



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

MAY 31 2016

Sandra
RECEIVED

JUN 13 2016

SURFACE WATER
QUALITY BUREAU

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7014 0150 0000 2453 1395)

REPLY TO: 6WQ-NP

Scott Sensanbaugher, Public Works Director
City of Rio Rancho
Utility Operation Division
3200 Civic Center Circle NE
Rio Rancho, NM 87144

Re: Application to Discharge to Waters of the United States Permit No. NM0027987,
Rio Rancho WWTP #2

Dear Mr. Sensanbaugher:

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,

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

Enclosures

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

NPDES PERMIT NO. NM0027987

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: City of Rio Rancho
Utility Operation Division
Rio Rancho WWTP #2
3200 Civic Center Circle NE
Rio Rancho, NM 87144

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

PREPARED BY: Tung Nguyen
Environmental Engineer
NPDES Permits Branch (6WQ-PP)
Water Quality Protection Division
VOICE: 214-665-7153
FAX: 214-665-2191
EMAIL: nguyen.tung@epa.gov

PERMIT ACTION: Final permit decision and response to comments received on the draft reissued NPDES permit publicly noticed on March 3, 2016

DATE PREPARED: May 17, 2016

Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of July 1st, 2015.

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 |
| ML | Minimum quantification level |
| O&G | Oil and grease |
| POTW | Publically owned treatment works |
| RP | Reasonable potential |
| 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 March 3, 2016:

- Pueblo of Sandia is added to receive progress reports in Part I.B. of the permit.
- 8-hour oral notification to Pueblo of Sandia is added to Part III.D.7.a Part II.B, Part I.D.
- Total phosphorus limit (TP) is removed and TP is monitored instead.
- Language is revised in Part I.A.1B. for internal Outfall 101.
- Compliance schedule has been changed to 24 months from 6 months.
- Time line to submit revisions to the pretreatment program is changed to 12 months from 6 months in Item 1, Appendix B of Part II.

STATE CERTIFICATION

Letter from James Hogan, New Mexico Environment Department (NMED) to William K. Honker, (EPA) dated April 8, 2016.

CONDITIONS OF CERTIFICATION

There are no conditions of State certification.

COMMENTS RECEIVED ON THE DRAFT PERMIT

Letter from Isaac Lujan, Governor, Pueblo of Sandia (Pueblo) to William K. Honker, (EPA) dated March 8, 2016.

Letter from James Hogan, New Mexico Environment Department (NMED) to William K. Honker, (EPA) dated April 8, 2016.

Letter from Scott Sensenbaugher, Public Work Director (permittee), to Evelyn Rosborough (EPA) dated April 1, 2016.

RESPONSE TO COMMENTS

Comment 1 (from Pueblo): The Pueblo requests that it is added to receive progress reports under Schedule of Compliance, Part I.B of the permit.

Response 1: The request has been granted and change is made in the final permit.

Comments 2 and 3 (from Pueblo): The Pueblo would like to be contacted within 8 hours of an overflow described in Part I.D and requires the permittee to contact the Pueblo whenever a non-compliance violations occurs and be contacted within 8 hours of the noncompliance violation under Part III.D.7.a of the permit.

Responses 2 and 3: Requested changes have been made to Part I, II and III of the final permit.

Comment 4 (from NMED): The Rio Rancho WWTP #2 has two separate trains of treatment. Both trains (2A and 2B) are then comingle prior to discharge (Outfall 001). NMED would like to have clarification on how the WWTP intends to sample their influent of BOD and TSS percent removal.

NMED would like to ensure that a representative sample is being used for their percent removal calculation.

Response 4: Effluents from WWTP #1, 2 & 6 are comingled prior to discharge via Outfall 001. The percent removal (85% or more) for BOD and TSS is required for each individual treatment plant monitored at Outfall 001, Internal Outfalls 101 and 601, prior the comingle. Influent and effluent at each plant are sampled when discharging in according with the sample locations specified in the permit, Part I.A.4. If something is missing in term of this matter, EPA is open for recommendation. No change is made to this comment.

Comment 5 (from NMED): NMED believes there are also no industrial users discharging to Rio Rancho #2 that use hexachlorobenzene. NMED requests that the monitoring frequency for Hexachlorobenzene be changed to once per quarter for the first year and thereafter once annually. NMED believes this will provide EPA with enough analytical information for their reasonable potential analysis during their next permit cycle.

Response 5: EPA did not receive supporting document from the permittee/NMED demonstrating there are no industrial users discharging to Rio Rancho #2 that use hexachlorobenzene. As stated in the Fact Sheet, EPA would have reconsidered the monitoring requirement upon submittal of test result(s) using EPA Method 612 during the public comment period. EPA did not receive a test result and retains this monitoring frequency that is consistent to other monitored pollutants. No change is made in the final permit to this comment.

Comment 6 (from permittee): The Pueblo of Sandia WQS has a guideline, not a numeric criteria for phosphorus. Rio Grande is highly laden with natural silts, therefore even the guideline cannot be applied to the Rio Grande. The silty nature of the Rio Grande has been documented since the early part of this century (Grover, 1913, U.S. Geological Survey Paper 357). Since neither the State of New Mexico nor the Pueblo of Sandia has an applicable numeric criteria for phosphorus, the permit requests the phosphorus effluent limit be removed from the permit.

Response 6: EPA coordinated with the Pueblo on the response to this comment. The referenced document is over 100 years old. Much has changed on the Middle Rio Grande since then. Dams, hydrological modifications to the river channel, invasive species, and WWTP effluents have altered the natural condition of the Middle Rio Grande. The Middle Rio Grande is highly laden with natural silts at certain times (after storm events) but in reality this stretch is sediment starved. Phosphorus water quality data for the Pueblo's stretch of the Middle Rio Grande is scarce. The Pueblo of Sandia plans to modify its phosphorus criteria in the next triennial review, which is happening this year. This monitoring will assist the Pueblo of Sandia in developing a valid criteria value. EPA removes the proposed limit, but instead establishes monitoring of total phosphorus once/quarter in the final permit.

Comment 7 (from permittee): The frequency of sampling and analysis for E. coli was increased from 5 times per week to 7 times per week. The basis for this change was noted in the Fact Sheet (Section D, page 12 of 15) as "increased due to several exceedances." The exceedances are from the Discharge Monitoring Reports submitted during the permit term (Fact Sheet, page 4 of 15). However, the exceedances shown are for fecal coliform which cannot be directly correlated with E. coli. There are no data for E. coli until about 3 years ago, so there is no way to determine if there have been exceedances of an E. coli limit during the permit term. Further, the cited exceedances were from earlier than the 3 years for which data are required for the NPDES application. We request that the frequency of sampling

and analysis for E. coli be changed to 5 times per week, which is consistent with the New Mexico Implementation Plan.

