



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: FNF Construction, Inc.
115 S. 48th St.
Tempe, AZ 85281

Project Name: FNF 96-00 Almix Asphalt Mixing Plant

Location: SE ¼ Section 13, Township 27N, Range 26E (Lat: 35 44 13.94; Long: 109 30 42.76)

Source Contact: Tressia Contreras, FNF Construction, (480) 929-6733, tressia@fnfinc.com

Date: April 19, 2017

Facility ID#: 9

Application #: 2017-001-GP

Summary

FNF Construction, Inc. (FNF) applied for coverage under the General Air Quality Permit for New or Modified Minor Source Hot Mix Asphalt Plants in Indian Country (General Permit). General Permit coverage would allow the facility to construct and operate a drum mix asphalt plant on the Navajo Nation Indian Tribal land. FNF proposes to construct and operate a portable asphalt mixing plant on Navajo Nation tribal land. EPA has reviewed FNF's application for coverage and finds that the proposed facility qualifies for coverage under the General Permit. This Technical Support Document (TSD) describes the legal and factual basis for our approval.

Background

The Clean Air Act (CAA) provides EPA with broad authority to protect air resources throughout the nation, including air resources in Indian Country. Unlike States, Indian Tribes are not required to develop CAA new source review (NSR) permitting programs. See, e.g., Indian Tribes: Air Quality Planning and Management, 63 Fed. Reg. 7253 (Feb. 12, 1998) (also known as the Tribal Authority Rule). In the absence of an EPA-approved NSR program, EPA has the authority to implement a Federal Implementation Plan (FIP) in order to protect air resources from impacts due to the construction of new or modified stationary sources of air pollutants on tribal lands. In 2011, EPA finalized the Tribal NSR Rule, codified at 40 CFR Part 49, as part of a FIP under the CAA for Indian Country. 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.

The Navajo Nation does not have an EPA-approved NSR program, so EPA is the permitting authority for new or modified stationary sources of air pollutants. EPA reviews applications and issues permits for the construction and operation of new and modified stationary sources on tribal land in accordance with the Tribal NSR Rule.

As part of the Tribal NSR Rule, EPA adopted the option of developing general permits for certain categories of minor sources to which the Tribal NSR Rule would apply. 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. EPA finalized the General Air Quality Permit for New or Modified Minor Source Hot Mix Asphalt (HMA) Plants in Indian Country (HMA General Permit) effective June 1, 2015. 80 Fed. Reg. 25068 (May 1, 2015). New and modified minor sources may apply for coverage under the HMA General Permit if the total 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 must also demonstrate that they meet all eligibility criteria.

Request for Coverage under HMA General Permit

On February 17, 2017, EPA Region 9 received a Request for Coverage under the HMA General Permit from FNF for the construction and operation of a 96-00 Almix Asphalt Mixing Plant at a road construction project (Project) located on State Route 264 that extends from Fish Wash to Burnside in Ganado, Arizona. Processed aggregates (sand, gravel, rock) will be transported to the plant where they will be used to manufacture asphalt for use in the road construction. On March 17, 2017 EPA sent a letter to FNF indicating that their application was complete.

The Project will be located on approximately 10.7 acres (9.7 for the pit and 1.0 for the access road)¹ of Navajo Nation Tribal Trust Land in Apache County, Arizona. FNF was awarded an Arizona Department of Transportation roadway construction project that includes providing up to 56,000 tons of asphalt per month from the proposed plant to repave State Route 264.

The geographic area where the Project will be located is designated attainment/unclassifiable under the CAA for all National Ambient Air Quality Standards (NAAQS) pollutants.

¹The actual lease from the Navajo Nation is for 28.5 acres, which includes 26.4 acres for the gravel pit (Ganado Borrow Pit) and 0.92 miles with a 20-ft wide right-of-way for the road construction. Navajo Nation approval was previously obtained for the entire 28.5-acre project. The Ganado Borrow Pit is not related to the proposed asphalt mixing plant. The Ganado Borrow Pit project included excavating a pit to remove dirt (borrow) and transport it to needed locations for the project. The Ganado Borrow Pit project has already been completed.

Equipment Description

FNF is proposing to construct a new facility for the production of a portable counter-flow drum mix asphalt plant. The proposed Project will not be co-located with a stone quarrying, crushing and screening plant. The facility will contain multiple emission units, which are described in Table 1.

