

August 2020
FACT SHEET
Authorization to Discharge under the
National Pollutant Discharge Elimination System
for the
Navajo Transitional Energy Company – Navajo Mine
NPDES Permit No. NN0028193

Applicant address: Bisti Fuels Company, LLC
P.O. Box 1717
Fruitland, New Mexico 87416

Applicant Contact: Vivie Melendez,
Superintendent Environment
(505) 598-3284

Facility Address: Navajo Mine
16 miles Southwest of Fruitland
Fruitland, New Mexico 87416

Facility Contact: Vivie Melendez,
Superintendent Environment

I. Status of Permit

A permittee may seek a major modification pursuant to 40 CFR 122.62(a)(1) where there are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. Such a permit modification needs to be public noticed pursuant to 40 CFR Section 124.10.

This permit was modified pursuant to 40 CFR 122.62(a)(1) following a public notice and comment period pursuant to 40 CFR Section 124.10 during which no comments were received. Please see the bold text in Section V. A. 4. and Section VI. B. of this factsheet for details about specific modifications to the permit.

BHP Navajo Coal Company (“BNCC”) was first issued National Pollutant Discharge Elimination System (“NPDES”) Permit No. NM0028193 on March 28, 1977, covering operations of Navajo Mine. Since then, the permit has been renewed several times. On December 14, 2005, the permit number was modified by replacing the two-letter prefix from NM to NN (Navajo Nation). The most recent permit was issued on March 5, 2008, became effective on April 7, 2008, and was to expire on April 6, 2013. BNCC submitted a timely application to renew the permit on October 2, 2012, and the permit was administratively extended until such time as a renewed permit is issued. In a series of transactions, 100% of BNCC’s ownership interest in Navajo Mine was transferred to Navajo Transitional Energy Company, LLC (“NTEC”) on December 30, 2013. NTEC, BNCC’s successor in Navajo Mine, entered into a mine management agreement with BHP

Billiton Mine Management Company (“MMCo”) pursuant to which MMCo will operate the Mine consistent with applicable regulatory requirements on behalf of NTEC. In a letter dated October 16, 2016, NTEC and MMCo, notified EPA that effective January 1, 2017, Bisti Fuels Company, LLC (“BFC”) would operate the mine instead of MMCo. At that time, BFC assumed the application and became the formal Applicant for this permit.

MMCo, as Applicant, proposed in its October 2, 2012, NPDES application the renewal of 13 existing outfalls and the approval of 26 new outfalls. The previous permit had 14 outfalls. At the time of the application in 2012 Outfall 016 no longer existed. Subsequently in October 2017 the applicant indicated that it was withdrawing its request to include two other outfalls(identified as Outfalls 001 and 002) in the proposed draft that was public noticed in 2015. There are currently 11 existing outfalls and 12 of the 26 new outfalls are located either within the previously approved Surface Mining Control and Reclamation Act (“SMCRA”) permit area (SMCRA Permit No. NM-003F) which was updated by the United States Department of the Interior Office of Surface Mining Reclamation and Enforcement (“OSMRE”) on July 15, 2015 (SMCRA Permit No. NM-003G). The remaining 14 outfalls are located within a new SMCRA permit area called the Pinabete area. OSMRE completed its environmental review of the Pinabete SMCRA Permit (SMCRA Permit No. NM-0042A) and signed the Record of Decision on July 17, 2015. The new proposed SMCRA permit area will be considered a “new source” for purposes of the NPDES permit.

