

**US ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne St.
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

DRAFT NPDES PERMIT NO. NN 0022179

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 other conditions set forth in this permit. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

Discharger Name		Peabody Western Coal Company		
Discharger Address		P.O. Box 650 Kayenta, AZ 86033		
Facility Name		Black Mesa/Kayenta Mine Complex		
Facility Location Address		Route 41 Kayenta, AZ 86033		
		Major		
Outfall Number(s)	General Type of Waste Discharged	Outfall Latitude(s)	Outfall Longitude(s)	Receiving Water(s)
Over 105 Outfalls listed in Attachments A-C	Alkaline Mine Drainage (Attachment A), Coal Preparation Areas (Attachment B), Western Alkaline Reclamation (Attachment C)	Over 105 Outfalls listed in Attachments A-C	Over 105 Outfalls listed in Attachments A-C	Moenkopi Wash, Dinnebito Wash, and several tributaries

This permit was issued on:	<Director signature date, e.g., January 1, 2020>
This permit shall become effective on:	<1 st of month following 33 days after issue date>
Permit reapplication due no later than:	<Effective date + 5 years – 180 days>
This permit shall expire at midnight on:	<Effective date + 5 years – 1 day>

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 ____ day of _____, 2020, for the Regional Administrator.

Tomás Torres, Director
Water Division

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Part I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Alkaline Mine Drainage Outfalls - Final Effluent Limits and Monitoring Requirements

Peabody Western Coal Company (the Permittee) is authorized to discharge mine drainage from the Outfall Numbers listed in Attachment A – “Alkaline Mine Drainage” in compliance with the effluent limits and monitoring requirements specified in Table 1. The Permittee shall monitor the effluent to evaluate compliance. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters. As discussed further, below, certain outfalls listed in Attachment A that through reclamation will be converted to outfalls that will become subject to conditions applied to outfalls listed in Attachment C.

Table 1: Alkaline Mine Drainage – Effluent Limitations and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limits			Monitoring Requirements		Notes
	Average Monthly	Maximum Daily	Units	Frequency ¹	Sample Type	
ALL OUTFALLS						
Flow rate	n/a	n/a	MGD	continuous	calculated	(1), (2)
pH	Within 6.5 and 9.0 at all times		S.U.	once/day	discrete	(1)
TSS	35	70	mg/L	once/day	discrete	(1)
Iron, total	3.5	7.0	mg/L	once/day	discrete	(1)
Arsenic	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Cadmium	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Chromium, total	n/a	n/a	ug/L	once/day	discrete	(1), (4)
Lead	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Mercury	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Selenium	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Hardness	n/a	n/a	ug/L	once/day	discrete	(1), (4), (5)

NOTES:

- (1) Samples shall be taken once during each discharge 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) Dissolved.
- (4) Monitoring of these parameters applies only to outfalls located on the Hopi Reservation. No limitations apply.
- (5) Total

B. Coal Preparation Plants, Storage Areas, and Ancillary Area Runoff Outfalls - Final Effluent Limits and Monitoring Requirements

The Permittee is authorized to discharge mine drainage from the Outfall Numbers listed in Attachment B – “Coal Preparation & Associated Areas” in compliance with the effluent limits and monitoring requirements specified in Table 2. The Permittee shall monitor the effluent to evaluate compliance. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters. As discussed further, below, certain of the outfalls listed in Attachment B will be converted to outfalls that through reclamation will become subject to conditions applied to outfalls listed in Attachment C.

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

Parameter	Maximum Allowable Discharge Limits			Monitoring Requirements		Notes
	Average Monthly	Maximum Daily	Units	Frequency ¹	Sample Type	
ALL OUTFALLS						
Flow rate	n/a	n/a	MGD	continuous	calculated	(1), (2)
pH	Within 6.5 and 9.0 at all times		S.U.	once/day	discrete	(1)
TSS	35	70	mg/L	once/day	discrete	(1)
Oil & Grease	n/a	15	mg/L	once/day	Discrete	(1)
Iron, total	3.5	7.0	mg/L	once/day	discrete	(1)
Arsenic	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Cadmium	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Chromium, total	n/a	n/a	ug/L	once/day	discrete	(1), (4)
Lead	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Mercury	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Selenium	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Hardness	n/a	n/a	ug/L	once/day	discrete	(1), (4), (5)

NOTES:

- (1) Samples shall be taken once during each discharge 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) Dissolved.
- (4) Monitoring of these parameters applies only to outfalls located on the Hopi Reservation. No limitations apply.
- (5) Total

C. *Western Alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded area outfalls - Final Effluent Limits and Monitoring Requirements*

The Permittee is authorized to discharge runoff from the Outfall Numbers listed in Appendix C – “Western Alkaline Reclamation Areas” in compliance with the effluent limits and monitoring requirements as specified below. As discussed further, below, certain outfalls listed in Attachment A and Attachment B will be converted through reclamation to become subject to conditions applied to outfalls listed in Attachment C.

To reclassify any outfalls listed in this permit under Attachment A or B to Attachment C outfalls, the Permittee must submit to EPA for review and approval:

- a) a site-specific Sediment Control Plan 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 Life-of-Mine permit issued by the United States Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSMRE).
- 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, e.g. Attachment C. 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.

D. Discharges resulting from precipitation events - Final Effluent Limits and Monitoring Requirements

- The Permittee is authorized to discharge runoff from Outfall Numbers listed in Attachment A – “Alkaline Mine Drainage” and Attachment 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) specified in Table 3 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 3: Discharges from precipitation events less than 10-yr. 24-hr event(s) – Effluent Limits and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limits			Monitoring Requirements		Notes
	Average Monthly	Maximum Daily	Units	Frequency ¹	Sample Type	
OUTFALLS in Attachments A & B						
Flow rate	n/a	n/a	MGD	continuous	calculated	(1), (2), (3), (4)
pH	Within 6.5 and 9.0 at all times		S.U.	once/day	discrete	(1)
Settleable Solids	n/a	0.5	ml/L	once/day	discrete	(1)
Arsenic	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Cadmium	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Chromium, total	n/a	n/a	ug/L	once/day	discrete	(1), (4)
Lead	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Mercury	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Selenium	n/a	n/a	ug/L	once/day	discrete	(1), (3), (4)
Hardness	n/a	n/a	ug/L	once/day	discrete	(1), (4), (5)

NOTES:

- Samples shall be taken once during each occurrence or once every 24-hours if the duration of the occurrence is greater than 24-hours.
- To determine total flow in gallons for each discharge and duration of discharge.
- Dissolved.
- Monitoring applies to all Outfalls located on the Hopi Reservation. No limitations apply.
- Total.

