



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

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CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7010 2780 0002 4353 8994)

Mr. Scott Jones, Vice President
San Juan Coal Company
San Juan Mine
P.O. Box 561
Waterflow, NM 87421

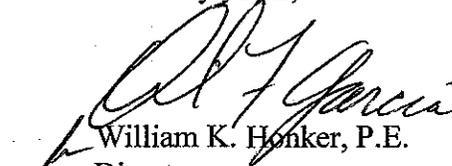
Re: NPDES Permit No. NM0028746
Final Permit Decision

Dear Mr. Jones:

This package constitutes EPA's final permit decision for the above referenced facility. Enclosed are the responses to comments received during the public comment period and the final permit. According to EPA regulations at 40 CFR124.19, within 30 days after a final permit decision has been issued, any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision.

Should you have any questions regarding the final permit, please feel free to contact Isaac Chen of the NPDES Permits Branch at the above address or VOICE:214-665-7364, FAX:214-665-2191, or EMAIL:chen.isaac@epa.gov. Should you have any questions regarding compliance with the conditions of this permit, please contact the Water Enforcement Branch at the above address or VOICE:214-665-6468.

Sincerely yours,


William K. Honker, P.E.
Director
Water Quality Protection Division

Enclosures

cc (w/enclosures): New Mexico Environment Department
Western Environmental Law Center

NPDES PERMIT NO. NM0028746
RESPONSE TO COMMENTS

RECEIVED ON THE SUBJECT DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IN ACCORDANCE WITH REGULATIONS LISTED AT 40CFR124.17

APPLICANT: San Juan Coal Company
San Juan Mine
P.O. Box 561
Waterflow, NM 87421

ISSUING OFFICE: U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

PREPARED BY: Isaac Chen
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PERMIT ACTION: Final permit decision and response to comments received on the draft reissued NPDES permit publicly noticed on January 26, 2013.

DATE PREPARED: August 27, 2013

Unless otherwise stated, citations to 40CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of July 1, 2013.

CHANGES FROM DRAFT PERMIT

There are changes from the draft reissued permit publicly noticed on January 26, 2013. All significant changes and their rationale can be found in the following response to conditions of certification or response to comments.

1. Change discharge authorization to “no discharge” status at Outfall 009;
2. Delete toxicity testing requirements for Outfalls 001, 002, 010, 011, and 012;
3. Delete gross alpha effluent limitation for Outfalls 001, 002, 010, and 011;
4. Delete aluminum effluent limitation for Outfalls 001, 010, and 011;
5. Change acute toxicity testing requirements to chronic testing for Outfalls 006, 007, and 008;
6. Change pH effluent limitation from 6.0 – 9.0 to 6.6 – 9.0 at all authorized outfalls;
7. Delete COD effluent limitation at all authorized outfalls;
8. Change TDS effluent limitation;
9. Add monitoring requirements for human health associated pollutants as specified in EPA’s response to NMED’s CWA §401 Certification Condition 14; and
10. Add monitoring requirements for pollutants listed in EPA Application Form 2C for all outfalls.

State Certification

State certification letter from Mr. James Hogan (NMED) to Mr. William Honker (EPA), dated March 29, 2013, conditionally certifies that the discharge will comply with the applicable provisions of the Clean Water Act and with appropriate requirements of State law. NMED also includes comments in the certification letter.

Note: Inclusion of permit requirements to comply with conditions of certification are required by 40 CFR § 124.55(a)(2). Challenges to conditions of certification must be made through NMED. Some conditions required by NMED are based on “Procedures for Implementing NPDES in New Mexico – NMIP. Because NMIP are guidelines, not state regulations, EPA treated those conditions which are based on NMIP as recommendations or comments, and respond accordingly. Some conditions will result in less stringent permit conditions and EPA treated those conditions as a statement of the extent to which the permit could be made less stringent (see 40 CFR §124.53(e)(3)).

Comments Received From Other Entities

Letter from Ms. Megan Anderson (Western Environmental Law Center-WELC) to Ms. Diane Smith (EPA) dated March 14, 2013.

Letter from Mr. Steve Perkins (San Juan Coal Company-SJCC) to Ms. Diane Smith (EPA) dated March 15, 2013.

EPA Responses

Condition 1: NMED conditioned that the identified receiving waters on the Title Page of the Final Permit be clarified as follows:

Discharges from multiple outfalls are authorized to the following receiving waters:
Westwater Arroyo subject to unclassified 20.6.4.98 NMAC, Shumway Arroyo in unclassified 20.6.4.98 NMAC, and directly to the San Juan River in Segment 20.6.4.401 NMAC, of the San Juan River Basin.

Response: Water segment number 20.6.4.98 is added to describe the unclassified receiving waterbodies listed in the permit cover page.

Condition 2: NMED conditioned that the receiving water for Outfall 012 on the Title Page of the Draft Permit should be San Juan River.

Response: Error is corrected.

Condition 3: NMED conditioned that the discharge limits for pH in Part I.A.1 (Outfalls 001, 002, 010 and 011), Part I.A.2 (Outfalls 006, 007 and 008), and Part I.A.3 (Outfall 009) of the Draft Permit need to be corrected from a range of 6 to 9 standard units (su) to 6.6 to 9.0 su, because the designated uses in 20.6.4.98 includes marginal warmwater aquatic life and primary contact and State WQS criteria "*pH within the range of 6.6 to 9.0*" is specified for primary contact and marginal warmwater aquatic life.

Response: More stringent pH limitations are incorporated into the permit at outfalls which are authorized for discharges.

Condition 4: NMED stated that the monitoring and discharge limits for chemical oxygen demand (COD) in Part I.A.1 (Outfalls 001, 002, 010 and 011), Part I.A.2 (Outfalls 006, 007 and 008) and Part I.A.4 (Outfall 012) of the Draft Permit are not required under the State of New Mexico Statewide Water Quality Management Plan (WQMP) or the State WQS. And, to NMED's knowledge, SJCC has not been given written notice of a permit violation for COD in the previous permit term. Therefore, NMED conditioned that monitoring and limitations for COD can be removed from Part I.A.1, Part I.A.2 and Part I.A.4 of the Final Permit.

Response: COD limitations were required by NMED based on Section 20.6.2.2101 NMAC when EPA worked on reissuance of the permit in 2000. Since NMED has determined that Section 20.6.2.2101 does not apply to NPDES permits, EPA has treated this condition as a statement as described in 40 CFR §124.53(e)(3)) and removed COD limitations from the final permit.

Condition 5: NMED conditioned that to apply the "no salt return" waiver for the tributaries of the Colorado River system, the daily maximum load limit for total dissolved solids (TDS) in Part I.A.1 (Outfalls 001, 002, 010 and 011), Part I.A.2 (Outfalls 006, 007 and 008), Part I.A.3 (Outfall 009), and Part I.A.4 (Outfall 012) of the Draft Permit must be corrected from 2,000 pounds per day (lbs/day) to <2,000 or 1,999 lbs/day in the Final Permit. NMED also stated that if prior to the issuance of the final permit, SJCC provides additional information that satisfactorily demonstrates that it is not practicable to prevent the discharge and USEPA determines that the discharge qualifies for a "fresh water waiver," irrespective of the total daily or annual salt load, then NMED may consider modifying this Condition of Certification to remove TDS monitoring and limitations from the permit.