MMCo (now BFC) also maintains coverage under the federal Multi-Sector General Permit (“MSGP”) for stormwater discharges associated with industrial activities at Navajo Mine. Under the MSGP program, certain defined discharges associated with, in this context, industrial activities, will be treated as covered for purposes of the Clean Water Act NPDES permit program. *See, generally*, <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities> (description of the MSGP program for industrial discharges.) Many of the potential stormwater discharges emanating from the Navajo Mine site are qualified for coverage under the MSGP; those that are not eligible for coverage under the MSGP need individual NPDES permit coverage, and some of those discharges are being permitted in this action. BNCC submitted a Notice of Intent (“NOI”) for coverage under the 2008 MSGP on May 5, 2009. The United States Environmental Protection Agency (“USEPA”) issued coverage on June 4, 2009 (Tracking No. NMR05FW0I.) BNCC conducted a MSGP Annual Comprehensive Inspection on June 27, 2012. This report identified 10 corrective actions that were taken as a result of the annual comprehensive site inspection. On November 22, 2013 MMCo, on behalf of NTEC, BNCC’s successor in interest, submitted a letter to USEPA confirming that it will operate under the “no action assurance” and/or the administrative continuance described in the September 27, 2013 Guidance Memo (“Memo”) from Cynthia Giles, EPA Assistant Administrator for Enforcement and Compliance Assurance. MMCo certified that it will meet all requirements of the 2008 MSGP and the Memo and will notify the appropriate EPA NPDES permitting authority prior to the discharge of any stormwater associated with industrial activity. Subsequent to this, MMCo completed a 2014 MSGP Annual Comprehensive inspection and also an inspection in June 2015 that satisfied the 2015 MSGP Annual Comprehensive inspection and identified 52 corrective actions taken. MMCo. also submitted a Notice of Intent (NOI) for coverage under the 2015 MSGP on September 2, 2015.

In a letter dated October 18, 2017, NTEC, through its outside counsel, Schwabe Williamson & Wyatt further updated its permit application to indicate that Outfalls 001 and 002 (previously included in the October 2, 2012, application) do not function as NPDES outfall

locations, and therefore should be removed from the final NPDES permit.

II. Description of Facility(Background)

The NTEC (successor in interest to BNCC) Navajo Mine is located in Fruitland, San Juan County, New Mexico; within the northeastern portion of the Navajo Nation. The Navajo Mine lease area is divided into six areas (I, II, II, IV North, IV South, and V). Currently, all mining activity is occurring in Area III. Reclamation activities are ongoing in Areas I-III.

The OSMRE issued BNCC (now NTEC) SMCRA permit No. NM-0003F in September 2004. This permit allows NTEC to operate through July 2016. NTEC is proposing to expand its mining and reclamation activities into portions of Area IV North and Area IV South, called the Pinabete Permit area (SMCRA Permit No. NM-0042A) within its Navajo Mine Lease. These operations will be in conjunction with the existing Navajo Mine Permit area. The proposed Pinabete SMCRA permit application is part of the Four Corners Power Plant and Navajo Mine Energy Project, in which OSMRE and its federal agency partners evaluated a set of related federal actions in the Navajo Mine and Four Corners Power Plant operations in a single comprehensive environmental review. As indicated above, OSMRE approved the Navajo Mine SMCRA Permit (NM-003F) renewal application on July 15, 2015, and issued a new Navajo Mine SMCRA Permit (NM-003G). OSMRE also completed its environmental review of the Pinabete SMCRA (NM00042A) Permit and signed the Record of Decision on July 17, 2015. The U.S. Fish and Wildlife Service issued its final biological opinion under the Endangered Species Act on the Four Corners Power Plant and Navajo Mine Energy Project on April 8, 2015 (“Final Biological Opinion”).

In January 2008, the Navajo Mine stopped accepting coal combustion by-products (“CCBs”) from the Four Corners Power Plant (“FCPP”) and ceased using CCBs as mine backfill. From 1971 to 2008, CCBs from FCPP were placed in mined out pits and ramps in Areas I and II. These areas have been capped with approximately 10 feet of low permeability material, in accordance with the Navajo Mine Lease and the Navajo Mine SMCRA permit. There are no future plans to utilize CCBs as backfill at Navajo Mine. The disposal of all CCB material produced by FCPP is the responsibility of the Arizona Public Service Co. (“APS”).