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

The Permittee is authorized to discharge runoff from Outfall Numbers listed in Attachment A – “Alkaline Mine Drainage” and Attachment B – “Coal Preparation & Associated Areas” resulting from precipitation events greater than a 10-year, 24-hour precipitation event (greater than 1.80 inches within a 24-hour period). Such discharges shall be limited and monitored by the Permittee as specified below in Table 4. 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 4: Discharges from precipitation events greater than 10-yr. 24-hr event(s) – Effluent Limits and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limits			Monitoring Requirements		Notes
	Average Monthly	Maximum Daily	Units	Frequency ¹	Sample Type	
OUTFALLS in Attachments A & B						
Flow rate	n/a	n/a	MGD	continuous	calculated	(1), (2)
pH	Within 6.5 and 9.0 at all times		S.U.	once/day	discrete	(1)

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.

E. Receiving Water Limitations

1. All Waters of the Navajo Nation shall be free from pollutants in amounts or combinations that, for any duration:
 - a. Cause injury to, are toxic to, or otherwise adversely affect human health, public safety, or public welfare.
 - b. 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.

- c. 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.
 - d. 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.
 - e. Cause solids, oil, grease, foam, scum, or any other form of objectionable floating debris on the surface of the water body; may cause film 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.
 - f. Cause objectionable odor in the area of the water body.
 - g. Cause objectionable taste, odor, color, or turbidity in the water body.
 - h. Cause objectionable taste in edible plant and animal life, including waterfowl, that reside in, on, or adjacent to the water body.
 - j. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, or propagation of other aquatic life or that impair recreational uses.
2. The following General Standards apply to all surface and ground waters of the Hopi Tribe:
- a. Stream Bottom Deposits: Surface waters shall be free from contaminants from other than natural causes that may settle and have a deleterious effect on the aquatic biota or that will significantly alter the physical or chemical properties of the water or the bottom sediments.
 - b. Floating Solids, Oil, and Grease: Surface waters shall be free from objectionable oils, scum, foam, grease, and other floating materials and suspended substances of a persistent nature resulting from other than natural causes (including visible films of oil, globules of oil, grease, or solids in or on the water, or coatings on stream banks). As a guideline, oil and grease discharged into surface waters shall not exceed 10 mg/liter average or 15 mg/liter maximum.
 - c. Color: Surface waters shall be free from the true color-producing materials (other than those resulting from natural causes) that create an aesthetically undesirable condition. Color shall not impair the designated and other attainable uses of a water body. Color-producing substances from other than natural sources are limited to concentrations equivalent to 70 color units (CU).
 - d. Odor and Taste: Contaminants from other than natural causes are limited to concentrations that do not impart unpalatable flavor to fish, that do not result in offensive odor or taste arising from the water, and that do not otherwise interfere with the designated and other attainable uses of a water body. Taste and odor-producing substances from other than natural origins shall not interfere with the production of a potable water supply by modern treatment methods.
 - e. Nuisance Conditions: Plant nutrients or other substances stimulating algal growth from other than natural causes shall not be present in concentrations that produce objectionable algal densities or nuisance aquatic vegetation, or that result in a dominance of nuisance

species instream, or that cause nuisance conditions in any other fashion. Phosphorus and nitrogen concentrations shall not be permitted to reach levels that result in man-induced eutrophication problems. As a guideline, total phosphorus shall not exceed 100 µg/L instream or 50 µg/L in lakes and reservoirs, except in waters highly laden with natural silts or color that reduces the penetration of sunlight needed for plant photosynthesis, or in other waters where it can be demonstrated that algal production will not interfere with or adversely affect designated and other attainable uses. Alternative or additional nutrient limitations for surface waters may be established by the Hopi Tribe and incorporated into water quality management plans.

- f. Pathogens: Waters shall be free from pathogens. Waters used for irrigation of table crops (e.g., lettuce) shall be free of salmonella and shigella species.
- g. Turbidity: Turbidity attributable to other than natural causes shall not reduce light transmission to a point at which aquatic biota are inhibited or to a point that causes an unaesthetic and substantial visible contrast with the natural appearance of the water. Specifically, turbidity shall not exceed 5 nephelometric turbidity units (NTU, a measure of turbidity in water) over background when background turbidity is 50 NTU or less, with no more than a 10-percent increase when background turbidity is more than 50 NTU.
- h. Temperature: The introduction of heat by other than natural causes shall not increase the temperature in a stream, outside a mixing zone, by more than 2.7 °C (5 °F), based upon the monthly average of the maximum daily temperatures measured at mid-depth or 3 feet (whichever is less) outside the mixing zone. In lakes, the temperature of the water column or epilimnion (if thermal stratification exists) shall not be raised more than 1.7 °C (3 °F) above that which existed before the addition of heat of artificial origin, based upon the average of temperatures taken from the surface to the bottom of the lake, or surface to the bottom of the epilimnion (if stratified). The normal daily and seasonal variations that were present before the addition of heat from other than natural sources shall be maintained. High water temperatures caused by unusually high ambient air temperatures are not violations of these standards.
- i. Salinity/Mineral Quality (total dissolved solids, chlorides, and sulfates): Existing mineral quality shall not be altered by municipal, industrial, and instream activities, or other waste discharges, so as to interfere with the designated or attainable uses for a water body. An increase of more than one-third over naturally occurring levels shall not be permitted.
- j. pH: The following water quality standards for pH, expressed in standard units, shall not be violated by other than natural causes: Maximum=9.0; Minimum=4.5; Maximum change due to discharge=0.5
- k. Dissolved oxygen: If a stream or other water body is capable of supporting aquatic biota, the dissolved oxygen standard will be a minimum of 6 mg/L.
- l. Fecal coliform: The following water quality standards for fecal coliform, expressed in colony forming units per 100 milliliters of water (cfu/100 mL), shall not be exceeded: 30-day geometric mean: (5 sample minimum) = 200 cfu/100 mL; 10% of samples for a 30-day = 400 cfu/mL; Single sample maximum = 800 cfu/mL.
- m. Toxic Substances: Toxic substances shall not be present in receiving waters in quantities that are toxic to human, animal, plant, or aquatic life, or in quantities that interfere with

the normal propagation, growth, and survival of the sensitive indigenous aquatic biota. Within the mixing zone, there shall be no acute toxicity.

- n. Water discharged under this permit shall not contain settleable materials or suspended materials in concentrations great than or equal to ambient concentrations present in the receiving stream that cause nuisance or adversely affect beneficial uses.
- o. Activities conducted under this permit shall not result in the violations of any narrative and numeric criteria established in the Hopi Tribe's Water Quality Standards.

F. Seepage Monitoring and Best Management Plan

The Permittee shall continue to implement the Seep Monitoring and Management plan designed to identify and characterize seeps, to identify those seeps that may pose a threat to water quality, and to establish Best Management Practices at seeps determined to pose a threat to water quality.

