UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

OCT 1 0 2019

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7009 1680 0002 2842 2520)

REPLY TO: 6WD-NP

John M. Stomp III, P.E.
Chief Operating Officer
Albuquerque Bernalillo County Water Utility Authority (ABCWUA)
PO Box 568
Albuquerque, NM 87103

Re: Application to Discharge to Waters of the United States Permit No. NM0022250, ABCWUA-Southside Water Reclamation Plant

Dear Mr. Stomp III:

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 CFR §124.19, 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 Tung Nguyen of the NPDES Permits Branch at the above address or by telephone: (214) 665-7153, by fax: (214) 665-2191, or by E-mail: nguyen.tung@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 by telephone: 214-665-6468.

Sincerely yours,

Charles W. Maguire for
Director
Water Division

Enclosures

cc w/enclosures:
Pueblo of Isleta
New Mexico Environment Department

NPDES PERMIT NO. NM0022250
RESPONSE TO COMMENTS

RECEIVED ON THE SUBJECT DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IN ACCORDANCE WITH REGULATIONS LISTED AT 40 CFR §124.17

APPLICANT: Albuquerque Bernalillo County Water Utility Authority (ABCWUA)
PO Box 568
Albuquerque, NM 87103

ISSUING OFFICE: U.S. Environmental Protection Agency
Region 6
1201 Elm Street, Suite 500
Dallas, TX 75270

PREPARED BY: Tung Nguyen
Environmental Engineer
NPDES Permitting Section (WDPE)
Water Division
VOICE: 214-665-7153
EMAIL: nguyen.tung@epa.gov

PERMIT ACTION: Final permit decision and response to comments received on the draft reissued NPDES permit publicly noticed on December 22, 2018

DATE PREPARED: October 7, 2019

Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of July 1st, 2018.

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POI	Pueblo of Isleta
POIWQS	Pueblo of Isleta Water Quality Standards
POTW	Publicly owned treatment works
RP	Reasonable potential
SSM	Sufficiently Sensitive Method
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan

SUBSTANTIAL CHANGES FROM DRAFT PERMIT

There are changes from the draft NPDES permit publicly noticed on December 22, 2018:

- A monitoring location has been established at the I-25 bridge.
- Part I.A has been renumbered.
- Applicable oral reporting for spill, overflow and daily maximum limit exceedance have been changed to "immediately" from "within 12 hours".
- Effluent monitoring for arsenic has been added.
- The abbreviation for Pueblo of Isleta has been changed to "POI" in the final permit.
- POI has been added in Part III.D.7 for oral notification.
- Influent sample type for BOD and TSS have been changed to "24-hour composite".
- A provision for pH sample type has been added.
- Footnote for E. coli regarding to geometric mean has been added.
- Capacity, Management, Operation and Maintenance plan has been placed in a separate header in Part II.
- A footnote allowing POI to update the contact information has been added.
- Test method for mercury has been specified.
- Methylmercury has been added in Part I.F
- Details of the fish tissue study have been specified.
- Limitations for total inorganic nitrogen and ammonia have been restored.
- $CBOD_5$ loading has been corrected to 709 lbs./day.

STATE CERTIFICATION

Letter from Shelly Lemon, New Mexico Environment Department (NMED) to Charles Maguire (EPA) dated March 27, 2019.

CONDITIONS OF CERTIFICATION

None

COMMENTS RECEIVED ON THE DRAFT PERMIT

Letter from Max Juni, Governor, Pueblo of Isleta (POI) to Evelyn Rosborough (EPA) dated March 11, 2019.

Letter from Shelly Lemon, New Mexico Environment Department (NMED) to Charles Maguire (EPA) dated March 27, 2019.

Letter from John M. Stomp III, P.E., Chief Operating Officer, ABCWUA (permittee), to Evelyn Rosborough (EPA) dated February 1, 2019.

RESPONSE TO COMMENTS

Comment 1 (POI): Ambient data for EPA's analyses pertaining to mercury were taken from the Rio Bravo Bridge (USGS gage #08330150). The POI suggests that EPA also consider ambient data for mercury at the Alameda Bridge (USGS gage #08329918), which the Pueblo submitted to EPA. The

Pueblo agrees with EPA's decision to retain mercury limits in the previous Permit and to require implementation of the Mercury Minimization Study tasks and schedule.

Response 1: Ambient data for total mercury (5 data points) at Rio Bravo Bridge indicate all data points were "less than" 0.2 ug/L (refer to RTC Attachment 1). Consistent with the NMIP, EPA assumes the values as zero for the RP analysis purpose since all reported values were "non-detect."

Alameda Bridge is about 13 miles or more (waterway) upstream from Rio Bravo Bridge according to NEPAssist (https://www.epa.gov/nepa/nepassist). EPA presumes ambient data at Rio Bravo Bridge (about 0.6 mile upstream from the facility) is more representative than those at Alameda Bridge due to distance from the facility. The RPs exist with the obtained data at the two bridges regarding POIWQS. These RP excursions did not result in any new numeric limits being established. The numeric limits from the previous limits for mercury are retained in the final permit and a mercury study and minimization plan were included in the draft permit to address the RP to cause or contribute to exceedance of POIWQS. There is no change in the final permit in response to this comment.

Comment 2 (POI): Please clarify that the pH permit limitation is established as 6.6-9.0 s.u.

Response 2: As stated in Section V.A of the Fact Sheet, "permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit." The 6.6-9.0 s.u. pH limit in the permit is based on the water quality-based effluent limitation protective of the New Mexico and POI water quality standards and not the less restrictive technology-based limit of 6.0-9.0 s,u,.

Comment 3 (POI): Please explain and clarify why 53 cfs is selected by EPA as the assumed critical low flow rate in RP excursions calculations? As opposed to another critical low flow rate, does a flow rate of 53 cfs protect POIWQS throughout the Draft Permit as proposed?

Response 3: The critical low flow of 53 cfs used to apply POIWQS was stated in page 7 of 17 of the Fact Sheet, Section V.C.3. This flow is consistently used in the RP analysis and WET testing requirements to implement the POIWQS. There is no indication the flow in the Rio Grande at the Rio Bravo Bridge has been less than approximate 53 cfs since September 1997. Therefore, this lowest observed flow in the Rio Grande above the permitted discharge in more than 20 years has been selected as the critical low flow in term of POIWQS. Using a zero low flow has been deemed to be overly protective since the Bernalillo and Rio Rancho wastewater treatment plants discharge continuously; thus, making zero flow in the Rio Grande is unlikely. This assumption is supported because no flow below 53 cfs has been recorded at the Rio Bravo monitoring station in 20 years. At any flow rate higher than 53 cfs, the POIWQS would also be protected due to more available dilution. For this permit renewal, EPA believes permit conditions using 53 cfs would be protective of the POIWQS "at all times and at all flow rates" consistent with POIWQS Section I.H. The permit has a standard reopener clause that would allow the permit to be changed if POIWQS are revised at a later date. In a letter from the POI dated October 23, 2018, the use of 53 cfs was deemed to be not "unreasonable" for applying the "at all flows" requirement of the POIWQS.

Comment 4 (POI): The POI requests that the monitoring location right above the Pueblo's northern boundary be specifically defined and suggests a location near the I-25 bridge, which would be reasonably representative of the Pueblo's receiving waters.

Response 4: EPA agrees with the Pueblo's suggestion and has revised the monitoring location in Part I.F. of the final permit as suggested.

Comment 5 (POI): The Fact Sheet does not mention, though the Permit does include (Part I.F, page 5 of Part 1), that "Test results (which are monthly) shall be submitted to EPA, Pueblo of Isleta and NMED quarterly." The Pueblo affirms that ambient data collected under the Permit is to be shared with the Pueblo of Isleta.

Response 5: Comment is noted, no change to the final permit is required in response to this comment.

Comment 6 (POI): Please clarify the % removal for what parameter(s), which is stated in the Fact Sheet (table under Section V.D, monitoring frequency).

Response 6: The % removal requirement for $CBOD_5$ and TSS is described on page 6 of 17 of the Fact Sheet. This % removal requirement for $CBOD_5$ and TSS is also specified in Part I.A of the permit. No change to the final permit is required in response to this comment.

Comment 7 (POI): Like the Pueblo's comment above regarding mercury, please clarify that 53 cfs is a critical low flow rate defined by EPA; it is EPA's interpretation of POIWQS. Please clarify that a flow rate of 53 cfs is not specified in POIWQS.

Response 7: Response 3 above explains how 53 cfs has been chosen as the critical low flow for applying POIWQS for this permitting action. EPA agrees that 53 cfs is not a specific low flow requirement of the currently approved POIWQS, which currently states that the POIWQS must be protected "at all times and at all flow rates" (POIWQS Section I.H).

Comment 8 (POI): There is a statement that the "Effluent PCB level was detected at 0.0000603 ppm ... " ppm is equivalent to mg/L. Appendix A to the Fact Sheet reports a PCB reported value of 0.0000603 ug/L, with ug/L equivalent to ppb. Please correct this discrepancy in the units.

Response 8: The correct unit was ug/L. EPA does not revise the proposed Fact Sheet, but comment is noted for the record. No change is made in the final permit in response to this comment.

Comment 9 (POI): While the Fact Sheet does not mention the Pueblo of Isleta in this section, the Pueblo of Isleta acknowledges that Permit re-opener language is retained from the previous permit (1) "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 Pueblo of Isleta WQS, New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, established and/or remanded" and (2) "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".

Response 9: Comment is noted for the record.

Comment 10 (POI): Section 2 of Part I.A is missing from the permit.

Response 10: EPA agrees and has renumbered Part I.A.

Comment 11 (POI): Change reporting to POI from "within 12 hours" to "immediately" in Part I.D, Part. II.B and "Pueblo of Isleta Reporting Requirement" of the permit.

Response 11: EPA agrees to the POI request because a sewage spill (or E. coli exceedance), going into the Rio Grande, can potentially reach the POI waters in much less than 12 hours due to the discharge only being approximately 5.4 miles above the POI boundary. The permittee must notify POI immediately (as soon as practical) after becoming aware of the spill or exceedance. The changes have been made in the final permit.

Comment 12 (POI): It appears EPA is asking for an Asset Management Plan for the SWRP. The permit language suggests wording which gives ABCWUA an option to create a new plan that may not tie ABCWUA to specific capital improvement timelines, goals, and/or objectives. There is already an existing "Southside Water Reclamation Plant Renewal and Asset Management Plan (RAMP) dated December 2015." Like requirements included in Administrative Compliance Orders issued to ABCWUA, the RAMP appears to require capital expenditures for facility upgrades, yet this document is not specifically referenced to be updated in the proposed permit. This section of the permit is allusive and doesn't substantiate how or where ABCWUA will address the "useful life of the facility". The Pueblo is requesting clarification on how EPA and ABCWUA will work together to prioritize future infrastructure improvements over the next 15 – 20 years.

Response 12: EPA appreciates POI for bring up this comment. Part I.E. "Pollution Prevention Requirements" are general permit conditions and retained from the previous permit. This part does not supersede any agreements, conditions, compliances included in the existing "Consent Agreements and Final Order", "Administrative Order" and the 2105 RAMP Update; this part is independent of those documents, which are enforcement and corrective actions undertaken by EPA Region 6 Enforcement & Compliance Division. The request is not within the scope of the NPDES permitting process; this request has been forwarded to the Enforcement and Compliance Assurance Division. Useful information regarding the ABCWUA capital improvements and finances can be found at: http://www.abcwua.org/Your_Water_Authority.aspx. EPA makes no change in the final permit based on this comment.

Comment 13 (POI): The Pueblo of Isleta is concerned about EPA's decision to remove monitoring of arsenic from the proposed Draft Permit. The Pueblo of Isleta requests that arsenic monitoring be added into the Permit either in Part I.F along with mercury as a once/quarter pollutant scan. The Pueblo of Isleta requests that the permittee continue to monitor arsenic concentrations given its importance to the Pueblo in the protection of human health. Measured non-detect or concentrations below 4.3 mg/L is positive information about water quality in the Rio Grande. All levels of exposure to toxics pose some probability of an adverse response.

Response 13: EPA agrees and has added quarterly monitoring of arsenic in the effluent to the final permit.

Comment 14 (POI): In Part III.D.7, it appears that notifying the Pueblo of Isleta was left out of this section. Please add notification to the Pueblo of Isleta to this section and include the updated language mentioned above - "Overflows that endanger health or the environment shall be reported to the Pueblo of Isleta immediately".