III. Receiving Water

The proposed discharge points are all to waterbodies within the external boundaries of the Navajo Nation and are subject to the water quality standards established by the Navajo Nation and approved by USEPA. The Navajo Nation’s Resource Committee promulgated the Navajo Nation Surface Water Quality Standards (“NNSWQS”) on November 9, 1999, and amended them on May 13, 2008. The Navajo Nation applied for and received recognition from USEPA to be treated in the same manner as a state (“TAS”) under CWA Section 106 on June 30, 1993. USEPA approved the NNSWQS pursuant to CWA Section 303 in 2006. The NNSWQS therefore serve as the applicable water quality standards for purposes of this NPDES permit renewal.

Table 205.1 of the NNSWQS defines the designated uses of the Chaco River to be: Primary Human Contact (“PrHc”), Secondary Human Contact (“ScHc”), Fish Consumption (“FC”),

Aquatic and Wildlife Habitat (“A&WHbt”), and Livestock Watering (“LW”). There are a total of 38 Outfalls. Outfalls No. 004, 006-011, 013, 017-019 (renewals) and all 26 of the new outfalls discharge to Chaco River which is a tributary to the San Juan River.

IV. Description of Discharge

The Navajo Mine operations include three general situations which may result in a discharge to protected waterbodies. These are categorized under the Clean Water Act regulations governing discharges from coal mining (40 CFR Part 434) as Alkaline Mine Drainage, Coal Preparation Plants and Coal Preparation Plant Associated Areas, and Western Alkaline Coal Mining. Alkaline Mine Drainage is surface runoff from: topdressing removal; overburden drilling, storage, and stripping; mining pits; spoil rows or piles; re-graded spoils; and primary/final re-grading of the last spoil row. Coal Preparation Plants and Coal Preparation Plant Associated Areas contain runoff from coal storage, coal preparation, and ancillary areas (coal stockpiles, the coal plant, maintenance shops, and associated areas). Surface water in both areas can be discharged from impoundments that are designed to capture flow from a minimum 10-year 24 hour (10yr-24hr) precipitation event or may be pumped from the impoundments. The discharge may occur unintentionally from overflow or intentionally from pumping out from the impoundments. Treatment before discharge may include allowing sediment to settle, evaporation, or discharging through approved outfalls. The Western Alkaline Coal Mining category includes runoff from brushing and grubbing, topsoil stockpiles, re-graded surface areas, and reclamation areas. Discharge will take place from reconnected native drainages that surround the permit area, once sufficient sediment control measures have been installed to demonstrate average annual sediment yields are less than pre-mined levels.

Twenty-five of the new outfalls are categorized as Alkaline Mine Drainage and one is categorized under Coal Preparation Plants and Coal Preparation Plant Associated Areas. The same treatment methods that are mentioned above will be followed.

Discharges covered by the existing NPDES permit have historically been rare. There have been ten NPDES discharges at Navajo Mine since the issuance of the original NPDES permit in March 1977.

V. Regulatory Basis of Proposed Effluent Limits

Section 301(a) of the CWA provides that the discharge of any pollutant to waters of the United States is unlawful without a NPDES permit. Section 402 of the CWA establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the U.S. from point sources (40 CFR §122.1(b)(1)) through a combination of various requirements including technology-based and water quality-based effluent limitations

A. Technology-based effluent limitations

Under 40 CFR §125.3(c)(2), technology-based treatment requirements may be imposed on a case-by-case basis under CWA section 402(a)(1), to the extent that EPA-promulgated effluent

limitations are inapplicable. The permit writer shall apply the appropriate factors listed in 40 CFR §125.3(d). In addition, the regulation allows the permit writer to consider the appropriate technology for the category or class of point sources and any unique factors relating to the applicant.

The discharge of wastewater from coal mines is subject to 40 CFR Part 434: Coal Mining Point Source Category, Best Practicable Control Technology Currently Available (“BPT”), Best Available Technology Economically Achievable (“BAT”), Best Conventional Pollutant Control Technology (“BCT”) Limitations and New Source Performance Standards (“NSPS”). Navajo Mine has the potential to discharge from separate sources that are subject to subcategories of Part 434.