Response: The Colorado River Salinity Control Forum's Policy (the Salinity Policy) states, "The "no salt return" may be waived in cases where the discharge is less than one ton per day or 366 tons per year, or the permitting authority determines that a discharge qualifies for a "fresh water waiver," irrespective of the total daily or annual salt load." EPA already determined that "no salt return" or "zero TDS" is unattainable, so a daily limitation of 2,000 pounds (one ton) was proposed in the permit. SJCC has also provided comments to support their request for "waiver." Because of lack of sufficient effluent data for TDS, EPA could not evaluate whether the facility qualifies for a "fresh water waiver" or not. In

accordance with NMED's condition of certification, a TDS effluent limitation of < 2,000 lb/day is established in the final permit.

Condition 6 & 9: NMED stated that Footnote 7 of the NMIP Section V. Narrative Toxics Implementation - Whole Effluent Toxicity states, "The distinction between the two classes of minor discharges in the federal/industrial category is based upon the Surface Water Quality Bureau's best professional judgment regarding the reasonable potential for these categories to cause a water quality standards impairment based upon past review of permit applications, compliance records and compliance inspections of these types of facilities. Discharges from coal mine classified as "reclamation area" operations will not be required to have WET testing." Therefore, NMED conditioned that both the whole effluent toxicity monitoring and Footnote 3 in Part I.A.1 (Outfalls 001, 002, 010, and 011) in the Draft Permit must be removed from the Final Permit.

Response: Because the condition is based on NMIP and will result in less stringent permit requirements, EPA treated it as a statement as described in 40 CFR §124.53(e)(3)). In accordance with the NMIP, WET testing requirements for Outfalls 001, 002, 010, and 011 are removed.

Condition 7 & 10: Because discharges from Outfalls 006, 007, and 008 are to Shumway Arroyo in unclassified 20.6.4.98 NMAC (Intermittent stream), NMED conditioned that pimephales promelas and ceriodaphnia dubia shall be used for a 48-hour WET testing with a frequency of 1/5 years be established in accordance with NMIP. (NMED corrected the typing error by changing "48-hour acute" to "7-day chronic" and defined CD = 100% via an email dated July 9, 2013.)

Response: Chronic WET testing requirements with CD = 100% are incorporated into the permit as required by the certification.

Condition 8 & 10: NMED conditioned that pimephales promelas and ceriodaphnia dubia shall be used for WET testing with a frequency of 1/5 years be established at Outfall 009 in accordance with NMIP.

Response: Pursuant to SJCC's comment that the evaporation pond which holds treated sanitary waste is designed for no discharge, EPA establishes a "no discharge" condition at Outfall 009. Therefore, no monitoring requirements are established at Outfall 009. Outfall 009 is not authorized for discharges to waters of the United States. Any discharge from Outfall 009 would trigger the need for a noncompliance report under Part III.D of the permit.

Condition 11 & 12: NMED conditioned that the whole effluent toxicity monitoring at Outfall 012 needs to be removed from the Final Permit in accordance with NMIP.

Response: Because the condition is based on NMIP and will result in less stringent permit requirements, EPA treated it as a statement as described in 40 CFR §124.53(e)(3)). Due to the nature of cause and frequency of potential discharges (i.e., discharge would have to be triggered by sufficient rainfall to exceed the capacity of ponds designed to hold the 100 year, 6 hour storm event), EPA removed the WET requirement as recommended.

Condition 13: NMED provides specific conditions to address impairment in the provision of Permit Part II, section C. Permit Modification and Reopener.

Response: The term “new information” used in the reopener clause already addresses the situations covered by this condition. The suggested language has no material effect to incorporate more stringent requirements of State laws into the proposed permit. No change is made.

Condition 14: NMED requires, based on NMIP, that (a) the Final Permit must require monitoring and reporting conditions for Outfalls 001, 002, 006, 007, 008, 010, and 011 (not Outfall 009) for the following pollutants:

Antimony (dissolved (D))	Zinc (D)	Dieldrin
Arsenic (D)	Aldrin	2,3,7,8-TCDD dioxin
Nickel (D)	Benzo (a) pyrene	Hexachlorobenzene
Selenium (D)	Chlordane	PCBs
Thallium (D)	4,4' -DDT and derivatives	Tetrachloroethylene

and (b) the Final Permit must require monitoring and reporting for Outfall 012 for the following pollutants:

Antimony (D)	2-Chlorophenol	Fluoranthene
Arsenic (D)	2,4-Dichlorophenol	Fluorene
Nickel (D)	2,4-Dimethylphenol	Hexachlorobenzene
Selenium (D)	2-Methyl-4-6-Dinitrophenol	Hexachlorobutadiene
Thallium (D)	2,4-Dinitrophenol	Hexachlorocyclopentadien
Zinc (D)	Pentachlorophenol	Hexachloroethane
Cyanide, weak acid	Phenol	Indeno (1,2,3-cd)Pyrene
2,3,7,8-TCDD (Dioxin)	2,4,6-Trichlorophenol	Isophorone
Acrolein	Acenaphthene	Nitrobenzene
Acrylonitrile	Anthracene	n-Nitrodimethylamine
Benzene	Benzidine	n-Nitrosodi-n-Propylamine
Bromoform	Benzo(a)anthracene	n-Nitrosodiphenylamine
Carbon Tetrachloride	Benzo(a)pyrene	Pyrene
Chlorobenzene	Benzo(b)fluoranthene	1,2,4-Trichlorobenzene
Clorodibromomethane	Benzo(k)fluoranthene	Aldrin
Chloroform	Bis (2-chloroethyl)	Ether Alpha-BHC
Dichlorobromomethane	Bis (2-chloroisopropyl)	Beta-BHC
1,2-Dichloroethane	Bis (2-ethylhexyl) Phthalate	Gamma-BHC
1,1-Dichloroethylene	Butyl Benzyl	Phthalate Chlordane
1,2-Dichloropropane	2-Chloronapthalene	4, 4'-DDT and derivatives
1,3-Dichloropropene	Chrysene	Dieldrin
Ethylbenzene	Dibenzo(a,h)anthracene	Alpha-Endosulfan
Methyl Bromide	1,2-Dichlorobenzene	Beta-Endosulfan
Methylene Chloride	1,3-Dichlorobenzene	Endosulfan sulfate
1,1,2,2-Tetrachloroethane	1,4-Dichlorobenzene	Endrin
Tetrachloroethylene	3,3-Dichlorobenzidine	Endrin Aldehyde
Toluene	Diethyl Phthalate	Heptachlor
1,2-trans-Dichloroethylene	Dimethyl Phthalate	Heptachlor Epoxide
1,1,2-Trichloroethane	Dibutyl Phthalate	PCBs
Trichloroethylene	2,4-Dinitrotoluene	Toxaphene
Vinyl Chloride	1,2-Diphenylhydrazine	

Response: EPA considers sedimentation or evaporation ponds (S/E ponds) to be BMPs for storm water-associated discharges to comply with chronic and/or human health standards in accordance with the provisions in 40 CFR 122.44(k) which allows BMPs to control or abate the discharge of pollutants when (1) Authorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. The monitoring required by the State would allow assessment of the effectiveness of the BMPs in protecting instream water quality standards.

In accordance with the State's condition of certification, EPA establishes the monitoring requirements at those outfalls when a discharge occurs. Consistent with the application requirements at 40 CFR 122.21 for industrial discharges, one sample per permit term is required. However, the EPA recommends the permittee collect additional samples to provide a better statistical basis for calculation reasonable potential in the future.