Response 14: The language requiring the permittee to report to POI for all overflow is included in Part I.D. EPA has added POI in Part III.D.7 of the final permit.

Comment 15 (POI): There are spelling errors for POI in pages 7 and 11 of the Fact Sheet. The Pueblo also requests that the abbreviation for Pueblo of Isleta be changed to POI.

Response 15: Comment is noted for the record; it's EPA practice not to change the Fact Sheet after publishing it. The abbreviation for Pueblo of Isleta has been changed to POI in the final permit.

Comment 16 (POI): Public education and outreach regarding ABCWUA's SWRP is not specifically addressed in the proposed Draft Permit. The Middle Rio Grande Watershed Based MS4 Permit requires permittees to implement a public education program to distribute educational knowledge to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. ABCWUA has created an excellent single-page portrayal "Where our water comes from" for its customers to understand the various sources of its public water supply. Missing from the diagram is treated wastewater. Though treated effluent is not labelled on the diagram, the Rio Grande is depicted as flowing to the Gulf of Mexico. While this is true, it is a limited view.

The Pueblo would welcome discussions with ABCWUA about how it can educate its customers on the fate of wastewater, perhaps a companion piece to "Where our water comes from" called "Where our water goes." If treated wastewater goes to the Gulf of Mexico, it certainly goes through Isleta and other communities on its way. ABCWUA customers ought to be made aware of how they contribute to wastewater impacts on downstream communities. For example, if anything can be diverted to the solid waste stream that is ordinarily washed down a drain or flushed down a toilet it would improve surface water quality downstream of the SWRP.

Response 16: Comment is noted; however, the requirements of the MS4 permit are outside the scope of this permit. There is no change in the final permit.

Comment 17 (NMED): "NMED requests that EPA clarify in Part 1.A.1, CBOD and TSS Influent that the sample type should also be a 24-hour Composite sample along with the calculation footnote *2."

Response 17: EPA agrees to change the "Grab" sample type for influent $CBOD_5$ and TSS to 24-hour composite for consistency with the effluent ones.

Comment 18 (NMED): "Although it states in Part 1.F Pollutant Scan, NMED requests that EPA clarify in Part 1.A.1, chlorides, TDS, and sulfates be monitored upstream at the Rio Bravo Bridge by adding a footnote specifying this location."

Response 18: Effluent monitoring (for chlorides, TDS, and sulfates) is specified in Part I.A.1; whereas, ambient monitoring is stated in Part I.F. EPA instead keep these monitoring requirements separate to prevent possible confusion if they are combined in Part I.A.1. EPA respectfully makes no change in the final permit for this comment.

Comment 19 (NMED): "The Capacity, Management, Operation and Maintenance (CMOM) program must be addressed in the permit, as it is in the Fact Sheet. NMED requests that EPA add language stating that the permittee must continue to implement and update (if necessary) the CMOM plan required previously."

Response 19: The CMOM plan continues to be required in Part II.E of the permit.

Permittee's Comments Below: All comments are detailed in the referenced letter.

Comment 20 (permittee): "The critical low flow used to implement Pueblo of Isleta Water Quality Standards (POIWQS) should be the four consecutive day flow that occurs with a frequency of once in three years (4Q3). Alternatively, it should be another statistically valid critical low flow based on flow measured by the U.S. Geological Survey (USGS) at Central Avenue Bridge (Albuquerque Gage# USGS 08330000)." [quote from Item I of letter attachment ("ATTACHMENT")].

Response 20: POIWQS and NMWQS are both used in development of this permit; critical low flow "at all times and at all flow rates" (POIWQS Section I.H) is applicable to POIWQS and the 4Q3 is applicable for NMWQS, except for human health standards which use the harmonic mean flow (NMAC 20.6.4.11(b)). Revision of an existing adopted and approved tribal or state water quality standard is outside the scope of a NPDES permitting action. Since 40 CFR 122.4(d) prohibits the issuance of a permit that is not protective of the water quality requirements of all affected states and tribes, conditions that are more protective than needed to protect NMWQS must be included where necessary to be protective of POIWQS.

According to 20.6.4.11.B.2 NMAC, "the critical low flow is the minimum average four consecutive day flow that occurs with a frequency of once in three years (4Q3)." This 4Q3 flow does not meet the POIWQS criterion defined as "at all times and at all flow rates" since the 4Q3 would not include low flows that occurred for less than four consecutive days or less frequently than once in three years. In this permit term, EPA chooses the lowest observed flow, 53 cfs, over a 20 year-period mentioned in Table 1 below to use as the POIWQS critical low flow since POIWQS would be protected at all flows known to have occurred in the last 20 years. (Refer also to Response No. 3 above.)

Responses to the permittee's comments below are in reference to to POIWQS (unless noted).

Referencing to Fact Sheet of the 2012 permit, ABCWUA states "The Fact Sheet (Section V.C.5 on page 11 of 24) explains: 'To determine impacts of water quality-based pollutants and its compliance with POIWQS, the permit will evaluate the ABCWUA discharge after mixing with the 4Q3 identified above.'" (page 4 of ATTACHMENT). EPA finds the same referenced paragraph of this document states "For purposes of ensuring that permit limits established for the protection of Pueblo of Isleta criteria are protected zero (0) cfs critical low flow is appropriate and consistent with the previous permit." The critical flow in term of POIWQS was inconsistently stated in the 2012 Fact Sheet. Nonetheless the 4Q3 or Qs4D (the running four-day average of river flow) ABCWUA mentioned in its submitted comments (page 2 of ATTACHMENT) have been referenced in the NMWQS and are not applicable to POIWQS. In case there is any mistake/error made in the previous permit, EPA would correct it to protect POIWQS and/or NMWQS. Pursuant to Section 301(b)(1)(C) of the CWA and 122.44(d), the permit must include conditions to meet the water quality standards. If any term is not defined in POIWQS, EPA will use ordinary language and professional judgment to implement POIWQS.

Table 1: Critical Low Flow for Application of POIWQS Used in the Permit

	2005 Permit	2012 Permit	2018 Proposed Permit
Critical low flow, cfs	Zero	Zero*	53**

* Zero (0) was stated in the Fact Sheet, page 11 of 24; but 52.9 MGD (4Q3) was stated in RP analysis, Appendix 4 of Fact Sheet.

** EPA rounds this measured value to nearest whole number (on 9/8/2013 and 9/9/2013; see RTC Attachment 2), which was the lowest flow during 9/1997 – 9/2017.

In the proposed permit EPA could have retained the zero cfs critical low flow because it is the most conservative and would also be protective of POIWQS at all times. However, after consultation with POI regarding to the obtained flow data above, EPA and POI have agreed 53 cfs flow is appropriated for this permit term (RTC Attachment 3). EPA has not arbitrarily changed the method for interpretation POIWQS without any "legal basis" as the permittee has implied in page 2 of ATTACHMENT. Using this 53 cfs flow would provide some dilution and ease applicable limits compare to the zero flow. For example, the mercury limit would be 0.0016 ug/L (30-day average) using 53 cfs flow or 0.0011 ug/L (30-day average) using zero flow.

EPA has chosen the river segment between the USGS gauge and northern boundary of POI to determine credit for diversion inflow(s) to the segment. Because POIWQS apply to all tribal surface waters pursuant to POIWQS Section I.B, EPA does not give credit for the Atrisco and Albuquerque Drains inflows located in POI and approximate 1.5-mile waterway downstream from its northern boundary (Figure 2 of Jacobs Memorandum). This 1.5-mile waterway does not have dilution benefit from the drain inflows. There is a South Diversion Channel inflow (including Rio Bravo Generating Station discharge mentioned in Table 2 below) to this water stretch; but data for this channel inflow is either ungagged or is not available (Table 5 of Jacobs Memorandum). NMED stated via email on July 2, 2018 that "There may be small irrigation returns, but they're not easily defined." If EPA evaluates RP analysis for mercury using the measured flow data on September 8, 2013 submitted by the permittee (Table 5 of Jacobs Memorandum), the limits would be more stringent as follows:

Instream concentration = ((FQa × Ca) + (Qe × Ce × 2.13)) ÷ (FQa + Qe), ug/L
= ((53 x 0) + (79 x 0.003 x 2.13)) ÷ 50
= 0.01 ug/L (RP exists due to greater than standard, 0.0011 ug/L)

Where:
Ce is the average effluent concentration, 0.003 ug/L (same value stated in the Fact Sheet)
Ca is the geometric mean ambient concentration upstream of discharger, 0 ug/L (same in Fact Sheet)
Qe is the measured effluent flow rate, 79 cfs
Qa is the critical flow, 53 cfs (POIWQS)
F is the fraction of stream allowed for mixing, 1.0
(FQa + Qe) is now 50 cfs, measured value at USGS gauge 08330875 at RG Isleta Lakes (Isleta northern boundary). This value includes the South Diversion Channel inflow (if any).

30-day Average Limit = Cs[(FQa + Qe) ÷ Qe] – Ca(FQa ÷ Qe), ug/L
= 0.0011[50 ÷ 79] – 0(50) = 0.00069 ug/L (compared to 0.0016 ug/L above)
Daily max. Limit = 30-day average limit x 1.5 ug/L
= 0.00069 x 1.5 = 0.001 ug/L

Where:
Cs is the applicable POIWQS, 0.0011 ug/L
Ca is the ambient concentration upstream of discharger, 0 ug/L
Qe is the measured effluent flow rate, 79 cfs
Qa is the critical flow rate, 53 cfs
F is the fraction of stream allowed for mixing, 1.0
(FQa + Qe) is now 50 cfs, as stated above

The permittee has stated "According to the USGS, the low flow value of 53 cfs is not an actual measured flow, but an estimated value." (page 3 of ATTACHMENT and footnote 10 on page 9 of Jacobs). The

permittee did not submit supporting information (referenced by the USGS) for this claim. Data obtained at the USGS gauge has been "Approved for publication -- Processing and review completed." If the value is estimated, the report would show "Value has been estimated." as seen in attached report (RTC Attachment 2). EPA understands that measurement devices/instruments have different levels of tolerances/accuracies (e.g., ± 5%, ± 10%, ± 15%) by different manufacturers. This principle likely applies to the effluent data (flows, concentrations) due to flow measuring device(s) and laboratory instrument(s) the permittee utilizes. Note that with regard to reporting of monitoring data, the permittee complies with the permit conditions regarding the flow measurement and analytical test methods and EPA generally accepts the reported values. For implication, EPA does not evaluate the upper bound or lower bound (e.g., +5%, -5%, +10%, -10%...) of tolerances because it's not required and up to 10% tolerance of flow instrument is generally accepted as stated in Part III of the permit.

EPA does not address whether it's appropriate using one single day's flowrate (53 cfs) to evaluate the RP and calculate effluent limitations for "parameters that have a longer-term (chronic) impact." because it's beyond scope of this permitting process to question the approved POIWQS at this time. Since this comment appears to be related to the way the POIWQS are written, this comment has been referred to EPA Region 6 Water Quality Protection Section and POI. Only currently approved POIWQS are implemented for this permitting process. EPA understands all the water diversions upstream from the USGS gage affects the effluent limitations and the POI water quality, but diversions are regulated by the State and are outside the jurisdiction of the NPDES permit program. The permittee claims ABCWUA is not diverting the water. EPA understands there are multiple users of Rio Grande waters upstream of the ABCWUA facility in New Mexico and Colorado and has no evidence that POI solely causes all diversions of Rio Grande waters above the Pueblo. In any event, EPA has no authority over water rights and water diversions (CWA §101(g)). Before finalizing the permit, EPA had met at least twice with POI to discuss the comments received regarding the draft permit. POI has not rejected the critical flow (53 cfs) used in the draft permit after the meetings. ABCWUA is welcome to work directly with POI regarding possible revisions of POIWQS to establish a different critical low flow, which is beyond the scope of this permitting process. The final permit has standard language to modify the permit should the POIWQS be revised and approved in the future. EPA makes no change in the final permit in response to this comment.

Comment 21 (permittee): Since added into POIWQS in 2002, the wildlife usage criterion for total mercury has never been used to establish a permit limit. Any limitations for total mercury based on this criterion should be removed. The adopted wildlife usage criterion for mercury is wrong.

