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

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. NN0000019

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:

Discharger Name	Arizona Public Service Company
Discharger Address	P.O. Box 53999 Phoenix, Arizona 85072-3999
Facility Name	APS Four Corners Power Plant
Facility Location Address	20 Miles SW of Farmington San Juan County, New Mexico 87416
Facility Rating	Major

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Cooling Pond Discharge	36˚42' 16.5" N	108˚ 29' 12" W	No-name tributary to Chaco River

This permit was issued on:	
This permit shall become effective on:	<1st of month following 33 days after issue date>
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 _____, <201#>, for the Regional Administrator.

_____
Jane Diamond, Director
Water Division

Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Effluent Limits and Monitoring Requirements

1. Outfall Number 001 - Cooling Pond Discharge

During the period beginning on the effective date of this permit and lasting through the date of expiration, the Permittee is authorized to discharge from Outfall No. 001

Such discharge shall be limited and monitored by the Permittee as specified below. Samples shall be collected and flow measurements taken at the point where Morgan Lake blowdown water discharge through the existing parshall flume.

Table 1. Effluent Limits and Monitoring Requirements – Outfall Number 001

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements(2)	
	Average Monthly	Maximum Daily	Units	Frequency	Sample Type	
Temperature, water deg. centigrade	32.2	35	˚C	Continuous	Discrete	
Flow rate	(1)	14.7	MGD	Once/Week	Calculated	
TDS	(2)	(2)	mg/L	Once/Month	Discrete	
pH	between 6.0 to 9.0			Once/Week	Discrete	
Priority Pollutant Scan				Once /In year 4 of the Permit Term	24 Hour-Composite	

NOTES:

1. Report both average weekly/monthly and maximum daily flows
2. During Periods of Discharge. Total Dissolved Solids shall be determined by the "calculation method" (sum of constituents) as described in the 1979 edition of "Techniques of Water Resources Investigations of the United States Geological

survey-Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," or any subsequent editions.

2. Outfall Number 001 - Narrative Surface Water Quality Standards

Discharge from Outfall 001 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 a film or iridescent appearance on the surface of the water body; or 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.
i. 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.

3. Internal Outfall 01A – Condenser Cooling Water Discharge

a. During the period beginning on the effective date of this permit and lasting through date of expiration, the Permittee is authorized to discharge from Internal Outfall 01A.

Such discharge shall be limited and monitored by the Permittee as specified below. Stormwater runoff is included in this discharge. Samples shall be

collected at the point where condenser cooling water from 4 and 5 is discharged from the circulating water canal to Morgan Lake

Table 2.1 Effluent Limits and Monitoring Requirements – Outfall Number 01A

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Flow	-	-	-	MGD	Once/Week	Calculated (1)
TRC(2,3)	-	-	954	lbs/day	Once/Week	Discrete
	-	-	0.2	mg/L	Once/Week	Discrete
Oil & Grease	15.0		20.0	mg/L	Once/Week	Discrete
pH	between 6.0 to 9.0 std. units				Once/Week	Discrete

NOTES:

(1) Based upon pumping records. Report both average and maximum daily flows
(2) As defined in 40 CFR 423.11. Limits for total chlorine are set in accordance with 40 CFR 423.13(b)(1) for once through cooling water. Internal Outfall No. 01A discharge is further restricted by 40 CFR 423.13(2) in that total residual chlorine may not be discharged from any single generating unit for more than two hours per day. Simultaneous multi-unit chlorination is permitted.
(3) Samples shall be collected during periods of chlorination. Permittee shall report both concentration and mass loading values.

b. Effluent Toxicity Testing:

Effluent toxicity shall be monitored and defined as follows. The Permittee shall only be required to conduct chronic toxicity testing if discharges from Internal Outfall No. 01A are known to occur during at least five (5) consecutive days. If there is continuous discharge from Outfall No. 01A, the Permittee shall conduct toxicity tests on 24-hour composite effluent samples on a quarterly basis. Following a year of quarterly testing, and if there is evidence that there is no reasonable potential for chronic toxicity, the Permittee may apply to EPA for a reduction in toxicity testing frequency and also request toxicity testing using the single, most sensitive species. The most sensitive species is the fish, invertebrate, or alga species which demonstrates the largest percent effect level at the In-stream Waste Concentration (IWC), where:

IWC percent effect level = [(Control mean response − IWC mean response) ÷ Control mean response] × 100.