Table 1. List of Affected Emission Units Covered by this Approval of Request for General Permit Coverage

ID #	Description of Affected Emission Units	Control Technology	Date of Manufacture
96-01	Dryer; 106 MMBtu/hour burner capacity; natural gas	Baghouse	2013
96-01	Drum Mixer; 350 ton/hour capacity	Baghouse	2013
96-03	Load Out Silo w/Slat Conveyor; 350 ton/hour capacity	N/A	2013
96-05	Cold Fee Bins; 350 ton/hour capacity	Wet Suppression	2013
96-06	Screen/ Pugmill; 350 ton/hour capacity	Wet Suppression	2013
96-07	Lime Silo; 350 ton/hour capacity	Baghouse	2013
96-08	Incline Weigh Conveyor; 350 ton/hour capacity	N/A	2013
96-09	Hot Asphaltic Concrete Oil Heater; 1.5 MMBtu/hour burner capacity; distillate	N/A	2013
96-09	Hot Asphaltic Concrete Oil Storage Tank; 30,000-gallon capacity; vapor pressure ND	N/A	2013
96-10	Diesel Fuel Tank; 18,000-gallon capacity; 0.022 psi @100° F	N/A	2013
96-11	Recycled Asphalt Bins RAP; 350 ton/hour capacity	N/A	2013
96-12	RAP Screen; 100 ton/hour capacity	Wet Suppression	2013
62-01	Asphalt Rubber Oil Heater; 4.2 MMBtu/hour burner capacity; distillate	N/A	1993
62-01	Asphalt Rubber Oil Tank; 30,000-gallon capacity; vapor pressure ND	N/A	1993
62-36	Hot Asphaltic Concrete Oil Heater; 1.8 MMBtu/hour burner capacity; distillate	N/A	1986
62-36	Hot Asphaltic Concrete Oil Storage Tank; 30,000-gallon capacity; vapor pressure ND	N/A	1986
Rental	Natural gas tank; 11,000-gallon capacity; 45-70 psi	N/A	unk
Rental	Natural gas tank; 11,000-gallon capacity; 45-70 psi	N/A	unk

Eligibility Criteria

Based upon our review of the FNF Request for Coverage, we have determined the Project qualifies for the HMA General Permit because it meets the following criteria:

- The Project is for a new synthetic minor source drum hot mix asphalt plant, see Potential to Emit section below;
- FNF is not planning to construct or modify a major source batch or drum hot mix asphalt plant, see Potential to Emit section below;
- The Project is located within Indian country;
- The Project facility will produce only hot mix asphalt;
- The Project is not located in a severe or extreme ozone nonattainment area;
- The Project will use only natural gas in the dryer;
- Emissions from the asphalt dryer/mixer will be controlled by a baghouse;
- The Project is located in an ozone attainment area and as stated in the General Permit conditions, the asphalt production rate is limited to 83,000 tons per month;
- The Project is not located in a serious nonattainment area for carbon monoxide;
- The Project will use only distillate fuel in the auxiliary heaters;
- The total maximum heat input capacity of the auxiliary heaters (including hot oil heaters) will be equal to or less than 10 MMBtu/hour;
- The Project will use only non-road, portable engines to supply power to the project that will remain in place for less than 12 months.
- The Project is located in an attainment area for ozone and as stated in the General Permit conditions, the total liquid fuel usage for the generators and engines is limited to 12,500 gallons per month;
- Each asphalt storage tank and fuel storage tank at the Project site will have a maximum capacity less than 39,890 gallons;
- The Project is not seeking to co-locate with a stone quarrying, crushing and screening operation;
- FNF has demonstrated that it meets Criterion A of Appendix A with respect to the protection of any and all species that are federally listed as threatened or endangered under the Endangered Species Act (ESA) or of habitat that is federally designated as “critical habitat” under the ESA, (see Listed Species-Related Eligibility Criteria section below); and
- FNF has completed the screening process pursuant to the National Historic Preservation Act (NHPA), (see Historic Properties-Related Eligibility Criteria section below).

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. PTE is meant to be a worst-case emissions calculation and is used in many cases to determine the applicability of federal CAA requirements. 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 hours of operation and/or on the type or amount of material combusted, stored, or processed. Our evaluation of whether the Project qualifies for the HMA General Permit included consideration of the limitations and controls required by 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. Table 3 lists the minor and major source thresholds pursuant to 40 CFR 49.153 (Tribal Minor NSR), 40 CFR Part 52.21(b)(1)(i)(b) (*PSD Major Source*), and 40 CFR Part 71 (*title V Major Source*).² If post-control emissions for each regulated NSR pollutant are above the applicable thresholds, then the relevant CAA permitting requirements apply for that pollutant. See Table 3.