"In the proposed permit, EPA used an average effluent concentration value for mercury of 0.003 ug/L to determine RP. This value is incorrect. The average effluent concentration of mercury is 0.001 ug/L, as submitted in Appendix D of the permit application. The 0.001 ug/L value represents the average concentration of mercury discharged during the last year." The discharge concentrations on mercury should be removed from the proposed permit. (Page 5 of ATTACHMENT)

EPA is not implementing POIWQS for the total mercury criterion on similarly located dischargers (Rio Bravo Generating Station, current Municipal Separate Storm Sewer System general permit, City of Rio Rancho) in a uniform manner. "This further indicates that there is no clear implementation procedure. The different ways that mercury has been implemented indicate that the limits in this proposed permit are arbitrary and capricious." (Page 6 of ATTACHMENT)

Response 21: According to POIWQS Section V.A, designated uses include wildlife usage, which criterion is 1.1 ng/L (0.0011 ug/L) for mercury (POIWQS Section IV.I). This applicable criterion is the

most stringent one among those applicable designated uses. Regardless how this criterion was missed in 2005 and 2012, EPA is correcting the mistake to protect POIWQS. Since the POIWQS are the applicable WQS, EPA must implement them to issue the permit. This permittee's statement has been forwarded to the Region 6 Water Quality Protection Section and POI. The draft permit does not include any new numeric limits for total mercury based on the wildlife criterion, but retains the previous limitations.

Submitted application Form 2A was dated February 21, 2017; averaged concentration of mercury was indicated as 0.001 ug/L with 52 samples. On June 1, 2017 the permittee emailed more data indicating (RTC Attachment 4) averaged concentration of mercury was 0.003 ug/L with 221 samples from October 2012 to December 2016. EPA used 0.003 ug/L to evaluate the RP because it's a bigger data set (221 samples) and thus more representative compared to the 52 samples. DMR for mercury between January 2017 and August 2018 (RTC Attachment 5) shows the average concentration varied from 0.001 to 0.002 ug/L, which is different from the permittee's claim. Calculations for each scenario using the same RP analysis as stated in the Fact Sheet (with the same factors: critical flow 53 cfs, effluent flow 117.8 cfs, ambient concentration 0 ug/L) are below:

Mercury RP analysis	**Calculated instream concentration, ug/L**	**RP excursion compared to criterion of 0.0011 ug/L**	**Calculated limit (30-day average), ug/L**
Aveg. effluent concentration used in proposed permit, 0.003 ug/L	0.0044	Yes, because instream concentration is greater than criterion	0.0016
Aveg. effluent concentration permittee claims, 0.001 ug/L	0.0015	Yes	Same value (0.0016) because effluent concentration is not a factor to calculate the limit after RP has been found
Aveg. effluent concentration from DMR, 0.001 – 0.002 ug/L	≥ 0.0015	Yes	Same value (0.0016) because effluent concentration is not a factor to calculate the limit after RP has been found

The table shows if the average effluent concentration is 0.001 ug/L or greater, the calculated limit is unchanged. EPA does not agree with the permittee to use the value of 0.001 ug/L for the RP analysis because DMR shows the values differently and the permittee does not assure this effluent mercury value would be representative for effluent discharge in this permit term. If 0.001 ug/L is proven representative for this permit term, then ABCWUA already meets the calculated limit (0.0016 ug/L). If POIWQS are revised in the future, the permittee could request modification of the exiting permit, but EPA would apply the new WQS at the time of permit reissuance.

EPA has or has not applied the POIWQS to the nearby facility permits as explained below:

Table 2: NPDES Permits Near ABCWUA Plant

Facility	**NPDES Permit Type**	**Approximate Upstream Distance* from POI boundary**	**Discharge to**	**POIWQS (total mercury) Applied**
ABCWUA plant (NM0022250)	Individual POTW	5.4 miles (waterway)	Rio Grande	Yes, due to proximity and CD effect on downstream POIWQS
Rio Bravo Generating Station (NM0030376)	Individual non-POTW	7.1 miles (waterway)	Unnamed unlined arroyo thence to South Diversion Channel (approx. 3.4 miles	No, due to "de minimis" demonstrated below

			total) before reaching Rio Grande	
Middle Rio Grande Watershed Based Municipal Separate Storm Sewer System (MS4) General Permit (NMR04A000)	General storm water & limited non-storm water	Entire Middle Rio Grande Watershed boundary, including City of Albuquerque	Middle Rio Grande Watershed	Yes. Note that storm water discharge permit has different requirements. The MS4 permit uses Best Management Practices, including prohibition on non-storm water, to control pollutants rather than end-of-pipe limits. POIWQS for mercury, but as with the previous ABCWUA permits not the wildlife use WQS, were considered***.
Rio Rancho WWTP (NM0027987)	Individual POTW	27.4 miles (waterway)	Rio Grande	No, due to proximity and CD effect on downstream POIWQS **

* Distance is measured using SWQB Mapper (https://gis.web.env.nm.gov/oem/?map=swqb).
** Pueblo of Sandia WQS is applicable (Page 7 of 15; RTC Attachment 6).
*** Fact Sheet and Permit are available at: https://www.epa.gov/sites/production/files/2018-10/documents/r6-npdes-middle-rio-grande-ms4-nmr04a000-fact-sheet-2014.pdf
https://www.env.nm.gov/swqb/NPDES/Permits/NMR04A000-MRG-MS4.pdf

The highest monthly average discharge rate reported from the Rio Bravo permit application was 0.072 MGD (Section XII page 12 of RTC Attachment 7); this discharge reaching Rio Grande is downstream from the ABCWUA plant outfall. Even if the entire 0.072 MGD (0.11 cfs) reaches Rio Grande, any impact to POI water quality is "de minimis" as the critical dilution is calculated:

CD = Rio Bravo flow/(ABCWUA flow + POIWQS critical flow + Rio Bravo flow)
= 0.11/(117.8 + 53 + 0.11) = 0.064%

The Rio Rancho Permit has historically not been subjected to POIWQS because it's located far upstream from the POI boundary, as compared to the ABCWUA location; Pueblo of Sandia WQS (PSWQS) and NMWQS have been applied instead. The mercury in the Rio Rancho permit was consistently analyzed for RP using the same approach; mercury was not limited because the RP did not exist as follows:

Total mercury RP analysis for Rio Rancho WWTP	Critical low flow	Most stringent criterion (wildlife), ug/L	RP excursion
PSWQS	4Q3 (PSWQS Section I.H)	0.77 (PSWQS Section IV.K)	No (see RTC Attachment 8)
NMWQS	4Q3 (20.6.4.11.B NMAC)	0.77 (20.6.4.900.J NMAC)	No

Due to justifications mentioned above, EPA does not agree with ABCWUA's statement that: "The EPA therefore is not implementing similar water quality standards on similarly located dischargers in a uniform manner. This further indicates that there is no clear implementation procedure. The different ways that mercury have been implemented indicate that the limits in this proposed permit are arbitrary and capricious." No other discharger consistently discharges as much effluent in such close proximity to the POI. In a consistent manner of considering downstream WQS, EPA did apply the PSWQS to the Rio Ranch permit because that discharge is in proximity to the Pueblo of Sandia. Differences in permitting outcomes are a result of different treatment plant flows, effluent quality, critical dilutions, and WQS that apply in the ABCWUA vs. Rio Ranch situations.

There is no change made in the final permit for this comment.

Comment 22 (permittee):

a) pH monitoring is listed as continuous. There should be a provision to take a daily grab sample if continuous pH monitoring equipment fails.

b) Proposed percent removal for $CBOD_5$ is not appropriate.

c) The 30-day average limit for E.coli bacteria should be a geometric mean, not an average.

d) The permit should change note *3 to remove the requirement for daily monitoring when disinfection of treatment equipment is required and specify that daily monitoring is only required when the direct effluent is being chlorinated as a means of disinfection.

e) EPA proposes to require annual monitoring for PCBs. The Fact Sheet (Part VI) implies that the permittee can certify that treatment hasn't changed in lieu of monitoring. This condition is not specified in the permit. The permit and the Fact Sheet should be consistent.

f) The Capacity, Management, Operations and Maintenance (CMOM) plan does not appear to be in the correct location and should have its own header.

Response 22:

a) "Instantaneous Grab" for pH sample type was required in the previous permit. EPA establishes "Continuous" sample type in this draft permit at the permittee's request. Understanding pH measurement device/equipment can fail, EPA has added to footnote *E a provision in the final permit to temporarily authorize "Instantaneous Grab" sampling as follows:
"In case the continuous pH instrument fails, "Instantaneous Grab" is authorized up to 15 consecutive days at a time. If more than 15 days is needed, the permittee shall request and obtain approval from EPA. Each time "Instantaneous Grab" is utilized, the permittee shall report and send the document to EPA, POI and NMED monthly in accordance with Part I.C of the permit. The report shall include nature of issue(s) that lead the continuous pH instrument fails (including date, time, duration...), corrective actions taken, date when the grab sample type is used along with pH result value(s). The conditions in Part III shall be applicable to any continuous pH instrument."

b) Per 40 CFR §133.102(a)(4), the minimum of 85% removal for $CBOD_5$ is required as stated in the Fact Sheet for technology-based effluent limitation. The concentration and loading limits, retained from the previous permit, are based on water-quality based limitations. 40 CFR 122.44 requires the permit must include conditions meeting both technology and water quality-based limitations (the more stringent between those).

c) EPA agrees the 30-day average limit for E.coli bacteria is a geometric mean as defined in Part III. The final permit includes a footnote *8 stating "Geometric mean of the daily values."

d) When used in treatment process, including disinfection of equipment, chlorine must be monitored to comply with the Tribe and NMQWS. EPA does not expect a long duration for equipment cleaning in terms of daily use. The use of chlorine is limited to protect the POIWQS and NMWQS. There is no change in footnote *3 of the final permit, which states "Daily when chlorine is used as either backup bacteria control or when disinfection of plant treatment equipment is required. Otherwise, once per week is required."

e) NMED has required the permit to include annual monitoring for PCBs because the receiving water is impaired for PCBs in fish tissue. At NMED request, certification in lieu of monitoring is not allowed for this permit. It's EPA practice not to revise the Fact Sheet after permit proposal. The final permit does not change regarding monitoring of PCBs.

f) EPA agrees to make a separate header for the CMOM plan shown in Part II of the final permit.

Comment 23 (permittee): The Water Authority submits the official report electronically through EPA's Net DMR system. The Pueblo of Isleta Reporting requirement requires DMRs to be emailed. To aid in simplicity the Water Authority requests that the Pueblo of Isleta be granted access to Net DMR in order to view discharge monitoring reports electronically.

Response 23: Comment is noted. EPA has assisted POI for an access to Net DMRs. The Pueblo should contact EPA for further assistance if needed.

Comment 24 (permittee):

a) Minor leaks, discharges, overflows and spills within the boundary of the SWRP that do not migrate outside of the process area should be clarified as not an overflow and as not needing to be reported.

b) If the permittee knows that the discharge to a surface street or storm drain is contained (captured), then it may consider the event a Category Two and comply with the Category Two Protocol procedure.

c) The permittee suggests a provision to change POI contact information (due to possible personnel changes) without intervention from EPA as follows:
"The table contained in this attachment describe the positions to be notified and the names and/or phone numbers are not binding to this Permit. In the event of a change of the person in that position or a phone number assigned to that position, the POI shall notify the ABCWUA of the changes and the ABCWUA shall acknowledge the changes. A modification to the Permit is not required."

Response 24:

a) Any leaks, discharges, overflows and spills must be reported regardless it's within the boundary of the SWRP. Depending on the circumstances, reports must be made orally and/or in writing stated in Part I.D.

b) When "Overflow events from a broken line or spill that could or will discharge to the Rio Grande and/or reach the Pueblo through a drain, culvert, canal, or other feature", the permittee is required to contact POI immediately (as soon as practical after becoming aware of) described under Category One Protocol regardless if the overflow events can be contained.

c) EPA has added a footnote allowing POI to update the contact information without requesting a minor permit modification.

Comment 25 (permittee):

a) The sampling locations of Rio Bravo Bridge and above the northern POI boundary are not specified clearly.

b) Mercury is required to be sampled monthly at Rio Bravo and the northern PI boundary. The permit does not specify if the low-level mercury method is required. The Water Authority requests that low level mercury not be required at these locations.

c) The parameter EC is required to be taken once per month at Rio Bravo, above the northern PI boundary and the effluent. This abbreviation is not defined. The Water Authority assumes that this is electric conductivity. The Water Authority Water Quality Laboratory is able to perform the method for specific conductance in accordance with 40 CFR 136 and requests that EPA confirm that these parameters are equivalent.

