



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: Poe Asphalt Paving, Inc.
P.O. Box 449
Lewiston, ID 83501

Project Name: Hard Rock Quarry – Plant #2000

Location: Hard Rock Quarry
Idaho State Highway 5 (1.5 miles east of Plummer, ID)
Plummer, ID
Benewah County
Coeur d’Alene Reservation
Latitude: 47.340° N; Longitude: 116.855° W

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Permit #: R10TNSR02600

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 the Tribal New Source Review (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 emission increase 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 November 23, 2020, Region 10 received an initial Request for Coverage under the HMA General Permit from Poe Asphalt Paving, Inc. (Poe Asphalt) to construct and operate a hot mix asphalt (HMA) plant synthetic minor source on the Coeur d'Alene Reservation (the Project) at the Hark Rock Quarry.

Poe Asphalt plans to co-locate the HMA plant with a stone quarrying, crushing and screening plant (SQCS), owned and operated by another independent entity at the Hard Rock Quarry. It is noted, Peak Sand and Gravel, Inc. was approved by Region 10 in August 2018 to operate an SQCS at the Hark Rock Quarry under the SQCS General Permit, co-located with an HMA. The SQCS may produce crushed rock prior to or during operation of the HMA. Poe Asphalt 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 (drum) 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 or propane in the dryer/mixer.
- The dryer mixer is controlled by a baghouse.
- The generators will be powered by diesel.
- The auxiliary heater will be powered by diesel and has a heat input capacity less than 10 MMBtu/hour
- 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 20b of the HMA General Permit to limit combined emissions of 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 Coeur d'Alene Reservation at the location described on page 1 of this TSD.

Project Description

The Hard Rock Quarry is an active quarry owned by Bettie and Alan Roecks. Peak Sand and Gravel, Inc. has the mining rights to the quarry. Poe Asphalt proposes to construct (locate) and operate a portable HMA plant as a stationary source at the quarry. The HMA plant is a portable counter-flow plant with a design capacity of 400 tons per hour of hot mix.

Poe Asphalt anticipates a rock crushing operation will be co-located at the quarry, possibly operating at the same time as the HMA plant. A firm independent of Poe Asphalt will operate the SQCS before or during operation of the HMA.

Poe Asphalt HMA Plant: Affected Emission Units Covered by this Approval

ID #	Description of Affected Emission Units^a	Controls
1	HMA Drum Dryer/Mixer: Gencor Model 400 portable asphalt plant, counter-flow design drum; 400 tons/hour capacity; RAP capability; 94.43 mmBtu/hr burner, fueled with natural gas or propane; manufactured in 1993, modified in 2015	CFP-182 Baghouse
2	Aggregate Handling: aggregate to piles via trucks; from piles to drum dryer via loader; 5-bin feeder and scale conveyer; 400 tons/hour capacity;	None listed
3	RAP Handling: recycled asphalt to piles via trucks; to drum dryer via RAP bins, crushers, loader and Recycle Feed Conveyor; 200 tons/hour RAP capacity;	None listed
4	Silo Filling: asphalt to silo from drum dryer via Drag Conveyor; 450 tons/hour capacity;	None listed
5	Truck Loading and Fumes: asphalt load-out from silos to trucks and fumes from loaded truck bed while in plant;	None listed
6	Vehicle Traffic: asphalt, aggregate and RAP trucks; diesel tanker trucks; loader for aggregate and RAP handling; passenger vehicles	Water application
7	Aggregate Storage Piles and Open Areas	None listed
8	Auxiliary Heater: HYCGO-200 heater, 2.0 MMBtu/hour, diesel fuel; manufactured in 2020	None listed
9	Asphalt Oil Storage Tank: 30,000 gallons asphalt oil; installed 2020	None listed
10	Reclaimed Fuel Oil Tank: 16,000 gallons; installed 2009 (RFO not to be used for any purpose at the Hard Rock Quarry site nor within the Coeur d'Alene Reservation)	None listed
11	Diesel Storage Tank: 9,000 gallons #2 diesel; installed 2009	None listed
12	Asphalt Tack Storage Tank: 8,000 gallons; installed 1991	None listed

^aThree diesel generators were included in the application and are considered portable non-road engines, exempt from the engine requirements in the General Permit.

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 no active representative monitors in the

vicinity of the Quarry. Instead, the NW-Airquest Regional Background Lookup Tool¹ was used to identify representative background concentrations at the Hard Rock quarry. 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.

Hard Rock Quarry Representative Background Concentrations.