Navajo Mine is classified under Part 434 as an “alkaline, mine drainage,” which is defined as mine drainage which, before any treatment, has a pH equal to or greater than 6.0 and total iron concentration of less than 10 mg/l. The current permit contains limitations for the following outfall subcategories: a) Alkaline Mine Drainage, b) Coal Preparation Plants and Coal Preparation Plant Associated Areas, and c) Western Alkaline Reclamation. The proposed permit will include NSPS for each of these subcategories which address the 26 new outfalls.

1. Existing Outfalls 006, 007, 008, 011, 013, 019 –Alkaline Mine Drainage

The proposed permit sets limits for these outfalls in accordance with the requirements of “Subpart D – Alkaline Mine Drainage” for BPT, BCT, and BAT regulations that apply to such discharges. The proposed permit sets discharge limits for these outfalls for:

Effluent Parameter	Units	Daily Average	Daily Maximum
Iron, total	mg/l	3.5	7.0
Total Suspended Solids (TSS)	mg/l	35	70
pH	Std. Units	No less than 6.0 or greater than 9.0	

These requirements are consistent with those of the previous permit.

2. New Outfalls – Alkaline Mine Drainage, NSPS

Outfalls: 020	4-2	4-7	4-12	4-18
021	4-3	4-8	4-13	4-19
022	4-4	4-9	4-15	4-20
023	4-5	4-10	4-16	4-21
4-1	4-6	4-11	4-17	4-22

These outfalls are determined to be “new source coal mine” activity under 40 CFR §434.11(j)(1)(ii)(C) and therefore will be subject to NSPS under “Subpart D – Alkaline Mine Drainage”. The proposed permit sets discharge limits for these outfalls for:

Effluent	Units	Daily	Daily
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Parameter		Average	Maximum
Iron, total	mg/l	3.0	6.0
Total Suspended Solids (TSS)	mg/l	35	70
pH	Std. Units	No less than 6.0 or greater than 9.0	

3. New Outfall 4-14 – Coal Preparation Plants and Coal Preparation Plant Associated Areas, NSPS

This outfall is determined to be a “new source coal mine” activity under 40 CFR §434.11(j)(1)(ii)(C) and will therefore be subject to NSPS under “Subpart B – Coal Preparation Plants and Coal Preparation Plant Associated Areas”. The proposed permit sets discharge limits for this outfall to be:

Effluent Parameter	Units	Daily Average	Daily Maximum
Iron, total	mg/l	3.0	6.0
Manganese, total	mg/l	2.0	4.0
Total Suspended Solids (TSS)	mg/l	35	70
pH	Std. Units	No less than 6.0 or greater than 9.0	

4. Existing Outfalls 004, 009, 010, 017, and 018 – Western Alkaline Coal Mining

These outfalls meet the definition of “Subpart H – Western Alkaline Coal Mining”, which “applies to alkaline mine drainage at western coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and re-graded areas.” (40 CFR §434.81(a)). In accordance with the requirements established in Subpart H, the Applicant has:

- 1) Submitted a site-specific Sediment Control Plan to USEPA incorporating the minimum requirements of 40 CFR §434.82,
- 2) Demonstrated that implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined undisturbed conditions.

The Applicant submitted these materials to USEPA as part of their NPDES permit package on October 2, 2012. These materials are part of the Administrative Record for the proposed permit and are available for public review.

USEPA approved the Sediment Control Plan consistent with the requirements of Subpart H. Additionally, in accordance with Subpart H, the permit requires that the approved Sediment Control Plan be incorporated into the permit as an effluent limit,

and requires that the Applicant design, implement, and maintain the Best Management Practices (“BMPs”) in the manner specified in the Sediment Control Plan.