Chronic toxicity test samples shall be taken at the NPDES sampling location. A split of each sample shall also be analyzed for all other monitored parameters at the minimum frequency specified for that parameter. See Table 2.1 above

2. Freshwater Species and Test Methods

   Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the fourth edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR 136).

   The permittee shall conduct static renewal toxicity tests with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0); the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.01); and the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

3. Chronic WET Permit Trigger

   For this discharge, the determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the IWC of 100 percent effluent is determined using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010). For any one chronic toxicity test, the chronic WET permit trigger that must be achieved is rejection of the null hypothesis (H_o):

   IWC (100 percent effluent) mean response $\leq 0.75 \times$ Control mean response.

   A test result that rejects this null hypothesis is reported as "Pass" on the DMR form. A test result that does not reject this null hypothesis is reported as "Fail" on the DMR form. To calculate either "Pass" or "Fail", the Permittee shall follow the instructions in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A. If a test result is reported as "Fail", then the Permittee shall follow Section 6 (Accelerated Toxicity Testing and TRE/TIE Process) of this permit.

4. Quality Assurance

   a. Quality assurance measures, instructions, and other recommendations and requirements are found in the chronic test methods manual previously referenced. Additional requirements are specified below.

   b. This discharge is subject to a determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the IWC (for statistical flowchart and procedures, see *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A, Figure A-1). The chronic IWC for this discharge is 100 percent effluent.

d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

e. All multi-concentration reference toxicant test results must be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136)* (EPA 821-B-00-004, 2000).

f. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the Permittee shall resample and retest within 14 days.

g. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.

h. pH drift during a toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in the effluent. To determine whether or not pH drift is contributing to artifactual toxicity, the permittee shall conduct three sets of side-by-side toxicity tests in which the pH of one treatment is controlled at the pH of the effluent while the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. Upon this confirmation and following written approval by the permitting authority, the Permittee may use the procedures outlined in Section 11.3.6.2 of the chronic freshwater test methods manual to control effluent sample pH during the toxicity test.

5. Initial Investigation TRE Work Plan

Within 90 days of the permit effective date, the Permittee shall prepare and submit to the permitting authority a copy of its Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan (1-2 pages) for review. This plan shall include steps the permittee intends to follow if toxicity is measured above the chronic WET trigger and should include the following, at minimum:

a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

6. Accelerated Toxicity Testing and TRE/TIE Process

a. If the chronic WET trigger is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the Permittee shall conduct one additional toxicity test using the same species and test method. This toxicity test shall begin within 14 days of receipt of a test result exceeding the chronic WET permit trigger. If the additional toxicity test does not exceed the chronic WET permit trigger, then the Permittee may return to the regular testing frequency.

b. If the chronic WET trigger is exceeded and the source of toxicity is not known, then the Permittee shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12-week period. This testing shall begin within 14 days of receipt of a test result exceeding the chronic WET permit trigger. If none of the additional toxicity tests exceed the chronic WET permit trigger, then the Permittee may return to the regular testing frequency.

c. If one of the additional toxicity tests (in paragraphs 6.a or 6.b) exceeds the chronic WET permit trigger, then, within 14 days of receipt of this test result, the Permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction, the Permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the Permittee to investigate, identify, and correct the causes of toxicity; actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

d. The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).