The plan shall be modified to address the construction of new impoundments, and shall include:

- a. Identification of all seeps located within 100 meters downgradient of sediment impoundments including a record of the location, date, time, flow, proximity to waters of the United States, and accessibility by livestock.
- b. Sampling (or summary of current data if sufficient and valid) of seepages identified in Section F.a. for pH, Selenium (Total and Dissolved), and Nitrates. If PWCC submits past data, sampling techniques shall be described in order to determine validity of data. EPA, upon reviewing all data submitted, shall determine whether additional sampling should be performed.
- c. Hydrogeologic modeling or studies in order to determine if the source the seeps are the impoundments and, if so, which impoundments.
- d. Determination of source of Selenium and Nitrates, where data indicates that seepages have a reasonable potential to violate water quality standards.
- e. The plan shall continue to be implemented as described in the revised Seepage Management Plan, submitted to EPA on September 27, 2011. EPA and OSMRE accepted this plan and requested that PWCC formulate a Special Reclamation Plan for the removal of sediment ponds J16-E and J16-F. PWCC submitted several successive Special Reclamation Plans between 2013 and 2017. OSMRE approved each plan for the removal of individual impoundments, with the latest plan approved February 27, 2017.
- f. The study results shall be submitted annually to EPA. EPA, upon reviewing the results of the study, may reopen the permit for the establishment of numerical limits and/or additional monitoring requirements.

G. Precipitation Gauging Stations

For the purpose of this permit, the precipitation gauge stations used to monitor rainfall for specific discharge outfalls shall be:

Precipitation Gauge No.

Discharge Outfalls

- 1. (ARG1) 048, 049, 050, 051, 052, 069, 070, 071, , 088, 089, 090, 147, 163, 169, 170, 171, 172, 173

5. (ARG2R) 017, , 026, 027, 047, 086, 098, 105, 141, 142, 149, 178
7. (ARG7R) 008, 009, 013, 014, 016, 081, 094, 159, 160, 161, 162, 164, 165
8. (ARG6R) 024, 025, 030, 031, 032, 033, 039, 043, 103, 104, 127, 130, 133,
9. (ARG9) 001, 002, 003, 005, 010, 012, 021, 022, 037, 045, 082, 083, 099, 139, 140, 150, 151, 153, 157, 197
10. (ARG3R) 054, 095, 106, 107, 118, 126, 136, 137, , 152, 167, 184, 185, 186, 187, 188, 189, 190, 191, 192,
11. (ARG200) 079, 148, 174, 175, 176, 177, 179, 195, 196
12. (ARG12) 180, 181, 182, 183

H. Sample locations

1. Samples and measurements shall be representative of the volume and nature of the monitored discharge.
2. Samples shall be taken at the following locations:

Effluent samples shall be taken after return flows and the last treatment process and prior to mixing with the receiving water, where representative samples can be obtained.

I. General Monitoring and Reporting Requirements

1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in this permit, the Permittee shall utilize 40 CFR 136 test methods with MDLs and MLs that are lower than the effluent limits in this permit. For parameters without an effluent limit, the Permittee must use an analytical method at or below the level of the applicable water quality criterion for the measured pollutant or the amount of the pollutant is high enough that the method detects and quantifies the level of pollutant in the discharge. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the Permittee shall utilize the test method with the lowest MDL or ML. In this context, the Permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML. Influent and effluent analyses for metals shall measure “total recoverable metal,” except as provided in Part I of this permit or under 40 CFR 122.45(c).
2. As an attachment to the first DMR, the Permittee shall submit, for all parameters with monitoring requirements specified in this permit:

- a. The test method number or title and published MDL or ML,
- b. The preparation procedure used by the laboratory,
- c. The laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR 136,
- d. The standard deviation (S) from the laboratory's MDL study,
- e. The number of replicate analyses (n) used to compute the laboratory's MDL, and
- f. The laboratory's lowest calibration standard.

As part of each DMR submittal, the Permittee shall certify that there are no changes to the laboratory's test methods, MDLs, MLs, or calibration standards. If there are any changes to the laboratory's test methods, MDLs, MLs, or calibration standards, these changes shall be summarized in an attachment to the subsequent DMR submittal.

3. The Permittee shall develop a Quality Assurance (QA) Manual for the field collection and laboratory analysis of samples. 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. At a minimum, the QA Manual shall include the following:
 - a. Identification of project management and a description of the 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;
 - b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control (QC) samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
 - c. Identification of the laboratory 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; MDL and ML to be reported; 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 in response to problems identified during QC checks; and
 - d. Discussion of how the Permittee will perform data review, report results, and resolve data quality issues and identify limits on the use of data.
4. Throughout all field collection and laboratory analyses of samples, the Permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the Permittee shall ensure that the laboratory has a QA Manual on file. A copy of the Permittee's QA Manual shall be retained on the Permittee's premises and available for review by regulatory authorities upon request. The Permittee shall review its QA Manual annually and revise it, as appropriate.
5. Samples collected during each month of the reporting period must be reported on Discharge Monitoring Report forms, as follows:

- a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:
The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or
NODI (Q), if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or
NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.
 - b. For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either:
The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or
NODI (Q), if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or
NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.
 - c. For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report:
The *average value* of all analytical results where 0 (zero) is substituted for *NODI (B)* and the laboratory's MDL is substituted for *NODI (Q)*.
6. In addition to information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. 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, and sample condition upon receipt, holding time, and preservation.
 7. All monitoring results shall be submitted in such format as to allow direct comparison with effluent limitations, monitoring requirements and conditions of this Permit. Monthly Discharge Monitoring Reports (DMRs) for the previous three (3) months shall be submitted quarterly no later than by the 28th day of the month following the previous quarterly reporting period. For example, the three DMR forms for January, February, and March are due on April 28th. A DMR must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required.
 8. Submittal of DMRs and the Use of NetDMR
The Permittee shall electronically submit compliance monitoring data and reports using the electronic reporting tools provided by EPA Region 9 (NetDMR) and cease mailing paper DMRs. NetDMR is a web-based tool that allows Permittees to electronically submit DMRs and other required reports via a secure internet connection. NetDMR can be registered at <https://cdxnodengn.epa.gov/net-netdmr/> and accessed at

<https://netdmr.zendesk.com/hc/en-us>. By using NetDMR, the Permittee will no longer be required to submit hard copies of DMRs to EPA under 40 CFR 122.41 and 403.12.

9. Submittal of Reports as NetDMR Attachments

After the Permittee begins submitting electronic DMRs, the Permittee shall electronically submit all reports as NetDMR attachments rather than as hard copies, unless otherwise specified in this permit. A report submitted electronically as a NetDMR attachment shall be submitted to U.S. EPA by the 28th day of the month following the calendar quarter it was due.

10. The Permittee shall submit an electronic or paper Discharge Monitoring Report to the Navajo Nation and Hope Tribe offices. Paper DMR forms shall be mailed to:

Navajo Nation EPA
P.O. Box 339
Window Rock, AZ 86515

Hopi Water Resources Program
P.O. Box 123
Kykotsmovi, AZ 86039

11. *Hardness (CaCO₃)*. The Permittee shall monitor for (total) hardness in addition to certain (dissolved) metals.

