCS Plant		63	63		88	19	7
Co-located HMA Plant and SQCS Plant	86	63	30	18	90	78	27

Attainment, Unclassifiable or Attainment/Unclassifiable (Controlled) Potential to Emit Summary

The Central Manufacturing HMA plant has been source tested for Particulate Matter as recently as May 18, 2021. Based on when this performance testing occurred, PM would need to be reconducted since the most recent test was conducted outside of two years of this approval, as specified in Condition 32c. Initial performance tests will be required for the mixer/dryer for Carbon Monoxide and Nitrogen Oxides, to comply with Condition 32 of the permit. No testing of the generator engines is required as long as the engines are non-road engines (the HMA is portable and will not be located at the site more than 365 days).

As specified in Condition 32 of the General Permit, within 60 days after achieving the maximum production rate at which the permitted source will operate but not later than 180 days after the first day of operation after receiving coverage under the General Permit, Central Manufacturing shall perform an initial performance test of the Mixer/Dryer to verify compliance with the applicable emission limitations in the General Permit.

Listed Species-Related Eligibility Criteria

The EPA developed eligibility criteria related to species that are listed as endangered or threatened

under the federal Endangered Species Act that applicants must satisfy to qualify for coverage under the HMA General Permit. Appendix A to the Request for Coverage form for the HMA General Permit provides detailed screening procedures for applicants to follow to assess the potential impacts of their sources on federally-listed species and their critical habitat. To be eligible for coverage under a General Permit, sources must demonstrate that they have satisfactorily completed the screening procedures and that they meet one of the species-related eligibility criteria, provide sufficient documentation supporting the criterion selected and obtain confirmation from the EPA that they have done so.

The Applicant's Request for Coverage states that the Project meets Criterion D of Appendix A with respect to listed species protection, noting that the quarry has been previously approved for rock crushing and concrete batch plant operations associated with the Wheeler operations. The Request for Coverage included a map of the Project location showing the property boundaries associated with the Project. This information indicates that the Project is located in an agricultural area, is an active rock quarry and will not be expanding areas where there would be additional ground disturbance.

The previous approvals of coverage for the Wheeler operations stated that those projects met Criterion A because the FWS had not indicated that there are any listed species and/or critical habitat that could exist within the specific action area of the Project. For this Project, Region 10 requested input from the U.S. Fish and Wildlife Service. The U.S. FWS confirmed that they had no concerns with this approval.

After review and consideration of this information, Region 10 agrees that the Applicant has completed the species-related screening procedures and has demonstrated by providing the appropriate information and documentation that the proposed Project meets Criterion D of the listed species-related eligibility criteria for coverage under the HMA General Permit. Per Appendix A of the Request for Coverage, this HMA plant would meet Criterion D because the quarry has been approved in the past and informal consultation with federal agencies has confirmed there are no new concerns about the Project, as well as Criterion A because no listed species and/or critical habitats are likely to occur within action area of the Project.

Historic Properties-Related Eligibility Criteria

The EPA engaged in the National Historic Preservation Act Section 106 process when the General Permit was issued. Requests for approval under the General Permit are not subject to NHPA Section 106 but are subject to the NHPA screening requirements in Appendix B of the Request for Coverage. The EPA developed the screening process in Appendix B of the Request for Coverage to enable source owners/operators to appropriately consider the potential impacts, if any, resulting from the construction, modification, and/or operation of a new or modified emission source on historic properties that are either listed on or eligible for listing on the National Register of Historic Places and, if applicable, determine whether actions can be taken to mitigate any such impacts. To be eligible for coverage under the HMA General Permit, sources must demonstrate that they have satisfactorily completed the screening procedures and that they meet one of the historic property-related eligibility criteria, provide sufficient documentation supporting the criterion selected and obtain confirmation from the EPA that they have done so.

With respect to the Project, the Applicant indicated in the Request for Coverage that the screening process in Appendix B of the Request for Coverage form had been completed to determine if the construction, modification, or operation of the Project has the potential to cause effects to historic Central Manufacturing HMA Page 7 of 9 TSD for Approval of HMA General Permit Coverage properties. The Request for Coverage indicated that no historic properties or cultural resources would be affected by the Project because it is to be located in the previously disturbed portions of the Wapato pit and no additional disturbance is necessary for the Project.