Response 25:

a) As requested by POI (Comment 4 above), EPA establishes the sampling locations, at Rio Bravo Bridge and I-25 Bridge, for Part I.F. Samples should be taken near or at these bridges, where accessibility is available for safety reason.

b) Test analyses for NPDES permits must be complied with requirements 40 CFR 136, where the test procedure must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv). The permittee must test mercury using EPA Method 1631E according to the applicable POIWQS criterion (1.1 ng/L). EPA denies the permittee request and specifies the test method for mercury in final permit.

c) EC stands for electroconductivity.

Comment 26 (permittee): "It is unclear what the purpose of the fish tissue study is. Both the NMWQS and POIWQS contain a numeric criterion for methylmercury of 0.3 mg/kg. However, neither standard has not been used to regulate the SWRP discharge previously." "If the purpose is to determine if methylmercury is detected in the fish caught in the area between the SWRP discharge and the northern PI boundary, how will such information be used? The fact that methylmercury may be detected in the tissue, would not link the Water Authority (or any other discharge) as the source of that mercury. An adequate plan cannot be developed without a clear purpose."

The Water Authority requests at least two years to conduct the first round of fish sampling. The number of sampling stations, locations, target fish, and number of fish per species need to be specified. EPA needs to modify the language to specify what deliverable must be submitted within two years of permit effective date. More information is needed for the fish tissue study provision. Alternatively, EPA may allow the Water Authority nine (9) months after the permit effective date to submit a draft study plan and require the first round of sampling to be conducted within one (1) year of EPA approval of the study plan.

Response 26: Information obtained from the study would help EPA to evaluate and determine appropriate limitations/reduction for mercury and/or methylmercury in the next permit renewal. Data will be reviewed to renew the permit in according with the then approved Tribe/State WQS. EPA does not evaluate methylmercury in this permit renewal because methylmercury effluent data are unavailable. To implement both POIWQS and NMWQS, EPA adds analyses of methylmercury in Part I.F in the final permit. EPA recognizes that ABCWUA discharges are unlikely to be the sole source of any mercury found during instream monitoring, but effluent data does show that the discharges do contain mercury. EPA's primary interest is in having information on which to base future permitting decisions and ensure authorized discharges do not cause or contribute to an exceedance of applicable WQS. This study is part

of the justification for retaining previous mercury numeric limits rather than implementing numeric limits based on POIWQS for wildlife use at this time.

After reviewing relevant information from New Mexico Department of Game and Fish (NMDGF), EPA specifies requirements for the fish study as follows:

Reference	Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1, Fish Sampling and Analysis, Third Edition.
Fish Sampling Location	At or near I-25 Bridge, where accessible
Target Fish	Bottom Feeder: Channel catfish Predator: Largemouth bass or White crappie
Number of fishes per species	2 or more
Sample Type	Skinless, fillet, and composite
Timeline from permit effective date	• Six (6) months: A study plan (with obtaining proper permit from MNDGF) must be submitted to EPA and POI for approval. • Eight (8) months: EPA reviews the plan; if EPA does not respond, the plan is automatically approved. • Nine or ten (9 or 10) months: Permittee must respond to EPA comment(s) on the plan for approval if necessary. • Twelve* (12) months: Fist fish sampling must be taken. • Twenty-one* (21) months: Second fish sampling must be taken (spring and early summer). • Twenty-four (24) months: Report** of the study must be submitted to EPA and POI. Due date for the report may be extended if authorized by EPA.

*Maybe extended upon authorization from EPA.
**Including raw analytical & QA/QC data in electronic format for fish tissue samples.

Comment 27 (permittee): This section includes two violations that did not occur. There is an incorrect violation for pH on 5/31/15 and an incorrect mercury violation on 3/31/16. These violations were not reported in DMRs and are not found on the EPA Enforcement and Compliance History Online (ECHO) database. If these incorrect values were used in determining or influencing permit limits, then these limits should be re-evaluated.

Response 27: The Fact Sheet correctly states the exceedances on 1/31/15 and 5/31/15 according to DMR (RTC Attachment 9) obtained from Integrated Compliance Information System (ICIS). This information was not used to determine limit range for pH, which is retained from the previous permit. No change is made in the final permit based on this comment.

Comment 28 (permittee): The Fact Sheet describes pH limits as measured continuously according to 40 CFR 401.17 and states that EPA may adjust the requirements according to 40 CFR 401.17.b or switch back to "instantaneous grab" sampling if the Permittee does not comply with the requirement of continuous monitoring. It is ambiguous as to what would warrant the switch to grab sampling. EPA should clarify this in the permit.

Response 28: There are conditions required under 40 CFR 401.17(a):
(1) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
(2) No individual excursion from the range of pH values shall exceed 60 minutes.

If the permittee does not comply with either condition above, EPA may adjust the requirement or switch back to "instantaneous grab" for pH.

Comment 29 (permittee): The Fact Sheet states that daily monitoring is required only in case a chlorine-based product is used to disinfect the effluent discharging to the receiving stream. This differs from note *3 from section Part I.A.1 of the permit which states that a daily measurement is required when chlorine is used as a backup bacteria control or when disinfection of plant treatment equipment is required. Disinfection of treatment equipment at any point in the WWTP is not likely to create an increase in chlorine at the outfall. The permit should change note *3 to remove the requirement for daily monitoring when disinfection of treatment equipment is required.

Response 29: EPA addresses this comment in Response 22 above.

Comment 30 (permittee): Limitations for total inorganic nitrogen (TIN) and total ammonia (as N) based on a statistically valid critical low flow should be retained in the permit.

Response 30: As stated in the Fact Sheet, no RP exists for TIN or total ammonia; therefore, EPA proposed to remove the previous limits for these parameters. However, in response to the permittee's request for limits on TIN and ammonia, the previous limitations for TIN and ammonia have been restored for the final permit. 53 cfs (lowest flowrate from 9/1997 to 9/2017) is used as the critical low flow for POIWQS (see Response 20 above).

Comment 31 (permittee): Daily chlorine monitoring is required when disinfection of plant treatment equipment is required. This note should match the wording from section V.5.C.5.d.

Response 31: Comment is noted; it's EPA practice not to revise the Fact Sheet after permit proposal. Please refer to Response 22 regarding chlorine monitoring.

Comment 32 (permittee): The critical low-flow dilution (CD) was changed from 60% effluent to 69%. This CD is based on the EPA's interpretation of critical low flow based on their interpretation of the Pueblo of Isleta Water Quality Standards. The critical dilution should be based on a statistically valid low flow.

Response 32: CD of 69% for WET is established to protect both POIWQS and NMWQS as stated in the Fact Sheet. The critical low flow, 53 cfs, is used in term of the POIWQS as addressed in Response 20 above. DMRs show the WET test results passed at CD of 81 % during the previous permit term; there is no RP excursion at the CD of 69% and the facility is expected to continue passing WET tests even at the 69% for CD. EPA makes no change in the final permit.

Comment 33 (permittee): EPA proposes to require annual monitoring for PCBs (Part I.A. I). The Fact Sheet (Part VI, page 15) seems to imply that the permittee can certify that treatment hasn't changed in lieu of monitoring. This condition is not specified in the permit. The permit and the Fact Sheet should be consistent.

Response 33: EPA addresses this comment in Response 22 and makes no change in the final permit.

EPA Comment: In the final permit, EPA has corrected a typographical error for $CBOD_5$ loading to 709 lbs./day, which is retained from the previous permit and explained in the Fact Sheet.

Enclosures: Available electronically (due to large file size)

POI comment letter dated March 11, 2019

POI letter dated October 23, 2018
NMED email dated July 02, 2018
Permittee comment letter dated February 1, 2019
Submitted Appendices 1 – 15 from permittee's comments
RTC Attachments 1 to 9

REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

NPDES Permit No NM0022250

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"),

Albuquerque Bernalillo County Water Utility Authority (ABCWUA) WWTP
PO Box 568
Albuquerque, NM 87103

is authorized to discharge from a facility located at 4201 2nd Street SW, Bernalillo County, New Mexico. The discharge will be to receiving water named Rio Grande River (Segment 20.6.4.105 of the Middle Rio Grande River Basin), from a point located approximately:

Outfall 001: Latitude 35° 01' 04" North and Longitude 106° 40' 13" West

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

This permit, prepared by Tung Nguyen, Environmental Engineer, Permitting Section (WDPE), supersedes and replaces NPDES Permit No. NM0022250 with an effective date of October 1, 2012.

This permit shall become effective on December 1, 2019

This permit and the authorization to discharge shall expire at midnight, November 30, 2024

Issued on OCT 10 2019

Maria L. M FOR

Charles W. Maguire
Director
Water Division (WD)

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
ML	Minimum level
MQL	Minimum quantification level
O&G	Oil and grease
POI	Pueblo of Isleta
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settleable solids
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plan

PART I – REQUIREMENTS FOR NPDES PERMITS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. OUTFALL 001 - FINAL Effluent Limits – 76 MGD Design Flow

During the period 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 domestic wastewater from Outfall 001 to the Rio Grande River (Segment 20.6.4.105 of the Middle Rio Grande River Basin). Such discharges shall be limited and monitored by the permittee as specified below:

POLLUTANT	DISCHARGE LIMITATIONS MINIMUM	DISCHARGE LIMITATIONS MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	6.6 s.u.	9.0 s.u.	Daily	Continuous (*E)

POLLUTANT	30-DAY AVG, lbs/day, unless noted	7-DAY AVG lbs/day, unless noted	30-DAY AVG mg/l, unless noted (*1)	7-DAY AVG mg/l, unless noted (*1)	DAILY MAX mg/l, unless noted (*1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	N/A	N/A	N/A	Daily	Totalized meter
$CBOD_5$	709	Report	15	22.5	N/A	Daily	24-hr Composite
$CBOD_5$, influent	N/A	N/A	Report	N/A	N/A	Weekly	24-hr Composite
TSS	19015	28522	30	45	N/A	Daily	24-hr Composite
TSS, influent	N/A	N/A	Report	N/A	N/A	Weekly	24-hr Composite
$CBOD_5$ % removal, minimum	≥85 (*2)	N/A	N/A	N/A	N/A	Monthly	Calculation
TSS % removal, minimum	≥85 (*2)	N/A	N/A	N/A	N/A	Monthly	Calculation
E. coli bacteria	1.35×10^{11} cfu/day (mpn/day) (*A)	N/A	47 cfu/100 ml (mpn/100 ml) (*8)	N/A	88 cfu/100 ml (mpn/100 ml)	Daily	Grab
TRC	N/A	N/A	N/A	N/A	11 ug/l (*4)	Daily or Weekly (*3)	Instantaneous Grab (*5)
DO	N/A	N/A	5	N/A	N/A	Daily	Instantaneous Grab
TDS	N/A	N/A	Report	N/A	N/A	Monthly	24-hr Composite
Chlorides	N/A	N/A	Report	N/A	N/A	Monthly	24-hr Composite
Sulfates	N/A	N/A	Report	N/A	N/A	Monthly	24-hr Composite
Mercury, total (*C)	0.005	0.008 (Daily max.)	0.008 ug/L	N/A	0.012 ug/L	Weekly	Grab (*B)
Arsenic, total	N/A	N/A	N/A	N/A	Report	Quarterly	24-hr Composite

Total Inorganic Nitrogen, as N (*D)	9513	6342 (Daily max.)	10	N/A	15	Daily	24-hr Composite
Total Ammonia, as N	634	951 (Daily max.)	1.0	N/A	1.5	Daily	24-hr Composite
Total Phosphorus	N/A	N/A	N/A	N/A	Report	Quarterly	24-hr Composite
Total Nitrogen (*6)	N/A	N/A	N/A	N/A	Report	Quarterly	24-hr Composite
PCBs (*7)	N/A	N/A	N/A	N/A	Report	Yearly	24-hr Composite

WHOLE EFFLUENT TOXICITY TESTING 7-DAY CHRONIC NOEC FRESHWATER (*10)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Quarterly (*9)	24-hr Composite
Pimephales promelas	Report	Quarterly (*9)	24-hr Composite

Footnotes:

*1 See **Appendix A of Part II** of the permit for minimum quantification limits.

*2 Percent removal is calculated using the following equation:

$$\text{Percent removal} = \frac{\text{average monthly influent concentration } \left(\frac{mg}{L}\right) - \text{average monthly effluent concentration } \left(\frac{mg}{L}\right)}{\text{average monthly influent concentration } \left(\frac{mg}{L}\right)} \times 100$$

*3 Daily when chlorine is used as either backup bacteria control or when disinfection of plant treatment equipment is required. Otherwise, once per week is required.