Part II. SPECIAL CONDITIONS

A. *Erosion Protection*

The Permittee shall design, install and maintain erosion protection measures to prevent erosion from the discharge point to receiving water.

B. *Reclassification of Outfalls*

This Permit authorizes the discharge of wastewater from approximately 107 existing outfalls. The outfalls approved by this Permit are categorized into three (3) distinct subcategories, A, B, and C, with coordinates of each outfall listed in Permit Attachments A, B, and C, respectively. The outfalls in Attachment A are currently classified as Alkaline Mine Drainage Outfalls, the outfalls in Attachment B are currently classified as Coal Preparation & Associated Area Outfalls, and the outfalls in Attachment C are currently classified as Western Alkaline Reclamation Area Outfalls.

This Permit also authorizes the reclassification of Alkaline Mine Drainage Outfalls or Coal Preparation & Associated Area Outfalls to Western Alkaline Reclamation Area Outfalls, keeping in compliance with the effluent limitations and monitoring and reporting requirements which are clearly identified in the Permit for each sub-category.

Additionally, discharges from any one of the three sub-categories must always also meet the receiving water limitations discussed in Permit Part I, E.

C. *Permit Reopener(s)*

In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards or TMDL implementation; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.

D. *Twenty-four Hour Reporting of Noncompliance*

1. The Permittee shall report any noncompliance which may endanger human health or the environment. The Permittee is required to provide an oral report by directly speaking with an EPA, Navajo Nation EPA, and Hopi Tribe staff person within 24 hours from the time the Permittee becomes aware of the noncompliance. If the Permittee is unsuccessful in reaching a staff person, the Permittee shall provide notification by 9 a.m. on the first business day following the noncompliance. The Permittee shall notify EPA, Navajo Nation EPA and Hopi Tribe at the following telephone numbers:

U.S. Environmental Protection Agency
Wastewater Enforcement Section (ENF-3-1)
Telephone: (415) 947- 4179

Patrick Antonio, NPDES Program Manager
Navajo Nation EPA
Telephone: (928) 871-7185

Jarrett Calnimpewa, Director
Hopi Tribe Water Resources Program
Telephone: (928) 734 - 3711
Fax: (928) 734-3609

The Permittee shall follow up with a written submission within five (5) days of the time the Permittee becomes aware of noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. The following shall be included as information which must be reported within 24-hours under this paragraph.

- i. Any unanticipated bypass which exceeds any effluent limit in the permit (see

40 CFR 122.44(g)).

- ii. Any upset which exceeds any effluent limit in the permit.
 - iii. Violation of a maximum daily discharge limit for any of the pollutants listed by the director in the permit to be reported within 24-hours (see 40 CFR 122.44(g)).
3. EPA may waive the written report on a case-by-case basis for reports required under paragraph B.2, if the oral report has been received within 24 hours.

E. Summary of Special Reports

The Permittee is required to submit special reports in this permit by the dates listed below in Table 5. The Permittee shall submit all reports to EPA at R9NPDES@epa.gov. The Permittee shall also submit reports to Navajo Nation EPA and Hopi tribe in addition to any specific reporting instructions otherwise specified in this permit.

When submitting reports to R9NPDES@epa.gov, the Permittee shall include the following information in the subject line:

- 1. The permit number (NN0022179)
- 2. The name of the report as written in the table below.
- 3. The word “submittal”

Table 5. Special Reports to Submit to EPA.

Special Report Name	Due Date	Permit Section
Annual Seep Monitoring Report	One year after effective date of permit, then annually thereafter through term of Permit.	Part I. F.

PART III. POLLUTION PREVENTION PLAN REQUIREMENTS

- 1. In accordance with section 304(e) of the CWA and 40 CFR 122.44(k), the Permittee shall develop and implement appropriate pollution prevention measures or Best Management Practices designed to control site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage which are associated with or ancillary to the maintenance, transportation, and storage of petroleum products or other potential pollutants at the facility that may contribute significant amounts of such pollutants to surface waters. The Permittee shall develop (or update) and implement a Pollution Prevention Plan (the Plan) that describes the pollution prevention measures or BMPs that specifically apply to the facility.
- 2. The Plan must identify the potential sources of pollution which may reasonably be expected to affect the quality of the effluent discharges from the facility, describe and ensure implementation practices which will be used to reduce the pollutants in effluent

discharges from the facility, and assure compliance with the terms and conditions of this permit. The Plan must be revisited and updated, if necessary, within 30 days from effective date of permit and implemented by 90 days from effective date of permit. The Plan requirements are based on EPA's NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, dated June 4, 2015, and on the circumstances of the facility.

3. The Plan shall include the following contents:
 - a. the identification of a pollution prevention committee (with name of each individual member) or individual(s) (by name or title) within the facility organization responsible for developing, implementing, and maintaining the Plan.
 - b. a description of the facility that includes:
 - i. a description of the nature of the industrial activity(ies) at the facility;
 - ii. a general location map (e.g., USGS quadrangle, or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility; and
 - iii. a drainage site map identifying the directions (using arrows) of storm water and non-storm water flow; location of areas where storm water and non-storm water co-mingle, if applicable; locations of all existing structural BMPs and all surface water bodies; locations of potential pollutant sources and locations of significant materials and activities (e.g., fueling stations, vehicle and equipment cleaning areas, loading/unloading areas, locations used for treatment, storage and disposal of wastes, processing and storage areas, liquid storage tanks, location of transfer of substance in bulk, etc.) that exposed to precipitation; and locations of storm water outfalls.
 - c. the name of the nearest receiving water(s) that receives or may receive effluent discharges from the facility.
 - d. a summary of potential pollutant sources that includes: a description of each separate area of the facility where industrial materials or activities that generate non-storm water effluent and those that are exposed to storm water (e.g., on-site waste storage or disposal, dirt/gravel parking areas for vehicles for vehicles awaiting maintenance, fueling areas, bulk storage areas); and a list of associate pollutant(s) or parameters (e.g., pH, BOD, etc.) for each material or activity.
 - e. a description of existing and planned BMPs for storm water and non-storm water controls; the Plan shall describe the type and location of existing non-structural and structural BMPs selected for each of the areas where industrial materials or activities are exposed to storm water or generate non-storm water; selection of BMPs should take into consideration the quantity and nature of the pollutants, and their potential to impact the water quality of the receiving water, non-structural and structural BMPs must include, but are not limited to the following:
 - i. good housekeeping: the Permittee must keep all exposed areas of the facility in a clean, orderly manner where such exposed areas could contribute pollutants to storm water and non-storm water discharges;
 - ii. vehicle and equipment storage areas must be regularly inspected and cleaned for spills and leaks (including storm inlets); and have spill response equipment (e.g., drip pans, sorbent pads) to respond immediately to spills or leaks;
 - iii. vehicle and equipment fueling areas must have measures that prevent or minimize

