



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: Roy Houck Construction LLC
4444 22nd Avenue NE
Salem, Oregon 97301

Project Name: Houck Portable Hot Mix Asphalt Plant

Location: Patawa Pit Quarry (previously disturbed portion of the quarry only)
Thompson Road, Pendleton, Oregon, 97801
Umatilla County
Umatilla Indian Reservation
Latitude: 45.597° N; Longitude: 118.647° W

Source Contact: Pam Houck
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Date: June 8, 2018

Permit #: R10TNSR01400

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. 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 their 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 Permits.

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 May 5, 2018, Region 10 received an initial Request for Coverage under the HMA General Permit from Roy Houck Construction LLC (Houck) to construct and operate a hot mix asphalt (HMA) plant as a synthetic minor source at the Patawa Pit within the exterior boundaries of the Umatilla Indian Reservation (the Project). This Request for Coverage was certified and signed as being true, accurate and complete by Pam Houck on May 4, 2018. On June 7, 2018, Houck indicated that the HMA plant may be co-located with a stone quarrying, crushing, and screening (SQCS) facility contracted by Houck to only produce aggregate for Houck's HMA plant. Houck 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/classifiable area for all National Ambient Air Quality Standards (NAAQS) pollutants.
- The plant will only use propane fuel in the dryer/mixer and #2 distillate (a type of diesel) fuel in the generators, and the auxiliary heater is electric.
- The dryer mixer is controlled by a baghouse.
- Each asphalt and fuel storage tank has a capacity less than 39,890 gallons.
- The Project may be co-located with a SQCS facility and will comply with conditions 17 and 20.b of the HMA General Permit to limit combined emissions of regulated NSR 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 Umatilla Indian Reservation at the location (within the previously disturbed portion of the Patawa Pit only) described on page 1 of this TSD. Region 10's review with respect to the criteria is discussed in more detail below.

Project Description

Houck proposes to construct (locate) and operate a portable HMA plant possibly co-located with an SQCS facility within the previously disturbed portion of the identified location (Patawa Pit) only. The Patawa Pit is an active quarry.

Houck HMA Plant List of Affected Emissions Units Covered by this Approval

ID #	Description of Affected Emissions Units	Controls
70-01	HMA Drum Dryer/Mixer: Cedar Rapids 100x40 Drum, Astro Flame Burner Manuf. 1989; Parallel Flow drum design; 400 tons of HMA per hour capacity; RAP capability; 150 mmBtu/hour burner, currently fueled with propane	CMI RA-318P Baghouse; manufactured 1995; fines and dust reinjected to drum mixer
19-04	Primary Generator: Caterpillar 3412; manufactured 1989; fueled with #2 diesel; 800 brake horsepower; 550 kilowatt hours.	None
19-03	Secondary Generator: Caterpillar 3360; manufactured 1993; fueled with #2 diesel; 300 brake horsepower; 140 kilowatt hours	None
70-15	Asphalt Oil Heater: 3.5 mmBtu/hour, Electric; manufactured 2002	None
70-03	Aggregate and RAP Handling and Screening: to and from piles via loader to feeder bin; 1 virgin aggregate scalping screen; 1 aggregate conveyor; 1 RAP conveyor; 1 weigh conveyor; 400 tons of HMA per hour capacity	Water Sprays
71-02	Silo Filling: via drag slat conveyor from drum dryer; 400 tons of HMA per hour capacity	None
71-01	Truck Loading and Fumes: HMA truck load-out from silos and fumes from loaded truck bed while in plant; 400 tons per hour capacity	None
VT1	Vehicle Traffic: HMA trucks, aggregate and RAP trucks, asphalt trucks, loader for aggregate and RAP.	Water application
AS1	Aggregate Storage Piles: open areas and aggregate storage piles. 2 to 4 piles, depending on AC mix	Water application
18-04	Liquid Asphalt Oil Storage Tank: 25,000 gallons, electrically heated	None
18-06	#2 Diesel Storage Tank: 12,000 gallons to supply generator engines and vehicles	None
RP1	Propane Storage Tank: 18,000 gallons to supply drum dryer	None

Ambient Air Quality

The geographic area where the Project will be located is designated as attainment/unclassifiable under the CAA for all National Ambient Air Quality Standards (NAAQS) pollutants. The available information on air quality in the area shows that ambient concentrations are well below the levels of the NAAQS. The HMA and SQCS General Permits contains limits on emissions and operations sufficient to ensure that the combined emissions from the HMA plant and SQCS facility are 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. Therefore, Region 10 believes that the HMA General Permit, in conjunction with the SQCS facility, is appropriately protective of the NAAQS.

Potential to Emit (in tons/year)

Potential to emit (PTE) means the maximum capacity of a stationary source to emit an air pollutant under its physical and operational design. The HMA General Permit includes enforceable physical or operational limitations on the maximum capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on the type or amount of material combusted, stored, or processed. PTE is meant to be a worst case emissions calculation and is used in many cases to determine the applicability of federal CAA requirements. Actual emissions are typically lower than PTE. Our evaluation of whether the Project qualifies for the HMA General Permit included consideration of the limitations on PTE in the HMA General Permit.

