NPDES PERMIT NO. NM0020311 FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

City of Roswell Wastewater Treatment Facility P.O. Box 1838 Roswell, New Mexico 88202-1838

ISSUING OFFICE

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

PREPARED BY

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DATE PREPARED

April 12, 2013

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued December 1, 2006, with an effective date of December 1, 2006, and an expiration date of November 30, 2011.

RECEIVING WATER – BASIN

Outfall 001: Rio Hondo (NM-2208_25) - Pecos River - Upper Pecos-Long Arroyo Basin

Outfall 002: Berrendo Creek - Rio Hondo (NM-2208_25) – Pecos River – Upper Pecos-Long Arroyo Basin

DOCUMENT ABBREVIATIONS

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

| 4Q3 | lowest four-day average flow rate expected once every three years |
|--------|---|
| BAT | best available technology economically achievable |
| BCT | best conventional pollutant control technology |
| BPT | best practicable control technology currently available |
| BOD5 | five-day biochemical oxygen demand |
| BPJ | best professional judgment |
| CD | critical dilution |
| CFR | Code of Federal Regulations |
| cfs | cubic feet per second |
| cfu | colony forming units |
| CWA | Clean Water Act |
| DMR | discharge monitoring report |
| ELG | effluent limitation guidelines |
| EPA | United States Environmental Protection Agency |
| ESA | Endangered Species Act |
| FWS | United States Fish and Wildlife Service |
| GM | geometric mean |
| lbs | pounds |
| ug/L | micrograms per litter (one part per billion) |
| mg/L | milligrams per liter (one part per million) |
| MGD | million gallons per day |
| NAICS | North American Industry Classification System |
| ND | non-detect |
| 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 |
| STORET | EPA Storage and Retrieval Database |
| su | 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 |
| WET | whole effluent toxicity |
| WLA | Waste Load Allocations |
| WQS | water quality standards |
| WWTP | wastewater treatment plant |

1. CHANGES FROM THE PREVIOUS PERMIT

- The Monitoring frequency of the following has been changed to the revised version of the NMIP
 - pH monitoring frequency has changed from 5/Week to Daily
 - Flow monitoring frequency has changed from continuous to Daily
 - BOD5 and TSS monitoring frequency has changed from 5/Week to 1/Week
- BOD5 and TSS Percent Removal has been included in the proposed permit
- The WET has changed from 86% (calculated from 4Q3 of 1.7 cfs and a harmonic mean of 3.6 cfs) to 89% (calculated from a 4Q3 of 1.38cfs (or 0.89 MGD) and a harmonic mean of 3.85 cfs)
- Aluminum was removed in the proposed permit since it did not show an exceedance of the NM WQS with the new 4Q3.

2. APPLICANT LOCATION and ACTIVITY

The plant site is located at 2306 East College Boulevard, in the City of Roswell, in Chavez County, New Mexico. The receiving water named Rio Hondo, thence to the Pecos River for Outfall 001, and to Berrendo Creek, thence to the Rio Hondo, thence to the Pecos River for Outfall 002. The Outfalls are located at the following coordinates:

| Outfall 001: | Latitude 33E 24' 37" N, Longitude 104E 28' 45" W |
|--------------|--|
| Outfall 002: | Latitude 33E 24' 50" N, Longitude 104E 27' 40" W |

Under the Standard Industrial Classification (SIC) Code 4952, and the North American Industry Classification System (NAICS) code 221320, the applicant operates a municipal wastewater treatment facility equivalent to a POTW. The facility has a design flow capacity of 7.0 MGD (7,000,000 gallons per day) serving a population of 48,000. In a 1995 letter from NMED, it was determined that effluent limits for Outfall 002 in Berrendo Creek should be the same as Outfall 001 because of the close proximity of Outfall 002 to the Rio Hondo.

Treatment Scheme

There are a total of three lift stations that bring influent from the City of Roswell into the WWTP. Influent enters the plant through a pump station where it goes through a bar screen and a grit chamber. It then enters one of two primary clarifiers, into a splitter box and then flows into aeration basins with fine bubble diffusers. It then flows into the final clarifiers. Disinfection is accomplished with Ultraviolet light. A total of two banks, 96 bulbs are used. Weekly maintenance is performed on the UV system to ensure its proper disinfection of the effluent. There are remnants of the old trickling filter onsite along with the previous chlorine contact chamber, which is no longer used.

Sludge

All sludge generated is composted using the static windrow method. Sludge in the drying bed is allowed to dry to a minimum of 50% solid before windrowing. Temperatures are monitored within the windrows. Regular turning of windrows is performed with a minimum of five turnings to meet the requirements. Fecal coliform densities are also taken to ensure compliance, along with vector attraction reduction requirements.

A map of the facility is provided in Figure 1.