- contamination of storm water runoff from these areas such as covering the fueling area, using spill/overflow protection and cleanup equipment, using proper cleaning methods instead of hosing down area, minimizing runoff to fueling areas, and treating and/or recycling collected storm water and non-storm water runoff;
- iv. material storage areas with storage vessels (e.g., for used oil/oil filters, cleaning solvents, hydraulic fluids, petroleum and oil-related products) must be maintained to prevent contamination of storm water; examples include storing the materials indoors and installing berms/dikes around area(s); these areas shall have proper storage of all fluids, including greases, used oil, cleaning solvents, hydraulic and transmission fluids, in accordance with local and federal laws;
 - v. vehicle and equipment (e.g., tank, fuel lines) cleaning areas must have measures that prevent or minimize contamination of storm water runoff from all areas used for vehicle and equipment cleaning; these areas should have appropriate containment and/or diversionary structures or equipment to ensure wash water is discharge to the sanitary sewer or is filtered and recycled where feasible; and
 - vi. vehicle and equipment maintenance areas must have measures that prevent or minimize contamination of storm water runoff from all areas used for vehicle and equipment maintenance such as performing maintenance activities indoor; using drip pans and treating and/or recycling storm water and non-storm water runoff.
- f. minimizing exposure: where practicable, industrial materials and activities should be protected to prevent exposure to rain or runoff.
 - g. preventive maintenance: the Plan must describe the facility's preventive maintenance program that includes timely inspections and maintenance of storm water and non-storm water management devices, (e.g., cleaning oil/water separators) as well as inspecting, testing, maintaining and repairing facility equipment and systems to avoid breakdowns or failures that may result in discharges of pollutants to surface waters; all BMPs listed in the Plan must be maintained in effective operating condition to control source runoff.
 - h. spill prevention and response procedures: the Permittee is required to develop and implement a Spill Prevention, Control and Countermeasure Plan in accordance with 40 CFR 112; the Plan must describe the procedures that will be followed for cleaning up spills or leaks and for disposal of oil and hazardous waste; measures for cleaning up spills or leaks and disposal of such materials must be consistent with applicable RCRA regulations at 40 CFR 264 and 265 and CWA regulations at 40 CFR 112.
 - i. routine facility inspections: the Plan must have qualified personnel inspect all areas of the facility where industrial materials or activities are exposed to storm water and non-storm water (i.e., storage areas for vehicles/equipment awaiting maintenance, fueling areas, vehicle/equipment maintenance areas, material storage areas, line-flushing area, vehicle/equipment cleaning areas, and loading/unloading area, location(s) of oil/water separators, storm drains, etc.); inspections must include an evaluation of existing BMPs; the Plan must identify how often the inspections are to occur.
 - j. employee training: the Plan must describe the storm water and non-storm water training program for the facility; topics should include spill response, good housekeeping and material management practices, proper fueling practices, proper

- painting or sandblasting procedures for the removal of paint, and must identify periodic dates for such training; training must be provided to all employees that operate in areas where industrial materials or activities generate non-storm water or are exposed to storm water; employee training shall occur at least once per year.
- k. sediment and erosion control: the Plan must identify the areas of the facility that have a potential for significant soil erosion; and the Plan must describe the structural, vegetative, and/or stabilization BMPs that are or will be implemented to limit erosion.
 - l. management of runoff: the Plan must describe the traditional storm water and non-storm water management practices (permanent structural BMPs other than those which control the generation or source(s) of pollutants) that currently exist or that are planned for the facility; these BMPs typically are used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm water or non-storm water discharges from the site; examples include oil/water separators and retention basins.
 - m. a copy of this Permit.
4. The Plan must have management approval and be maintained and amended whenever there is a change in design, construction, operation, or maintenance of the facility which has a significant effect on the discharge, or potential for discharge, of pollutants from the facility.
 5. The Plan must be maintained and amended whenever there is indication of pollutants in the effluent discharge that may impact water quality standards; indication of pollutants requires the Permittee to evaluate potential pollutant sources and corresponding BMPs and make appropriate Plan revisions; the Permittee shall implement timely corrective actions and revise BMPs, as necessary.
 6. The Plan must be retained on-site and be made available, upon request, for review at the time of an EPA and Navajo EPA inspection.

Part IV. STANDARD CONDITIONS

The permittee shall comply with all EPA Region 9 Standard Conditions below.

A. All NPDES Permits

In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.

1. Duty to comply; at 40 CFR 122.41(a).

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person

shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- c. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of this Act. The statutory administrative civil penalty amounts for CWA violations, as adjusted for inflation, are set forth in 40 C.F.R. § 19.4.

2. Duty to reapply; at 40 CFR 122.41(b).

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. Any permittee with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.

3. Need to halt or reduce activity not a defense; at 40 CFR 122.41(c).

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate; at 40 CFR 122.41(d).

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper operation and maintenance; at 40 CFR 122.41(e).

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. Permit actions; at 40 CFR 122.41(f).

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property rights; at 40 CFR 122.41(g).

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to provide information; at 40 CFR 122.41(h).

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

9. Inspection and entry; at 40 CFR 122.41(i).

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

10. Monitoring and records; at 40 CFR 122.41(j).

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed
 - (4) The individuals(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40

CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.

- e. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

11. Signatory requirement; at 40 CFR 122.41(k).

- a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.) All permit applications shall be signed as follows:

- (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.

- (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional

Administrators of EPA).

- b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this section;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
 - (3) The written authorization is submitted to the Director.
- c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
- e. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

12. Reporting requirements; at 40 CFR 122.41(l).

- a. Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required only when:
- (1) The alteration or addition to a permitted facility may meet one of the criteria for

- determining whether a facility is a new source in 40 CFR 122.29(b); or
- (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- b. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
 - c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the CWA. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)
 - (1) Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR 122.62(b)(2)), or a minor modification made (under 40 CFR 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.
 - (2) Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - (A) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
 - (B) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (C) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.
 - d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016, all reports and forms submitted in compliance with this section must be submitted electronically by the

- permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR 127.
- (2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 503, or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
 - f. Twenty-four hour reporting.
 - (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127.
 - (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g).)
 - (B) Any upset which exceeds any effluent limitation in the permit.
 - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40

CFR 122.44(g.)

- (3) The Director may waive the written report on a case-by-case basis for reports under 40 CFR 122.41(l)(6)(ii) of this section if the oral report has been received within 24 hours.
 - g. Other noncompliance. The permittee shall report all instances of noncompliance not reported under 40 CFR 122.41(l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.
 - h. Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
13. Bypass; at 40 CFR 122.41(m).
- a. Definitions.
 - (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 40 CFR 122.41(m)(3) and (m)(4) of this section.
 - c. Notice.
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).
 - (3) As of December 21, 2020 all notices submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in [40 CFR 127.2\(b\)](#), in compliance with this section and [40 CFR part 3](#) (including, in all cases, subpart D to part 3), [40 CFR 122.22](#), and [40 CFR part 127](#). Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.
 - d. Prohibition of bypass.
 - (1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (C) The permittee submitted notices as required under paragraph (m)(3) of this section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

14. Upset; at 40 CFR 122.41(n).

- a. Definition. “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24-hour notice).
 - (4) The permittee complied with any remedial measures required under paragraph (d) of this section.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Reopener Clause; at 40 CFR 122.44(c).

