

US EPA ARCHIVE DOCUMENT

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
NPDES PERMIT NO. NN0029386**

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and attached standard conditions set forth in this permit:

Discharger Name	Chevron Mining, Inc.
Discharger Address	P.O. Box 4590
	Gallup, NM 87305
Facility Name	McKinley Mine
Facility Location Address	24 Miles NW of Gallup on Highway 264
	Gallup, NM 87305

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
56 Outfalls from 001 thru 057	Stormwater from Alkaline Mine Drainage, Coal Preparation Areas, Western Alkaline Reclamation Areas.	35° 35' to 35° 43'	108° 53' to 109° 2'	Coal Mine Wash, Defiance Draw, and Bonita Wash Tributaries to Rio Puerco

This permit was issued on:	10/26/09
This permit shall become effective on:	12/01/09
This permit shall expire at midnight on:	11/30/14
In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.	

Signed this   22nd   day of   October  , 2009, for the Regional Administrator.

// Alexis Strauss //

\_\_\_\_\_  
Alexis Strauss, Director  
Water Division

**SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**1. Alkaline Mine Drainage Outfalls**

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge mine drainage from the Outfall Numbers listed in Appendix A – “Alkaline Mine Drainage” to the receiving waters listed in Appendix A – “Alkaline Mine Drainage.”

Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

Table A-1: Alkaline Mine Drainage Effluent Limitations and Monitoring Requirements

<b>Effluent Parameter</b>	<b>Units</b>	<b>Monthly Average</b>	<b>Maximum For any 1 day</b>	<b>Monitoring Frequency <sup>(1)</sup></b>	<b>Sampling Type</b>
Flow	MGD	--	--	Continuous	Calculated <sup>(2)</sup>
TSS	mg/L	35	70	1/day <sup>(1)</sup>	Discrete
Iron, total	mg/L	3.5	7.0	1/day <sup>(1)</sup>	Discrete
pH	std. units	between 6.5 to 9.0		1/day <sup>(1)</sup>	Discrete

NOTES:

- (1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.
- (2) To determine total flow in gallons for each discharge and duration of discharge.

**2. Coal Preparation Plants, Storage Areas, and Ancillary Area Runoff Outfalls**

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from the Outfall Numbers listed in Appendix B – “Coal Preparation & Associated Areas” to the receiving waters listed in Appendix B – “Coal Preparation & Associated Areas”.

Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

Table A-2: Coal Preparation Areas Effluent Limitations and Monitoring Requirements

Effluent Parameter	Units	Monthly Average	Maximum For any 1 day	Monitoring Frequency <sup>(1)</sup>	Sampling Type
Flow	MGD	--	--	Continuous	Calculated <sup>(2)</sup>
TSS	mg/L	35	70	1/day <sup>(1)</sup>	Discrete
Oil and Grease	mg/L	15	--	1/day <sup>(1)</sup>	Discrete
Iron, total	mg/L	3.5	7.0	1/day <sup>(1)</sup>	Discrete
pH	std. units	between 6.5 to 9.0		1/day <sup>(1)</sup>	Discrete

NOTES:

- (1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.
- (2) To determine total flow in gallons for each discharge and duration of discharge.

**3. Western Alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded area Outfalls.**

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from the Outfall Numbers listed in Appendix C – “Western Alkaline Reclamation Areas” to the receiving waters listed in Appendix C – “Western Alkaline Reclamation Areas”.

Such discharges shall be limited and monitored by the permittee as specified below. The permittee must:

- a) within 90 days submit a site-specific Sediment Control Plan for EPA approval demonstrating 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 Sediment Control Plan shall, at a minimum, identify Best Management Practices (BMPs), including design specifications, construction specifications, maintenance schedules, criteria for inspection, and expected performance and longevity of the BMPs.

b) demonstrate using watershed models that the 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 watershed model must be the same model that is being used to acquire the permittee's SMCRA permit.

c) design, implement, and maintain the BMPs in the manner specified in the approved Sediment Control Plan throughout the term of this permit.

d) revise the Sediment Control Plan to incorporate new areas. As existing outfalls defined in this permit as "alkaline mine drainage" are reclaimed, the approved Sediment Control Plan shall be updated to incorporate the newly reclaimed outfalls into this subpart. A revised Sediment Control Plan and revised watershed model must be submitted to EPA and approved by EPA before it becomes effective. Revisions to the Sediment Control Plan must meet all requirements contained at 40 CFR Part 434.82, and 100% of the drainage area to an outfall that has been disturbed by mining must meet the definition of "western alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded areas" (as defined at 40 CFR 434.80) to be considered for coverage. EPA's approval of an updated Sediment Control Plan and reclassification of an existing outfall from "alkaline mine drainage" to a reclaimed area will be considered a minor modification to the permit as described in Section C of this permit.