Condition 15: NMED requires specific footnote language, based on NMIP, to address compliance schedule for E. coli limitation at Outfall 009, to be read as "The discharge shall comply with E. coli limitations at the earliest practicable time for treatment facility modifications no later than 6 months from the effective date of the permit."

Response: The final permit establishes a "no discharge" condition at Outfall 009, so no monitoring requirement is required at the outfall.

Condition 16: Based on NMIP, NMED requires chronic WQS of 11 µg/l for total residual chlorine (TRC) to be established at Outfall 009 and also requires specific footnote language for compliance purpose.

Response: Under the final permit, Outfall 009 is a "no discharge" outfall, so no limits are necessary.

Comment 1: NMED requests USEPA clarify narrative technology based effluent limits and whether or not 1) Sediment Control Plan (SCP) requirements have been met, and 2) if updates to the SCP (or SMCRA Permit) approved by New Mexico Mining and Minerals Division need to be submitted to USEPA; and 3) correct Part II.E (Sediment Control Plan) of the Final Permit, if needed.

Response: SJCC has had an approved SCP. EPA will require SJCC to submit SCP update and revise the permit to read as "The updated Sediment Control Plan must be submitted to the permitting authority for approval and be incorporated into the permit as an effluent limitation."

Comment 2: NMED requests USEPA clarify some references to technology based effluent limitation guidelines (TBELGs) and discharge due to storm events that were in the USEPA Fact Sheet for this Draft Permit, and correct the Final Permit TBELGs, if appropriate.

Response: In accordance with 40 CFR 434.63(d)(2), pH is the only TBELG for discharges due to precipitation events from the facility. Effluent limitations for settleable solids at Outfalls 006, 007 and 008 are deleted in the final permit.

Comment 3: NMED has several comments on fact sheet and particularly on data used for RP analysis. Comments include the effective date of State Water Quality Standards cited in the fact sheet, uses of water samples from ponds instead of actual discharges, application of data from one pond to other ponds' discharges, uses of estimated discharge flow instead of "zero" flows reported in the application, and uses of arbitrary stream pH and temperature data.

Response: Because "zero" flow rates were reported in the application, EPA did not have flow information to conduct RP analysis, except for acute aquatic life standards. NM WQS require application of acute aquatic life standards at the end of pipe. Because of unique practices exercised by coal mining operators, there have rarely been discharges from coal mine areas except for few facilities where impoundments are required to be dismantled by the Surface Mining Control and Reclamation Act (SMCRA) agency. In order to assess RP against state WQS, the EPA permit writer has used assumptive data, such as an assumed flow rate should there be a discharge, pond sample data, and other assumptions to conduct RP analysis, so in case there is a discharge, receiving stream water quality may be protected. NMED has accepted this approach in the past and coal mine operators have not raised concerns about this assumptive approach. But, because NMED raises its concerns now, the EPA permit writer needs to reconsider how to perform RP analysis for "zero flow" dischargers or any short period of intermittent or episodic discharges resulting from storm events. Accordingly, the following changes are made in the final permit:

1) Because lack of effluent data, chronic WQ-based effluent limitations are deleted in the final permit, except for effluent limitations which are based on actual effluent data and acute aquatic life criteria because acute aquatic life standards apply at the pipe of discharge in accordance with WQS. Therefore, live stock watering –based effluent limitation for gross alpha is removed from Outfalls 001, 002, 010, and 011 in the final permit.

2) Effluent limitations apply only at the outfall where samples were taken and demonstrated RP. Therefore, acute aquatic life-based aluminum limitations are removed from Outfalls 001, 010, and 011 because the RP was based on a sample from Outfall 002. And,

3) SJCC is required to sample daily at every discharge event.

In order to properly evaluate the RP for episodic discharges caused by catastrophic storm events, SJCC may consider working with NMED to develop site-specific stream critical low flows as defined in NMWQS, section 20.6.4.11.B.(1) and (2) below.

(1) For human health-organism only criteria, the critical low flow is the harmonic mean flow; "harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows; that is, it is the reciprocal of the mean of reciprocals. For ephemeral waters the calculation shall be based upon the nonzero flow intervals and modified by including a factor to adjust for the proportion of intervals with zero flow.

(2) For all other narrative and numeric criteria, the critical low flow is the minimum average four consecutive day flow that occurs with a frequency of once in three years (4Q3). The critical low flow may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

Without a site-specific critical low flow, a "zero" critical low flow may be assigned for RP analysis and

WET test.

Assumptive pH and temperature data, while included on the spreadsheet, are not used in the RP analysis calculations.

Response to Other Comments

Comment 1: The Western Environmental Law Center (WELC) provided several comments on removal of various limitations for several outfalls and those comments are summarized as: (a) EPA proposed to remove total suspended solids, arsenic, copper, selenium, zinc, lindane, alpha-endosulfan, endrin, heptachlor, expoxide, pentachlorophenol, toxaphene, aluminum, and fecal coliform at various outfalls without giving justifications; (b) WELC supports keeping limitations for parameters (e.g., TSS) for which there have been violations and/or issues in the past; (c) WELC concerned why it is appropriate to remove monitoring requirements and effluent limitations for aluminum, arsenic, copper, selenium, and zinc from outfalls 006, 007, and 008; (d) New Mexico is expected to face dramatic changes in climate as a result of global warming; predictions include “more intense storm events and flash floods,” and possible increases in precipitation. EPA should consider these changes when deciding whether the present sedimentation and evaporation ponds are of adequate size to control discharges and protect water quality; and (e) EPA cannot claim that no data means there is no reasonable potential for concerns with those parameters. EPA should require the applicant to provide this data, so that an adequate RP analysis can be conducted.

Response: Fact sheet provided rationale to remove monitoring requirements for those pollutants. Specifically, TSS has been replaced with the 40 CFR Subpart H TBELG which is Sediment Control Plan for outfalls in the reclamation areas, i.e., Outfalls 001, 002, 010, 011 and 012. Also, TBELG TSS limitation is not required at Outfalls 006, 007 and 008 because discharges at those outfalls (which were built to a 100 year storm standard) will be due to a storm more intensive than 10-year, 24-hour above which even the previously applicable ELG’s TSS limit does not apply. Limitation for settleable solids are discussed above in response to NMED’s comment (Comment 2). Although if a discharge occurs, such a discharge may contribute an elevated level of TSS or other pollutants, the fact that TBELGs only have pH limitation for discharges caused by storms greater than a 10-year, 24-hour precipitation event indicates that evaporation or sedimentation ponds are the best technology available to control or minimize other pollutants being discharged into the environment.

Water quality-based effluent limitations (WQBELs) for arsenic, copper, selenium, zinc, lindane, alpha-endosulfan, beta-endosulfan, endrin, heptachlor, heptachlor expoxide, pentachlorophenol, and toxaphene were removed because data submitted for Outfalls 002 and 012 demonstrated no reasonable potential (RP). Because Outfalls 001, 002, 010, 011 and 012 are all under reclamation and limited effluent data are available due to rare discharge events, same effluent data were used for RP determinations and same monitoring requirements were established for those outfalls. However, because NMED questioned the uses of the assumptive discharge flow and pond water sample results for RP analysis, EPA determined that based on “zero” effluent flow, no RP are presented in discharges. Instead, monitoring requirements are established in the final permit to collect representative data, should discharges occur.