Response 7: The previous permit became effective on November 1, 2010 and expired on October 31, 2015. E. coli was limited and reported in the DMRs during this permit term (see attachment). The permittee did not elaborate why fecal coliform was tested to comply with the requirement of E. coli prior to about 3 years ago. The NPDES application (Form 2A) requires effluent testing data must be no more than four and half years old. According to the DMRs, E. coli exceedances occurred from September 2011 to December 2012, which is within the 4^{1/2} years old from the application date, April 29, 2015. In addition, both Fecal coliform and E. coli are controlled with the same disinfection system; so if any violation of the Fecal coliform limit would also be indication of failure to properly operate the disinfection system to control E. coli. EPA does not agree with the permittee's request and there is no change in the final permit.

Comment 8 (from permittee): The requirement for composite sampling is 12-hr composite, which is consistent with the NMIP. The facility also discharges effluent via Groundwater Discharge Permit issued by NMED. This groundwater permit requires a 6-hour composite sampling. To avoid duplicative sampling and analysis, the permittee requests that the pollutants in Part I.A.1A, 1B and 1C with sample type of "12-hr composite" be changed to 6-hr composite.

Response 8: The established 12-hr composite sample type is appropriate for a major facility with continuous discharge to ensure that sample is adequately representative. EPA believes this 12-hr composite is more representative than the 6-hr one and could be accepted by NMED for compliance with the groundwater permit requirement. There is no change in the final permit.

Comment 9 (from permittee): Required Method 1668A to test PCBs should be removed until it is adopted into 40 CFR 136.

Response 9: Listed methods in 40 CFR 136.3 are not capable of picking up PCBs at the State applicable standard. NMED has requested this method for PCBs on multiple permits since it is able to detect PCBs at or below the WQS level even though the method is not currently approved under 40 CFR 136. There is no change in the final permit.

Comment 10 (from permittee): The investigation of analytical laboratory capability to analyze using EPA Method 612 identified a single analytical laboratory that said they could analyze samples of wastewater using EPA Method 612. The permittee has two concerns about this: first is that the lab may not be skilled in using this very old method and second that there is no other lab that a duplicate sample can be sent to in order to check on the results from the laboratory. We request that footnote 13 be amended to state that "Analysis shall be performed using EPA Method 612 by an analytical laboratory certified by Environmental Laboratory Accreditation Program (ELAP). If no such laboratory services are available, this effluent monitoring requirement is waived."

Response 10: EPA currently requires hexachlorobenzene to be analyzed using EPA Method 612 under the Sufficient Sensitive Method requirement. Imposing the certification to an analytical laboratory for this analysis is beyond the regulation under 40 CFR 136. In addition to the permittee's finding, EPA has found one lab outside the region that can test hexachlorobenzene using EPA Method 612; laboratory information is available upon request. It's the permittee's choice to have a laboratory testing the parameter as long as the requirement per 40 CFR 136 is met. If a parameter is tested more than once, all

valid test results must be submitted to EPA; there is no pick and choose what or what not to be submitted. There is no change in the final permit.

Comment 11 (from permittee): Discharges from internal Outfall 101 are seasonal, generally in the winter as the effluent is used for irrigation. We request that EPA add to the permit an explicit statement that the monitoring is only required when WWTP # 1 is discharging to WWTP #2.

Response 11: EPA agrees with the request and makes change in the final permit, Part I.A.1B.

Comment 12 (from permittee): The compliance schedule stated in this part of the permit to meet final effluent limits for Total Dissolved Solids, Oil and Grease, and Total Phosphorus in 6 months is onerous. This permit allows for the blending of effluent from three plants (WWTP #1, #2, and #6) and the engineering and operational changes required to meet these final limits must be implemented at three plants, not just one. Additionally, there is the potential that plant modifications could be required and requests for funding for capital improvements would have to go through the municipal budget cycle. We are requesting that the compliance schedule be changed to 24 months.

Response 12: EPA agrees with the request and makes the requested change in the final permit, Part I.B.

Comment 13 (from permittee): The permittee requests to be allowed 12 months from permit issuance date to accomplish the necessary revisions to its pretreatment program, pollution prevention program and the sewer ordinance.

Response 13: EPA agrees with the request and makes change in the final permit, Item 1 in Appendix B of Part II.

51040 E. coli / Location 1 / Season 0 / Base

| Limit Start Date | Limit End Date | Sample Type | Frequency of Analysis |
|------------------|----------------|-------------|-----------------------|
| 11/1/2010 | 10/31/2015 | GRAB | Five per Week |

| Limit | A1 | C2 | C3 |
|------------------|--------------------|----------------|------------------------|
| Limit Unit Desc | Million Colony For | Colony Forming | Colony Forming Units p |
| Statistical Base | 30DAVGEO | 30DAVGEO | DAILY MX |
| Limit Value | 9800. | 47. | 88. |
| DMR Values | A1 | C2 | C3 |
| 11/30/10 | 695 | 5 | 16 |
| 12/31/10 | 730 | 5 | 20 |
| 1/31/11 | 1088 | 7 | 73 |
| 2/28/11 | 955 | 6 | 24 |
| 3/31/11 | 599 | 5 | 21 |
| 4/30/11 | 365 | 3 | 6 |
| 5/31/11 | 407 | 3 | 23 |
| 6/30/11 | 431 | 3 | 23 |
| 7/31/11 | 281 | 2 | 8 |
| 8/31/11 | 306 | 2 | 4 |
| 9/30/11 | 819 | 5 | 210 |
| 10/31/11 | 1033 | 6 | 20 |
| 11/30/11 | 1238 | 7 | 125 |
| 12/31/11 | 989 | 5 | 19 |
| 1/31/12 | 1268 | 7 | 24 |
| 2/29/12 | 1847 | 11 | 120 |
| 3/31/12 | 984 | 7 | 25 |
| 4/30/12 | 932 | 7 | 13 |
| 5/31/12 | 1497 | 12 | 19 |
| 6/30/12 | 1518 | 14 | 3500 |
| 7/31/12 | 660 | 6 | 240 |
| 8/31/12 | 443 | 4 | 15 |
| 9/30/12 | 479 | 4 | 16 |
| 10/31/12 | 645 | 5 | 30 |
| 11/30/12 | 431 | 3 | 22 |
| 12/31/12 | 428 | 3 | 152 |
| 1/31/13 | 451 | 3 | 15 |
| 2/28/13 | 704 | 5 | 21 |
| 3/31/13 | 655 | 5 | 16 |
| 4/30/13 | 494 | 4 | 8 |
| 5/31/13 | 651 | 5 | 22 |
| 6/30/13 | 562 | 5 | 65 |
| 7/31/13 | 686 | 5 | 75 |
| 8/31/13 | 426 | 3 | 23 |
| 9/30/13 | 456 | 3 | 11 |
| 10/31/13 | 989 | 7 | 31 |
| 11/30/13 | 789 | 5 | 14 |
| 12/31/13 | 829 | 5 | 12 |
| 1/31/14 | 1114 | 7 | 23 |
| 2/28/14 | 1044 | 7 | 16 |
| 3/31/14 | 1047 | 7 | 9 |
| 4/30/14 | 575 | 4 | 12 |
| 5/31/14 | 1240 | 9 | 16 |
| 6/30/14 | 697 | 5 | 10 |
| 7/31/14 | Not Received | Not Received | Not Received |
| 8/31/14 | 423 | 3 | 5 |
| 9/30/14 | 572 | 4 | 17 |
| 10/31/14 | 714 | 5 | 10 |
| 11/30/14 | 756 | 5 | 25 |
| 12/31/14 | 835 | 5 | 10 |
| 1/31/15 | 841 | 5 | 18 |
| 2/28/15 | 965 | 6 | 19 |
| 3/31/15 | Not Received | Not Received | Not Received |



REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

NPDES Permit No NM0027987

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"),

City of Rio Rancho
Utility Operation Division
3200 Civic Center Circle NE
Rio Rancho, NM 87144

is authorized to discharge from a facility located at 101 Industrial Park Loop, Rio Rancho, Sandoval County, New Mexico. The discharge will be to receiving water named Rio Grande River in Segment 20.6.4.106 of the Middle Rio Grande Basin, from a point located approximately

Outfall 001: Latitude 35° 15' 23" North and Longitude 106° 35' 32" 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 supersedes and replaces NPDES Permit No. NM0027987 with an effective date of November 1, 2010.

This permit shall become effective on

July 1, 2016

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

June 30, 2021

Issued on

MAY 31 2016

Prepared by

William K. Honker, P.E.
Director
Water Division (6WQ)

Tung Nguyen
Environmental Engineer
Permitting Section (6WQ-PP)

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 |
| MQL | Minimum quantification level |
| O&G | Oil and grease |
| POTW | Publically 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 plant |

PART I – REQUIREMENTS FOR NPDES PERMITS**A. LIMITATIONS AND MONITORING REQUIREMENTS****1A. OUTFALL 001 - FINAL Effluent Limits – 8.2 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, in Segment 20.6.4.106 of the Middle Rio Grande Basin. Such discharges shall be limited and monitored by the permittee as specified below:

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS | |
|--------------------------|-----------------------|----------|-------------------------|-------------------------|
| POLLUTANT | MINIMUM | MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| pH | 6.6 s.u. | 9.0 s.u. | Daily | Instantaneous Grab (*5) |

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | | | | MONITORING REQUIREMENTS | |
|-------------------------------------|------------------------------|-----------------|-------------------------|-----------|---------------|-------------------------|-------------------------|
| | lbs/day, unless noted | | mg/l, unless noted (*1) | | | | |
| POLLUTANT | 30-DAY AVG (*11) | 7-DAY AVG (*12) | 30-DAY AVG | 7-DAY AVG | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | N/A | N/A | N/A | Daily | Totalized meter |
| BOD ₅ | 684 | 1026 | 10 | 15 | N/A | 5/Week | 12-hr Composite |
| TSS | 1026 | 1573 | 15 | 23 | N/A | 5/Week | 12-hr Composite |
| BOD ₅ % removal, minimum | ≥85 (*2) | N/A | N/A | N/A | N/A | 1/Week | Calculation |
| TSS % removal, minimum | ≥85 (*2) | N/A | N/A | N/A | N/A | 1/Week | Calculation |
| E. coli bacteria | 9.8 x10 ⁹ cfu/day | N/A | 47 cfu/100 ml | N/A | 88 cfu/100 ml | Daily | Grab |
| TRC | N/A | N/A | N/A | N/A | 11 ug/l (*4) | Daily (*3) | Instantaneous Grab (*5) |
| DO (*6) | N/A | N/A | Report | N/A | Report | 5/Week | Instantaneous Grab (*5) |
| PCB (*9) | N/A | N/A | N/A | N/A | Report | Once | Grab |
| Arsenic, total | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |
| Ammonia, total (as N) | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |
| Adjusted gross alpha (*10) | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |
| TDS | 108117 | N/A | 1580 | N/A | 2372 | 5/Week | 12-hr Composite |
| O&G | 684 | N/A | 10 | N/A | 15 | 5/Week | 12-hr Composite |
| Phosphorus, total (TP) | N/A | N/A | N/A | N/A | Report | 1/Quarter | 12-hr Composite |
| Hexachlorobenzene (*13) | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |

| EFFLUENT CHARACTERISTICS | DISCHARGE MONITORING | MONITORING REQUIREMENTS |
|--------------------------|----------------------|-------------------------|
|--------------------------|----------------------|-------------------------|

| WHOLE EFFLUENT TOXICITY TESTING 48-HR ACUTE NOEC FRESHWATER (*7) | 30-DAY AVG | 48-HR MINIMUM | MEASUREMENT FREQUENCY (*8) | SAMPLE TYPE |
|---|------------|---------------|-------------------------------|-----------------|
| Daphnia pulex | Report | Report | Once/Quarter | 24-hr Composite |
| Pimephales promelas | Report | Report | Once/Quarter | 24-hr Composite |

1B. OUTFALL 101 (Internal) - FINAL Effluent Limits – Seasonal Discharges from WWTP #1

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. Such discharges shall be limited and monitored by the permittee as specified below when discharge from WWTP #1 occurs:

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | | | | MONITORING REQUIREMENTS | |
|-------------------------------------|-----------------------|------------|-------------------------|-----------|-----------|-------------------------|-----------------|
| | lbs/day, unless noted | | mg/l, unless noted (*1) | | | | |
| POLLUTANT | 30-DAY AVG | 7-DAY AVG | 30-DAY AVG | 7-DAY AVG | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | N/A | N/A | N/A | Daily | Totalized meter |
| BOD ₅ | N/A | N/A | 30 | 45 | N/A | 5/Week | 12-hr Composite |
| TSS | N/A | N/A | 30 | 45 | N/A | 5/Week | 12-hr Composite |
| BOD ₅ % removal, minimum | ≥85 (*2) | N/A | N/A | N/A | N/A | 1/Week | Calculation |
| TSS % removal, minimum | ≥85 (*2) | N/A | N/A | N/A | N/A | 1/Week | Calculation |