e) conduct reclamation inspections at least quarterly within the drainage areas associated with the Sediment Control Plan to verify implementation of the Sediment Control Plan. Each reclamation inspection report shall include, at a minimum, the following items:

- 1) The personnel who conduct the inspection.
- 2) Date(s) on which the inspection was performed.
- 3) A written summary of major observations, including observations of no deficiency.
- 4) Actions that should be taken to correct noted deficiencies.
- 5) Photodocumentation of findings.
- 6) Signature of inspector.

f) provide an annual Sediment Control Plan Report documenting that the facility has met the requirements set forth in this section. The first annual report shall be submitted by January 15, 2011.

**4. Discharges resulting from precipitation events**

a) The permittee is authorized to discharge runoff from Outfall Numbers listed in Appendix A – “Alkaline Mine Drainage” and Appendix B – “Coal Preparation & Associated Areas” resulting from precipitation events less than or equal to a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period)

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from all Outfalls resulting from precipitation events less than or equal to a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period).

Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

During precipitation events, samples may be collected from a sampling point representative of the type of discharge, rather than from each point of discharge. At no time shall less than 20% of discharges be sampled. If samples are collected from a representative point, the permittee shall specify in the monitoring narrative: the Outfalls being represented; the rationale for Outfalls being representative including a description of the control measures at each outfall.

Table A-4-a: Discharges from precipitation events less than 10-yr, 24-hr event.

<b>Effluent Parameter</b>	<b>Units</b>	<b>Maximum For any sample</b>	<b>Monitoring Frequency <sup>(1)</sup></b>	<b>Sampling Type</b>
Flow	MGD	- -	Continuous	Calculated <sup>(2)</sup>
Settleable Solids (SS)	ml/l	0.5	1/day <sup>(1)</sup>	Discrete
pH	std. units	between 6.5 to 9.0	1/day <sup>(1)</sup>	Discrete

NOTES:

- (1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.
- (2) To determine total flow in gallons for each discharge and duration of discharge.

b) Discharges resulting from precipitation events great than a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period)

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from all Outfalls resulting from precipitation events greater than a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period).

Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

During precipitation events, samples may be collected from a sampling point representative of the type of discharge, rather than from each point of discharge. At no time shall less than 20% of discharges be sampled. If samples are collected from a representative point, the permittee shall specify the Outfalls being represented in the quarterly report narrative.

Table A-4-b: Discharges from precipitation events greater than 10-yr, 24-hr event.

<b>Effluent Parameter</b>	<b>Units</b>	<b>Maximum For any sample</b>	<b>Monitoring Frequency <sup>(1)</sup></b>	<b>Sampling Type</b>
Flow	MGD	- -	Continuous	Calculated <sup>(2)</sup>
pH	std. units	between 6.5 to 9.0	1/day <sup>(1)</sup>	Discrete

NOTES:

- (1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.
- (2) To determine total flow in gallons for each discharge and duration of discharge.

**SECTION B. GENERAL DISCHARGE SPECIFICATIONS**

All discharges shall be free from pollutants in amounts or combinations that, for any duration:

1. Cause injury to, are toxic to, or otherwise adversely affect human health, public safety, or public welfare.
2. Cause injury to, are toxic to, or otherwise adversely affect the habitation, growth, or propagation of indigenous aquatic plant and animal communities or any member of these communities; of any desirable non-indigenous member of these communities; of waterfowl accessing the water body; or otherwise adversely affect the physical, chemical, or biological conditions on which these communities and their members depend.
3. Settle to form bottom deposits, including sediments, precipitates and organic materials, that cause injury to, are toxic to, or otherwise adversely affect the habitation, growth or propagation of indigenous aquatic plant and animal communities or any member of these communities; of any desirable non-indigenous member of these communities; of waterfowl accessing the water body; or otherwise adversely affect the physical, chemical, or biological conditions on which these communities and their members depend.
4. Cause physical, chemical, or biological conditions that promote the habitation, growth, or propagation of undesirable, non-indigenous species of plant or animal life in the water body.
5. Cause solids, oil, grease, foam, scum, or any other form of objectionable floating debris on the surface of the water body; may cause a Elm or iridescent appearance on the surface of the water body; or that may cause a deposit on a shoreline, on a bank, or on aquatic vegetation.
6. Cause objectionable odor in the area of the water body.
7. Cause objectionable taste, odor, color, or turbidity in the water body.
8. Cause objectionable taste in edible plant and animal life, including waterfowl, that reside in, on, or adjacent to the water body.