WELC has concern about changes in climate as a result of global warming which may cause “more intense storm events and flash floods,” and possible increases in precipitation. WELC’s comment is noted. So far, acute aquatic life standards established in NMWQS may address environmental impacts caused by a short period of discharge (e.g., discharge associated with storm events) because NMWQS

20.6.4.11.E(2) states that acute aquatic life criteria, as set out in Subsection I, Subsection J, and Subsection K of 20.6.4.900 NMAC, shall be attained at the point of discharge for any discharge to a surface water of the state with a designated aquatic life use. EPA will establish WQBELs if any discharge demonstrates RP for exceeding acute aquatic life criteria.

Also see EPA's response to NMED's Comment 3, above.

Comment 2: WELC commented that EPA should either require a new Sediment Control Plan (SCP) or explain why a new SCP is not necessary. Specifically, EPA should confirm that the operator has shown that implementation of the SCP will result in compliance with the standards and that EPA has reviewed the plan to ensure the same.

Response: SJCC did provide an updated SCP to EPA. EPA will require SJCC to submit SCP update in the final permit. EPA continues to rely on SMCRA agency's (Office of Surface Mining Reclamation and Enforcement) expertise to approve the SCP.

Comment 3: WELC commented that WET testing is not adequate because the receiving waterbodies are not ephemeral streams and 24-hour composite sampling should be required.

Response: As discussed in the response to NMED's Conditions 6 through 12, WET testing should not be required for discharges from reclamation areas.

Comment 4: WELC commented that discharge flows should be measured, instead of estimated.

Response: Most sedimentation/evaporation (S/E) ponds are designed to achieve either no discharge or infrequent discharge. All potential discharges will be overflows from those S/E ponds caused by a 100-year, 6-hour or equivalent storm event. Such discharges, if occur, are not on a regular basis, and the volume or duration of each discharge is not manageable by the operator. Although TDS loading limitation is established in the final permit, the discharge frequency is expected to be very low. Furthermore, based on samples data collected in the receiving streams after a discharge caused by a storm during August 23-24, 2012, TDS concentrations in both samples were below 500 mg/l. EPA determines that the use of estimated flow will serve the purposes for compliance unless new information demonstrate otherwise.

Comment 5: WELC commented that the E. coli compliance schedule is unnecessary.

Response: The evaporation pond was designed for no discharge. A "no discharge" condition is placed for Outfall 009. Therefore, no compliance schedule is established for Outfall 009.

Comment 6: WELC identified a typo on the permit cover page.

Response: The typo is corrected.

Comment 7: SJCC supported the proposed changes identified in paragraphs 1, 2, 4, 5, 6, and 8 below. SJCC also commented that the evaporation pond for Outfall 009 was designed for no discharge of sanitary wastewater.

1. Remove TSS, arsenic, copper, selenium, and zinc limitations and monitoring requirements

- from Outfall(s) 001, 002, 010, 011, and 012;
2. Remove monitoring requirements for lindane, alpha-endosulfan, beta-endosulfan, endrin, heptachlor, heptachlor epoxide, pentachlorophenol, and toxaphene from Outfall(s) 001, 002, 010, 011, and 012;
 3. Change aluminum effluent limitations at Outfalls(s) 001, 002, 010, 011, and 012;
 4. Categorize Outfall 006 with Outfalls 007 and 008, and remove monitoring requirements or effluent limitations for aluminum, arsenic, copper, selenium, and zinc from Outfalls 006, 007, and 008;
 5. Replace TSS limitations with settleable solids at Outfalls 006, 007, and 008;
 6. Remove monitoring requirements for fecal coliform and change effluent limitations for E. coli at Outfall 009;
 7. Remove monitoring requirements for zinc and change effluent limitations for aluminum and copper at Outfall 012; and
 8. Remove one-time monitoring requirements for human health pollutants at Outfall 012.

Response: Comments noted. See EPA's responses to NMED's conditions and comments above for responses on these issues and resulting permit changes.

Comment 8: SJCC objected to the proposed changes to the aluminum effluent limitations identified in paragraphs 3 and 7 above, for two reasons: (1) WET testing results demonstrated that the effluents did not contribute toxicity in aquatic organisms; and (2) WQS for aluminum are based on total recoverable aluminum in a sample that is filtered to minimize mineral phases (see 20.6.4.900.I(1) & (2)), but aluminum concentrations reported in the application were based on total aluminum which were unfiltered samples.

Response: Effluent limitations for aluminum are established at Outfalls 002 and 012 based on effluent data provided by SJCC. EPA regulations require total (recoverable) metals limits in the permit and EPA approved analytical methods, whenever available, to be used for compliance purposes. A state may develop its WQS for metals in different forms (i.e., dissolved). In order to demonstrate no RP, SJCC may provide additional effluent data based on State specified analytical procedure and method. Because SJCC did not provide any such data during the comment period, EPA considered the more conservative total value was representative for RP determination. See response to NMED's Comment 3 above, aluminum effluent limitations were not established for Outfalls 001, 010, and 011.

Comment 9: SJCC objected to the proposed total dissolved solids (TDS) effluent limitation for outfalls associated with reclamation areas because of the following four reasons: (A) EPA did not provide explanation why TDS limitation for all outfalls is necessary; (B) to include TDS effluent limitation for the outfalls associated with reclamation areas conflicts with the Western Alkaline Coal Mining Standards; (C) TDS limitation does not take into account SJCC's sedimentation control; and (D) EPA ignored the waiver of the "no-salt discharge" provision established in the Colorado River Salinity Standards NPDES Permit Program Policy (Salinity Policy).

Response: The NMED CWA §401 certification dated March 29, 2013, stated that the proposed permit's TDS limits did not correctly apply a "no salt return" for the tributaries of the Colorado River system. The certification contained a condition that the permit maximum daily load limit for TDS for outfalls 001, 002, 010, 011, 006, 007, 008, 009, and 012 be revised to <2000 lbs/day or 1999 lbs/day. No NPDES permit may be issued unless it conforms to a condition of state certification and the permit limit

has been revised to <2000 lbs/day. Further information on the concerns raised by the permittee are included below:

(A) The TDS limit was included in the permit to implement New Mexico water quality standard 20.6.4.54 COLORADO RIVER BASIN, which states that for the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the most current "Review, Water Quality Standards for Salinity, Colorado River System" or equivalent report by the Colorado River Salinity Control Forum." The TDS limit was based on the "2011 Review, Water Quality Standards for Salinity, Colorado River System" report's "Policy for Implementation of Colorado River Salinity Standards Through the NPDES Permit Program" (ICRSS) which was adopted by the Colorado River Basin Salinity Control Forum February 28, 1977 and revised Revised October 30, 2002 (available online via <http://www.coloradoriversalinity.org/documents.php>).

(B) The TDS effluent limitation is based on a State water quality standard and not the Western Alkaline Mine effluent limitation guidelines (ELGs). In accordance with 40 CFR 122.44(d), NPDES permits must include the more stringent of the federal technology-based effluent limits (TBELs) based on the ELGs and water quality-based effluent limits (WQBELs).