7. Reporting of Chronic Toxicity Monitoring Results

   a. The Permittee shall report on the DMR for the month in which the toxicity test was conducted: "Pass" or "Fail" (based on the Welch's t-test result) and the calculated "percent mean response at IWC", where:

      percent mean response at IWC = ((Control mean response – IWC mean response) ÷ Control mean response)) × 100

   b. The Permittee shall submit a full laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The laboratory report shall contain: the toxicity test results; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

   c. The Permittee shall notify the permitting authority in writing within 14 days of exceedance of the chronic WET trigger. This notification shall describe actions the Permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

8. Permit Reopener for Chronic Toxicity

   In accordance with 40 CFR 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to chronic toxicity.

Table 2.2. Toxicity Limits and Monitoring Requirements – Outfall Number 01A

Parameter	Discharge Limitation	Monitoring Requirements(2)	
	Daily Maximum	Frequency	Sample Type
Chronic Toxicity Testing	(1)	(2)	Composite

NOTES:

(1) There is no discharge limitation for chronic toxicity at this time. Monitoring and reporting for chronic toxicity are specified in Section 1 and 2 below.

(2) See discussion in Section 3.b. above for determination of frequency of Chronic toxicity testing.

4. Internal Outfall 01B – Chemical Metal Cleaning Wastewater

During the period beginning on the effective date of this permit and lasting through date of expiration, the Permittee is authorized to discharge from Internal Outfall No. 01B.

Such discharges shall be limited and monitored by the Permittee as specified below. Samples shall be collected prior to mixing with any other waste source stream and/or discharge to the circulating water canal.

Table 3. Effluent Limits and Monitoring Requirements – Outfall Number 01B

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements(2)	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Flow(1)	-	-	-	MGD	Once/Day	Estimated
TSS	-	30	100	mg/L	1/Occurrence	Discrete
Oil & Grease	-	15	20	mg/L	1/Occurrence	Discrete
Iron	-	1.0	1.0	mg/L	1/Occurrence	Discrete
Copper, total	-	1.0	1.0	mg/L	1/Occurrence	Discrete
pH	between 6.0 to 9.0 std. units				1/Occurrence	Discrete

NOTES:

(1) Defined in 40 CFR 423.11

5. <u>Internal Outfall 01E – Combined Waste Treatment Pond Discharge</u>

During the period beginning with the effective date of this permit and lasting through the date of expiration, the Permittee is authorized to discharge from Internal Outfall No. 01E.

Such discharges shall be limited and monitored by the Permittee as specified below. Samples shall be collected prior to mixing with any other waste source stream and/or release to the circulating water canal.

Table 4. Effluent Limits and Monitoring Requirements – Outfall Number 01E

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Flow	-	-	-	MGD	Once/Week	Estimated (1)
TSS	-	30	100	mg/L	Once/Week	Discrete
Oil & Grease	15.0		20.0	mg/L	Once/Week	Discrete
pH	between 6.0 to 9.0 std. units				Once/Week	Discrete

NOTES:

(1) Report both average and maximum daily flows.

B. General Discharge Specification

1. **PCB Fluids**

As per 40 CFR 423.13 There shall be no discharge of polychlorinated biphenyl (PCB) fluids from any waste streams.

2. **Surface Seepage**

Surface seepage intercept systems shall be constructed and operated for existing and future unlined ash ponds. Water collected by these intercept systems shall be returned to the ash ponds, or evaporation ponds. All provisions of the Seepage Monitoring and Management Plan as described below in the Special Conditions Section must be implemented.

3. **Cooling Water Requirements**

The Permittee shall submit all the material required under 40 CFR 122.21 (r) (1)-(8) upon submittal of their next renewal application.