**SECTION C. PERMIT REOPENER**

Should any of the monitoring indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursions above water quality criteria, the permit may be reopened for the imposition of water quality based limits and/or whole effluent toxicity limits. Also, this permit may be modified, in accordance with the requirements set forth at 40 CFR Parts 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new Tribal or State of New Mexico water



quality standards.

This permit authorizes the discharge of wastewater from over 50 outfalls in 3 distinct subcategories. Throughout the permit term, as mine operations continue in a linear fashion, new outfall locations may become necessary to treat runoff and other outfalls may need to be authorized under a different subcategory. Therefore, EPA may modify the list of Outfalls in the Appendixes during the permit term to add, terminate or reclassify a discharge that occurs during the anticipated course of the existing mining activities. This will be accomplished thru a minor modification of the permit in accordance with 40 CFR Part 122.63. The permit may be reopened to authorize new outfalls for an area not currently being mined through a major modification to the existing permit 40 CFR Part 122.63.

## **SECTION D. MONITORING AND REPORTING**

### **1. Monitoring Requirements**

a) The permittee shall monitor all pollutants listed below at each outfall listed in Appendix A – “Alkaline Mine Drainage” and Appendix B – “Coal Preparation & Associated Areas” once per calendar year when a discharge occurs:

Aluminum, dissolved  
Antimony, dissolved  
Arsenic, dissolved  
Boron, dissolved  
Cadmium, dissolved  
Chromium, total as Cr  
Copper, dissolved  
Lead, dissolved  
Mercury, Total  
Nickel, dissolved  
Selenium, Total  
Silver, dissolved  
Thallium, dissolved  
Zinc, dissolved

b) New Mexico 401 Certification Monitoring Requirements:

The permittee shall monitor all pollutants listed below at each outfall discharging with the State of New Mexico listed in Appendix A – “Alkaline Mine Drainage”, Appendix B – “Coal Preparation & Associated Areas” and Appendix C – “Western Alkaline Reclamation Areas” once per calendar year when a discharge occurs:

<u>Pollutant (total, unless indicated)</u>	<u>Numeric Criteria (µg/L, unless indicated)</u>
Aluminum, dissolved	750
Antimony, dissolved	640
Arsenic, dissolved	9.0
Boron, dissolved	5000
Cadmium, dissolved	hardness dependant – see 20.6.4.900.I
Chromium, dissolved	hardness dependant – see 20.6.4.900.I
Cobalt, dissolved	1000
Copper, dissolved	hardness dependant – see 20.6.4.900.I
Cyanide, weak acid dissociable	5.2
Lead, dissolved	hardness dependant – see 20.6.4.900.I
Mercury	0.77
Nickel, dissolved	hardness dependant – see 20.6.4.900.I
Selenium, total recoverable	5.0
Silver, dissolved	hardness dependant – see 20.6.4.900.I
Thallium, dissolved	6.3
Vanadium, dissolved	100
Zinc, dissolved	hardness dependant – see 20.6.4.900.I
Adjusted gross alpha	15 pCi/L
Radium 226 +Radium 228	30 pCi/L
Aldrin	0.00050
Benzo(a)pyrene	0.18
Gamma-BHC (Lindane)	0.95
Chlordane	0.0081
4,4'-DDT and derivatives	0.001
Dieldrin	0.00054
2,3,7,8-TCDD Dioxin	5.1 E-08
alpha-Endosulfan	0.22
beta-Endosulfan	0.22
Endrin	0.086
Heptachlor	0.52
Heptachlor epoxide	0.52
Hexachlorobenzene	0.0029
PCBs	0.00064
Pentachlorophenol	19
Tetrachloroethylene	33
Toxaphene	0.73

## **2. Reporting of Monitoring Results**

- a. Monitoring results shall be reported on Discharge Monitoring Report (ADMR@) forms (EPA No. 3320-1) to be supplied by the EPA Regional Administrator, to the extent that the information reported may be entered on the forms.