(C) EPA does not expect that a sedimentation pond would be used to reduce TDS. Rather, TDS concentration in the sedimentation pond may actually be become elevated over time due to evaporation. For example, according to Appendix 2 of the permit application dated June 28, 2010, "Pond S2" contained 1310 mg/l TDS. However, because SJCC's sedimentation ponds were designed for effectively "no discharge," those ponds could significantly reduce volumes of discharges and therefore annual contributions of TDS to Colorado River Basin. As with the final permit, only the TDS in an actual discharge is subject to the limitation.

(D) As stated in EPA's response to NMED's Condition 5, EPA already determined that "no salt return" or "zero TDS" is unattainable, so a daily limitation of 2,000 pounds (one ton) was proposed in the permit. Although, the Salinity Policy allows either 1 ton per day or 366 tons per year, the expired permit has a narrative limit which as stated above and the NMED condition required revision of the limit to <2000 lbs/day or 1999 lbs/day. If SJCC can provide effluent data which demonstrate the TDS concentrations from all or some discharges are below 500 mg/l, EPA may consider the "freshwater waiver" in the future.



REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

NPDES Permit No NM0028746

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

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

San Juan Coal Company – San Juan Mine
P.O. Box 561
Waterflow, NM 87421

is authorized to discharge from a facility located 16 miles west of Farmington, New Mexico, in Waterflow, San Juan County, New Mexico. Discharges from multiple outfalls are authorized to the following receiving waters: Westwater Arroyo subject to unclassified 20.6.4.98 NMAC, Shumway Arroyo in unclassified 20.6.4.98 NMAC, and directly to the San Juan River in Segment 20.6.4.401 NMAC, of the San Juan River Basin. The discharges are located at the following coordinates:

Outfall No.	Latitude	Longitude	Receiving Water
001	36°48'51"	108°25'49"	Westwater Arroyo
002	36°48'33"	108°25'42"	Westwater Arroyo
006	36°47'58"	108°25'42"	Shumway Arroyo
007	36°47'49"	108°25'44"	Shumway Arroyo
008	36°47'32"	108°25'50"	Shumway Arroyo
009	36°47'29"	108°25'50"	Shumway Arroyo
010	36°47'15"	108°25'43"	Shumway Arroyo
011	36°46'43"	108°25'28"	Shumway Arroyo
012	36°45'23"	108°24'50"	San Juan River

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II, and Part III hereof.

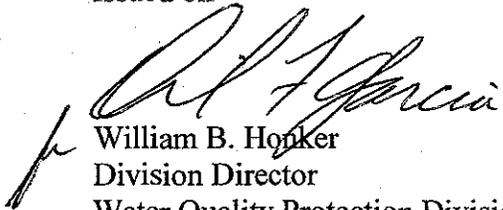
This permit supersedes and replaces NPDES Permit No. NM0028746 issued June 30, 2006, and expired December 31, 2010.

This permit shall become effective on October 1, 2013

This permit and the authorization to discharge shall expire at midnight, September 30, 2018

Issued on August 29, 2013

Prepared by


William B. Honker
Division Director
Water Quality Protection Division (6WQ)


Isaac Chen
Environmental Engineer
Permits & Technical Section (6WQ-PP)

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PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

1. Outfall 001, 002, 010, and 011

Beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge wastewater associated with western alkaline mining reclamation to Westwater Arroyo from Outfalls 001 and 002, and to Shumway Arroyo from Outfalls 010 and 011. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Standard Units			
POLLUTANT	MINIMUM	MAXIMUM	MONITORING FREQUENCY	SAMPLE TYPE
pH	6.6	9.0	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted			
POLLUTANT	30-DAY AVG	DAILY MAX	30-DAY AVG	DAILY MAX	SAMPLE FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	N/A	N/A	1/Day	Estimate (*1)
Aluminum (*2)	N/A	N/A	7.07	7.07	1/Day	Grab
Total Dissolved Solids	N/A	< 2000 (*3)	N/A	N/A	1/Day	Grab
Form 2C constituents	N/A	N/A	N/A	Report	1/Term	Grab (*4)

Footnotes:

- *1 “Estimate” flow measurements shall be based on the best engineering judgment, but is not subject to the accuracy provisions established at Part III.C.6.
- *2 Total recoverable aluminum limitations apply to Outfall 002 only.
- *3 Total limitation from all discharge sources.
- *4 Effluent sample shall be collected during the first discharge for analysis of pollutants listed in Application Form 2C. If the volume of the sample collected at the first discharge event is not enough for analysis of all constituents, samples from different discharge events may be used for rest of constituents. Analytic results can also be used for EFFLUENT CHARACTERIZATION EVALUATION as defined below.

2. Outfall 006, 007, and 008

Beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge run-offs from coal storage and ready line areas from Outfalls 006 and 007, and run-offs from maintenance yard, administration and maintenance buildings, and parking lot areas from Outfall 008, to Shumway Arroyo. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Standard Units			
POLLUTANT	MINIMUM	MAXIMUM	MONITORING FREQUENCY	SAMPLE TYPE
pH	6.6	9.0	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted			
POLLUTANT	30-DAY AVG	DAILY MAX	30-DAY AVG	DAILY MAX	SAMPLE FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	N/A	N/A	1/Day	Estimate (*1)
Form 2C constituents	N/A	N/A	N/A	Report	1/Term	Grab (*2)
Total Setteable Solids	N/A	N/A	N/A	0.5 ml/l	1/Day	Grab
Total Dissolved Solids	N/A	< 2000 (*3)	N/A	N/A	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
	30-DAY AVG MINIMUM	48-HR MINIMUM	MONITORING FREQUENCY	SAMPLE TYPE
WHOLE EFFLUENT TOXICITY TESTING (*4) (7-Day Static Renewal)	Report	Report	1/ 5 Years	Grab
Pimephales promelas Ceriodaphnia dubia	Report	Report	1/ 5 Years	Grab

Footnotes:

*1 "Estimate" flow measurements shall be based on the best engineering judgment, but is not subject to the accuracy provisions established at Part III.C.6.

*2 Effluent sample shall be collected during the first discharge for analysis of pollutants listed in Application Form 2C. If the volume of the sample collected at the first discharge event is not enough for analysis of all constituents, samples from different discharge events may be used for rest of constituents. Analytic results can also be used for EFFLUENT CHARACTERIZATION EVALUATION as defined below.

*3 Total limitation from all discharge sources.

*4 Test should be taken as soon as possible when the first discharge occurs. Also see Part II, Section F. Whole Effluent Toxicity (7-Day Chronic Testing).

3. Outfall 009

Beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated sanitary waste to Shumway Arroyo from Outfall 009. Such discharges shall be limited and monitored by the permittee as specified below:

No Discharge.

4. Outfall 012

Beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge wastewater associated with western alkaline mining reclamation to the San Juan River from Outfall 012. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Standard Units			
POLLUTANT	MINIMUM	MAXIMUM	MONITORING FREQUENCY	SAMPLE TYPE
pH	6.6	9.0	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted			
POLLUTANT STORET CODE	30-DAY AVG	DAILY MAX	30-DAY AVG	DAILY MAX	SAMPLE FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	N/A	N/A	1/Day	Estimate (*1)
Total Aluminum	N/A	N/A	6.11	6.11	1/Day	Grab
Total Copper	N/A	N/A	0.115	0.115	1/Day	Grab
Form 2C constituents	N/A	N/A	N/A	Report	1/Term	Grab (*2)
Total Dissolved Solids	N/A	< 2000 (*3)	N/A	N/A	1/Day	Grab

Footnotes:

*1 "Estimate" flow measurements shall be based on the best engineering judgment, but is not subject to the accuracy provisions established at Part III.C.6.