1C. OUTFALL 601 (Internal) - FINAL Effluent Limits – 1.2 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 601 to the Rio Grande River, in Segment 20.6.4.106 of the Middle Rio Grande Basin. Such discharges shall be limited and monitored by the permittee as specified below:

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS | |
|-----------------------------|-----------------------|----------|--------------------------|-------------------------|
| | MINIMUM | MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| pH | 6.6 s.u. | 9.0 s.u. | Daily | Instantaneous Grab (*5) |

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | | | | MONITORING REQUIREMENTS | |
|-------------------------------------|-----------------------|------------|-------------------------|-----------|---------------|-------------------------|-------------------------|
| | lbs/day, unless noted | | mg/l, unless noted (*1) | | | | |
| POLLUTANT | 30-DAY AVG | 7-DAY AVG | 30-DAY AVG | 7-DAY AVG | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | N/A | N/A | N/A | Daily | Totalized meter |
| BOD ₅ | N/A | N/A | 10 | 15 | N/A | 5/Week | 12-hr Composite |
| TSS | N/A | N/A | 15 | 23 | N/A | 5/Week | 12-hr Composite |
| BOD ₅ % removal, minimum | ≥85 (*2) | N/A | N/A | N/A | N/A | 1/Week | Calculation |
| TSS % removal, minimum | ≥85 (*2) | N/A | N/A | N/A | N/A | 1/Week | Calculation |
| E. coli bacteria | N/A | N/A | 47 cfu/100 ml | N/A | 88 cfu/100 ml | Daily | Grab |
| TRC | N/A | N/A | N/A | N/A | 11 ug/l (*4) | Daily (*3) | Instantaneous Grab (*5) |
| DO (*6) | N/A | N/A | Report | N/A | Report | 5/Week | Instantaneous Grab (*5) |
| PCB (*9) | N/A | N/A | N/A | N/A | Report | Once | Grab |
| Arsenic, total | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |
| Ammonia, total (as N) | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |
| Adjusted gross alpha (*10) | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |
| TDS | N/A | N/A | 1580 | N/A | 2372 | 5/Week | 12-hr Composite |
| O&G | N/A | N/A | 10 | N/A | 15 | 5/Week | 12-hr Composite |
| Phosphorus, total (TP) | N/A | N/A | N/A | N/A | Report | 1/Quarter | 12-hr Composite |
| Hexachlorobenzene (*13) | N/A | N/A | N/A | N/A | Report | 1/Quarter | Grab |

| EFFLUENT CHARACTERISTICS | DISCHARGE MONITORING | | MONITORING REQUIREMENTS | |
|---|----------------------|---------------|----------------------------|-----------------|
| | 30-DAY AVG | 48-HR MINIMUM | MEASUREMENT FREQUENCY (*8) | SAMPLE TYPE |
| WHOLE EFFLUENT TOXICITY TESTING 48-HR ACUTE NOEC FRESHWATER (*7) | | | | |
| Daphnia pulex | Report | Report | Once/Quarter | 24-hr Composite |
| Pimephales promelas | Report | Report | Once/Quarter | 24-hr Composite |

Footnotes for 1A, 1B and 1C:

- *1 See **Appendix A of Part II** of the permit for minimum quantification limits.
- *2 Percent removal is calculated using the following equation:

$$[\text{average monthly influent concentration (mg/l)} - \text{average monthly effluent concentration (mg/l)}] \div [\text{average monthly influent concentration (mg/l)}] \times 100.$$
- *3 TRC shall be measured during periods when chlorine is used as either backup bacteria control or when disinfection of plant treatment equipment 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 Field kit (probe) can be used to measure.
- *7 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.
- *8 The test shall take place between November 1 and April 30, if possible. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple failures. However, upon failure of any WET test, the permittee must report the results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.

- *9 PCB Testing shall be one time during the first 12-months after the permit effective date or first discharge; whichever comes first. Test shall use Method 1668A, as revised: Chlorinated Biphenyl Congeners in Water, Soil, Sediment and Tissue by High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS).
- *10 Test method ML/MDL shall be sensitive to 15 pCi/L.
- *11 Mass loadings shall be calculated using flows from WWTPs #2 and #6 with respective concentrations (consistent units) on 30-day averages as follow:
[(Flow, MGD x Effluent Concentration, mg/L)_{WWTP #2} + (Flow, MGD x Effluent Concentration, mg/L)_{WWTP #6}] x 8.345
For E. coli: [(Flow, MGD x Effluent Concentration, cfu/100 ml)_{WWTP #2} + (Flow, MGD x Effluent Concentration, cfu/100 ml)_{WWTP #6}] x 3.79 x 10⁷
- *12 Mass loadings shall be calculated using flows from WWTPs #2 and #6 with respective concentrations on 7-day averages as follow:
[(Flow, MGD x Effluent Concentration, mg/L)_{WWTP #2} + (Flow, MGD x Effluent Concentration, mg/L)_{WWTP #6}] x 8.345
- *13 Analysis shall be performed using EPA Method 612.

3. 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.

4. 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. The locations shall be as follow:

Outfall 001: at UV channel of the WWTP #2

Internal Outfall 101: right after Effluent Pond #1 of WWTP #1

Internal Outfall 601: right after final treatment of WWTP #6 and before comingle to WWTP #2 effluent

B. SCHEDULES OF COMPLIANCE

The permittee shall comply with the following schedule of activities for the attainment of state water quality standards-based final effluent limitations for TDS and O&G:

- a. Determine exceedance cause(s);
- b. Develop control options, if needed;
- c. Evaluate and select control mechanisms;
- d. Implement corrective action; and
- e. Attain final effluent limitations no later than 24 months from the permit effective date.

The permittee shall submit quarterly progress reports to EPA, Pueblo of Sandia and NMED, in accordance with the following schedule. The permittee shall also include the following in its quarterly progress reports: design completion, construction start and construction completion if any. The requirement to submit quarterly progress reports shall expire after written final report has been submitted. No later than 14-days after the date compliance with the final limits have been met, the permittee shall submit a written final report both to EPA and the State, stating that compliance has been completed. If at any time during the compliance periods the permittee determines that full compliance will not be met within the time allowed, a separate report shall be sent to EPA, Pueblo of Sandia and NMED stating the explanation for this delay and proposed remedial actions.

PROGRESS REPORT DATES: January 30, April 30, July 30, October 30

The permittee should note that each date applies to the prior three month period.

Progress and final reports shall be sent to the agencies (EPA, Pueblo of Sandia, NMED) mentioned in the Part I.C below.