Monitoring results obtained during the previous three (3) months shall be summarized for each month and submitted on forms to be supplied by the EPA Regional Administrator, to the extent that the information reported may be entered on the forms. Monitoring results obtained from sampling any discharge shall be entered directly on the DMR forms. In cases where No Discharge has occurred, monitoring results may be reported in narrative format due the large number of outfalls permitted.

The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the permit. Unless otherwise specified, discharge flow shall be reported in terms of the average flow over that 30 day period. These reports are due January 28, April 28, July 28, and October 28 of each year. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator at the following addresses:

NPDES Compliance Office  
Environmental Protection Agency (WTR-7)  
75 Hawthorne Street  
San Francisco, CA 94105  
Telephone: (415) 972-3505

Navajo Nation Environmental Protection Agency  
Navajo Nation EPA  
P.O. Box 339  
Window Rock, AZ 86515  
Telephone: (928) 871-7185

Program Manager  
Surface Water Quality Bureau  
New Mexico Environment Department  
P.O. BOX 5469  
1190 Saint Francis Drive  
Santa Fe, NM 87502-5469

b. For effluent analyses, the permittee shall utilize an EPA-approved analytical method with a Method Detection Limit (MDL) that is lower than the effluent limitations (or lower than applicable water quality criteria if monitoring is required but no effluent limitations have been established.) MDL is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by the specific laboratory method listed in 40 CFR Part 136. The procedure for determination of a laboratory MDL is in 40 CFR Part 136, Appendix B.

c. If all published MDLs are higher than the effluent limitations (or applicable criteria concentrations), the permittee shall utilize the EPA-approved analytical method with the lowest published MDL.

d. The permittee shall develop a Quality Assurance (QA) Manual/QA Plan. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. As appropriate and applicable, the QA Manual shall include the details enumerated below. The QA Manual shall be retained on the permittee's premises and be available for review by USEPA, Navajo Nation EPA, or New Mexico Environment Department upon request. The permittee shall review its QA Manual annually and revise it when appropriate. Throughout all field sampling and laboratory analyses, the permittee shall use quality assurance/quality control (QA/QC) procedures as documented in their QA Manual.

- i. Project Management including roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples.
- ii. Sample collection procedures; equipment used; the type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks); preservatives and holding times for the samples (see 40 CFR Part 136.3).
- iii. Identification of the laboratory to be used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; required QC results to be reported (e.g., matrix spike recoveries,

duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.

- iv. Discussion of how the permittee will perform data review and requirements for reporting of results to USEPA, Navajo Nation EPA, or New Mexico Environment Department to include resolving of data quality issues and identifying limitations on the use of the data.
- e. Sample collection shall be performed as stated in the QA Manual. The QA Manual shall include a discussion on the preservation and handling, preparation and analysis of samples as described in the most recent edition of 40 CFR Part 136.3, unless otherwise specified in this permit.

### **3. Monitoring and Records**

Records of monitoring information shall include:

- a. Date, exact location, and time of sampling or measurements performed, preservatives used;
- b. Individual(s) who performed the sampling or measurements;
- c. Date(s) analyses were performed;
- d. Laboratory(ies) which performed the analyses;
- e. Analytical techniques or methods used;
- f. Any comments, case narrative or summary of results produced by the laboratory. These should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether they met project and 40 CFR Part 136 requirements. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, holding times, and preservation.
- g. Summary of data interpretation and any corrective action taken by the permittee.
- h. Effluent limitations for analytes/compounds being analyzed.

### **4. Twenty Four-Hour Reporting of Noncompliance**

The permittee shall report any non-compliance which may endanger human health or the

environment. This information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to the following persons or their offices:

U.S. EPA Region 9: CWA Compliance Office Manager: (415) 972-3505

Navajo Nation EPA: Attn: Patrick Antonio (928) 871-7185

New Mexico Environment Department: SWQB: (505) 827-0187

If the permittee is unsuccessful in contacting the persons above, the permittee shall report by 9 a.m. on the first business day following the noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

#### **SECTION E. INSPECTION AND ENTRY**

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to perform inspections under authority of Section 10: Inspection and Entry of the EPA Region 9 AStandard Federal NPDES Permit Conditions,@ dated June 3, 2002, as attached.

#### **SECTION F. DEFINITIONS**

The following definitions shall apply unless otherwise specified in the permit:

1. ADiscrete sample@ means any individual sample collected in less than 15 minutes.
2. ADaily discharge@ means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar for purposes of sampling. For pollutants with limitations expressed in terms of mass, the ADaily discharge@ is calculated as the total mass of the pollutant discharges over the sampling day. For pollutants with limitations expressed in other units of measurement, the ADaily discharge@ is calculated as the average measurement of the pollutant over the sampling day. ADaily discharge@ determination of concentration made using a composite sample shall be the concentration

of the composite sample. When grab samples are used, the  $\Delta$ daily discharge $\Delta$  determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that sampling day.