For any permit issued to a treatment works treating domestic sewage (including “sludge-only facilities”), the Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA. The Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

16. Minor modifications of permits; at 40 CFR 122.63.

Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 40 CFR 124. Any permit modification not processed as a minor modification under this section must be made for cause and with 40 CFR 124 draft permit and public notice as required in 40 CFR 122.62. Minor modifications may only:

- a) Correct typographical errors;
- b) Require more frequent monitoring or reporting by the permittee;
- c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
- d) Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.
- e) Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR 122.29.
- f) Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
- g) Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.

17. Termination of permits; at 40 CFR 122.64.

The following are causes for terminating a permit during its term, or for denying a permit renewal application:

- a) Noncompliance by the permittee with any conditions of the permit;
- b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
- c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- d) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

18. Availability of Reports; pursuant to CWA section 308

Except for data determined to be confidential under 40 CFR 2, all reports prepared in

accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential.

19. Removed Substances; pursuant to CWA section 301

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials entering waters of the U.S.

20. Severability; pursuant to CWA section 512

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

21. Civil and Criminal Liability; pursuant to CWA section 309

Except as provided in permit conditions on "Bypass" and "Upset", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

22. Oil and Hazardous Substances Liability; pursuant to CWA section 311

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

23. State, Tribe, or Territory Law; pursuant to CWA section 510

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State, Tribe, or Territory law or regulation under authorities preserved by CWA section 510.

B. Specific Categories of NPDES Permits

In accordance with 40 CFR 122.42, the following conditions, in addition to those set forth at 40 CFR 122.41, apply to all NPDES permits within the category specified below and are expressly incorporated into this permit.

1. Existing manufacturing, commercial, mining, and silviculture dischargers; at 40 CFR 122.42 (a). All existing manufacturing, commercial, mining, and silviculture dischargers must notify the Director as soon as they know or have reason to believe;

- a. *That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":*

- (1) One hundred micrograms per liter (100 µg/l);

- (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - (4) The level established by the Director in accordance with 40 CFR 122.44(f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
- (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
 - (4) The level established by the Director in accordance with 40 CFR 122.44(f).
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Attachment A – “Alkaline Mine Drainage” Outfalls

<u>Outfall Number/ Serial Number</u>	<u>Latitude Deg.Min.Sec.</u>	<u>Longitude Deg.Min.Sec.</u>	<u>Receiving Water</u>
010/J3-A	36-28-45	110-25-00	Coal Mine Wash Trib.
012/N6-E	36-30-30	110-25-15	Coal Mine Wash Trib.
026/MW-A	36-27-30	110-23-45	Moenkopi Wash
027/MW-B	36-27-30	110-23-45	Moenkopi Wash
030/J16-D	36-30-00	110-18-30	Moenkopi Tributary
045/WW-6#1	36-30-00	110-22-15	Moenkopi Tributary
081/N1-O	36-32-00	110-24-00	Coal Mine Wash
086/WW-4	36-26-45	110-24-45	Moenkopi Wash
088/WW-9A	36-23-45	110-24-45	Yucca Flat Wash Trib.
089/WW-9B	36-23-45	110-24-45	Yucca Flat Wash Trib.
090/WW-9C	36-24-15	110-24-30	Yucca Flat Wash Trib.
141/J3-F	36-28-00	110-25-15	Coal Mine Wash Trib.
142/J3-G*	36-28-00	110-25-15	Coal Mine Wash Trib.
159/N11-A*	36-32-20	110-22-40	Coal Mine Wash
162/N11-G*	36-32-30	110-21-40	Coal Mine Wash
177/J21-G	36-24-44	110-16-40	Dinnebito Wash
179/J7-JR*	36-26-13	110-19-52	Red Peak Valley Wash
180/J19-A	36-27-28	110-19-24	Reed Valley Wash
181/J19-B	36-27-16	110-20-10	Red Peak Valley Wash
182/J19-D	36-26-50	110-19-55	Red Peak Valley Wash
183/J19-E	36-26-42	110-19-55	Red Peak Valley Wash
184/N9-A	36-34-49	110-23-56	Yellow Water Canyon
185/N9-B	36-33-49	110-24-13	Yellow Water Canyon
186/N9-C	36-33-23	110-24-49	Yellow Water Canyon
187/N9-D	36-33-18	110-25-02	Yellow Water Canyon
189/N9-F	36-32-44	110-25-31	Yellow Water Canyon
190/N9-G	36-33-27	110-25-51	Yazzie Wash
191/N9-H	36-33-58	110-25-46	Yazzie Wash
192/N9-I	36-34-13	110-25-32	Yazzie Wash
195/J21-H	36-26-29	110-17-04	Dinnebito Wash
196/J21-I*	36-23-55	110-17-40	Dinnebito Wash
197/J3-B*	36-28-34	110-24-05	Moenkopi Wash

Attachment B – “Coal Preparation & Associated Areas” Outfalls

<u>Outfall Number/ Serial Number</u>	<u>Latitude Deg.Min.Sec.</u>	<u>Longitude Deg.Min.Sec.</u>	<u>Receiving Water</u>
001/N1-F	36-31-45	110-24-45	Coal Mine Wash
002/N1-L	36-31-45	110-24-15	Coal Mine Wash
003/N1-M	36-32-45	110-24-15	Coal Mine Wash
009/N10-C	36-32-00	110-24-00	Coal Mine Wash
014/N10-D*	36-32-30	110-23-00	Coal Mine Wash Trib.
016/N12-C*	36-32-15	110-23-15	Coal Mine Wash Trib.
017/BM-A1	36-26-30	110-24-00	Moenkopi Tributary
043/N14-Q	36-30-00	110-19-15	Moenkopi Tributary
047/J7-DAM*	36-25-30	110-23-30	Red Peak Valley
054/N1-AC	36-32-00	110-25-45	Yellow Water Canyon
083/N5-F	36-31-15	110-25-00	Coal Mine Wash
094/N10-B1	36-33-00	110-22-15	Coal Mine Wash Trib.
095/KM-D	36-31-30	110-25-15	Coal Mine Wash Trib.
098/BM-SS	36-27-00	110-23-45	Moenkopi Tributary
099/J3-E*	36-28-45	110-23-30	Moenkopi Tributary
103/N14-B	36-31-00	110-20-30	Moenkopi Tributary
104/N14-C*	36-30-00	110-19-15	Moenkopi Tributary
105/BM-B	36-26-45	110-24-00	Moenkopi Tributary
106/KM-A3	36-31-45	110-26-00	Yellow Water Canyon
107/KM-B	36-31-30	110-26-00	Yellow Water Canyon
118/TPC-A	36-33-00	110-29-15	Long House Valley Trib.
126/TS-A	36-33-45	110-31-00	Klethla Valley
127/J16-A*	36-30-00	110-18-15	Moenkopi Tributary
130/N14-P	36-31-00	110-20-30	Moenkopi Tributary
133/J16-L*	36-30-45	110-19-30	Reed Valley
136/KM-TPB	36-31-15	110-28-00	Yellow Water Canyon Trib.
137/KM-TPB1	36-33-00	110-28-00	Yellow Water Canyon Trib.
139/KM-E	36-31-15	110-25-30	Coal Mine Wash Trib.
140/J2-A*	36-29-00	110-25-45	Wild Ram Valley
149/J27-A	36-27-15	110-23-15	Moenkopi Tributary
152/TS-B	36-33-30	110-31-15	Klethla Valley
167/TPF-E*	36-32-00	110-26-02	Yellow Water Canyon
188/N9-E	36-32-56	110-25-24	Yellow Water Canyon