*2 An effluent sample shall be collected during the first discharge for analysis of pollutants listed in Application Form 2C. If the volume of the sample collected at the first discharge event is not enough for analysis of all constituents, samples from different discharge events may be used for rest of constituents. Analytic results can also be used for EFFLUENT CHARACTERIZATION EVALUATION as defined below.

*3 Total limitation from all discharge sources.

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the points of discharge from the associate sediment ponds prior to the receiving stream.

TOXICS

No discharge shall contain any substance, including but not limited to selenium, DDT, PCB's and dioxin, at a level which, when added to background concentration, can lead to bioaccumulation to toxic levels in any animal species.

EFFLUENT CHARACTERIZATION EVALUATION

A one-time sampling during the period of the life of permit shall be conducted to collect discharge at specific outfall when and only when a discharge at that outfall occurs. For Outfalls 001, 002, 006, 007, 008, 010, and 011, the following pollutants are required for analysis:

Antimony (dissolved (D))	Zinc (D)	Dieldrin
Arsenic (D)	Aldrin	2,3,7,8-TCDD dioxin
Nickel (D)	Benzo (a) pyrene	Hexachlorobenzene
Selenium (D)	Chlordane	PCBs
Thallium (D)	4,4' -DDT and derivatives	Tetrachloroethylene

For Outfall 012, the following pollutants are required for analysis:

Antimony (D)	2-Chlorophenol	Fluoranthene
Arsenic (D)	2,4-Dichlorophenol	Fluorene
Nickel (D)	2,4-Dimethylphenol	Hexachlorobenzene
Selenium (D)	2-Methyl-4-6-Dinitrophenol	Hexachlorobutadiene
Thallium (D)	2,4-Dinitrophenol	Hexachlorocyclopentadien
Zinc (D)	Pentachlorophenol	Hexachloroethane
Cyanide, weak acid	Phenol	Indeno (1,2,3-cd)Pyrene
2,3,7,8-TCDD (Dioxin)	2,4,6-Trichlorophenol	Isophorone
Acrolein	Acenaphthene	Nitrobenzene
Acrylonitrile	Anthracene	n-Nitrodimethylamine
Benzene	Benzidine	n-Nitrosodi-n-Propylamine
Bromoform	Benzo(a)anthracene	n-Nitrosodiphenylamine

Carbon Tetrachloride	Benzo(a)pyrene	Pyrene
Chlorobenzene	Benzo(b)fluoranthene	1,2,4-Trichlorobenzene
Clorodibromomethane	Benzo(k)fluoranthene	Aldrin
Chloroform	Bis (2-chloroethyl)	Ether Alpha-BHC
Dichlorobromomethane	Bis (2-chloroisopropyl)	Beta-BHC
1,2-Dichloroethane	Bis (2-ethylhexyl) Phthalate	Gamma-BHC
1,1-Dichloroethylene	Butyl Benzyl	Phthalate Chlordane
1,2-Dichloropropane	2-Chloronapthalene	4, 4'-DDT and derivatives
1,3-Dichloropropene	Chrysene	Dieldrin
Ethylbenzene	Dibenzo(a,h)anthracene	Alpha-Endosulfan
Methyl Bromide	1,2-Dichlorobenzene	Beta-Endosulfan
Methylene Chloride	1,3-Dichlorobenzene	Endosulfan sulfate
1,1,2,2-Tetrachloroethane	1,4-Dichlorobenzene	Endrin
Tetrachloroethylene	3,3-Dichlorobenzidine	Endrin Aldehyde
Toluene	Diethyl Phthalate	Heptachlor
1,2-trans-Dichloroethylene	Dimethyl Phthalate	Heptachlor Epoxide
1,1,2-Trichloroethane	Dibutyl Phthalate	PCBs
Trichloroethylene	2,4-Dinitrotoluene	Toxaphene
Vinyl Chloride	1,2-Diphenylhydrazine	

B. MONITORING AND REPORTING (MINOR DISCHARGERS)

Monthly monitoring information shall be submitted as specified in Part III.D.4 of this permit.

Reporting periods shall end on the last day of the months March, June, September, and December.

The permittee is required to submit regular quarterly reports as described above no later than the 28th day of the month following each reporting period.

The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary). Any noncompliance which may endanger health or the environment shall be made to the EPA at the following e-mail address: R6_NPDES_Reporting@epa.gov, as soon as possible, but within 24-hours from the time the permittee becomes aware of the circumstance. This language supersedes that contained in Part III.D.7 of the Permit. Additionally, oral notification shall also be to the New Mexico Environment Department at (505) 827-0187 as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment shall be provided to EPA and the New Mexico Environment Department, within 5 days of the time the permittee becomes aware of the circumstance.

C. APPLICATION

Application for permit renewal sent to EPA shall be pursuant to Part III of this permit. A copy of application for permit renewal shall be sent to New Mexico Environment Department (NMED) at the mailing address listed in Part III.D.4 of this permit.

PART II - OTHER CONDITIONS

A. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed in the Appendix A to this permit, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40CFR136. For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to the EPA Region 6 NPDES Permits Branch (6WQ-P) a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$\text{MQL} = 3.3 \times \text{MDL}$$

Upon written approval by the EPA Region 6 NPDES Permits Branch (6WQ-P), the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) reporting requirements.

B. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported to EPA at the following e-mail address:

R6_NPDES_Reporting@epa.gov and orally to the New Mexico Environment Department at (505) 827-0187, within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

Aluminum and Copper

C. PERMIT MODIFICATION AND REOPENER

In accordance with 40 CFR Part 122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or new State water quality standards are established and/or remanded by the New Mexico Water Quality Control Commission.

In accordance with 40 CFR Part 122.62(s)(2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

D. SMCRA BOND RELEASE

When the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work has been satisfactorily completed on a watershed or a specific part of a disturbed area, the permittee may request to terminate the corresponding NPDES discharge points to

that specific drainage area. The permittee must also demonstrate that the Phase III bond for that particular drainage area has been released before permit coverage can be terminated.

E. SEDIMENT CONTROL PLAN

(1) This subpart applies to drainage at western alkaline coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas where the discharge, before any treatment, meets all the following requirements:

- (a) pH is equal to or greater than 6.0;
- (b) Dissolved iron concentration is less than 10 mg/L; and
- (c) Net alkalinity is greater than zero.

(i) The term *brushing and grubbing area* means the area where woody plant materials that would interfere with soil salvage operations have been removed or incorporated into the soil that is being salvaged.

(ii) The term *regraded area* means the surface area of a coal mine that has been returned to required contour.

(iii) The term *sediment* means undissolved organic and inorganic material transported or deposited by water.

(vi) The term *sediment yield* means the sum of the soil losses from a surface minus deposition in macro-topographic depressions, at the toe of the hillslope, along field boundaries, or in terraces and channels sculpted into the hillslope.

(v) The term *topsoil stockpiling area* means the area outside the mined-out area where topsoil is temporarily stored for use in reclamation, including containment berms.

(vi) The term *western coal mining operation* means a surface or underground coal mining operation located in the interior western United States, west of the 100th meridian west longitude, in an arid or semiarid environment with an average annual precipitation of 26.0 inches or less.