USEPA Region IX and OSMRE entered into a Memorandum of Understanding on December 19, 2003: “Process for Obtaining A NPDES Permit Under Subpart H – Western Alkaline Mine Drainage Category”. Working through the process outlined in the MOU, OSMRE conducted a technical review of the Sediment Control Plan submitted by the Applicant. OSMRE and USEPA concluded that the Sediment Control Plan was submitted in accordance with the requirements of 40 CFR Part 434, and that the Sediment Control Plan met all minimum requirements to demonstrate that the average annual sediment yields will not be greater than the sediment yield levels from pre-mined, undisturbed conditions.

In a letter dated November 11, 2019 the permittee requested a modification to their existing permit. The permittee proposed the construction of one new outfall and conversion of nine existing outfalls defined in this permit from “alkaline mine drainage” to Subpart H requirements for “Western alkaline drainage”. Details about the location of the proposed new outfall and converted outfalls as well as the timeframe for construction and conversion is described in Attachment C. of the permit.

Prior to construction or conversion, the Sediment Control Plan shall be updated and the revised Plan submitted to USEPA for approval. The revised plan shall also be reviewed by OSMRE prior to USEPA approving the revisions. Revisions to the Sediment Control Plan must meet all requirements contained at 40 CFR §434.82, and 100% of the drainage areas to an outfall must meet the definition of Subpart H to be considered for coverage under Subpart H.

Only the one new outfall and the nine existing outfalls identified in Attachment C. may be updated without further public notice. If the permittee seeks to construct any other outfalls or convert any other existing outfalls, the permittee must submit a request for a permit modification under 40 CFR §122.62.

B. Water Quality-Based Effluent Limitations

In addition to technology-based effluent limitations, Sections 402 and 301(b)(1)(C) of the Clean Water Act require that an NPDES permit contain effluent limitations that, among other things, are necessary to meet water quality standards. An NPDES permit must contain effluent limits for pollutants that are determined to be discharged at a level which has “the reasonable potential to cause or contribute to an excursion above any State [or Tribal] water quality standard, including State [or Tribal] narrative criteria for water quality.” 40 CFR Section 122.44(d)(1)(i). To determine whether the discharge causes, has the reasonable potential to cause or contributes to an excursion of a numeric or narrative water quality criterion for individual toxicants, the regulatory authority must consider a variety of factors. 40 CFR Section 122.44(d)(1)(ii). These factors include the following:

- Dilution in the receiving water;
- Existing data on toxic pollutants;
- Type of industry;
- History of compliance problems and toxic impacts; and
- Type of receiving water and designated use.

Based on an analysis of factors at Navajo Mine operations and projected wastewater quality data provided in the application, USEPA concludes that there continues to be no “reasonable potential” to cause or contribute to an exceedance of water quality standards for pollutants not previously identified as Technology based effluent limits above. However, as proposed in the previous permit, EPA will continue to require monitoring for arsenic, boron, cadmium, lead, selenium, sulfate and TDS which may be present and may have the potential to cause or contribute to a violation of water quality standards. Additionally, based on the Environmental Review conducted by OSMRE for the Four Corners Power Plant and Navajo Mine Energy Project, as well as Term and Condition (“RPM”) 5.f in the Final Biological Opinion, USEPA as the lead agency for this NPDES permit will include monitoring of mercury in the renewed permit.

The proposed permit sets general conditions based on narrative water quality standards contained in Section 202 of the NNSWQS. These standards are set forth in Section B (“General Discharge Specifications”) of the permit.

VI. Anti-Backsliding/Anti-degradation

A. Anti-Backsliding

Section 402(o) of the CWA prohibits the renewal or reissuance of an NPDES permit that contains effluent limits less stringent than those established in the previous permit, except as provided in the statute. The permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding.