Attachment C – “Western Alkaline Reclamation Areas” Outfalls

Outfall Number/ Serial Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water
005/N5-A*	36-31-15	110-24-45	Coal Mine Wash
008/N10-A1*	36-32-45	110-22-30	Coal Mine Wash
013/N10-B	36-33-00	110-22-15	Coal Mine Wash Trib.
021/N6-C	36-29-30	110-22-45	Moenkopi Tributary
022/N6-D	36-29-15	110-23-00	Moenkopi Tributary
024/N14-F*	36-30-30	110-18-30	Moenkopi Tributary
025/N14-G*	36-30-30	110-18-15	Moenkopi Tributary
031/J16-E	36-30-00	110-18-30	Moenkopi Tributary
032/J16-F	36-30-00	110-18-45	Moenkopi Tributary
033/J16-G*	36-29-45	110-19-00	Moenkopi Tributary
037/N6-F	36-30-45	110-22-30	Moenkopi Tributary
039/N14-H*	36-30-45	110-17-30	Moenkopi Tributary
048/J7-G	36-25-00	110-24-15	Red Peak Valley
049/J7-CD	36-24-45	110-22-15	Sagebrush Wash
050/J7-E	36-24-45	110-22-30	Sagebrush Wash
051/J7-F	36-24-30	110-22-30	Sagebrush Wash
052/J7-K	36-24-30	110-23-00	Sagebrush Wash
069/J7-I	36-24-45	110-24-30	Yucca Flat Wash Trib.
070/J7-J	36-24-30	110-24-30	Yucca Flat Wash Trib.
071/J7-M	36-24-15	110-24-15	Yucca Flat Wash Trib.
079/J21-A*	36-26-15	110-14-45	Dinnebito Wash
082/N5-E	36-31-15	110-25-00	Coal Mine Wash
147/J7-A	36-25-30	110-23-30	Red Peak Valley
148/J21-C*	36-26-00	110-15-30	Dinnebito Wash
150/N6-G	36-29-30	110-23-00	Coal Mine Wash
151/N6-H	36-29-30	110-23-00	Coal Mine Wash
153/N6-I	36-31-45	110-24-15	Coal Mine Wash
157/N6-J	36-31-45	110-24-00	Coal Mine Wash
160/N11-C	36-32-25	110-22-35	Coal Mine Wash
161/N11-E	36-32-35	110-22-25	Coal Mine Wash
163/J7-B1	36-25-10	110-23-58	Red Peak Valley
164/N6-L	36-31-58	110-23-58	Coal Mine Wash
165/N6-M	36-32-12	110-23-27	Coal Mine Wash
169/J7-R	36-24-05	110-24-00	Moenkopi Tributary
170/J7-S	36-24-05	110-23-50	Yucca Flat Wash
171/J7-T	36-24-00	110-23-40	Yucca Flat Wash
172/J7-U	36-24-10	110-23-30	Yucca Flat Wash
173/J7-V	36-24-10	110-23-20	Yucca Flat Wash
174/J21-D	36-25-39	110-15-37	Dinnebito Wash
175/J21-E	36-25-32	110-15-49	Dinnebito Wash
176/J21-F	36-25-23	110-16-00	Dinnebito Wash
178/J27-RC*	36-27-08	110-23-02	Moenkopi Tributary

*An outfall name followed by an asterisk indicates that a given outfall (or an impoundment upstream of and in-series with the given outfall) will remain in the final post-mining landscape. All outfalls listed without an asterisk are temporary and will be removed or reclaimed as part of the final mine-wide reclamation process.

Attachment D: DEFINITIONS

1. “Average monthly discharge limitation” means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.
2. “Average weekly discharge limitation” means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
3. “Best Management Practices” or “BMPs” are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the U.S. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.
4. A “composite” sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
5. A “daily discharge” means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.
6. A “daily maximum allowable effluent limitation” means the highest allowable “daily discharge.”
7. A “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the Permittee.
8. A “grab” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
9. The “method detection limit” or “MDL” is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is distinguishable from the method blank results, as defined by a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.