C. General Monitoring and Reporting

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 and the water quality criteria concentrations in the National Recommended Water Quality Criteria. 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 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 a format as to allow direct comparison with the effluent limits, monitoring requirements, and conditions of this permit. Monitoring results are to be reported on EPA Form 3320-1, a pre-printed Discharge Monitoring Report form ("DMR") provided by the EPA Region 9 DMR

Coordinator for NPDES. Monthly DMR forms shall be submitted by the 28th day of the month following the previous reporting period. For example, under monthly submission the DMR form for January is due by February 28th, and under quarterly submission, the three DMR forms for January, February, and March are due on April 28th. Monitoring and reporting schedules are as follows:

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	DMR Due Date
Continuous	Permit effective date	Continuous	28th day of the month following calendar quarter
Once/Day	Permit effective date	Midnight through 11:59 p.m.	28th day of the month following calendar quarter
Once/Week	Permit effective date	Sunday through Saturday	28th day of the month following calendar quarter
Once/Month	Permit effective date	First day of the calendar month through last day of the calendar month	28th day of the month following calendar quarter
Once/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	28th day of the month following calendar quarter
Once/Year	January 1 following permit effective date	January 1 through December 31	January 28, each year

A DMR form 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. Duplicate signed copies of these, and all other reports required herein, shall be submitted to EPA at the following addresses:

NPDES Data Team (WTR-7)
EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105

The Discharger has the option to submit all monitoring results in the electronic reporting format approved by EPA. The Discharger may submit DMRs electronically

using EPA's NetDMR application. NetDMR is a national tool for regulated Clean Water Act Permittees to submit DMRs electronically via a secure Internet application to EPA. By using NetDMR, dischargers can discontinue mailing hard copy forms under 40 CFR 122.41 and 403.12

Part II. STANDARD CONDITIONS

The Permittee shall comply with all EPA Region 9 Standard Conditions included in an attachment to this permit (see Attachment A).

Part III. SPECIAL CONDITIONS

A. Seepage Management and Monitoring Plan

A Seepage Monitoring and Management Plan shall be established and implemented to determine the source of and pollutants in seepages below all ash ponds that receive or received coal combustion residue either currently or in the past. The Plan shall be established and submitted to EPA within 120 days of the issuance of this permit. The Plan shall at a minimum do the following:

1. Identify all seeps within 100 meters down gradient of such impoundments;
2. Conduct sampling (or provide summary of current data if sufficient and valid) of seepages for boron, mercury, nickel, selenium, uranium, zinc and total dissolved solids.
3. Provide information about number of flows observed and range of flows observed
4. Provide information about exceedances of any human health, livestock, or chronic or acute aquatic life standards as established in the 2007 NNWQS in the samples collected for analysis.

B. 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 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.

C. Twenty-four Hour Reporting of Noncompliance

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 staff person within 24 hours from the time the Permittee becomes aware of the circumstances. 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 at the following telephone numbers:

U.S. Environmental Protection Agency
CWA Compliance Office (WTR-7)
(415) 972-3577

The Permittee shall follow up with a written submission within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including 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.

1. 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 limit in the permit (see 40 CFR 122.44(g)).

   b. Any upset which exceeds any effluent limit in the permit.

   c. 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)).

2. The Director 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.

Part IV. ATTACHMENTS

Attachment A: 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 greater than zero, 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) x 10n, where n is zero or an integer. (For example, if an MDL is 2.5 µg/l, then the calculated ML is: 2.5 µg/l x 3.18 = 7.95 µg/l. The multiple of (1, 2, or 5) x 10n nearest to 7.95 is 1 x 101 = 10 µg/l, so the calculated ML, rounded to the nearest whole number, is 10 µg/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.

13. "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.

14. "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.

15. "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.

16. 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.

17. 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.

18. A "daily maximum allowable effluent limitation" means the highest allowable "daily discharge."

19. 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.

20. 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.

21. 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 greater than zero, 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.

22. 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) x 10n, where n is zero or an integer. (For example, if an MDL is 2.5 µg/l, then the calculated ML is: 2.5 µg/l x 3.18 = 7.95 µg/l. The multiple of (1, 2, or 5) x 10n nearest to 7.95 is 1 x 101 = 10 µg/l, so the calculated ML, rounded to the nearest whole number, is 10 µg/l.)

23. 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.

24. 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 B: Standard Permit Condition

Attachment C: Location Map

Attachment D: Wastewater Flow Schematic