C. MONITORING AND REPORTING (MAJOR DISCHARGERS)

Monitoring results shall be reported to EPA on either the electronic or paper Discharge Monitoring Report (DMR) approved formats. Monitoring results can be submitted electronically in lieu of the paper

DMR Form. All DMRs shall be electronically reported effective December 21, 2016 per 40 CFR 127.16. To submit electronically, access the NetDMR website at www.epa.gov/netdmr and contact the R6NetDMR@epa.gov in-box for further instructions. Until you are approved for Net DMR, you must report on the Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically, however when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and copies to Pueblo of Sandia as required (See Part III.D.IV 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 quarterly 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 day Biochemical Oxygen Demand (BOD5), or for the five-day Carbonaceous Biochemical Oxygen Demand (CBOD5), as applicable, where the permittee can demonstrate long term correlation of the method with BOD5 or CBOD5 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.
8. The permittee shall submit a copy of an annual summary of the data that results from WET testing to the agencies (EPA, Pueblo of Sandia, NMED)

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 orally reported at (214) 665-6595, Pueblo of Sandia at (505)867-4533 (within 8 hours) and 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, Pueblo of Sandia 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 3 scans for each parameter below during the permit term. This submittal is additional pollutants requirement to Part D, Form 2A in the next permit renewal.

| Pollutant | CAS Number | Pollutant | CAS Number | Pollutant | CAS Number |
|---------------------------------|------------|---|------------|----------------------------------|------------|
| Aluminum, dissolved | 7429-90-5 | Tritium | | Dioxin | |
| Aluminum, total recoverable | 7429-90-5 | Aldrin | 309-00-2 | alpha-Endosulfan | 959-98-8 |
| Asbestos | 1332-21-4 | Benzo(b)fluoranthene | 205-99-2 | beta-Endosulfan | 33213-65-9 |
| Barium, dissolved | 7440-39-3 | alpha-BHC | 319-84-6 | Endosulfan sulfate | 1031-07-8 |
| Boron, dissolved | 7440-42-8 | beta-BHC | 319-85-7 | Endrin | 72-20-8 |
| Cadmium, dissolved | 7440-43-9 | Gamma-BHC (Lindane) | 58-89-9 | Endrin aldehyde | 7421-93-4 |
| Chlorine residual | 7782-50-5 | Chlordane | 57-74-9 | Heptachlor | 76-44-8 |
| Chromium III, dissolved | 16065-83-1 | Diazinon | 333-41-5 | Heptachlor epoxide | 1024-57-3 |
| Chromium VI, dissolved | 18540-29-9 | 4,4'-DDT and derivatives | | 2-Methyl-4,6-dinitrophenol | 534-52-1 |
| Cobalt, dissolved | 7440-48-4 | Dieldrin | 60-57-1 | Nonylphenol | 84852-15-3 |
| Manganese, dissolved | 7439-96-5 | Bis(chloromethyl)Ether* | 542-88-1 | Polychlorinated Byphenyls (PCBs) | 1336-36-3 |
| Methylmercury | 22967-92-6 | 3-Methyl-4-Chlorophenol* | 59-50-7 | Toxaphene | 8001-35-2 |
| Molybdenum, dissolved | 7439-98-7 | Chlorpyrifos* | 2921-88-2 | 1,2-Trans-dichloroethylene | 156-60-5 |
| Molybdenum, total recoverable | 7439-98-7 | Demeton* | 8065-48-3 | Flouride* | 16984-48-8 |
| Nitrate as N | | 2-(2,4,5-Trichlorophenoxy) Propionic acid (Silvex)* | 93-72-1 | Guthion* | 86-50-0 |
| Uranium, dissolved | 7440-61-1 | TTHM (Sum of total Trihalomethanes)* | | Methoxychlor* | 72-43-5 |
| Vanadium, dissolved | 7440-62-2 | Sulfates* | | Mirex* | 2385-85-5 |
| Adjusted gross alpha | | Chlorides* | | Nitrosamines* | |
| Radium 226 + Radium 228 | | | | Nitrosodibutylamine N* | 924-16-3 |
| Strontium 90 | | | | Nitrosodiethylamine N* | 55-18-5 |
| Lithium, dissolved* | | | | N-Nitrosopyrrolidine* | 930-55-2 |
| Cyanide, weak acid dissociable* | | Dissolved Hardness (as CaCO ₃) | | Parathion* | 56-38-2 |
| Iron, dissolved* | 7439-89-6 | | | Pentachlorobenzene* | 608-93-5 |
| Malathion* | 121-75-5 | | | Sulfide-Hydrogen sulfide* | 7783-06-4 |
| | | | | Tetrachlorobenzene-1,2,3,4* | 95-94-3 |

* Per Pueblo of Sandia WQS

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 O, 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 | STORET Code |
|-------------------------|------------|-------------|
| Total Residual Chlorine | 7782-50-5 | 50060 |
| Cadmium | 7440-43-9 | 01027 |
| Silver | 7440-22-4 | 01077 |
| Thallium | 7440-28-0 | 01059 |
| Cyanide | 57-12-5 | 78248 |
| Dioxin (2,3,7,8-TCDD) | 1764-01-6 | 34675 |
| 4, 6-Dinitro-0-Cresol | 534-52-1 | 34657 |
| Pentachlorophenol | 87-86-5 | 39032 |
| Benzidine | 92-87-5 | 39120 |
| Chrysene | 218-01-9 | 34320 |
| Hexachlorobenzene | 118-74-1 | 39700 |
| N-Nitrosodimethylamine | 62-75-9 | 34438 |
| Aldrin | 309-00-2 | 39330 |
| Chlordane | 57-74-9 | 39350 |
| Dieldrin | 60-57-1 | 39380 |
| Heptachlor | 76-44-8 | 39410 |
| Heptachlor epoxide | 1024-57-3 | 39420 |
| Toxaphene | 8001-35-2 | 39400 |

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, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, Pueblo of Sandia (within 8 hours) and concurrently to NMED within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

TDS, O&G, TRC and E. coli

C. PERMIT MODIFICATION AND REOPENER

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

E. WHOLE EFFLUENT TOXICITY TESTING (48-HR ACUTE 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 |
| CRITICAL DILUTION (%): | 50 |
| EFFLUENT DILUTION SERIES (%): | 21, 28, 38, 50 and 67 |
| COMPOSITE SAMPLE TYPE: | Defined at PART I |
| TEST SPECIES/METHODS: | 40 CFR Part 136 |

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest 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.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest 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 defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Acute 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.
- c. The conditions of this item are effective beginning with the effective date of the WET limit. When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.
- d. The purpose of additional tests (also referred to as 'retests' or confirmation tests) is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates

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

- e. This permit may be reopened to require 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:

- ✓ Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.
- ✓ The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the *Daphnia pulex* survival test and fathead minnow survival test.
- ✓ The percent coefficient of variation between replicates shall be 40% or less in the critical dilution unless significant lethal effects are exhibited for the *Daphnia pulex* survival test and/or the fathead minnow survival test.