10. The “minimum level” or “ML” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.)

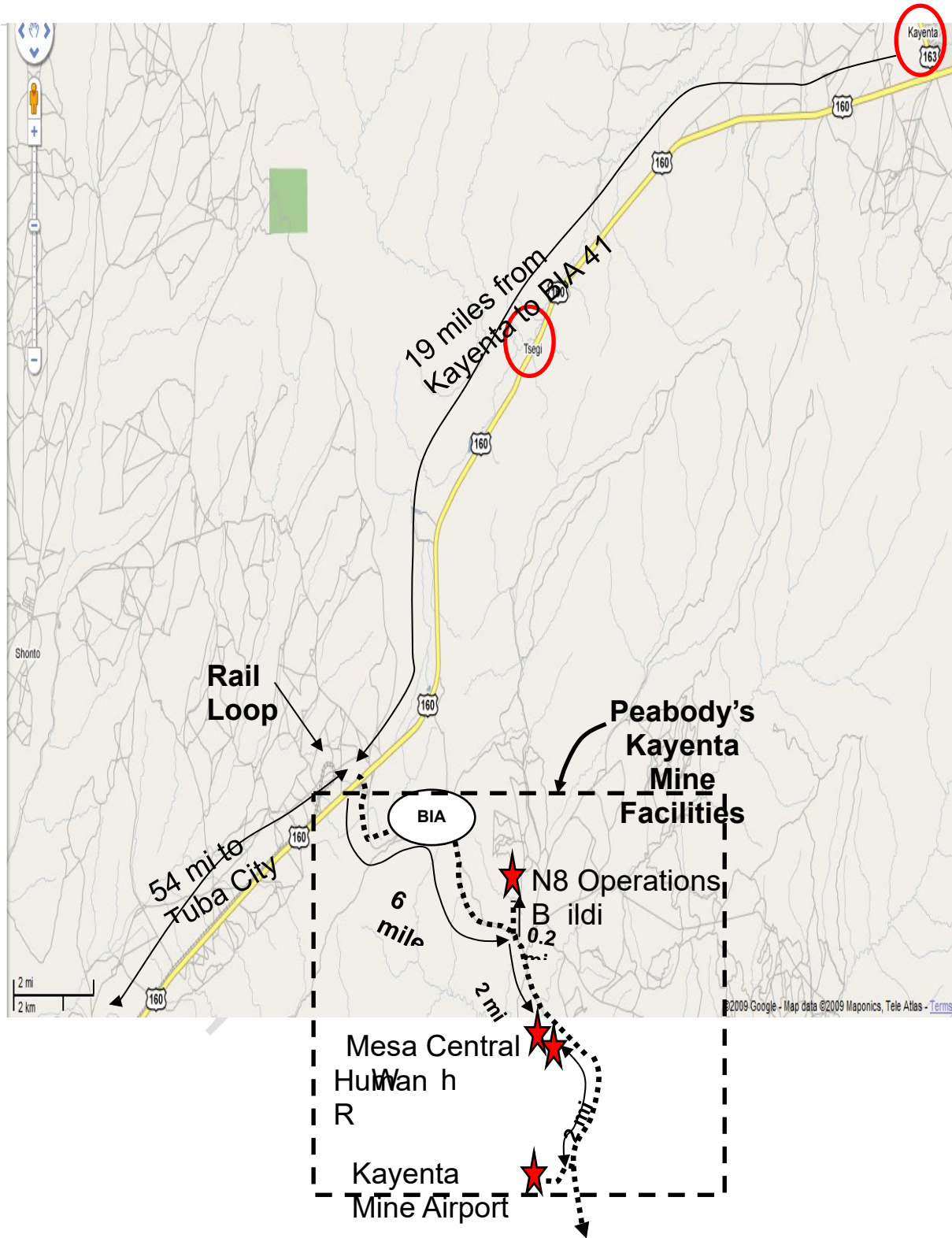
At this point in the calculation, a different procedure is used for metals, than non-metals:

- a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
- b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) $\times 10^n$, where n is zero or an integer. (For example, if an MDL is 2.5 $\mu\text{g/l}$, then the calculated ML is: $2.5 \mu\text{g/l} \times 3.18 = 7.95 \mu\text{g/l}$. The multiple of (1, 2, or 5) $\times 10^n$ nearest to 7.95 is $1 \times 10^1 = 10 \mu\text{g/l}$, so the calculated ML, rounded to the nearest whole number, is 10 $\mu\text{g/l}$.)

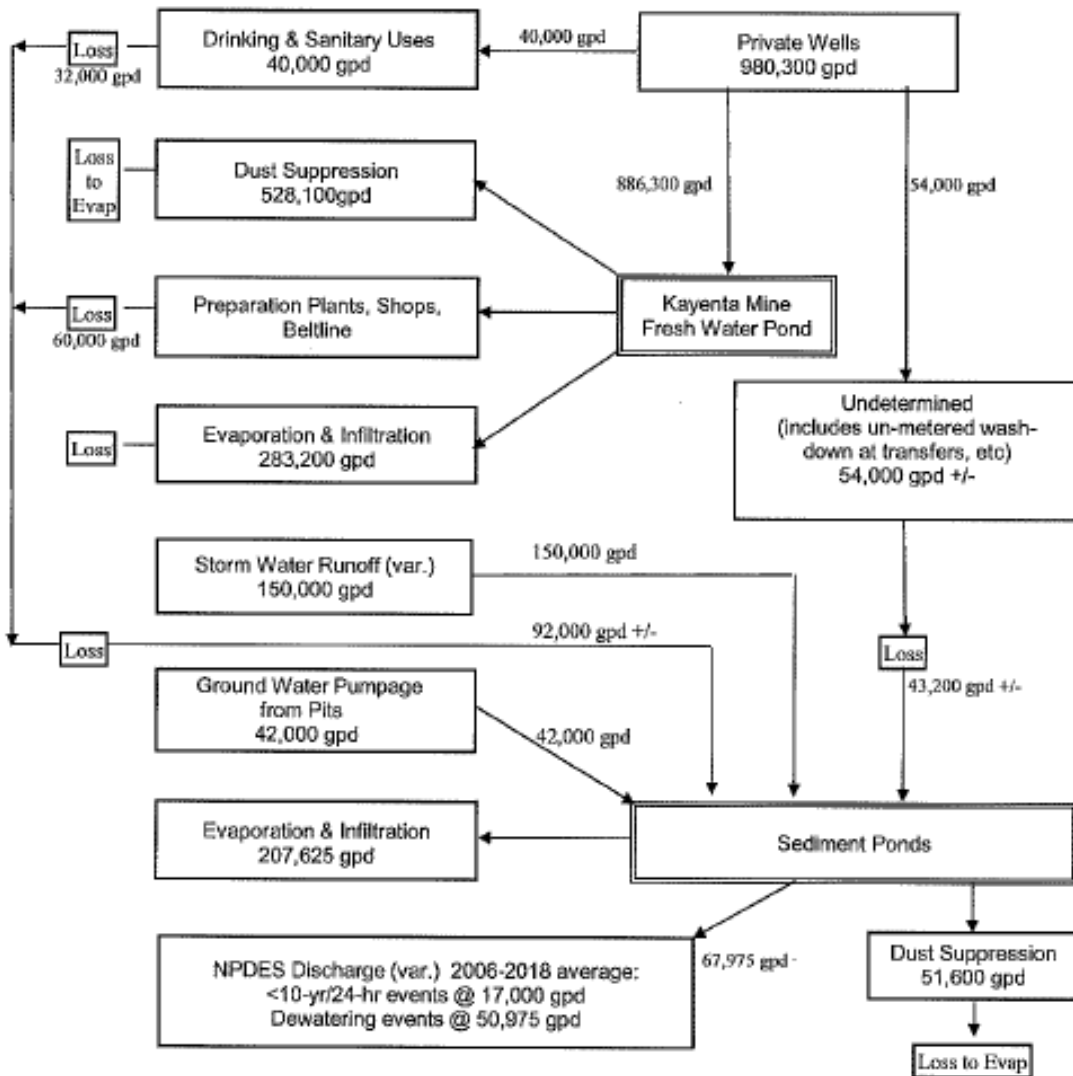
11. A “NODI(B)” means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory’s MDL.

12. A “NODI(Q)” means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory’s MDL, but less than the ML.

Attachment E: LOCATION MAP – vicinity of Kayenta, Arizona



Attachment F: Flow, Sources of Pollution and Treatment Technologies – Black Mesa and Kayenta Mines



Losses in system assumed to be ~80% at all locations

10/30/2018