On the Yakama Reservation, the Yakama Nation's Tribal Historic Preservation Officer (THPO) is the lead for the historical preservation program. Region 10 contacted Rose Ferri, Yakama Nation's THPO, to verify the Project was unlikely to cause any concern for impacts to cultural resources. On May 4, 2024, the THPO sent an email to Central Manufacturing indicating that as long as no additional ground would be disturbed by the project, they had no further comments or questions regarding that project. Central Manufacturing confirm that same day that no additional ground would be disturbed.

Region 10 has concluded that the Project meets the historic property-related eligibility criteria "no historic properties affected" and that the Project is consistent with the historic property-related eligibility criterion for coverage under the HMA General Permit.

Environmental Justice

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

The EPA believes the human health or environmental risk associated with this action will not have disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations. The EPA's primary goal in developing the HMA General Permit was to ensure that air resources in Indian Country will be protected in the manner intended by the CAA. The HMA General Permit will limit adverse impacts by restricting operations and emissions. In addition, the HMA General Permit is part of a flexible preconstruction permitting program for minor sources in Indian Country that is comparable to similar programs in neighboring states in order to create a more level regulatory playing field for owners and operators within and outside of Indian Country. The HMA General Permit reduces an existing disparity by filling the regulatory gap.

The EPA has developed an EJ mapping and screening tool called EJSCREEN. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports. According to EPA's EJSCREEN Version 2.1 environmental justice screening and mapping tool, minorities comprise 81% of the community within a three-mile radius of the facility, and 42% of the 1,652- resident population within that area is characterized as low income. The percentage of minorities in the community is higher than the national average (40%). The percentage of low-income residents are also higher than the national average (30%).

As explained above, the general permit was designed to be protective of the NAAQS, and Region 10 therefore believes that the HMA General Permit is appropriately protective of the NAAQS with respect to the Project. Compliance with the NAAQS is emblematic of achieving a level of public health protection that demonstrates that a proposed facility will not have a disproportionately high and adverse human

health or environmental effects on minorities or low-income populations. See, e.g., In re Shell Offshore Inc., 13 E.A.D. 357, 404-5 (EAB 2007).

Tribal Consultation

Region 10 sent a letter to the Chairman of the Yakama Nation's Tribal Council on May 21, 2024, offering an opportunity for consultation on this EPA permitting action. The EPA received a response from the Tribe on May 31, 2024 indicated that there were no concerns with the Project and that they would not be requesting formal consultation associated with this Project.

Public Participation

As described in 40 CFR 49.157, issuance of general permits pursuant to the Tribal NSR Rule must meet public participation requirements. Before issuing a permit under the Tribal NSR program, the EPA must prepare a draft permit and must provide adequate public notice to ensure that the affected community and the general public have access to the draft permit information. The public notice must provide an opportunity for a 30-day public comment period and notice of a public hearing, if any, on the draft permit. Consistent with these requirements, during the development of the proposed HMA General Permit, the EPA followed the applicable public participation process and received numerous comments. The EPA considered and addressed these comments in its issuance of the final HMA General Permit (See 80 Fed. Reg. 25068 (May 1, 2015)).

In contrast, a 30-day public comment period under 40 CFR 49.157 is not required for an approval of a request for coverage of a particular source under a General Permit. Region 10 posted the request for coverage on its website on May 16, 2023, prior to the issuance of any decision to approve or deny the request for coverage and requested the public to submit any concerns about the applicant's eligibility to construct under the General Permit. Region 10's air permits website can be found at: https://www.epa.gov/caa-permitting/caa-permitting-epas-pacific-northwest-region.

Region 10's Approval of the Request for Coverage for the Project is a final agency action for purposes of judicial review only for the issue of whether the Project is eligible for coverage under the HMA General Permit (see 40 CFR 49.156(e)(6)). Any petition for review of this approval action must be filed in the United States Court of Appeals for the appropriate circuit pursuant to CAA section 307(b).