*4 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

*5 Analyzed within 15 minutes of collection.

*6 Total Nitrogen is defined as the sum of Total Kjeldahl Nitrogen (as N) and Nitrate-Nitrite (as N).

*7 PCBs shall be tested using Method 1668A or as revised, as requested by NMED: Chlorinated Biphenyl Congeners in Water, Soil, Sediment and Tissue by High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS).

*8 Geometric mean of the daily values.

*9 Quarterly shall be for the first year after the permit effective date; if all the test pass, frequencies would be once/6 months for Cd and once/year for Pp for the remaining term. If any WET test fails, frequency returns to once/3 months for the remaining term. If eligible for frequency reduction after the first year, the permittee must request EPA before proceeding.

*10 Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit for WET testing requirements for additional WET monitoring and reporting conditions.

*A Loading is calculated by multiplying the discharge (in mgd) x bacteria concentration (in cfu/100 mL) x a conversion factor (3.79×10^7).

*B Authorized; if EPA switches back to the 24-hr composite with cause, a modification for this permit condition would be considered "minor" per 40 CFR 122.63.

*C EPA Method 1631E shall be used for analysis; ML shall be reported.

*D Total Inorganic Nitrogen (TIN) shall be calculated as the sum of: Ammonia (NH_3) + Ammonium (NH_4) + Nitrate (NO_3) + Nitrite (NO_2), expressed as Nitrogen.

*E EPA may adjust the requirements per 40 CFR 401.17(b) or switch back to "instantaneous grab" sampling for pH if the permittee does not comply with the requirements for the "continuous" measurement. In case the continuous pH instrument fails, "Instantaneous Grab" is authorized up to 15 consecutive days at a time. If more than 15 days is needed, the permittee shall request and obtain approval from EPA. Each time "Instantaneous Grab" is utilized, the permittee shall report and send the document to EPA, POI and NMED monthly in accordance with Part I.C of the permit. The report shall include nature of issue(s) that lead the continuous pH instrument fails (including date, time, duration...), corrective actions taken, date when the grab sample type is used along with pH result value(s). The conditions in Part III shall be applicable to any continuous pH instrument.

2. 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.

3. SAMPLE LOCATION

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment unit prior to the receiving stream. The sample point shall be clearly marked by the facility if it is not at the final outfall location. There shall be no flow from any source into the piping system after the sample point and prior to the final outfall.

B. SCHEDULES OF COMPLIANCE

None

C. MONITORING AND REPORTING (MAJOR DISCHARGERS)

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-7179. If paper reporting is granted temporarily, 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 and copies to POI (refer to attached "PUEBLO OF ISLETA REPORTING REQUIREMENT"), NMED (under Part III.D.4 of the permit). Reports shall be submitted monthly.

1. Reporting periods shall end on the last day of the month.

2. The permittee is required to submit regular reports as described above postmarked no later than the 15th day of the month following each reporting period.

3. The annual sludge report required in part IV of the permit is due on February 19 of each year and covers the previous calendar year from January 1 through December 31.

4. NO DISCHARGE REPORTING: If there is no discharge at Outfall 001 during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

5. If any 7-day average or 30-day average value exceeds the effluent limitations specified in Part I.A, the permittee shall report the excursion in accordance with the requirements of Part III.D.

6. Any 7-day average or 30-day average value reported in the required Discharge Monitoring Report which is in excess of the effluent limitation specified in Part I.A shall constitute evidence of violation of such effluent limitation and of this permit.

7. Other measurements of oxygen demand (e.g., TOC and COD) may be substituted for the five days Biochemical Oxygen Demand (BOD_5), or for the five-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), as applicable, where the permittee can demonstrate long term correlation of the method with BOD_5 or $CBOD_5$ values, as applicable. Details of the correlation procedures used must be submitted and prior approval granted by the permitting authority for this procedure to be acceptable. Data reported must also include evidence to show that the proper correlation continues to exist after approval.

D. OVERFLOW REPORTING

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).

Overflows that endanger health or the environment shall be reported via email to EPA (Part III.D.7) within 24 hours, to POI (refer to attached "PUEBLO OF ISLETA REPORTING REQUIREMENT") immediately, and to NMED Surface Water Quality Bureau at (505) 827-0187 within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows that endanger health or the environment shall be provided to EPA, POI and the NMED Surface Water Quality Bureau within 5 days of the time the permittee becomes aware of the circumstance.

E. POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing one) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:

a. The influent loadings, flow and design capacity;

b. The effluent quality and plant performance;

c. The age and expected life of the wastewater treatment facility's equipment;

d. Bypasses and overflows of the tributary sewerage system and treatment works;

e. New developments at the facility;

f. Operator certification and training plans and status;

g. The financial status of the facility;

h. Preventative maintenance programs and equipment conditions and;

i. An overall evaluation of conditions at the facility.

F. POLLUTANTS SCAN

The permittee shall submit at least 4 scans (once/year; 24-hr composite type) for each parameter below during the permit term. This submittal is additional pollutants requirement to Part D, Form 2A (once/year; 24-hr composite type) in the next permit renewal.

Pollutant	CAS Number	Pollutant	CAS Number	Pollutant	CAS Number
Chlorophenol (3- or 4-)		2,3,4,6-Tetrachlorophenol		Iron, dissolved	
2,3-Dichlorophenol		2-Methyl-4-Chlorophenol		Sulfide, hydrogen	
2,5-Dichlorophenol		3-Methyl-4-Chlorophenol		Chloropyrifos	
2,6-Dichlorophenol		3-Methyl-6-Chlorophenol			
3,4-Dichlorophenol		Methylmercury			

The permittee shall also collect data for the following parameters. Test results shall be submitted to EPA (NPDES Permit Section, 6WD-PE), POI and NMED quarterly:

Location	Pollutant: Frequency	Other Parameters at once/month	Sample Type
Rio Bravo Bridge	TDS, chlorides and sulfates: monthly; Mercury*: quarterly	Cations (calcium, magnesium, potassium, sodium); Anions (chloride, sulfate, bicarbonates); Electroconductivity (EC) and Alkalinity	Grab
I-25 Bridge	TDS, chlorides and sulfates: monthly; Mercury*: quarterly	Cations (calcium, magnesium, potassium, sodium); Anions (chloride, sulfate, bicarbonates); EC and Alkalinity	Grab
Effluent	Refer to Part I.A.1	Cations (calcium, magnesium, potassium, sodium); Anions (chloride, sulfate, bicarbonates); EC and Alkalinity	Grab
Influent	Mercury*: quarterly		Grab

* EPA Method 1631E shall be used for analysis.

G. OTHER REQUIREMENTS

Mercury Minimization Study: Copies of the tasks below shall be sent to EPA (NPDES Permit Section, 6WD-PE), POI and NMED:

Task	Due date from permit effective date
Identifying industrial, commercial sources or mercury conveyed to the WWTP.	One year
Conducting study of methylmercury in fish tissue as specified in table below.	Two years*
Establishing a plan to reduce mercury levels in the plant influent and effluent. The goal of the reduction plan would be to ensure the permitted discharge does not cause or contribute to exceedance of approved POIWQS. The plan must be developed in coordination with NMED and POI and approved by EPA. The plan is automatically deemed approved if not disapproved or additional information requested by EPA within ninety (90) days after receipt.	Three years
Implementing the approved plan.	Four years

*Maybe extended upon authorization from EPA.

Requirement for study of methylmercury in fish tissue:

Reference	Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1, Fish Sampling and Analysis, Third Edition.
Fish Sampling Location	At or near I-25 Bridge, where accessible
Target Fish	Bottom Feeder: Channel catfish Predator: Largemouth bass or White crappie
Number of fishes per species	2 or more
Sample Type	Skinless, fillet, and composite
Timeline from permit effective date	• Six (6) months: A study plan (with obtaining proper permit from MNDGF) must be submitted to EPA and POI for approval. • Eight (8) months: EPA reviews the plan; if EPA does not respond, the plan is automatically approved. • Nine or ten (9 or 10) months: Permittee must respond to EPA comment(s) on the plan for approval if necessary. • Twelve* (12) months: Fist fish sampling must be taken. • Twenty-one* (21) months: Second fish sampling must be taken (spring and early summer). • Twenty-four (24) months: Report** of the study must be submitted to EPA and POI. Due date for the report may be extended if authorized by EPA.

*Maybe extended upon authorization from EPA.
**Including raw analytical & QA/QC data in electronic format for fish tissue samples.

PART II - OTHER CONDITIONS

A. MINIMUM QUANTIFICATION LEVEL (MQL)

EPA-approved test procedures (methods) for the analysis and quantification of pollutants or pollutant parameters, including for the purposes of compliance monitoring/DMR reporting, permit renewal applications, or any other reporting that may be required as a condition of this permit, shall be sufficiently sensitive. A method is "sufficiently sensitive" when (1) the method minimum level (ML) of quantification is at or below the level of the applicable effluent limit for the measured pollutant or pollutant parameter; or (2) if there is no EPA-approved analytical method with a published ML at or below the effluent limit (see table below), then the method has the lowest published ML (is the most sensitive) of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or 0, for the measured pollutant or pollutant parameter; or (3) the method is specified in this permit or has been otherwise approved in writing by the permitting authority (EPA Region 6) for the measured pollutant or pollutant parameter. The Permittee has the option of developing and submitting a report to justify the use of matrix or sample-specific MLs rather than the published levels. Upon written approval by EPA Region 6 the matrix or sample-specific MLs may be utilized by the Permittee for all future Discharge Monitoring Report (DMR) reporting requirements.

Current EPA Region 6 minimum quantification levels (MQLs) for reporting and compliance are provided in Appendix A of Part II of this permit. The following pollutants may not have EPA approved methods with a published ML at or below the effluent limit, if specified:

POLLUTANT	CAS Number	POLLUTANT	CAS Number
Total Residual Chlorine	7782-50-5	Benzo(a)pyrene	50-32-8
Cadmium	7440-43-9	3,4-Benzofluoranthene	205-99-2
Silver	7440-22-4	Benzo(k)fluoranthene (207-08-9)	207-08-9
Thallium	7440-28-0	Indeno(1,2,3-cd)pyrene (193-39-5)	193-39-5
Cyanide	57-12-5	Dibenzo(a,h)anthracene (53-70-3)	53-70-3
Acrolein	107-02-8	Aldrin	309-00-2
Acrylonitrile	107-13-0	Chlordane	57-74-9
4, 6-Dinitro-0-Cresol	534-52-1	Dieldrin	60-57-1
Pentachlorophenol	87-86-5	Heptachlor	76-44-8
Benzidine	92-87-5	Heptachlor epoxide	1024-57-3
Chrysene	218-01-9	Toxaphene	8001-35-2
Hexachlorobenzene	118-74-1	Toxaphene (8001-35-2)	8001-35-2
N-Nitrosodimethylamine	62-75-9	Dioxin (2,3,7,8-TCDD)	1764-01-6
Benzo(a)anthracene	56-55-3		

Unless otherwise indicated in this permit, if the EPA Region 6 MQL for a pollutant or pollutant parameter is sufficiently sensitive (as defined above) and the analytical test result is less than the MQL, then a value of zero (0) may be used for reporting purposes on DMRs. Furthermore, if the EPA Region 6 MQL for a pollutant or parameter is not sufficiently sensitive, but the analytical test result is less than the published ML from a sufficiently sensitive method, then a value of zero (0) may be used for reporting purposes on DMRs.

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 orally to EPA Region 6 (email accepted), Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas and concurrently to POI (immediate report under attached PUEBLO OF ISLETA REPORTING REQUIREMENT) and to NMED within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

E. coli, TRC, and Mercury

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 Pueblo of Isleta WQS, 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 New Mexico Water Quality Control Commission, respectively.

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. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

See attached Appendix B of Part II; reports shall be due annually.

E. CAPACITY, MANAGEMENT OPERATIONS AND MAINTENANCE (CMOM)

The permittee shall continue to implement and update (if necessary) the Capacity, Management, Operation and Maintenance (CMOM) plan.