(2) (a) Within three (3) months from the effective date of the permit, the operator must have an updated site specific Sediment Control Plan (Plan) that is designed to prevent an increase in the average annual sediment yield from pre-mined, undisturbed conditions. The updated Sediment Control Plan must be submitted to the permitting authority for approval and be incorporated into the permit as an effluent limitation. The Sediment Control Plan must identify best management practices (BMPs) and also must describe design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the best management practices.

(b) If the Plan is approved by the Surface Mining Control and Reclamation Act (SMCRA) agency, the Plan is considered to meet EPA's approval requirement, unless EPA disproves the Plan within 90 days upon the reception of the Plan.

(3) Using watershed models, the operator must demonstrate 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 premined, undisturbed conditions. The operator must use the same watershed model that was, or will be, used to acquire the SMCRA permit.

(4) The operator must submit an annual Sediment Control Report every 12 months from the approval of the Sediment Control Plan. This report shall demonstrate that the facility has met requirements set forth in above sub-sections (2) and (3).

(5) The permittee shall also send a copy of the approved Plan and annual reports to the State of New Mexico Environment Department.

F. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC FRESHWATER)

It is unlawful and a violation of this permit for a permittee or his designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by EPA Region 6 or the State NPDES permitting authority.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 006, 007 and 008

REPORTED ON DMR AS FINAL OUTFALL: 006, 007 and 008

CRITICAL DILUTION (%): 100%

EFFLUENT DILUTION SERIES (%): 32%, 42%, 56%, 75% and 100%

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Lethal Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

2. PERSISTENT LETHAL and/or SUB-LETHAL EFFECTS

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal and/or sub-lethal effects at or below the critical dilution. The purpose of additional tests (also referred to as 'retests' or confirmation tests) is to determine the duration of a toxic event. A test that meets all test

acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.

If any valid test demonstrates significant lethal or sub-lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the life of the permit.

a. Part I Testing Frequency Other Than Monthly

i. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates significant toxic effects at or below the critical dilution. The additional tests shall be conducted monthly during the next three consecutive months. If testing on a quarterly basis, the permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in Item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

ii. IF LETHAL EFFECTS HAVE BEEN DEMONSTRATED If any of the additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Item 5 of this section. The permittee shall notify EPA in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

iii. IF ONLY SUB-LETHAL EFFECTS HAVE BEEN DEMONSTRATED If any two of the three additional tests demonstrates significant sub-lethal effects at 75% effluent or lower, the permittee shall initiate the Sub-Lethal Toxicity Reduction Evaluation (TRE_{SL}) requirements as specified in Item 5 of this section. The permittee shall notify EPA in writing within 5 days of the failure of any retest, and the Sub-Lethal Effects TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required for failure to perform the required retests.

iv. The provisions of Item 2.a.i. are suspended upon submittal of the TRE Action Plan.

b. Part I Testing Frequency of Monthly

The permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements as specified in Item 5 of this section when any two of three consecutive monthly toxicity tests exhibit significant lethal effects at or below the critical dilution. A TRE may also be required due to a demonstration of intermittent lethal and/or sub-lethal effects at or below the critical dilution, or for failure to perform the required retests.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

- ii. The mean number of *Ceriodaphnia dubia* neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- iii. 60% of the surviving control females must produce three broods. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
- iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the *Ceriodaphnia dubia* reproduction test; the growth and survival endpoints of the Fathead minnow test.
- v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the *Ceriodaphnia dubia* reproduction test; the growth and survival endpoints of the Fathead minnow test.
- vi. A Percent Minimum Significant Difference (PMSD) range of 13 - 47 for *Ceriodaphnia dubia* reproduction;
- vii. A PMSD range of 12 - 30 for Fathead minnow growth.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

- i. For the *Ceriodaphnia dubia* survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/821/R-02-013 or the most recent update thereof.
- ii. For the *Ceriodaphnia dubia* reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/821/R-02-013 or the most recent update thereof.
- iii. If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;

(A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

(B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(A) a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;

(B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 4 below; and

(D) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item 1.a above.

ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 6 degrees Centigrade during collection, shipping, and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 4 of this section.

v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in item 1.a. above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

4. REPORTING

The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA/821/R-02-013, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.

A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST lethal and sub-lethal effects results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.

The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit, as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.

Pimephales promelas (Fathead Minnow)

If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TLP6C

Report the NOEC value for survival, Parameter No. TOP6C

Report the Lowest Observed Effect Concentration (LOEC) value for survival, Parameter No. TXP6C

Report the NOEC value for growth, Parameter No. TPP6C

Report the LOEC value for growth, Parameter No. TYP6C

If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TGP6C

Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C

ii. *Ceriodaphnia dubia*

If the NOEC for survival is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TLP3B

Report the NOEC value for survival, Parameter No. TOP3B

Report the LOEC value for survival, Parameter No. TXP3B

Report the NOEC value for reproduction, Parameter No. TPP3B

Report the LOEC value for reproduction, Parameter No. TYP3B

If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TGP3B

Report the higher (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B

d. Enter the following codes on the DMR for retests only:

For retest number 1, Parameter 22415, enter a '1' if the NOEC for survival is less than the critical dilution; otherwise, enter a '0'

For retest number 2, Parameter 22416, enter a '1' if the NOEC for survival is less than the critical dilution; otherwise, enter a '0'

5. TOXICITY REDUCTION EVALUATIONS (TREs)

TREs for lethal and sub-lethal effects are performed in a very similar manner. EPA Region 6 is currently addressing TREs as follows: a sub-lethal TRE (TRE_{SL}) is triggered based on three sub-lethal test failures while a lethal effects TRE (TRE_L) is triggered based on only two test failures for lethality. In addition, EPA Region 6 will consider the magnitude of toxicity and use flexibility when considering a TRE_{SL} where there are no effects at effluent dilutions of less than 76% effluent.

Within ninety (90) days of confirming persistent toxicity, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The goal of the TRE is to maximally reduce the toxic effects of effluent at the critical dilution and includes the following:

Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents 'Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures' (EPA-600/6-91/003) and 'Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I' (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents 'Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity' (EPA/600/R-92/080) and 'Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity' (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

b) Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

Project Organization (e.g., project staff, project manager, consulting services, etc.).

The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.

The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:

any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;

any studies/evaluations and results on the treatability of the facility's effluent toxicity; and

any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution.

A copy of the TRE Activities Report shall also be submitted to the state agency.

d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the state agency.

e. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).

6. MONITORING FREQUENCY REDUCTION

a. The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for one or both test species, with no lethal or sub-lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than twice per year for the more sensitive test species (usually the *Ceriodaphnia dubia*).

b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a. above. In addition the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal and sub-lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance System section to update the permit reporting requirements.

c. SUB-LETHAL OR SURVIVAL FAILURES - If any test fails the survival or sub-lethal endpoint at any time during the life of this permit, three monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is re-issued. Monthly retesting is not required if the permittee is performing a TRE.

Any monitoring frequency reduction granted applies only until the expiration date of this permit, at which time the monitoring frequency for both test species reverts to once per quarter until the permit is re-issued.

APPENDIX A of PART II

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thallium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury *1	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

POLLUTANTS	MLQ µg/l	POLLUTANTS	MLQ µg/l
BASE/NEUTRAL			
Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronaphthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		
PESTICIDES AND PCBS			
Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs	0.2
Alpha-Endosulfan	0.01	Toxaphene	0.3

(MLQ's Revised November 1, 2007)

Footnotes:

*1 Default MLQ for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MLQ shall be 0.0005.