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 *Daphnia pulex* survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods EPA 821-R-02-012 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 90% 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 an 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 where the receiving stream is classified as intermittent or where the receiving stream has no flow 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 2.a was run concurrently with the receiving water control;
 - the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);
 - the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3.a 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 two flow weighted composite samples from the outfall(s) listed at Item 1.a above.
- ✓ The permittee shall collect second composite sample for use during the 24 hour renewal of each dilution concentration for both tests. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 36 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. 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 Part in accordance with the Report Preparation Section of EPA 821-R-02-012, 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. The permittee shall report the Whole Effluent Lethality values for the 30 Day Average Minimum and the 48 Hr. Minimum under Parameter No. 22414 on the DMR for that reporting period in accordance with PART III.D.4 of this permit.

If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.

If more than one species is tested during the reporting period, the permittee shall report the lowest 30 Day Average Minimum NOEC and the lowest 48 Hr. Minimum NOEC for Whole Effluent Lethality.

A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.

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

✓ Pimephales promelas (Fathead minnow)

- If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM6C.
- Report the NOEC value for survival, Parameter No. TOM6C.
- Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM6C.

✓ Daphnia pulex

- If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.
- Report the NOEC value for survival, Parameter No. TOM3D.

- Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.

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 one or both test species, with no 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 *Daphnia pulex*).
- b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a. above. In addition the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal 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 reissued.

APPENDIX A of PART II

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

| POLLUTANTS | MQL µg/l | POLLUTANTS | MQL µg/l |
|--|-------------|--------------------------------|-------------|
| METALS, RADIOACTIVITY, CYANIDE and CHLORINE | | | |
| Aluminum | 2.5 | Molybdenum | 10 |
| Antimony | 60 | Nickel | 0.5 |
| Arsenic | 0.5 | Selenium | 5 |
| Barium | 100 | Silver | 0.5 |
| Beryllium | 0.5 | Thallium | 0.5 |
| Boron | 100 | Uranium | 0.1 |
| Cadmium | 1 | Vanadium | 50 |
| Chromium | 10 | Zinc | 20 |
| Cobalt | 50 | Cyanide | 10 |
| Copper | 0.5 | Cyanide, weak acid dissociable | 10 |
| Lead | 0.5 | Total Residual Chlorine | 33 |
| Mercury *1 | 0.0005 | | |
| | 0.005 | | |
| DIOXIN | | | |
| 2,3,7,8-TCDD | 0.00001 | | |
| VOLATILE COMPOUNDS | | | |
| Acrolein | 50 | 1,3-Dichloropropylene | 10 |
| Acrylonitrile | 20 | Ethylbenzene | 10 |
| Benzene | 10 | Methyl Bromide | 50 |
| Bromoform | 10 | Methylene Chloride | 20 |
| Carbon Tetrachloride | 2 | 1,1,2,2-Tetrachloroethane | 10 |
| Chlorobenzene | 10 | Tetrachloroethylene | 10 |
| Chlorodibromomethane | 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-Chloronaphthalene | 10 | Isophorone | 10 |
| Chrysene | 5 | Nitrobenzene | 10 |
| Dibenzo(a,h)anthracene | 5 | n-Nitrosodimethylamine | 50 |
| 1,2-Dichlorobenzene | 10 | n-Nitrosodi-n-Propylamine | 20 |
| 1,3-Dichlorobenzene | 10 | n-Nitrosodiphenylamine | 20 |
| 1,4-Dichlorobenzene | 10 | Pyrene | 10 |
| 3,3'-Dichlorobenzidine | 5 | 1,2,4-Trichlorobenzene | 10 |
| Diethyl Phthalate | 10 | | |
| PESTICIDES AND PCBS | | | |
| Aldrin | 0.01 | Beta-Endosulfan | 0.02 |
| Alpha-BHC | 0.05 | Endosulfan sulfate | 0.02 |
| Beta-BHC | 0.05 | Endrin | 0.02 |
| Gamma-BHC | 0.05 | Endrin Aldehyde | 0.1 |
| Chlordane | 0.2 | Heptachlor | 0.01 |
| 4,4'-DDT and derivatives | 0.02 | Heptachlor Epoxide | 0.01 |
| Dieldrin | 0.02 | PCBs | 0.2 |
| Alpha-Endosulfan | 0.01 | Toxaphene | 0.3 |

(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.

APPENDIX B OF PART II

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The permittee shall operate an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403) and the approved POTW pretreatment program submitted by the permittee. The pretreatment program was approved on 5/22/2007. The Sewer Use Ordinance and the Pretreatment Program have not been modified to come into compliance with the current 40 CFR 403 regulations. The permittee shall submit all necessary proposed modifications to the EPA within 12 months of the effective date of the permit. The POTW pretreatment program is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:
 - (a) Industrial user information shall be updated at a frequency adequate to ensure that all IUs are properly characterized at all times;
 - (b) The frequency and nature of industrial user compliance monitoring activities by the permittee shall be commensurate with the character, consistency and volume of waste. The permittee must inspect and sample the effluent from each Significant Industrial User in accordance with 40 CFR 403.8(f)(2)(v). This is in addition to any industrial self-monitoring activities;
 - (c) The permittee shall enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements;
 - (d) The permittee shall control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of Industrial Users identified as significant under 40 CFR 403.3(v), this control shall be achieved through individual or general control mechanisms, in accordance with 40 CFR 403.8(f)(1)(iii). Both individual and general control mechanisms must be enforceable and contain, at a minimum, the following conditions:
 - (i) Statement of duration (in no case more than five years);
 - (ii) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
 - (iii) Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards, categorical Pretreatment Standards, local limits, and State and local law;
 - (iv) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored (including the process for seeking a waiver for a pollutant neither present nor expected to be present in the Discharge on accordance with § 403.12(e)(2), or

a specific waiver for a pollutant in the case of an individual control mechanism), sampling location, sampling frequency, and sample type, based on the applicable general Pretreatment Standards in 40 CFR 403, categorical Pretreatment Standards, local limits, and State and local law;

- (v) Statement of applicable civil and criminal penalties for violation of Pretreatment Standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and
 - (vi) Requirements to control slug discharges, if determined by the POTW to be necessary.
 - (e) The permittee shall evaluate, whether each Significant Industrial User needs a plan or other action to control slug discharges, in accordance with 40 CFR 403.8(f)(2)(vi);
 - (f) The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program; and,
 - (g) The approved program shall not be modified by the permittee without the prior approval of the Agency.
2. The permittee shall establish and enforce specific limits to implement the provisions of 40 CFR Parts 403.5(a) and (b), as required by 40 CFR Part 403.5(c). POTWs may develop Best Management Practices (BMPs) to implement paragraphs 40 CFR 403.5 (c)(1) and (c)(2). Such BMPs shall be considered local limits and Pretreatment Standards. Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.