B. Antidegradation Policy

EPA's antidegradation policy at 40 CFR 131.12 and Navajo Nation Water Quality Standards require that existing water uses and the level of water quality necessary to protect the existing uses be maintained. As described in this document, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit does not include a mixing zone, therefore these limits will apply at the end of pipe without consideration of dilution in the receiving water. The permit also establishes narrative discharge limits in the section entitled General Discharge Specifications which references the Navajo Nation narrative water quality standards. Furthermore, the receiving water bodies are not listed as impaired for any limits established pursuant to the permit under section 303(d) of the CWA. Therefore, the discharge is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

The proposed construction of a new outfall and conversion of nine existing outfalls pursuant to the plan described in Attachment C. of the permit will all occur in currently mined areas that will be reclaimed with sediment loads equal to or lower than prior to mining. Any updates to the permit will impose effluent limits and monitoring requirements in the permit that ensure that all existing water quality standards are met. Therefore, the discharge from these outfalls is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

VI. Special Conditions

A. Monitoring for pollutants of concern

USEPA has established monitoring for several parameters due to concerns raised during the comment period of the previous permit. Specifically, comments were raised about potential impacts from the disposal of CCBs generated at FCPP and used as backfill in Areas I and II. As noted previously in this document, NTEC has not accepted any CCBs since 2008 and does not have any current or future plans to place CCB materials as backfill for future reclamation within the Navajo Mine Lease. USEPA does not believe that the CCBs have had a negative effect on surface water quality. USEPA has provided a full response to these concerns in the Response to Comments document provided with the previous 2008 permit.

While USEPA does not believe that Navajo Mine operations are contributing to an increase of pollutant concentrations in the Chaco River downstream of the mine, USEPA notes that more effluent discharge data is needed for the pollutants of concern. Therefore, USEPA will continue the required effluent monitoring, imposed as permit conditions to the 2008 renewal, at each of the discharge outfalls for the following pollutants: arsenic, boron, cadmium, lead, mercury, selenium, sulfate, and total dissolved solids. Consistent with the Final Biological Opinion for the Four Corners Power Plant and Navajo Mine Energy Project (which, as noted above, covers this permit) and the Reasonable and Prudent Measures and Terms and Conditions required therein, USEPA will require that all monitoring of the above referenced pollutants be conducted using USEPA-approved “sufficiently sensitive” methods. *See* 40 CFR Section 136.1(c)(monitoring methods must be sensitive enough to detect violations of the applicable standard).

USEPA has included a reopener provision in the permit. If monitoring indicates that the discharge has the reasonable potential to cause or contribute to an excursion of water quality criteria, USEPA may reopen the permit to establish effluent limits for those parameters.

VII. Monitoring Requirements

The proposed permit requires discharge data obtained during the previous year to be summarized and reported monthly and submitted annually. If there is no discharge for the month, indicate “Zero Discharge.” These reports are due January 28 of each year. Duplicated signed copies of these and all other reports required herein, shall be submitted to the Regional Administrator and the Navajo Nation EPA.

VIII. Threatened and Endangered Species

Section 7 of the Endangered Species Act (ESA) of 1973 requires federal agencies to ensure that any action authorized, funded, or carried out by a federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat. 16 U.S.C. § 1536(a)(1). A federal agency must consult with the relevant Service, either U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service, if it determines that an endangered or threatened species is present in the area affected by the federal action and that the implementation of such action will likely affect the species. ESA §7(a)(3); 16 U.S.C. § 1536(a)(3).

USEPA identified potentially occurring endangered and threatened species by first using the list generated by the USFWS for OSMRE for the broader Four Corners Power Plant and Navajo Mine Energy Project Proposed Action. OSMRE obtained a list of species to be considered from USFWS on January 23, 2014. A total of 39 species were identified as potentially occurring in the Action Area of the Four Corners Power Plant and Navajo Mine Energy Project which is much larger than, but overlaps the location of the Outfalls covered by this permit. A separate species list was obtained by USEPA from USFWS on March 11, 2015 for the limited area that is the subject of this Action. Seven threatened or endangered species were identified. These species are listed below:

Birds

- Southwestern willow flycatcher (*Empidonax traillii extimus*): Endangered
- Yellow-billed cuckoo (*Coccyzus americanus*): Threatened

Fish

- Colorado pikeminnow (*Ptychocheilus lucius*) Endangered,
- Razorback sucker (*Xyrauchen texanus*) Endangered

Plants

- Mancos milk-vetch (*Astragalus humillimus*) Endangered
- Mesa Verde cactus (*Sclerocactus mesae-verdae*) Threatened
- Knowlton's cactus (*Pediocactus knowltonii*) Endangered.