PART III - STANDARD CONDITIONS FOR NPDES PERMITS**A. GENERAL CONDITIONS****1. INTRODUCTION**

In accordance with the provisions of 40 CFR Part 122.41, et. seq., this permit incorporates by reference ALL conditions and requirements applicable to NPDES Permits set forth in the Clean Water Act, as amended, (hereinafter known as the "Act") as well as ALL applicable regulations.

2. DUTY TO COMPLY

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

3. TOXIC POLLUTANTS

a. Notwithstanding Part III.A.5, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. DUTY TO REAPPLY

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. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. PERMIT FLEXIBILITY

This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. PROPERTY RIGHTS

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

7. DUTY TO PROVIDE INFORMATION

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.

8. CRIMINAL AND CIVIL LIABILITY

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to 18 U.S.C. Section 1001.

9. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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 Act.

10. STATE LAWS

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 established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

11. SEVERABILITY

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 the remainder of this permit, shall not be affected thereby.

B. PROPER OPERATION AND MAINTENANCE

1. NEED TO HALT OR REDUCE NOT A DEFENSE

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. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. DUTY TO MITIGATE

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

3. PROPER OPERATION AND MAINTENANCE

a. 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 permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will 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 this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. BYPASS OF TREATMENT FACILITIES

a. 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 Parts III.B.4.b. and 4.c.

b. 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, within 24 hours, submit notice of an unanticipated bypass as required in Part III.D.7.

c. 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 preventive maintenance; and,

(c) The permittee submitted notices as required by Part III.B.4.b.

(2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part III.B.4.c(1).

5. UPSET CONDITIONS

a. 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 Part III.B.5.b. 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.

b. 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;
- (3) The permittee submitted notice of the upset as required by Part III.D.7; and,
- (4) The permittee complied with any remedial measures required by Part III.B.2.

c. BURDEN OF PROOF

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. REMOVED SUBSTANCES

Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. PERCENT REMOVAL (PUBLICLY OWNED TREATMENT WORKS)

For publicly owned treatment works, the 30-day average (or Monthly Average) percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR 133.103.

C. MONITORING AND RECORDS

1. INSPECTION AND ENTRY

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the 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 purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. REPRESENTATIVE SAMPLING

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. RETENTION OF RECORDS

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.

4. RECORD CONTENTS

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;

- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) and time(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

5. MONITORING PROCEDURES

- a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. FLOW MEASUREMENTS

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

D. REPORTING REQUIREMENTS

1. PLANNED CHANGES

a. INDUSTRIAL PERMITS

The permittee shall give notice to the Director as soon as possible of any planned physical alterations 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 Part 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 listed at Part III.D.10.a.

b. MUNICIPAL PERMITS

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. 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.

3. 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 Act.

4. DISCHARGE MONITORING REPORTS AND OTHER REPORTS

Monitoring results must be reported to EPA on either the electronic or paper Discharge Monitoring Report (DMR) approved formats. Monitoring results can be submitted electronically in lieu of the paper DMR Form. To submit electronically, access the NetDMR website at www.epa.gov/netdmr and contact the R6NetDMR.epa.gov in-box for further instructions. Until you

are approved for Net DMR, you must report on the Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically, however when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA at the address below. Duplicate copies of paper DMR's and all other reports shall be submitted to the appropriate State agency (ies) at the following address (es):

EPA:

Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

New Mexico:

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

5. ADDITIONAL MONITORING BY THE PERMITTEE

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. AVERAGING OF MEASUREMENTS

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

7. TWENTY-FOUR HOUR REPORTING

a. 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 written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

- (1) A description of the noncompliance and its cause;
- (2) 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,
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (2) Any upset which exceeds any effluent limitation in the permit; and,
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II (industrial permits only) of the permit to be reported within 24 hours.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. OTHER NONCOMPLIANCE

The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 and Part I.B (for industrial permits only) at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.

9. 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.

10. CHANGES IN DISCHARGES OF TOXIC SUBSTANCES

All existing manufacturing, commercial, mining, and silvacultural permittees shall notify the Director as soon as it knows or has 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 listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) 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-dinitro-phenol 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; or
 - (4) The level established by the Director.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine 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; or
 - (4) The level established by the Director.

11. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified.

- a. 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:

(a) 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,

(b) 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.

- (2) FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP - by a general partner or the proprietor, respectively.

- (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:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

- b. ALL REPORTS required by the permit and other information requested by the Director shall be signed by a person described above 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 above;
- (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 a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental

matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the Director.

c. CERTIFICATION

Any person signing a document under 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."

12. AVAILABILITY OF REPORTS

Except for applications, effluent data permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

1. CRIMINAL

a. NEGLIGENT VIOLATIONS

The Act provides that any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

b. KNOWING VIOLATIONS

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

c. KNOWING ENDANGERMENT

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

d. FALSE STATEMENTS

The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309.c.4 of the Clean Water Act)

2. CIVIL PENALTIES

The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$27,500 per day for each violation.

3. ADMINISTRATIVE PENALTIES

The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

a. CLASS I PENALTY

Not to exceed \$11,000 per violation nor shall the maximum amount exceed \$27,500.

b. CLASS II PENALTY

Not to exceed \$11,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$137,500.

F. DEFINITIONS

All definitions contained in Section 502 of the Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. ACT means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.
2. ADMINISTRATOR means the Administrator of the U.S. Environmental Protection Agency.
3. APPLICABLE EFFLUENT STANDARDS AND LIMITATIONS means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.
4. APPLICABLE WATER QUALITY STANDARDS means all water quality standards to which a discharge is subject under the Act.
5. BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.
6. 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 terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling 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 sampling day. "Daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.
7. DAILY MAXIMUM discharge limitation means the highest allowable "daily discharge" during the calendar month.
8. DIRECTOR means the U.S. Environmental Protection Agency Regional Administrator or an authorized representative.
9. ENVIRONMENTAL PROTECTION AGENCY means the U.S. Environmental Protection Agency.
10. GRAB SAMPLE means an individual sample collected in less than 15 minutes.
11. INDUSTRIAL USER means a non-domestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.
12. MONTHLY AVERAGE (also known as DAILY AVERAGE) discharge limitations means the highest allowable average of "daily discharge(s)" over a calendar month, calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

$$C_1F_1 + C_2F_2 + \dots + C_nF_n$$

$$F_1 + F_2 + \dots + F_n$$

13. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Act.
14. 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.
15. SEWAGE SLUDGE means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff that are discharged to or otherwise enter a publicly owned treatment works.
16. TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at

the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.

17. 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 preventive maintenance, or careless or improper operation.
18. FOR FECAL COLIFORM BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
19. The term "MGD" shall mean million gallons per day.
20. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).
21. The term "µg/L" shall mean micrograms per liter or parts per billion (ppb).
22. MUNICIPAL TERMS
 - a. 7-DAY AVERAGE or WEEKLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during 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. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - b. 30-DAY AVERAGE or MONTHLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during 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. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.
 - c. 24-HOUR COMPOSITE SAMPLE consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.
 - d. 12-HOUR COMPOSITE SAMPLE consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.
 - e. 6-HOUR COMPOSITE SAMPLE consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
 - f. 3-HOUR COMPOSITE SAMPLE consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.