3.  $\Delta$ Daily average $\Delta$  discharge limitation means the highest allowable average of  $\Delta$ daily discharges $\Delta$  over a calendar month, calculated as the sum of all  $\Delta$ daily discharges $\Delta$  measured during a calendar month divided by the number of  $\Delta$ daily discharges $\Delta$  measured during that month.
4.  $\Delta$ Daily maximum $\Delta$  concentration means the measurement made on any single discrete sample of composite sample.
5.  $\Delta$ Daily maximum $\Delta$  mass limit means the highest allowable  $\Delta$ daily discharge $\Delta$  by mass during any calendar day.
6. A  $\Delta$ composite sample $\Delta$  means, for flow rate measurements, the arithmetic mean of no fewer than 4 individual measurements taken at equal intervals for one hour or for the duration of discharge, whichever is shorter. A composite sample means, for other than flow rate measurements, a combination of 4 individual portions obtained at equal time intervals for 4 hours or for the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling. The sampling period shall coincide with the period of maximum discharge flow.
7. A  $\Delta$ monthly or weekly average $\Delta$  concentration limitation means the arithmetic mean of consecutive measurements made during a calendar month or weekly period, respectively.
8. A  $\Delta$ monthly or weekly average $\Delta$  mass limitation means the total discharge by mass during a calendar monthly or weekly period, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the monthly or weekly average value shall be determined by the summation of all the measured discharges by mass divided by the number of days during the monthly or weekly period when the measurements were made.

**APPENDIX A – “Alkaline Mine Drainage”**

Serial Number/ Outfall Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water	Location
001/ 1N	35-40-38.78	108-59-27.14	Coal Mine Wash to Rio Puerco	NAVAJO
002 / 3N	35-40-34.95	108-59-30.41	Coal Mine Wash to Rio Puerco	NAVAJO
003 / 5N	35-40-10.91	108-59-50.63	Coal Mine Wash to Rio Puerco	NAVAJO
004 / 6S	35-36-59.67	108-29- 8.01	Defiance Draw to Rio Puerco	NM
005 / 7S	35-37- 7.32	108-59- 1.45	Defiance Draw to Rio Puerco	NM

**APPENDIX B – “Coal Preparation & Associated Areas”**

Serial Number/ Outfall Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water	Location
006 / 15-1	35-40-18.56	108-53-17.22	Defiance Draw to Rio Puerco	NAVAJO
007 / 16-1	35-40-32.22	108-52-34.60	Defiance Draw to Rio Puerco	NAVAJO
008 / 15-2	35-40-39.33	108-53-19.85	Defiance Draw to Rio Puerco	NAVAJO

**APPENDIX C – “Western Alkaline Reclamation Areas”**

Serial Number/ Outfall Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water	Location
009 /CB 1-7	35° 39' 55.7388	-108° 59' 28.251”	Coal Mine Wash	NAVAJO
010/DC 1	35° 40' 39.6042”	-108° 59' 32.1756”	Coal Mine Wash	NAVAJO
011 /CB 6-3	35° 43' 31.6596”	-108° 55' 47.4666”	Coal Mine Wash	NAVAJO
012 /CB 6-7	35° 43' 39.2808”	-108° 55' 30.5322”	Coal Mine Wash	NAVAJO
013 /SP 3-6	35° 41' 24.6654”	-108° 56' 25.5618”	Tse Bonita Wash	NAVAJO
014 /SP 3-5	35° 40' 49.1082”	-108° 56' 44.1882”	Tse Bonita Wash	NAVAJO
015 /EW-7	35° 40' 4.9404”	-108° 53' 50.6754”	Defiance Draw	NAVAJO
016 /EW-9	35° 39' 55.7742”	-108° 54' 18.5718”	Defiance Draw	NAVAJO
017 /CB 2-21	35° 40' 6.78”	-108° 57' 12.9738”	Tse Bonita Wash	NAVAJO
018 /CB 2-2	35° 39' 38.8404”	-108° 57' 46.839”	Tse Bonita Wash	NAVAJO
019 /CB 2-5	35° 39' 32.0682”	-108° 58' 3.7704”	Tse Bonita Wash	NAVAJO
020 /SP 10-17	35° 38' 28.8132”	-108° 58' 20.9676”	Defiance Draw	NAVAJO
021 /CB 10-6	35° 38' 26.8794”	-108° 58' 31.71”	Defiance Draw	NAVAJO
022 /CB 10-3	35° 38' 42.9648”	-108° 59' 5.5746”	Tse Bonita	NAVAJO
023 /CB 1-5	35° 38' 48.0438”	-108° 59' 8.9586”	Tse Bonita Wash	NAVAJO
024 /DC 2	35° 38' 43.9656”	-108° 59' 18.3336”	Tse Bonita Wash	NAVAJO
025 /SP 10-28	35° 39' 16.3398”	-108° 58' 56.0028”	Tse Bonita Wash	NAVAJO
026 /CB 10-29	35° 38' 54.816”	-108° 58' 54.5664”	Tse Bonita Wash	NAVAJO
027 /SP 10-1	35° 38' 51.432”	-108° 58' 52.8738”	Tse Bonita Wash	NAVAJO