Due to the overlap in the species and area potentially affected by the OSMRE and USEPA proposed actions, those agencies, the Permittee and the USFWS agreed to consider all of the federal actions in a single comprehensive ESA consultation

In analyzing the impacts of USEPA's Action, USEPA is relying on the Biological Assessment that the OSMRE prepared on the broader Four Corners Power Plant and Navajo Mine Energy Project, as it covered the activities being permitted through the NPDES permit. USEPA is also relying on the Final Biological Opinion, which considers the entire Four Corners Power Plant and Navajo Mine Energy Project Proposed Action, including explicitly the USEPA's action on this NPDES Permit NN0028193.

OSMRE, in its Biological Assessment, determined that the Knowlton's cactus known range is outside the Proposed Action Area for the Four Corners Power Plant and Navajo Mine Energy Project, and it was thus eliminated from further analysis. OSMRE also determined that the Four Corners Power Plant and Navajo Mine Energy Project Proposed Action is not likely to adversely affect the Mancos milk-vetch and Mesa Verde cactus, and the USFWS concurred in this determination and concluded informal consultation with respect to these species.

USFWS' Final Biological Opinion concludes that the Four Corners Power Plant and Navajo Mine Energy Project Proposed Action will not jeopardize the continued existence of or adversely modify or destroy the critical habitats of the above referenced fish and bird species. The Final Biological Opinion includes non-discretionary Terms and Conditions and an incidental take statement. The Terms and Conditions relevant to this permit for the Navajo Mine include primarily the monitoring requirements discussed herein. *See* Final Biological Opinion at Terms and Conditions 5(f)(page 152). USEPA will rely on the information developed under these provisions in the Final Biological Opinion to minimize impacts on federal threatened and endangered species from this permitting action.

IX. Impact to National Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. In order to fulfill its obligations under the National Historic Preservation Act ("NHPA"), USEPA became a signatory to the Programmatic Agreement for Navajo Mine under Section 106 of NHPA on December 30, 2014. This Programmatic Agreement provides an agreement between federal agencies and the Navajo Nation Tribal Historic Preservation Officer and the Advisory Council on Historic Preservation as to how activities affecting historic properties will be identified and protected during the implementation of the broad Four Corners Power Plant and Navajo Mine Energy Project. As noted above, USEPA's NPDES permitting action is one part of this larger Project. The Programmatic Agreement is part of the Administrative Record for this permitting action and is available for review as in the Administrative Information Section below.

X. Consideration of Environmental Justice (EJ) Impact

USEPA has conducted a screening level evaluation of the potential impact of this facility and other permitted facilities within the immediate area on local residents through use of USEPA's EJSCREEN tool. Specifically, USEPA used EJSCREEN to identify facilities near the NTEC Navajo Mine facility that could pose risk to local residents through discharge of environmental contaminants. USEPA has also evaluated whether demographic characteristics of the population living in the vicinity of the facility indicate that the local population might be particularly susceptible to such environmental risks. The results show that, at the time of this analysis, conducted on August 7, 2015, the area in which the facility is located was above the 93rd percentile nationally for ozone. The EJSCREEN analysis of demographic characteristics of the community living near the facility indicates the local population may be at relatively higher risk if exposed to environmental contaminants than the national population. Demographic characteristics that showed potentially sensitive scores were a high proportion of minority and low income population and population with less than high school education.