E. 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):	001
REPORTED ON DMR AS FINAL OUTFALL:	001
EFFLUENT DILUTION SERIES (%):	29, 39, 52, 69 and 92
CRITICAL DILUTION (%):	69
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 lethality or sublethality 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. 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:

- The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- 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.
- 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.
- 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.
- A PMSD range of 13 - 47 for Ceriodaphnia dubia reproduction;
- 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

- 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.
- 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.
- If the conditions of Test Acceptability are met in Item 2.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 3 below.

c. Dilution Water

- 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;

  - toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

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

- If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 2.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 synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;

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

  - the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3 below; and

  - 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

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

- The permittee shall collect a second and third composite samples for use during the 24-hour renewal of each dilution concentration for the tests. 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.

- 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.

- 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 3 of this section.

3. REPORTING

a. 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.

b. A valid test for each species must be reported 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.

c. The permittee shall submit the results of each valid toxicity test as follows below. Submit retest information, if required, clearly marked as such. Only results of valid tests are to be reported.

- 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 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

- 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. If retests are required by NMED, enter the following codes:

- For retest number 1, Parameter 22415, enter a '1' if the NOEC for the lethal or sublethal endpoint is less than the critical dilution; otherwise, enter a '0'

- For retest number 2, Parameter 22416, enter a '1' if the NOEC for the lethal or sublethal endpoint is less than the critical dilution; otherwise, enter a '0'

- For retest number 3, Parameter 51443, enter a '1' if the NOEC for the lethal or sublethal endpoint is less than the critical dilution; otherwise, enter a '0'

4. 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 a 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 above. In addition, the permittee must provide a list with each test performed including test initiation date, species, NOECs for 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. Survival Failures - If any test fails the survival 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.

d. This monitoring frequency reduction 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.

5. PERSISTENT TOXICITY

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. Significant toxic effects, are herein defined as a statistically significant difference at the 95% confidence level between the survival, growth or reproduction of the appropriate test organism in a specified effluent dilution and the control (0% effluent). If the initial WET test conducted fails, the permittee will conduct three retest. The purpose of retests 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 and/or sub-lethal effects to a test species at or below the critical dilution, the frequency of testing for this species is automatically increased to once per quarter with no option for frequency reduction.

a. Part I Testing Frequency Other than Monthly

The permittee shall conduct a total of three (3) additional tests for any species that demonstrates significant lethal effects at or below the critical dilution. The three 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 the procedures outlines in Item 3 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

b. If persistent lethality is demonstrated by failure of one or more retest, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Item 6 of this section. If persistent sub-lethality is demonstrated by failure of two or more retest, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements. 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 for lethal TREs or second failed retest for sub-lethal TREs. 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. The provisions of Item 5.a are suspended upon submittal of the TRE Action Plan.

6. TOXICITY REDUCTION EVALUATION (TRE)

a. Within ninety (90) days of confirming lethality and/or sub-lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE to the EPA WET Coordinator at 6WQ-PO. 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 TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

   i. 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) 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.

   ii. 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 toxicity was demonstrated within 24 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;

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

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

b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal.

c. 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:

   i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
   ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
   iii. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant toxicity 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 toxicity 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 toxicity 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).

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	Thalllium	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	MQL µg/l	POLLUTANTS	MQL 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-Chloronapthalene	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

(MQL's Revised November 1, 2007)

Footnotes:

*1 Default MQL 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 MQL shall be 0.0005.

NPDES PERMIT NO. NM 0022250

PUEBLO OF ISLETA REPORTING REQUIREMENT

NPDES PERMIT PART I.C: MONITORING AND REPORTING

- Email all "Discharge Monitoring Reports" to notifications@isletapueblo.com. No hard copy reports are required.

NPDES PERMIT PART I.D: OVERFLOW REPORTING

Category One Protocol: Overflow events from a broken line or spill that could or will discharge to the Rio Grande and/or reach the Pueblo through a drain, culvert, canal, or other feature:

Step 1: Immediately following the overflow event, contact the following numbers until a live person is reached. In the event there is no answer, leave a message on each number.

Position	Name	Office Number	Cell Number
Emergency Dispatch	N/A	505.869.3030	N/A
Environment Division Manager	Ruben Lucero	505.869.9819	505.917.8346
Transportation Division Manager	James Weldon	505.869.9818	505.933.1225 or 505.417.0124
Water Quality Specialist	Cody Walker	505.869.9623	505.220.4595

Pueblo of Isleta (POI) may update the contact information above. After updating, POI should send it to EPA and the permittee a copy via email or mail.

Step 2: Email all "Overflow Monitoring Report(s)" to notifications@isletapueblo.com. No hard copy reports are required.

Category Two Protocol: Overflow events from a broken line or spill that will not discharge to the Rio Grande and/or reach the Pueblo through a drain, culvert, canal, or other feature:

Step 1: Email all "Overflow Monitoring Report(s)" to notifications@isletapueblo.com. No hard copy reports are required.

Step 2: No additional steps are necessary.

NDPES PERMIT PART II.B: 24-HOUR ORAL REPORTING: DAILY MAXIUM LIMITATION VIOLATIONS

Step 1: Immediately contact the following numbers until a live person is reached. In the event there is no answer, leave a message on each number.

Position	Name	Office Number	Cell Number
Emergency Dispatch	N/A	505.869.3030	N/A

Environment Division Manager	Ruben Lucero	505.869.9819	505.917.8346
Transportation Division Manager	James Weldon	505.869.9818	505.933.1225 or 505.417.0124
Water Quality Specialist	Cody Walker	505.869.9623	505.220.4595

Pueblo of Isleta (POI) may revise the contact information above. After revising, POI should send it to EPA and the permittee a copy via email or mail.

Step 2: Email all "Daily Maximum Limitation Violation Report(s)" to notifications@isletapueblo.com. No hard copy reports are required.

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

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water

Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-6468. If paper reporting is granted temporarily, 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 and copies to NMED as required. Duplicate copies of all other reports shall be submitted to NMED and other(s) 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

Pueblo of Isleta:
Environmental Director
Pueblo of Isleta
P.O. Box 1270
Isleta, NM87022

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. Notification 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. Oral notification shall also be to Pueblo of Isleta immediately and 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 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 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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

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. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

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

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 $37,500 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 $16,000 per violation nor shall the maximum amount exceed $37,500.

b. CLASS II PENALTY
Not to exceed $16,000 per day for each day during which the violation continues nor shall the maximum amount exceed $177,500.

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 =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

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.

MAJOR - SEWAGE SLUDGE REQUIREMENTS

INSTRUCTIONS TO PERMITTEES

Select only those Elements and Sections which apply to your sludge reuse or disposal practice.

If your facility utilizes more than one type of disposal or reuse method (for example, Element I and Element II apply) or the quality of your sludge varies (for example, Section II and Section III of Element I apply) use a separate Discharge Monitoring Report (DMR) for each Section that is applicable.

The sludge DMRs shall be due by February 19th of each year and shall cover the previous January through December time period. (The sludge DMRs for permits in Texas shall be due by September 1 of each year, with the reporting period of August 1 to July 31)

The sludge conditions do not apply to wastewater treatment lagoons where sludge is not wasted for final reuse/disposal. If the sludge is not removed, the permittee shall indicate on the DMR "No Discharge".

ELEMENT 1 - LAND APPLICATION

SECTION I: Page 2 - Requirements Applying to All Sewage Sludge Land Application

SECTION II: Page 6 - Requirements Specific to Bulk Sewage Sludge for Application to the Land Meeting Class A or B Pathogen Reduction and the Cumulative Loading Rates in Table 2, or Class B Pathogen Reduction and the Pollutant Concentrations in Table 3

SECTION III: Page 10 - Requirements Specific to Bulk Sewage Sludge Meeting Pollutant Concentrations in Table 3 and Class A Pathogen Reduction Requirements

SECTION IV: Page 12 - Requirements Specific to Sludge Sold or Given Away in a Bag or Other Container for Application to the Land that does not meet the Pollutant Concentrations in Table 3

ELEMENT 2 - SURFACE DISPOSAL

SECTION I: Page 14 - Requirements Applying to All Sewage Sludge Surface Disposal

SECTION II: Page 19 - Requirements Specific to Surface Disposal Sites Without a Liner and Leachate Collection System

SECTION III: Page 20 - Requirements Specific to Surface Disposal Sites With a Liner and Leachate Collection System

ELEMENT 3 - MUNICIPAL SOLID WASTE LANDFILL DISPOSAL

SECTION I: Page 22 - Requirements Applying to All Municipal Solid Waste Landfill Disposal Activities

ELEMENT 1 - LAND APPLICATION

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.
2. If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at Section 405(d)(2) of the Clean Water Act. If new limits for Molybdenum are promulgated prior to permit expiration, then those limits shall become directly enforceable.
3. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
4. The permittee shall give prior notice to EPA (Chief, Permits Branch, Water Management Division, Mail Code 6WQ-P, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202) of any planned changes in the sewage sludge disposal practice, in accordance with 40 CFR Part 122.41(l)(1)(iii). These changes may justify the application of permit conditions that are different from or absent in the existing permit. Change in the sludge use or disposal practice may because for modification of the permit in accordance with 40 CFR Part 122.62(a)(1).

B. Testing Requirements

1. Sewage sludge shall be tested once during the life of the permit within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written rep ort shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 144 5 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6 EN-W , at the same street address.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Element 1, Section I.C.

Table 1

Pollutant	Ceiling Concentration (milligrams per kilogram)*
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by either the Class A or Class B pathogen requirements. Sewage sludge that is applied to a lawn or home garden shall be treated by the Class A pathogen requirements. Sewage sludge that is sold or given away in a bag shall be treated by Class A pathogen requirements.

a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. All 6 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container for application to the land. Below are the additional requirements necessary to meet the definition of a Class A sludge. Alternatives 5 and 6 are not authorized to demonstrate compliance with Class A sewage sludge in Texas permits.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time. See 503.32(a)(3)(ii) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours. The pH shall be defined as the logarithm of the reciprocal of the hydrogen ion concentration measured at 25 degrees Celsius or measured at another temperature and then converted to an equivalent value at 25 degrees Celsius.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

At the end of the 72 hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(ii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior

to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(iii) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque- forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed or at the time the sludge is prepared for sale or give away in a bag or other container for application to the land.

The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weigh t basis) at the time the sewage sludge is used or dispose d or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land.

Alternative 5 - Sewage sludge shall be treated by one of the Processes to Further Reduce Pathogens (PFRP) described in 503 Appendix B. PFRPs include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 - Sewage sludge shall be treated by a process that is equivalent to a Process to Further Reduce Pathogens, if individually approved by the Pathogen Equivalency Committee representing the EPA.

b. Three alternatives are available to demonstrate compliance with Class B sewage sludge. Alternatives 2 and 3 are not authorized to demonstrate compliance with Class B sewage sludge in Texas permits.

Alternative 1 - Seven random samples of the sewage sludge shall be collected for one monitoring episode at the time the sewage sludge is used or disposed.

The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge shall be treated in one of the Processes to significantly Reduce Pathogens described in 503 Appendix B.

Alternative 3 - Sewage sludge shall be treated in a process that is equivalent to a PSRP, if individually approved by the Pathogen Equivalency Committee representing the EPA.

In addition, the following site restrictions must be met if Class B sludge is land applied:

- Food crops with harvested parts that touch the sewage sludge /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

- Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.
- Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
- Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following alternatives 1 through 10 for Vector Attraction Reduction. If bulk sewage sludge is applied to a home garden, or bagged sewage sludge is applied to the land, only alternative 1 through alternative 8 shall be used.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solid of 2% or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 % based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

- Sewage sludge shall be injected below the surface of the land.
- No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10 -

- Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test - Once/Permit Life, performed within one year from the effective date of the permit

PCBs - Once/Year

All other pollutants shall be monitored at the frequency shown below:

Amount of sewage sludge (metric tons per 365 day period)*	Frequency
0 ≤ Sludge < 290	Once/Year
290 ≤ Sludge < 1,500	Once/Quarter
1,500 ≤ Sludge < 15,000	Once/Two Months
15,000 ≤ Sludge	Once/Month

*Either the amount of bulk sewage sludge applied to the land or the amount of sewage sludge received by a person who prepares sewage sludge that is sold or given away in a bag or other container for application to the land (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 40 CFR 503.8(b).

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain

concentrations of pollutants below those listed in Table 3 found in Element I, Section III, the following conditions apply:

1. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (kilograms per hectare)
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report
Nickel	420
Selenium	100
Zinc	2800

2. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, or lawn or home garden shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Element 1, Section I.B.3.