The permittee shall, within sixty (60) days of the effective date of this permit, (1) submit a **WRITTEN CERTIFICATION** that a technical evaluation has been demonstrated that the existing technically based local limits (TBLL) are based on current state water quality standards and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination, **OR** (2) submit a **WRITTEN NOTIFICATION** that a technical evaluation revising the current TBLL and a draft sewer use ordinance which incorporates such revisions will be submitted within 12 months of the effective date of this permit.

All specific prohibitions or limits developed under this requirement are deemed to be conditions of this permit. The specific prohibitions set out in 40 CFR Part 403.5(b) shall be enforced by the permittee unless modified under this provision.

3. The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in 40 CFR 122 Appendix D (NPDES Application Testing Requirements) Table II at least **once /12 months** and the toxic pollutants in Table III at least **once/3 months**. If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water

quality, or solids disposal procedures, analysis for those pollutants shall be performed at least **once/3 months** on both the influent and the effluent.

The influent and effluent samples collected shall be composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24 hour period and composited according to flow. **Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR 136. The effluent samples shall be analyzed to a level at least as low as required in (6) below.** Where composite samples are inappropriate, due to sampling, holding time, or analytical constraints, at least 4 grab samples, taken at equal intervals over a representative 24 hour period, shall be taken.

4. The permittee shall prepare annually a list of Industrial Users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements. For the purposes of this Part, significant noncompliance shall be determined based upon the more stringent of either criteria established at 40 CFR Part 403.8(f)(2)(viii) [rev. 10/14/05] or criteria established in the approved POTW pretreatment program. This list is to be published annually in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW during the month of **June**.

In addition, during the month of **June** the permittee shall submit an updated pretreatment program status report to EPA and the State containing the following information:

- (a) An updated list of all significant industrial users and identify which Industrial Users are Non-Significant Categorical Industrial Users (NSCIUs) or Middle Tier CIUs. The list must also identify:
 - Industrial Users subject to categorical Pretreatment Standards that are subject to reduced monitoring and reporting requirements under 40 CFR 403.12(e)(2) & (3),
 - Industrial Users subject to the following categorical Pretreatment Standards [Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) (40 CFR part 414), Petroleum Refining (40 CFR part 419), and Pesticide Chemicals (40 CFR part 455)] and for which the Control Authority has chosen to use the concentration-based standards rather than converting them to flow-based mass standards as allowed at 40 CFR 403.6(c)(6).
 - Categorical Industrial Users subject to concentration-based standards for which the Control Authority has chosen to convert the concentration-based standards to equivalent mass limits, as allowed at 40 CFR 403.6(c)(5).
 - General Control Mechanisms used for similar groups of SIUs along with the substantially similar types of operations and the types of wastes that are the same, for each separate General Control Mechanism, as allowed at 40 CFR 403.8(f)(1)(iii).
 - Best Management Practices or Pollution Prevention alternatives required by a categorical Pretreatment Standard or as a local limit requirement that are

implemented and documentation to demonstrate compliance, as required at 40 CFR 403.12 (b), (e) and (h).

For each industrial user listed the following information shall be included:

- (i) Standard Industrial Classification (SIC) or NAISC code and categorical determination;
- (ii) Control document status. Whether the user has an effective control document, and the date such document was last issued, reissued, or modified, (indicate which industrial users were added to the system (or newly identified) within the previous 12 months);
- (iii) A summary of all monitoring activities performed within the previous 12 months. The following information shall be reported:
 - * total number of inspections performed;
 - * total number of sampling visits made;
- (iv) Status of compliance with both effluent limitations and reporting requirements. Compliance status shall be defined as follows:
 - * Compliant (C) - no violations during the previous 12 month period;
 - * Non-compliant (NC) - one or more violations during the previous 12 months but does not meet the criteria for significantly noncompliant industrial users;
 - * Significant Noncompliance (SN) - in accordance with requirements described in 4. above; and
- (v) For significantly noncompliant industrial users, indicate the nature of the violations, the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. If **ANY** industrial user was on a schedule to attain compliance with effluent limits, indicate the date the schedule was issued and the date compliance is to be attained;
- (b) A list of all significant industrial users whose authorization to discharge was terminated or revoked during the preceding **12 month** period and the reason for termination;
- (c) A report on any interference, pass through, upset or POTW permit violations known or suspected to be caused by industrial contributors and actions taken by the permittee in response;
- (d) The results of all influent and effluent analyses performed pursuant to Part II (3) above;

- (e) A copy of the newspaper publication of the significantly noncompliant industrial users giving the name of the newspaper and the date published;
 - (f) The information requested may be submitted in tabular form as per the example tables provided for your convenience; and
 - (g) The monthly average water quality based effluent concentration necessary to meet the state water quality standards as developed in the approved technically based local limits.
5. The permittee shall provide adequate notice of the following:
- (a) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.
- Adequate notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.
6. All effluent monitoring conducted in accordance with item 3. above shall meet the Minimum Quantification Levels (MQLs) on Appendix A of Part II.

MONITORING RESULTS¹ FOR THE ANNUAL PRETREATMENT REPORT, REPORTING YEAR: _____, 20__ TO _____, 20__
 TREATMENT PLANT : _____ NPDES PERMIT NO. _____

| POLLUTANT | MAHL, if applicable, in $\mu\text{g/L}^2$ | Influent Values (in $\mu\text{g/L}$) on Dates Sampled | | | | Daily Average Effluent Limit in $\mu\text{g/L}^3$ | Effluent Values (in $\mu\text{g/L}$) on Dates Sampled | | | |
|--------------------|---|--|--|--|--|---|--|--|--|--|
| | | | | | | | | | | |
| Antimony (Total) | | | | | | | | | | |
| Arsenic (Total) | | | | | | | | | | |
| Beryllium (Total) | | | | | | | | | | |
| Cadmium (Total) | | | | | | | | | | |
| Chromium (Total) | | | | | | | | | | |
| Copper (Total) | | | | | | | | | | |
| Lead (Total) | | | | | | | | | | |
| Mercury (Total) | | | | | | | | | | |
| Molybdenum (Total) | | | | | | | | | | |
| Nickel (Total) | | | | | | | | | | |
| Selenium (Total) | | | | | | | | | | |
| Silver (Total) | | | | | | | | | | |
| Thallium (Total) | | | | | | | | | | |
| Zinc (Total) | | | | | | | | | | |
| Cyanide (Total) | | | | | | | | | | |
| 4 | | | | | | | | | | |
| | | | | | | | | | | |

- 1 It is advised that the influent and effluent samples are collected considering flow detention time through each plant. Analytical MQLs should be used so that the data can also be used for Local Limits assessment and NPDES application purposes.
- 2 Maximum Allowable Headworks Loading limitation in $\mu\text{g/L}$. Only complete for pollutants that have approved Technically Based Local Limits.
- 3 Daily average effluent limit in the NPDES permit OR the applicable state Water Quality Standard calculated to an equivalent permit effluent limit.
- 4 Record the names of any pollutants [40 CFR 122, Appendix D, Table II and/or Table V] detected and the quantity in which they were detected.