The Tribal NSR Rule establishes specific PTE thresholds for new or modified stationary sources that trigger the requirement to obtain a preconstruction permit under the Tribal Minor NSR program.

Tribal Minor NSR Permitting Thresholds (tons per year)

Pollutant	Nonattainment Areas	Attainment Areas
CO	5	10
NO _x	5	10
SO ₂	5	10
VOC	2	5
PM	5	10
PM ₁₀	1	5
PM _{2.5}	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

Projects at new or modified sources that must obtain Tribal Minor NSR program preconstruction permits based on PTE at or above these Tribal minor NSR thresholds may qualify for coverage under a Tribal Minor NSR general permit in lieu of obtaining a site-specific permit. In order to qualify for the HMA General Permit, the new or modified source must have a PTE below the major NSR source thresholds and meet criteria related to the size of equipment and maximum production rates at the source and other eligibility criteria. If a new or modified source does not meet the specified criteria, the source does not qualify for coverage under the HMA General Permit and must apply for a site-specific Tribal NSR permit or other applicable NSR permit.

In this case, Houck determined that the Project triggered the preconstruction permit requirements under the Tribal Minor NSR Rule and is seeking to obtain coverage under the HMA General Permit in lieu of obtaining a site-specific permit. As such, Region 10 has taken into account the enforceable limitations

under the HMA General Permit in determining the PTE for the Project, whether it is a major source, and whether it is eligible for the HMA General Permit.

The Project’s PTE will be limited to below 100 tons per year for the NAAQS pollutants and 250 tons per year for PM (which is not a NAAQS pollutant) making the Project a synthetic minor source for Title V and NSR major source thresholds in attainment areas. The potential emissions contained in Table below are based on the material throughput limits and fuel consumption limits for co-located HMA plants and SQCS facilities that are specified in the respective general permits. For more information about how these emissions were calculated please see the Background Document: General Air Quality Permit 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>. Accordingly, the Project’s potential emissions are at a level that qualifies it for coverage under the HMA General Permit co-located with an SQCS facility.

HMA and SQCS co-located (Controlled) Potential to Emit Summary

Process	Pollutant (tons/year)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Co-located HMA Plant and SQCS Facility	86	63	30	18	90	78	27

Listed Species-Related Eligibility Criteria

The EPA developed eligibility criteria related to species that are listed as threatened or endangered under the federal Endangered Species Act (ESA) 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 Request for Coverage states that the Project meets Criterion D of Appendix A with respect to listed species protection. The Request for Coverage included information pertaining to the Project and supporting their selection of Criterion D of Appendix A. Based on habitat requirements and an analysis of the available habitat within the boundaries of the proposed Project locations and the respective action areas, the information shows that listed species could exist in the Project’s action area. The Bureau of Indian Affairs (BIA) of the U.S. Department of the Interior prepared an Environmental Assessment (EA) dated February 2016 on the use of Patawa Pit as a SQCS facility and to provide for the operation of a HMA plant. Based on this EA, the BIA determined there was no significant impact to threatened and endangered fish and wildlife. The U.S. Fish and Wildlife Service and National Marine Fisheries Service did not review the EA prepared by the BIA.

After review and consideration of this information, Region 10 agrees that the Applicant has completed the species-related screening procedures and has demonstrated, providing appropriate information, that

the proposed Project meets Criterion B (instead of Criteria D), of the listed species-related eligibility criteria for coverage under the HMA General Permit. Per Appendix A of the Request for Coverage, this facility would meet Criterion B because the BIA's EA supports that the Project is not likely to cause any adverse effects to the listed threatened or endangered species or their critical habitat.

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 emissions source on historic properties that are listed 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 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. This conclusion was based on the facts that the source will be located in an existing quarry and prior earth disturbances diminish the likelihood that historic properties exist in the quarry and on the access roads. On the Umatilla Reservation, the Tribal Historic Preservation Officer (THPO) is the lead for the historical preservation program. Region 10 contacted the THPO for input on the proposed site locations regarding historic properties and cultural issues. After reviewing the information available and the proposed site locations, the THPO concurred via email dated May 24, 2108, that there will not be any historical or cultural issues as long as Houck locates their equipment and operation within the previously disturbed areas of the Patawa Pit.

Region 10 has concluded that the Project meets the historic property-related eligibility criteria "no historic properties affected." Region 10 has concluded 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 is 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, in conjunction with the SQCS 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 disproportionately high and adverse human health or environmental effects on minorities or low-income populations. See, e.g., *In re Shell Offshore Inc.*, 13 EA.D. 357, 404-5 (EAB 2007).

Tribal Consultation

Region 10 provided a copy of the request for coverage application as well as a copy of the draft approval letter and technical support document to the Umatilla tribal environmental authority. Region 10 sent a letter to the Chairman of the Umatilla Tribe offering consultation on this EPA permitting action on May 15, 2018. The Umatilla Tribe did not request consultation.

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 posts the request for coverage on its website prior to the issuance of any decision to approve or deny the request for coverage and requests the public to submit any concerns about the applicant's eligibility to construct under the General Permit. Region 10's air permits website is 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).