3. Management Practices

a. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the U.S., as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to section 404 of the CWA.
b. Bulk sewage sludge shall not be applied within 10 meters of a water of the U.S.
c. Bulk sewage sludge shall be applied at or below the agronomic rate in accordance with recommendations from the following references:

- STANDARDS 1992 , Standards, Engineering Practices and Data, 39th Edition (1992) American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659.
- National Engineering Handbook Part 651, Agricultural Waste Management Field Handbook (1992), P.O. Box 2890, Washington, D.C. 20013.
- Recommendations of local extension services or Soil Conservation Services.
- Recommendations of a major University's Agronomic Department.

d. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

- The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
- A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

- The annual whole sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Element I, Section III below are met.

4. Notification requirements

   a. If bulk sewage sludge is applied to land in a State other than the State in which the sludge is prepared, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

      - The location, by either street address or latitude and longitude, of each land application site.
      - The approximate time period bulk sewage sludge will be applied to the site.
      - The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who prepares the bulk sewage sludge.
      - The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

   b. The permittee shall give 60 days prior notice to the Director of any change planned in the sewage sludge practice. Any change shall include any planned physical alterations or additions to the permitted treatment works, changes in the permittee's sludge use or disposal practice, and also alterations, additions, or deletions of disposal sites. These changes may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional disposal sites not reported during the permit application process or absent in the existing permit. Change in the sludge use or disposal practice may because for modification of the permit in accordance with 40 CFR 122.62(a)(1).
   c. The permittee shall provide the location of all existing sludge disposal/use sites to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site.
   d. The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.

5. Recordkeeping Requirements - The sludge documents will be retained on site at the same location as other NPDES records.

   The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information for five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for recordkeeping found in 40 CFR 503.17 for persons who land apply.

   a. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 3 found in Element I, Section III and the applicable pollutant concentration criteria (mg/Kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (kg/ha) listed in Table 2 above.

b. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludge, if applicable).
c. A description of how the vector attraction reduction requirements are met.
d. A description of how the management practices listed above in Section II.3 are being met.
e. The recommended agronomic loading rate from the references listed in Section II.3.c. above, as well as the actual agronomic loading rate shall be retained.
f. A description of how the site restrictions in 40 CFR Part 503.32(b)(5) are met for each site on which Class B bulk sewage sludge is applied.
g. The following certification statement:
"I certify, under penalty of law, that the management practices in §503.14 have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
h. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 40 CFR 503.17(a)(4)(i)(B) or 40 CFR Part 503.17(a)(5)(i)(B) as applicable to the permittees sludge treatment activities.
i. The permittee shall maintain information that describes future geographical areas where sludge may be land applied.
j. The permittee shall maintain information identifying site selection criteria regarding land application sites not identified at the time of permit application submission.
k. The permittee shall maintain information regarding how future land application sites will be managed.

The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for recordkeeping found i n 40 CFR 503 .17 for persons who land apply.

a. The location, by either street address or latitude and longitude, of each site on which sludge is applied.
b. The number of hectares in each site on which bulk sludge is applied.
c. The date and time sludge is applied to each site.
d. The cumulative amount of each pollutant in kilograms/hectare listed in Table 2 applied to each site.
e. The total amount of sludge applied to each site in metric tons.
f. The following certification statement:

"I certify, under penalty of law, that the requirements to obtain information in §503.12(e)(2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

g. A description of how the requirements to obtain information in §503.12(e)(2) are met.

6. Reporting Requirements - The permittee shall report annually on the DMR the following information:

   a. Pollutant Table (2 or 3) appropriate for permittee's land app lication practices.
   b. The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.
   c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).
   d. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/K g) listed in Table 3 found in Element 1, Section III, or the applicable pollutant loading rate limit (kg/ha) listed in Table 2 above if it exceeds 90% of the limit.
   e. Level of pathogen reduction achieved (C lass A or Class B).
   f. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met in the DMR comment section or attach a separate sheet to the DMR.
   g. Vector attraction reduction alternative used as listed in Section I.B.4. h.
   h. Annual sludge production in dry metric tons/year.
   i. Amount of sludge land applied in dry metric tons/year.
   j. Amount of sludge transported interstate in dry metric tons/year.
   k. The certification statement listed in 503.17(a)(4)(i)(B) or 503.17(a)(5)(i)(B) whichever applies to the permittees sludge treatment activities shall be attached to the DMR.
   l. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the DMR.

      - The location, by either street address or latitude and longitude.
      - The number of hectares in each site on which bulk sewage sludge is applied.
      - The date and time bulk sewage sludge is applied to each site.
      - The cumulative amount of each pollutant (i.e., kilograms/hectare) listed in Table 2 in the bulk sewage sludge applied to each site.
      - The amount of sewage sludge (i.e., metric tons) applied to each site.
      - The following c certification statement:
      - "I certify, under penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in 40 CFR 503.12(e)(2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
      - A description of how the requirements to obtain information in 40 CFR 503.12(e)(2) are met.

SECTION III. REQUIREMENTS SPECIFIC TO BULK OR BAGGED SEWAGE SLUDGE MEETING POLLUTANT CONCENTRATIONS IN TABLE 3 AND CLASS A PATHOGEN REDUCTION REQUIREMENTS

For those permittees with sludge that contains concentrations of pollutants below those pollutant limits listed in Table 3 for bulk or bagged (containerized) sewage sludge and also meet the Class A pathogen reduction requirements, the following conditions apply (Note: All bagged sewage sludge must be treated by Class A pathogen reduction requirements.):

1. Pollutant limits - The concentration of the pollutants in the municipal sewage sludge is at or below the values listed.

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report
Nickel	420
Selenium	36
Zinc	2800

* Dry weight basis

2. Pathogen Control

   All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, or lawn or home garden shall be treated by the Class A pathogen reduction requirements as defined above in Element I, Section I.B.3. All bagged sewage sludge must be treated by Class A pathogen reduction requirements.

3. Management Practices - None.

4. Notification Requirements - None.

5. Recordkeeping Requirements - The permittee shall develop the following information and shall retain the information for five years. The sludge documents will be retained on site at the same location as other NPDES records.

   a. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 3 and the applicable pollutant concentration criteria listed in Table 3.
   b. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 503.17(a)(1)(ii) or 503.17(a)(3)(i)(B), whichever applies to the permittees sludge treatment activities.
   c. A description of how the Class A pathogen reduction requirements are met.
   d. A description of how the vector attraction reduction requirements are met.

6. Reporting Requirements - The permittee shall report annually on the DMR the following information:

   a. Pollutant Table 3 appropriate for permittee's land application practices.
   b. The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.
   c. Toxicity Characteristic Leaching Procedure (TCLP) results. (Pass/Fail).
   d. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) found in Element 1, Section I. In addition, the applicable pollutant concentration criteria listed in Table 3 should be included on the DMR.

e. Pathogen reduction Alternative used for Class A bagged or bulk sludge as listed in Section I.B.3.a.
f. Vector attraction reduction Alternative used as listed in Section I.B.4.
g. Annual sludge production in dry metric tons/year.
h. Amount of sludge land applied in dry metric tons/year.
i. Amount of sludge transported interstate in dry metric tons/year.
j. The certification statement listed in 503.17(a)(1)(ii) or 503.17(a)(3)(i)(B), whichever applies to the permittees sludge treatment activities, shall be attached to the DMR.

SECTION IV. REQUIREMENTS SPECIFIC TO SLUDGE SOLD OR GIVEN AWAY IN A BAG OR OTHER CONTAINER FOR APPLICATION TO THE LAND THAT DOES NOT MEET THE MINIMUM POLLUTANT CONCENTRATIONS

1. Pollutant Limits

Table 4

Pollutant	Annual Pollutant Loading Rate (kilograms per hectare per 365 day period)
Arsenic	2
Cadmium	1.9
Copper	75
Lead	15
Mercury	0.85
Molybdenum	Report
Nickel	21
Selenium	5
Zinc	140

2. Pathogen Control

All sewage sludge that is sold or given a way in a bag or other container for application to the land shall be treated by the Class A pathogen requirements as defined above in Section I.B.3.a. above.

3. Management Practices

Either a label shall be affixed to the bag or other container in which sewage sludge that is sold or given a way for application to the land, or an information sheet shall be provided to the person who receives sewage sludge sold or given away in another container for application to the land. The label or information sheet shall contain the following information:

a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.
c. The annual whole sludge application rate for the sewage sludge that will not cause any of the annual pollutant loading rates in Table 4 above to be exceeded.

4. Notification Requirements - None.

5. Recordkeeping Requirements - The sludge documents will be retained on site at the same location as other NPD ES records. The person who prepares sewage sludge or a sewage sludge material shall develop the following information and shall retain the information for five years.

    a. The concentration in the sludge of each pollutant listed above in found in Element I, Section I, Table 1.
    b. The following certification statement found in §503.17(a)(6)(iii).
    "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in §503.14(e), the Class A pathogen requirement in §503.32(a), and the vector attraction reduction requirement in (insert vector attraction reduction option) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices, pathogen requirements, and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment".
    c. A description of how the Class A pathogen reduction requirements are met.
    d. A description of how the vector attraction reduction requirements are met.
    e. The annual whole sludge application rate for the sewage sludge that does not cause the annual pollutant loading rates in Table 4 to be exceeded. See Appendix A to Part 503 - Procedure to Determine the Annual Whole Sludge Application Rate for Sewage Sludge.

6. Reporting Requirements - The permittee shall report annually on the DMR the following information:

    a. List Pollutant Table 4 appropriate for permittee's land application practices.
    b. The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.
    c. Toxicity Characteristic Leaching Procedure (TCLP) results. (Pass/Fail).
    d. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) found in Element 1, Section I.
    e. Class A pathogen reduction Alternative used as listed in Section I.B.3.a. Alternatives describe how the pathogen reduction requirements are met.
    f. Vector attraction reduction Alternative used as listed in Section I.B.4.
    g. Annual sludge production in dry metric tons/year.
    h. Amount of sludge land applied in dry metric tons/year.
    i. Amount of sludge transported interstate in dry metric tons/year.
    j. The following certification statement found in § 503.17(a)(6)(iii) shall be attached to the DMR.

    "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in §503.14(e), the Class A pathogen requirement in §503.32(a), and the vector attraction reduction requirement in (insert vector attraction reduction option) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices, pathogen requirements, and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment".

ELEMENT 2- SURFACE DISPOSAL

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE SURFACE DISPOSAL

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present.
2. If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at Section 405(d)(2) of the Clean Water Act.
3. In all cases, if the person (permit holder) who prepares the sewage sludge or supplies the sewage sludge to another person (owner or operator of a sewage sludge unit) for disposal in a surface disposal site, the permit holder shall provide all necessary information to the parties who receive the sludge to assure compliance with these regulations.
4. The permittee shall give prior notice to EPA (Chief, Permits Branch, Water Management Division, Mail Code 6WQ -P, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202) of any planned changes in the sewage sludge disposal practice, in accordance with 40 CFR Part 122.41(l)(1)(iii). These changes may justify the application of permit conditions that are different from or absent in the existing permit. Change in the sludge use or disposal practice may because for modification of the permit in accordance with 40 CFR Part 122.62(a)(1).
5. The permittee or owner/operator shall submit a written closure and post closure plan to the permitting authority 180 days prior to the closure date. The plan shall include the following information:

    a. A discussion of how the leachate collection system will be operated and maintained for three years after the surface disposal site closes if it has a liner and leachate collection system.
    b. A description of the system used to monitor continuously for methane gas in the air in any structures within the surface disposal site. The methane gas concentration shall not exceed 25% of the lower explosive limit for methane gas for three years after the sewage sludge unit closes. A description of the system used to monitor for methane gas in the air at the property line of the site shall be included. The methane gas concentration at the surface disposal site property line shall not exceed the lower explosive limit for methane gas for three years after the sewage sludge unit closes.
    c. A discussion of how public access to the surface disposal site will be restricted for three years after it closes.

B. Management Practices

1. An active sewage sludge unit located within 60 meters of a fault that has displacement in Holocene time shall close by March 22, 1994.
2. An active sewage sludge unit located in an unstable area shall close by March 22, 1994.
3. An active sewage sludge unit located in a wetland shall close by March 22, 1994.
4. Surface disposal shall not restrict the flow of the base 100-year flood.
5. The run-off collection system for an active sewage sludge unit shall have the capacity to handle run-off from a 25-year, 24-hour storm event.
6. A food crop, feed crop, or a fiber crop shall not be grown on a surface disposal site.