[illegible]

NPDES NM0027987

[illegible]

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

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

2. DUTY TO COMPLY

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

3. TOXIC POLLUTANTS

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

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

4. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. PERMIT FLEXIBILITY

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

6. PROPERTY RIGHTS

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

7. DUTY TO PROVIDE INFORMATION

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

8. CRIMINAL AND CIVIL LIABILITY

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

9. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

10. STATE LAWS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

11. SEVERABILITY

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

B. PROPER OPERATION AND MAINTENANCE**1. NEED TO HALT OR REDUCE NOT A DEFENSE**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. DUTY TO MITIGATE

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

3. PROPER OPERATION AND MAINTENANCE

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. BYPASS OF TREATMENT FACILITIES**a. BYPASS NOT EXCEEDING LIMITATIONS**

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.b. and 4.c.

b. NOTICE**(1) ANTICIPATED BYPASS**

If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) UNANTICIPATED BYPASS

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

c. PROHIBITION OF BYPASS

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

- (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
- (c) The permittee submitted notices as required by Part III.B.4.b.

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

5. UPSET CONDITIONS

a. EFFECT OF AN UPSET

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part III.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. CONDITIONS NECESSARY FOR A DEMONSTRATION OF UPSET

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required by Part III.D.7; and,
- (4) The permittee complied with any remedial measures required by Part III.B.2.

c. BURDEN OF PROOF

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

6. REMOVED SUBSTANCES

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

7. PERCENT REMOVAL (PUBLICLY OWNED TREATMENT WORKS)

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

C. MONITORING AND RECORDS

1. INSPECTION AND ENTRY

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

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

2. REPRESENTATIVE SAMPLING

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

3. RETENTION OF RECORDS

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report, or application. This period may be extended by request of the Director at any time.

4. RECORD CONTENTS

Records of monitoring information shall include:

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

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

5. MONITORING PROCEDURES

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

6. FLOW MEASUREMENTS

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

D. REPORTING REQUIREMENTS

1. PLANNED CHANGES

a. INDUSTRIAL PERMITS

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,
- (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements listed at Part III.D.10.a.

b. MUNICIPAL PERMITS

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

2. ANTICIPATED NONCOMPLIANCE

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. TRANSFERS

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. DISCHARGE MONITORING REPORTS AND OTHER REPORTS

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

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

EPA:

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

New Mexico:

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

Pueblo of Sandia:

Pueblo of Sandia Environmental Department
Water Quality Manager
481 Sandia Loop
Bernalillo, NM 87004

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 Sandia at (505) 867-4533 (within 8 hours of the noncompliance violation) and to the New Mexico Environment Department at (505) 827-0187 as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

- (1) A description of the noncompliance and its cause;
- (2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

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

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

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

8. OTHER NONCOMPLIANCE

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

9. OTHER INFORMATION

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

10. CHANGES IN DISCHARGES OF TOXIC SUBSTANCES

All existing manufacturing, commercial, mining, and silvacultural permittees shall notify the Director as soon as it knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) One hundred micrograms per liter (100 µg/L);
- (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2, 4-dinitro-phenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the Director.

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

- (1) Five hundred micrograms per liter (500 µg/L);
- (2) One milligram per liter (1 mg/L) for antimony;
- (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the Director.

11. SIGNATORY REQUIREMENTS

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

- a. ALL PERMIT APPLICATIONS shall be signed as follows:

- (1) FOR A CORPORATION - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

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

- (3) FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC AGENCY - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

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

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

- b. ALL REPORTS required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;
- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
- (3) The written authorization is submitted to the Director.

c. CERTIFICATION

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. AVAILABILITY OF REPORTS

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

E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

1. CRIMINAL

a. NEGLIGENT VIOLATIONS

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

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

13. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Act.
14. SEVERE PROPERTY DAMAGE means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
15. SEWAGE SLUDGE means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff that are discharged to or otherwise enter a publicly owned treatment works.
16. TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.
17. UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
18. FOR FECAL COLIFORM BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
19. The term "MGD" shall mean million gallons per day.
20. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).
21. The term "µg/L" shall mean micrograms per liter or parts per billion (ppb).
22. MUNICIPAL TERMS
 - a. 7-DAY AVERAGE or WEEKLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - b. 30-DAY AVERAGE or MONTHLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.
 - c. 24-HOUR COMPOSITE SAMPLE consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.
 - d. 12-HOUR COMPOSITE SAMPLE consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.
 - e. 6-HOUR COMPOSITE SAMPLE consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
 - f. 3-HOUR COMPOSITE SAMPLE consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

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 be 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 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, 1445 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 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. 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 be 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 in 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 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) as well as the applicable pollutant concentration criteria (mg/Kg) 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 (Class 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 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 away 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 away 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.
- The concentration in the sludge of each pollutant listed above in found in Element I, Section I, Table 1.
 - 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".
 - A description of how the Class A pathogen reduction requirements are met.
 - A description of how the vector attraction reduction requirements are met.
 - 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:
- List Pollutant Table 4 appropriate for permittee's land application practices.
 - The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.
 - Toxicity Characteristic Leaching Procedure (TCLP) results. (Pass/Fail).
 - 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.
 - Class A pathogen reduction Alternative used as listed in Section I.B.3.a. Alternatives describe how the pathogen reduction requirements are met.
 - Vector attraction reduction Alternative used as listed in Section I.B.4.
 - Annual sludge production in dry metric tons/year.
 - Amount of sludge land applied in dry metric tons/year.
 - Amount of sludge transported interstate in dry metric tons/year.
 - 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 be a cause 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 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 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 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 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 explosive 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 |
|---|--------------|
| $0 \leq \text{Sludge} < 290$ | Once/Year |
| $290 \leq \text{Sludge} < 1,500$ | 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 (Class 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 disposed 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 be a cause 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, 1445 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.