Air Pollutant	Averaging Time	NAAQS (µg/m³)	Hard Rock Quarry^b (µg/m³)
PM₁₀	24-hr	150	91
PM_{2.5}	24-hr	35	26
	annual	12	5.9
CO	1-hr	40,000	1
	8-hr	10,000	1
NO₂	1-hr	188	9
	annual	100	2
SO₂	1-hr	196	12
	3-hr	1300	17

^aHard Rock Quarry represented by grid cell at: 47.33°N, 116.88°W

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

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. Permit limitations, also called synthetic minor limits, are considered in determining whether a source will be a major source.

Tribal Minor NSR Permitting Thresholds (tons per year)

Pollutant	Nonattainment Areas	Attainment Areas
CO	5	10
NO _x	5	10
SO ₂	5	10

¹ The Northwest International Air Quality Environmental Science and Technology Consortium (NW-AIRQUEST) supports the Regional Background Lookup Tool, description and tool available here: <http://lar.wsu.edu/nw-airquest/lookup.htm>.

The Poe Asphalt HMA plant has not been source tested so will require testing, as required under the HMA General Permit. Initial performance tests will be required for the mixer/dryer. No testing of the generator engines is required as long as the engines are non-road engines.

As specified in Condition 32 of the HMA 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, Poe Asphalt 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 (coordination between a federal agency (EPA Region 10, in this case) and the Services has been concluded and the project will not adversely affected listed species or habitats). The applicant provided: (a) a memo dated May 25, 2011, from Region 10 to Poe Asphalt confirming Region 10 had no concerns regarding ESA impacts from operation of the 1900 plant at the Hard Rock Pit in 2011; (b) maps of the area and project site; (c) a letter from the U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species in the region of the project, an automated product from the USFWS website; (d) an email from November 23, 2020, documenting a recent telephone conversation with NOAA National Marine Fisheries Service (NMFS) personnel who stated NMFS confirms there is no ESA concerns from the project at this site.

More recent ESA review at the site was conducted for the Peak Sand and Gravel, Inc. SQCS approval for coverage under the SQCS General Permit at the Hard Rock Quarry. The approval was issued by Region 10 on August 9, 2018, and provided a record of coordination with the USFWS and NMFS. The final conclusion was the SQCS project would pose no risk to protected species and habitat.

Given the documented conclusions were from 2018, Region 10 reached out to USFWS and NMFS to confirm the conclusions were still valid and no changes had occurred in the status of endangered species concerns. Both organizations confirmed that they had no additional concerns with this approval (December 8, 2020, email from HMFS and December 21, 2020, email from UWFWS).

The USFWS letter provided from the website indicated there are no threatened, endangered, or candidate species in the immediate area of the project and no critical habitat. It also stated there are no refuge lands or hatcheries in the project area. The letter does identify the Bald Eagle as a protected, migratory bird in the region. Also, several endangered and protected species such as the Bull Trout, Gray Wolf, Canada Lynx, and Yellow-billed Cuckoo are identified as having habitat in the region. The project very likely does not have potential to interfere with any of these species and no concerns were raised by the services.

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 C 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 C because prior coordination with federal agencies has confirmed there are no ESA concerns related to the project actions.

Historic Properties-Related Eligibility Criteria

EPA engaged in the National Historic Preservation Act (NHPA) 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 properties. The Request for Coverage indicated that no historic properties would be affected by the Project. The applicant identified five historic properties within 10 miles of the project. The nearest is Plummer Point CCC Picnic and Hiking Area, located 3.5 miles from the project. None of the projects are in range of potentially being affected by the site operations.

On the Coeur d'Alene Reservation, the Tribal Historic Preservation Officer (THPO) is the lead for the historical preservation program. The applicant did not provide any evidence of coordination with the THPO to confirm the project does not pose a risk to cultural resources. Region 10 contacted the THPO (Dr. Wagner) to see if the tribe had any concerns. In her reply on January 19, 2021, she confirmed the project would likely not impact tribal cultural resources as proposed, since the project will be located on the existing bedrock portion of the quarry and no excavation or development is required to locate the plant at the site.

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.

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

The applicant sent an electronic copy of the HMA application and supporting information to the Coeur d'Alene environmental staff and THPO on November 21, 2020. The application included the record of the 2019 coordination with tribal environmental staff concluding they had no air quality or cultural resource impact concerns related to the project. On December 2, 2020, Region 10 reached out to tribal environmental staff to see if there were any concerns regarding project impacts. The Tribe did not raise any concerns.

On January 19, 2021, Region 10 confirmed with the THPO the tribe had no concerns regarding impacts to cultural resources given the project plan to locate the plant within the already disturbed portions of the quarry. Region 10 sent a letter to the Chairman of the Coeur d'Alene Tribal Council on December 15, 2020, offering an opportunity for consultation on this EPA permitting action. EPA did not receive a request for 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 November 30, 2020, 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).