051 /DC 3	35° 37' 47.496"	-109° 2' 7.5876"	Tse Bonita Wash	NAVAJO
052 /DC 4	35° 37' 48.0324"	-109° 2' 5.553"	Tse Bonita Wash	NAVAJO
053 /DC 5	35° 37' 47.9238"	-109° 2' 2.979"	Tse Bonita Wash	NAVAJO
054 /DC 6	35° 37' 49.1052"	-109° 1' 57.2988"	Tse Bonita Wash	NAVAJO
055 /DC 7	35° 37' 58.7496"	-109° 1' 53.2272"	Tse Bonita Wash	NAVAJO
056 /DC 8	35° 37' 50.6064"	-109° 1' 43.0458"	Tse Bonita Wash	NAVAJO
057 /DC 9	35° 37' 55.6422"	-109° 1' 24.5022"	Tse Bonita Wash	NAVAJO
028	INTENTIONALLY LEFT BLANK			
029 /CB 10-4	35° 38' 15.0246"	-108° 58' 56.2614"	Defiance Draw	NM
030 /CB 10-18	35° 38' 11.6406"	-108° 58' 37.635"	Defiance Draw	NM
031 /CB 10-10	35° 39' 15.984"	-108° 58' 21.5502"	Tse Bonita Wash	NM
032 /CB 10-27	35° 38' 27.726"	-108° 57' 57.8448"	Defiance Draw	NM
033 /SP 12-8	35° 39' 16.8294"	-108° 55' 19.527"	Defiance Draw	NM
034 /PI 11-9	35° 38' 52.2774"	-108° 55' 24.6066"	Defiance Draw	NM
035 /CB 11-5	35° 38' 38.7312"	-108° 55' 13.602"	Defiance Draw	NM
036 /CB 9-35	35° 37' 25.0752"	-108° 55' 2.5968"	Defiance Draw	NM
037 /CB 9-33	35° 36' 12.2688"	-108° 55' 16.1394"	Defiance Draw	NM
038 /CB 9-37	35° 36' 5.493"	-108° 55' 21.2196"	Defiance Draw	NM
039 /CB 9-38	35° 35' 27.3984"	-108° 55' 55.9308"	Defiance Draw	NM
040 /CB 9-24	35° 35' 25.7028"	-108° 56' 41.6502"	Defiance Draw	NM
041 /CB 9-25	35° 35' 23.1642"	-108° 57' 17.2074"	Defiance Draw	NM
042 /CB 9-26	35° 35' 24.8562"	-108° 57' 30.7506"	Defiance Draw	NM
043 /CB 9-9	35° 35' 38.403"	-108° 57' 28.2126"	Defiance Draw	NM
044 /CB 9-8	35° 35' 49.4082"	-108° 57' 44.298"	Defiance Draw	NM
045 /CB 9-7	35° 36' 10.5726"	-108° 57' 56.9988"	Defiance Draw	NM
046 /CB 9-15	35° 37' 8.418"	-108° 57' 10.35"	Defiance Draw	NM
047 /CB 9-17	35° 37' 8.6916"	-108° 56' 51.6084"	Defiance Draw	NM
048 /CB 9-20	35° 36' 51.5808"	-108° 56' 37.215"	Defiance Draw	NM
049 /CB 9-19	35° 36' 47.5056"	-108° 56' 27.9816"	Defiance Draw	NM
050 /CB 9-21	35° 36' 36.9138"	-108° 56' 21.462"	Defiance Draw	NM