Table 3. Tribal Minor NSR Permitting Thresholds (tons per year)

Regulated NSR pollutant	Tribal Minor NSR thresholds for attainment areas (tpy)	Major Source PSD thresholds for attainment areas (tpy)	Title V Major Source thresholds (tpy)
Carbon monoxide (CO)	10	250	100
Nitrogen oxides (NO _x)	10	250	100
Sulfur dioxide (SO ₂)	10	250	100
Volatile Organic Compounds (VOC)	5	250	100
PM	10	250	100
PM ₁₀	5	250	100
PM _{2.5}	3	250	100
Lead	0.1	—	—
Fluorides	1	—	—
Sulfuric acid mist	2	—	—
Hydrogen sulfide (H ₂ S)	2	—	—
Total reduced sulfur (including H ₂ S)	2	—	—
Reduced sulfur compounds (including H ₂ S)	2	—	—

² See 40 CFR part 71.2, *Definition of Major Source (Paragraph 2)*. The major source threshold under 40 CFR part 71 is 100 tons per year (tpy) for this area.

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 (without controls) below the major source thresholds in Table 3 or accept restrictions contained within the permit that reduces its PTE to below major source thresholds (synthetic minor source).³ 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, FNF 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, we have 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 has the potential to emit the following NSR pollutants: Particulate Matter (PM), Particulate Matter less than 10 microns (PM₁₀), Particulate Matter less than 2.5 microns (PM_{2.5}), Sulfur Dioxide (SO₂), Oxides of Nitrogen (NO_x), Carbon Monoxide (CO) and Volatile Organic Compounds (VOC). Before controls and restrictions in the permit, the Project’s potential emissions exceed the title V major source threshold for carbon monoxide (CO). See Table 4. After controls and other restrictions in the permit, the Project’s PTE does not exceed the applicable CAA major source thresholds in attainment areas. See Table 5. Accordingly, the Project’s potential emissions are at a level that potentially qualifies it for coverage under the HMA General Permit.

Table 4. Facility-wide Potential to Emit Summary (without controls)

Process	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Dryer/Mixer	50.6	35.3	4.45	16.86	58.3	199.3	49.1
Load-out/Silo Filling	1.70	1.70	1.70	-	-	3.77	24.68
Conveying	23.00	8.43	8.43	-	-	-	-
Screening	3.37	1.13	0.08	-	-	-	-
Storage Piles	4.29	2.03	0.31	-	-	-	-
Lime Silo Loading	4.82	4.82	4.82	-	-	-	-
Auxiliary Heaters	0.47	0.77	0.60	0.0	4.69	1.17	0.08
Engine/Generator	0.00	0.00	0.00	0.00	0.0	0.0	0.00
Total	88.23	54.15	20.38	16.91	62.95	204.23	73.81

³ According to 40 CFR 49.152, a “[s]ynthetic minor source means a source that otherwise has the potential to emit regulated NSR pollutants in amounts that are at or above those for major sources in §49.167, §52.21 or §71.2 of this chapter, as applicable, but that has taken a restriction so that its potential to emit is less than such amounts for major sources.” (emphasis added). Restrictions taken to create the synthetic minor source must be enforceable as a practical matter.

Table 5. Facility-wide Potential to Emit (PTE) Summary (includes controls)

Process	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Dryer/Mixer	16.4	11.5	1.44	5.48	18.9	64.7	15.9
Load-out/Silo Filling	0.55	0.55	0.55	-	-	1.22	8.02
Conveying	7.47	2.74	2.74	-	-	-	-
Screening	1.10	0.37	0.02	-	-	-	-
Storage Piles	1.39	0.66	0.10	-	-	-	-
Lime Silo Loading	4.82	4.82	4.82	-	-	-	-
Auxiliary Heaters	0.47	0.77	0.60	0.0	4.69	1.17	0.08
Engine/Generator	0.00	0.00	0.00	0.00	0.0	0.0	0.00
Total PTE	32.23	21.36	10.28	5.53	23.62	67.13	24.03

Listed Species-Related Eligibility Criteria

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 the 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 EPA that they have done so.

The Request for Coverage states that the Project meets Criterion A of Appendix A with respect to listed species protection, which states *“No federally-listed threatened or endangered species or designated critical habitat(s) of such species are likely to occur within the action area for your project.”* The Request for Coverage application includes a biological evaluation and assessment completed in October 2015. The Arizona Ecological Services Field Office of the U.S. Fish and Wildlife Service provided FNF with a list of endangered species that should be considered in a biological evaluation and assessment. The attached assessment includes documentation that concludes no federally-listed threatened, endangered, or proposed species are likely to occur within the action area for the proposed Project. After review and consideration of this information and documentation, EPA agrees that FNF has completed the species-related screening procedures and has demonstrated, providing appropriate documentation, that the proposed Project meets Criterion A of the listed species-related eligibility criteria for coverage under the HMA General Permit.

Historic Properties-Related Eligibility Criteria

EPA developed the screening process in Appendix B of the Request for Coverage form 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 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 EPA that they have done so.