7. Animals shall not be grazed on a surface disposal site.
8. Public access shall be restricted on the active surface disposal site and for three years after the site closes.
9. Placement of sewage sludge shall not contaminate an aquifer. This shall be demonstrated through one of the following:

    a. Results of a ground-water monitoring program developed by a qualified ground-water scientist.
    b. A certification by a qualified ground-water scientist may be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer.

10. When a cover is placed on an active surface disposal site, the concentration of methane gas in air in any structure within the surface disposal site shall not exceed 25% of the lower explosive limit for methane gas during the period that the sewage sludge unit is active. The concentration of methane gas in air at the property line of the surface disposal site shall not exceed the lower explosive limit for methane gas during the period that the sewage sludge unit is active. Monitoring shall be continuous.

C. Testing Requirements

1. Sewage sludge shall be tested once during the life of the permit within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written report shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 144 5 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6 EN-W, at the same street address.
2. Sewage sludge shall be tested at the frequency show below in Element 2, Section I.D. for PCBs. Any sludge exceeding a concentration of 50 mg/Kg shall not be surface disposed.
3. Pathogen Control

    All sewage sludge that is disposed of in a surface disposal site shall be treated by either the Class A or Class B pathogen requirements unless sewage sludge is placed on an active surface disposal site, and is covered with soil or other material at the end of each operating day. When reporting on the DMR, list pathogen reduction level attained as A, B, or C (daily cover). When reporting how compliance was met, list Alternative 1, 2, 3, 4, 5 or 6 for Class A, or Alternative Number 1, 2, 3, or 4 for Class B, on DMR.

    a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. All 6 alternatives require either the density of fecal coliform in the sewage sludge be less than 1000 MPN per gram of total solids (dry weight basis), or the density of Salmonella sp.

bacteria in the sewage sludge be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container for application to the land. Below are the additional requirements necessary to meet the definition of a Class A sludge. Alternatives 5 and 6 are not authorized to demonstrate compliance with Class A sewage sludge in Texas permits.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time. See 503.32(a)(3)(ii) for specific information. This alternative is not applicable to composting.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours. The pH shall be defined as the logarithm of the reciprocal of the hydrogen ion concentration measured at 25 degrees Celsius or measured at another temperature and then converted to an equivalent value at 25 degrees Celsius.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

At the end of the 72 hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(ii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(iii) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque- forming Unit per four grams of total solids (dry weight bas is) at the time the sewage sludge is used or disposed or at the time the sludge is prepared for sale or give away in a bag or other container for application to the land.

The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land.

Alternative 5 - Sewage sludge shall be treated by one of the Processes to Further Reduce Pathogens (PFRP) described in 503 Appendix B. PFRPs include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 - Sewage sludge shall be treated by a process that is equivalent to a Process to Further Reduce Pathogens, if individually approved by the Pathogen Equivalency Committee representing the EPA.

b. Four alternatives are available to demonstrate compliance with Class B sewage sludge. Alternatives 2, 3, and 4 are not authorized to demonstrate compliance with Class B sewage sludge in Texas permits.

Alternative 1 -

- Seven representative samples of the sewage sludge that is disposed shall be collected for one monitoring episode at the time the sewage sludge is used or disposed.
- The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge shall be treated in one of the Processes to significantly Reduce Pathogens described in 503 Appendix B.

Alternative 3 - Sewage sludge shall be treated in a process that is equivalent to a PSRP, if individually approved by the Pathogen Equivalency Committee representing the EPA.

Alternative 4 - Sewage sludge placed on an active surface disposal site is covered with soil or other material at the end of each operating day.

4. Vector Attraction Reduction Requirements

All sewage sludge that is disposed of in a surface disposal site shall be treated by one of the following alternatives 1 through 11 for Vector Attraction Reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solid of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or an anaerobic treatment process at the time the sewage sludge is disposed.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or an anaerobic treatment process.

Alternative 9 -

- Sewage sludge shall be injected below the surface of the land.
- No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10 -

- Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

Alternative 11 - Sewage sludge placed on an active sewage sludge unit shall be covered with soil or other material at the end of each operating day.

5. Methane Gas Control Within a Structure On Site

   When cover is placed on an active surface disposal site, the methane gas concentration in the air in any structure shall not exceed 25% of the lower ex plosive limit (LEL) for methane gas during the period that the disposal site is active.

6. Methane Gas Control at Property Line

   The concentration of methane gas in air at the property line of the surface disposal site shall not exceed the LEL for methane gas during the period that the disposal site is active.

D. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test - Once/Permit Life, performed within one year from the effective date of the permit.

PCBs - Once/Year

Methane Gas in covered structures on site - Continuous

Methane Gas at property line - Continuous

All other pollutants shall be monitored at the frequency shown below:

Amount of sewage sludge* (metric tons per 365 day period)	Frequency
0 ≤ Sludge < 290	Once/Year
290 ≤ Sludge < 1,500	Once/Quarter

1,500 ≤ Sludge < 15,000	Once/Two Months
15,000 ≤ Sludge	Once/Month

*Amount of sewage sludge placed on an active sewage sludge unit (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 40 CFR 503.8(b).

SECTION II. REQUIREMENTS SPECIFIC TO SURFACE DISPOSAL SITES WITHOUT A LINER AND LEACHATE COLLECTION SYSTEM.

1. Pollutant limits - Sewage sludge shall not be applied to a surface disposal site if the concentrations of the listed pollutants exceed the corresponding values based on the surface disposal site boundary to the property line distance:

Table 5

Unit boundary to property line distance (meter)	Pollutant concentrations* (mg/kg)			
	Arsenic	Chromium	Nickel	PCB's
0 to < 25	30	200	210	49
25 to < 50	34	220	240	49
50 to < 75	39	260	270	49
75 to < 100	46	300	320	49
100 to < 125	53	360	390	49
125 to < 150	62	450	420	49
≥ 150	73	600	420	49

*Dry weight basis

2. Management practices - Listed in Section I.B. above.
3. Notification requirements

   a. The permittee shall assure that the owner of the surface disposal site provide written notification to the subsequent site owners that sewage sludge was placed on the land.
   b. The permittee shall provide the location of all existing sludge disposal/use sites to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site.
   c. The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.

4. Recordkeeping requirements - The permittee shall develop the following information and shall retain the information for five years. The sludge documents will be retained on site at the same location as other NPDES records.

   a. The distance of the surface disposal site from the property line and the concentration (mg/Kg) in the sludge of each pollutant listed above in Table 5, as well as the applicable pollutant concentration criteria listed in Table 5.
   b. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 503.27(a)(1)(ii) or 503.27(a)(2)(ii) as applicable to the permittees sludge disposal activities.

c. A description of how either the Class A or Class B pathogen reduction requirements are met, or whether sewage sludge placed on a surface disposal site is covered with soil or other material at the end of each operating day.
d. A description of how the vector attraction reduction requirements are met.
e. Results of a groundwater monitoring program developed by a qualified ground-water scientist, or a certification by a qualified groundwater scientist may be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer. A qualified ground water scientist is an individual with a baccalaureate or post graduate degree in the natural sciences or engineering who has sufficient training and experience in groundwater hydrology and related fields, as may be demonstrated by State registration, professional certification or completion of accredited university programs, to make sound professional judgments regarding groundwater monitoring, pollutant fate and transport, and corrective action.

5. Reporting Requirements - The permittee shall report annually on the DMR the following information:

a. Report No for no liner and leachate collection system at surface disposal site.
b. The frequency of monitoring listed in Element II, Section I.D. which applies to the permittee.
c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).
d. The concentration (mg/K g) in the sludge of each pollutant listed in Table 5 as well as the applicable pollutant concentration criteria listed in Table 5.
e. The concentration (mg/Kg) of PCB's in the sludge.
f. The distance between the property line and the surface disposal site boundary.
g. Level of pathogen reduction achieved (C lass A or Class B), unless Vector attraction reduction alternative no. 11 is utilized.
h. List Alternative used as listed in Section I.C.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met.
i. Vector attraction reduction Alternative used as listed in Section I.C.4.
j. Annual sludge production in dry metric tons/year.
k. Amount of sludge surface disposed in dry metric tons/year.
l. Amount of sludge transported interstate in dry metric tons/year.
m. A narrative description explaining how the management practices in §503.24 are met shall be attached to the DMR.
n. The certification statement listed in 503.27(a)(1)(ii) or 503.27(a)(2)(ii) as applicable to the permittees sludge disposal activities, shall be attached to the DMR.

SECTION III. REQUIREMENTS SPECIFIC TO SURFACE DISPOSAL SITES WITH A LINER AND LEACHATE COLLECTION SYSTEM.

1. Pollutant limits - None.
2. Management Practices - Listed in Section I.B. above.
3. Notification requirements

a. The permittee shall assure that the owner of the surface disposal site provide written notification to the subsequent owner of the site that sewage sludge was placed on the land.
b. The permittee shall provide the location of all existing sludge disposal/use sites to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site. The permittee shall within 30 days after notification by

the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.

4. Recordkeeping requirements - The permittee shall develop the following information and shall retain the information for five years. The sludge documents will be retained on site at the same location as other NPDES records.

   a. The following certification statement found in 503.27(a)(1)(ii):

      "I certify, under penalty of law, that the pathogen requirements (define option used) and the vector attraction reduction requirements in (define option used) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine the (pathogen requirements and vector attraction reduction requirements, if appropriate) have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

   b. A description of how either the Class A or Class B pathogen reduction requirements are met or whether sewage sludge placed on a surface disposal site is covered with soil or other material at the end of each operating day.
   c. A description of how the vector attraction reduction requirements are met.
   d. Results of a ground-water monitoring program developed by a qualified ground-water scientist, or a certification by a qualified ground-water scientist may be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer.

5. Reporting Requirements - The permittee shall report annually on the DMR the following information:

   a. Report YES for liner and leachate collection system at surface disposal site.
   b. The frequency of monitoring listed in Element 2, Section I.D. which applies to the permittee.
   c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).
   d. The concentration (mg/Kg) in the sludge of PCBs.
   e. Level of pathogen reduction achieved (C lass A or Class B), unless Vector attraction reduction alternative no. 11 is used.
   f. List Alternative used as listed in Section I.C.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met.
   g. Vector attraction reduction Alternative used as listed in Section I.B.4. h.
   h. Annual sludge production in dry metric tons/year.
   i. Amount of sludge surface disposed in dry metric tons/year.
   j. Amount of sludge transported interstate in dry metric tons/year.
   k. A narrative description explaining how the management practices in §503.24 are met shall be attached to the DMR.
   l. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment (See 503.27(a)(1)(ii) or 503.27(a)(2)(ii) whichever applies to the permittees sludge disposal activities) shall be attached to the DMR.

ELEMENT 3 - MUNICIPAL SOLID WASTE LANDFILL DISPOSAL

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 40 CFR 258 concerning the quality of the sludge dispose d in a municipal solid waste landfill unit.
2. If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at Section 405(d)(2) of the Clean Water Act.
3. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a MSWLF for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
4. The permittee shall give prior notice to EPA (Chief, Permits Branch, Water Management Division, Mail Code 6WQ-P, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202) of any planned changes in the sewage sludge disposal practice, in accordance with 40 CFR Part 122.41(l)(1)(iii). These changes may justify the application of permit conditions that are different from or absent in the existing permit. Change in the sludge use or disposal practice may because for modification of the permit in accordance with 40 CFR Part 122.62(a)(1).
5. The permittee shall provide the location of all existing sludge disposal/use sites to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site. The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.
6. Sewage sludge shall be tested once during the life of the permit within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written report shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 144 5 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6EN-W, at the same street address.
7. Sewage sludge shall be tested as needed, or at a minimum, once/year in accordance with the method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).
8. Recordkeeping requirements - The permittee shall develop the following information and shall retain the information for five years.

a. The description, including procedures followed, and results of the Paint Filter Tests performed.
b. The description, including procedures followed, and results of the TCLP Test.

9. Reporting requirements - The permittee shall report annually on the Discharge Monitoring Report the following information:

a. Results of the Toxicity Characteristic Leaching Procedure Test conducted on the sludge to be disposed (Pass/Fail).
b. Annual sludge production in dry metric tons/year.
c. Amount of sludge disposed in a municipal solid waste landfill in dry metric tons/year.
d. Amount of sludge transported interstate in dry metric tons/year.
e. A certification that sewage sludge meets the requirements in 40 CFR 258 concerning the quality of the sludge disposed in a municipal solid waste landfill unit shall be attached to the DMR.