USEPA also considers the characteristics of the facility operation and discharges, and whether those discharges, in combination with discharges from local ozone sources, pose exposure risks that the NPDES permit needs to further address. The Navajo Mine facility is unlikely to discharge any noticeable ozone from activities regulated by this permit. As for surface water discharges Navajo Mine has only discharged ten times in the past four decades, and all except one discharge was due to precipitation events. Review of past DMRs indicate no violations of numeric limits from any of the discharges. Thus USEPA finds no evidence to indicate the wastewater discharged from the facility poses a significant risk to local residents. Additionally, because several outfalls permitted by this permit are new, and have been determined to be a “new source” USEPA participated as a signatory party to the EIS process for the broader Navajo Mine and Four Corners Power Plant Energy Project which was conducted by the Office of Surface Mining Reclamation and Enforcement (OSMRE). Based on the findings in the Record of Decision issued by OSMRE, the USEPA concludes that the activities at the facility pursuant to the NPDES permit are unlikely to contribute to any EJ issues. Furthermore, USEPA believes that by implementing and requiring compliance with the provisions of the Clean Water Act, which are designed to ensure full protection of human health, the permit is sufficient to ensure the facility discharges to not cause or contribute to human health risk in the vicinity of the facility.

Furthermore, the findings from the Four Corners Power Plant (FCPP) and Navajo Mine Energy Project Final Environmental Impact Statement (FEIS) indicated that the proposed larger action, including the continuing operations of the Navajo Mine and FCPP would not result in adverse impacts that would disproportionately affect low-income or minority populations.

XI. Permit Reopener

The permit contains a reopener clause to allow for modification of the permit if reasonable potential is demonstrated during the life of the permit or if additional information about threatened and endangered species or critical habitat is obtained which would impact the conclusions currently made under the Endangered Species Act, or in any other instance when new information would cause a significant change in the assumptions made to either the input or outcomes anticipated under the existing permit.

XII. Standard Conditions

Conditions applicable to all NPDES permits are included in accordance with 40 CFR Part 122. and attached herewith in Appendix A.

XIII. Administrative Information

A. Public Notice (40 CFR 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application

B. Public Comment Period (40 CFR 124.10)

The permit was public noticed on EPA's website and in the Navajo Times, a legal newspaper published in Window Rock, Navajo Nation, Arizona, on August 20, 2015 with a minimum 30 days provided for interested parties to respond in writing to EPA. All comments received have been addressed in a Response to Comments ("RTC") document was available concurrently with the final issuance of the permit. **A permit modification was public noticed on EPA's website on May 13, 2020 with a minimum of 45 days provided for interested parties to respond in writing to EPA. No comments were received during that comment period.**

C. Water Quality Certification Requirements (40 CFR 124.53 and 123.54)

For States, Territories, or Tribes with EPA approved water quality standards, USEPA requests certification from the affected State, Territory, or Tribe at the proposed permit will meet all applicable water quality standards. The Navajo Nation provided Certification under section 401 of the CWA for this permit on May 7, 2015.

D. Request for Additional Information

Requests for additional information relating to this permit may be directed to :

Gary Sheth
USEPA Region IX
75 Hawthorne Street (WTR-2-3)
San Francisco, CA 94105
Tel: (415) 972-3516/ Email: sheth.gary@epa.gov

XIV. Information Sources

While developing effluent limitations, monitoring requirements and special conditions for the final permit, the following information sources were used:

1. BNCC's October 2012 NPDES *Permit Renewal Application and Supporting Documents*
2. EPA. 2010 *USEPA NPDES Permit Writers' Manual*. Office of Water, EPA. EPA-833-K-10-001
3. 40 CFR Parts 122, 124, 131, 133, and 434
4. BNCC's 2012 MSGP Annual Comprehensive Inspection Report (August 23, 2012)
5. NNEPA Water Quality Program. 2008. *Navajo Nation Surface Water Quality Standards 2007*.
6. OSMRE 2014. *Four Corners Power Plant and Navajo Mine Energy Project Biological Assessment*.
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8. USFWS 2015. *Endangered Species Act – Section 7 Consultation Biological Opinion*. Biological Opinion Number: 02ENNM00-2014-F-0064
9. BNCC's November 11, 2019 Letter requesting permit modification
10. BNCC's April 2019 PowerPoint presentation on Geomorphic Reclamation.