With respect to the Project, FNF 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 application includes a cultural resource inventory report completed on April 10, 2015, that identified three historic projects that exist within the project area. All three sites are considered significant and are recommended as eligible for nomination to the National Registry of Historic Properties. The report recommends a determination of “*No Historic Properties Affected*” under the stipulation that certain conditions are met to ensure the protection of historic properties.

On February 24, 2017, FNF Construction submitted a Cultural Resource Inventory Determination (CRID) form, from the Navajo Nation Historic Preservation Department (NNHPD). Additionally, EPA received confirmation from the NNHPD on March 3, 2017 that the signed CRID submitted by FNF is the archeological approval for the project. The Tribal Historic Preservation Officer approved the Project with the following stipulations:

- 1) Site boundaries must be flagged and fenced under the direction of a qualified archeologist prior to all construction.
- 2) Fences will remain in place for the duration of the project.
- 3) All construction/ground disturbing activities will avoid the sites by a minimum of 50 feet from the fenced site boundaries.

EPA has concluded that FNF has demonstrated that it has satisfactorily completed the historic property-related screening procedures and that the Project meets one of the historic property-related eligibility criteria -- in this case, “no historic properties affected” -- and that FNF has provided sufficient documentation supporting the criterion selected.

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, 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. Consistent with these

requirements, during the development of the proposed HMA General Permit, EPA followed the applicable public participation process and received numerous comments. EPA considered and addressed these comments in its issuance of the final HMA General Permit. See 80 Fed. Reg. 25068 (May 1, 2015). EPA's final action and supporting documentation can be assessed at the EPA website link below:

<https://www.epa.gov/tribal-air/general-permits-and-permits-rule-final-action-5-source-categories-april-17-2015>

Approval of Request for General Permit Coverage

EPA has carefully reviewed the Request for Coverage and other relevant information and evaluated whether the Project meets all of the criteria to qualify it to apply for coverage under this General Permit. Based on our review of, and in reliance on, all of the information and representations provided in FNF's Request for Coverage, EPA has determined that the Project meets all such criteria and is eligible for coverage under the HMA General Permit, and is approving the Request for Coverage for the Project.

EPA's Approval of Request for Coverage for the Project is based in part on representations by FNF in the Request for Coverage that the engines powering the equipment at the Project are non-road engines that will operate at the site for a period of less than one year. These engines are the only engines powering the equipment at the site, and the Request for Coverage represents that the Project will have a total duration of less than one year. We note that if such engines and/or replacement engines intended to perform the same or a similar function are intended to be utilized for asphalt manufacturing for a period of at least one calendar year (or for a shorter time, if operations are conducted on a seasonal basis for consecutive seasons), or are actually utilized for this length of time, the engines would be considered stationary sources and subject to further requirements under the HMA General Permit, and the Project would not be eligible for coverage based on the current Request for Coverage, which does not indicate that stationary engines will be utilized for the Project. Thus, to conduct asphalt manufacturing for a longer period would require an additional request for coverage and approval under the HMA General Permit and compliance with this General Permit's requirements for stationary engines, or, alternatively, approval under an individual permit issued pursuant to the Tribal NSR program or other applicable NSR program implemented by EPA depending on the magnitude of the source's potential emissions.

Public Availability of Information

For coverage of a particular source under the HMA General Permit, EPA's analysis of whether the source is within the category of emissions sources to which this General Permit applies, including whether the source meets the criteria to be eligible for coverage under the general permit, must be made available to the public. 40 CFR 49.157(a)(5). EPA has described its analysis in this TSD, which will

be made available, along with EPA's Approval of Request for General Permit Coverage for the Project under the HMA General Permit and certain supporting documentation, on the EPA website at:

<http://www.epa.gov/caa-permitting/tribal-nsr-permits-region-9>

These documents, and the entire administrative record for this Approval of Request for Coverage, can also be obtained by contacting La Weeda Ward at the EPA address or phone number listed below. All documents will be available for review at the EPA Region IX office indicated below, during regular business hours. Due to building security procedures, please call La Weeda at (213) 244-1812 at least 24 hours in advance to arrange a visit.

La Weeda Ward (AIR-3)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne St.
San Francisco, CA 94105
Phone: (213) 972-3943 E-mail: Ward.Laweeda@epa.gov

Hard copies of these documents can be mailed to individuals upon request in accordance with Freedom of Information Act requirements as described on the EPA Region 9 website at <http://www.epa.gov/region9/foia/>.

EPA is also making this TSD and our Approval of Request for Coverage for the Project, and certain other supporting documentation, available for review at:

Navajo Nation Environmental Protection Agency
Air Quality Control Program
Route 112, North Bldg. #2837
P.O. Box 529
Fort Defiance, AZ 86504
(928) 871-6790

EPA's Approval of Request for Coverage for the Project is a final agency action for purposes of judicial review, only for the issue of whether the Project qualifies for coverage under the HMA General Permit. 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).