Figure 1



3. EFFLUENT CHARACTERISTICS

The City was provided a list of the current MQLs to be used in pollutant testing for the application. *See* Appendix A of Part II of the Permit for the MQL list. A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received June 20, 2011, is presented in Table 1 below:

Table 1 EPA NPDES Application Form 2A

| Parameter | Max | Number of |
|-------------------------------|---------|-----------|
| | 111011 | Samples |
| | 2.5 | |
| Flow, MGD | 3.5 | 365 |
| Temperature, winter | No Data | No Data |
| Temperature, summer | No Data | No Data |
| pH, minimum, s.u. | 7.0 | 253 |
| pH, maximum, s.u. | 7.5 | 253 |
| BOD5 (mg/L) | 9 | 185 |
| E.Coli | 100 | 187 |
| TSS (mg/L) | 25 | 185 |
| Ammonia (as N) | 5.48 | 12 |
| TRC | 0 | 0 |
| DO | No Data | No Data |
| TKN | 15 | 12 |
| Nitrate plus Nitrite Nitrogen | 12 | 12 |

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| Oil & Grease | No Data | No Data |
|--------------------|---------|---------|
| Phosphorus (total) | No Data | No Data |
| TDS | 1750 | 12 |
| Aluminum | 71 | 12 |

The complete list of pollutants tested is found at <u>Appendix D</u> of the Fact Sheet.

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This wastewater treatment facility currently receives waste from remedial activities. A list of the CERCLA (superfund) wastewater, RCRA remediation/ corrective action wastewater and other remedial activity wastewater listed in the table below.

Table 2

| Site Location | Waste Origin | Pollutants | Waste Treatment |
|---|---|---|--|
| 501 N Main St | Hydrocarbon contamination from leaking underground storage tank Proposed processing through air stripper – treated water discharged to municipal sewer | Benzene, touluene, ethelybenzene, total xylene, total Naphthalene | Removal greater than 99.0% via air stripper |
| McGaffey at Main 1100 Block of South Main St. | Ground Water Plume(s) originating from one or more inactive dry cleaner facilities | Benzene, touluene, ethelybenzene, total xylene, total Naphthalene and PCE | Preliminary design activities for a vapor intrusion mitigation system designed to capture PCE contaminated subsurface vapors present. Treated vapors will be vented to the atmosphere |

This wastewater treatment facility currently receive waste from industrial user dischargers that use an approved pretreatment program. A list of the industrial pretreated discharge wastewater is listed in the table below.

Table 3

| Name/Address | Industrial Process | Process Water/ Non Process Water GPD | Categorical Pretreatment Standards | 40 CFR Category | Principal Products | Raw Products | Class Code |
|----------------------------|--------------------|--|--|--------------------|--------------------|-------------------|---------------|
| Christmas by Krebs | Silver plate glass | 1100 / 0 | Y | 3231 | Decorated | Glass, silver, | SIU |
| 3911 S. Main St 88203 | Christmas bulbs | | | | Christmas bulbs | silver nitrate | |
| Dean Baldwin Painting, | Aircraft stripping | 367 / 22 | | 3721 & | Aircraft stripping | Aircraft sand, | SIU |
| Incorporated | & painting | | | 4581 | & painting | primer, stripper, | |
| 82 West Earl Cummings Loop | | | | | | paint | |
| Roswell NM 88203 | | | | | | | |

A summary of the past 24-months of available pollutant data taken from DMRs; January 2009, through December 2010, is shown on Appendix D of the Fact Sheet below.

| Fable 4 EPA NPDES Application Form 2A | Quantitative Discharge | for Outfall 001 and 002 |
|---------------------------------------|-------------------------------|-------------------------|
|---------------------------------------|-------------------------------|-------------------------|

| Parameter | Maximum Daily | Average daily |
|--------------------------|---------------|---------------|
| | Discharge | Discharge |
| Ammonia, as N (mg/l) | 5.48 | 2 |
| TRC (mg/l) | 0.0 | 0.0 |
| DO | Not Reported | Not Reported |
| TKN (mg/l) | 15 | 5 |
| Nitrate + Nitrite (mg/l) | 12 | 12 |
| Oil & Grease | Not Reported | Not Reported |
| Phosphorus, total | Not Reported | Not Reported |
| TDS (mg/l) | 1750 | 1586 |
| Aluminum total (ug/l) | 71 | 34 |

Table 4 is a summary of the last 3-years compliance monitoring history for NPDES Permit NM0020311.

Table 4

| Dates of Violation | Parameter | Value |
|--------------------|-----------|-------------------|
| 2010-11-30 | WET | Lack of Reporting |
| 2011-05-31 | WET | Lack of Reporting |
| 2011-11-30 | WET | Lack of Reporting |

4. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water"; more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered the NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit expired October 31, 2011. EPA received the NPDES application on June 20, 2011. The existing permit is administratively continued until this permit is issued.

5. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for TSS and BOD5. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH, TRC, nitrite-nitrate, nitrogen and WET.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD5, TSS, *E. coli* bacteria, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

The facility is a POTW treating sanitary wastewater. POTW's have technology-based ELGs established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD5, TSS and pH. BOD5 limits of 30 mg/l for the 30-day average and 45 mg/l for the 7-day average are found at 40 CFR §133.102(a). TSS limits; also 30 mg/l for the 30-day average and 45 mg/l for the 7-day average, are found at 40 CFR §133.102(b). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). Additionally limited in the ELG's contained in 40 CFR §133.102(b) is 85% removal for BOD5 and TSS. For the draft permit, TSS limits of 30 mg/l for the 30-day average and 45 mg/l for the 7-day average are continued based on 40 CFR Part 133 and the previous permit. New parameter 85% percent (minimum) removal will be proposed for TSS based on the ELG requirements. The BOD5 limitations in the draft permit are shown in the water quality section below.

Regulations at 40 CFR §122.45(f)(1) specifically states: all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. When determining mass limits for POTW's, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.34 conversion factor * design flow in MGD

30-day average BOD5 & TSS loading = 30 mg/l * 8.34 conversion factor * 7.0 MGD 30-day average BOD5 & TSS loading = 1751 lbs/day

7-day average BOD5 & TSS loading = 45 mg/l * 8.34 conversion factor * 7.0 MGD 7-day average BOD5 & TSS loading = 2627 lbs/day A summary of the technology-based limits for the facility is:

Technology-Based Effluent Limits – 7.0 MGD design flow.

Table 6

| Effluent Characteristics | Discharge Limitations | | | | |
|--------------------------|----------------------------------|------------|-------------|-------------|--|
| | lbs/Day | | mg/L (un | less noted) | |
| Parameter | 30-Day Avg. | 7-Day Avg. | 30-Day Avg. | 7-Day Avg. | |
| Flow | N/A | N/A | Measure MGD | Measure MGD | |
| BOD5 (lbs/day) | 1751 | 2627 | 30 | 45 | |
| BOD5, % removal, min | ≥85% | | | | |
| TSS (lbs/day) | 1751 | 2627 | 30 | 45 | |
| TSS, % removal, min | ≥85% | | | | |
| pH | N/A N/A 6.6 – 9.0 standard units | | units | | |

WATER QUALITY BASED LIMITATIONS

a. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technologybased limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

b. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

c. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4.206 NMAC amended November 20, 2012). The discharge from the WWTP flows into Rio Hondo in segment number 20.6.4.206 of the Pecos River Basin. Discharges occur from February – November. The rest of the year, the effluent is used as reclamation water at area farms and the Roswell Golf Course. The designated uses for this segment, 20.6.4.206, include: irrigation, livestock watering, wildlife habitat, secondary contact and warm water aquatic life.

d. Permit Action - Water Quality-Based Limits

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at [40 <u>CFR</u> 122.44 (d)] state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. Regulations promulgated at [40 <u>CFR</u> 122.44(d)] require limits in addition to or more stringent than effluent limitation guidelines (technology based).

In accordance with 20.6.4 <u>NMAC</u>, the permit must be developed to allow for the maintenance and attainment of acute numerical criteria at the point of discharge to the receiving stream and for the maintenance and attainment of chronic numerical criteria at the edge of the mixing zone.

The pollutant concentrations contained in the permit application were measured against State numeric water quality standards, and these are shown in the attached spreadsheet (Appendix A of the Fact Sheet).

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the appropriate test method publication. The full reports required by each test section need not be submitted unless requested. However, the full report is to be retained following the provisions of [40 <u>CFR</u> Part 122.41 (j) (2)]. The permit requires the submission of the toxicity testing information to be included on the DMR.

Based on the sampling results provided by the permittee, total mercury, total aluminum and total copper showed no reasonable potential to cause exceedances of the current State water quality numerical standards. As a result, monitoring has been removed from the proposed permit

1) pH

The draft permit will propose a pH limit of 6.6 to 9.0 su from 20.6.4.900 B(1) NMAC, which is more restrictive than the technology-based limit.

2) Bacteria

E. coli bacteria are 548 cfu/100 ml monthly geometric mean and 2507 cfu/100 ml single sample maximum as found in 20.6.4.900 E.

- 3) Toxics
 - i. General Comments

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, "publicly owned treatment works" but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of (like privately owned sanitary wastewater treatment facility, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit

applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

The facility is designated by EPA NPDES as a major POTW for permitting purposes and must supply the expanded pollutant testing list described in EPA Application Form 2A as presented above in Part 3 Effluent Characteristics of this Fact Sheet.

ii. TRC

The previous permit established water quality-based effluent limitations for TRC of 11 ug/L. This requirement will be maintained in the draft permit.

iii. Critical Conditions

Critical conditions are used to establish certain permit limitations and conditions. The State establishes a critical low flow designated as 4Q3, as the minimum average four consecutive day flow which occurs with a frequency of once in three years. The SWQB of the NMED provided EPA with the 4Q3 for the City of Roswell WWTP.

For permitting purposes of certain parameters such as WET, the critical dilution of the effluent to the receiving stream is determined. The critical dilution, CD, is calculated as:

 $CD = Qe/(F \cdot Qa + Qe)$, where:

Qe = facility flow (7.0 MGD) Qa = critical low flow of the receiving waters (0.89 MGD) F = fraction of stream allowed for mixing (1.0)

CD = 7.0 MGD/[(1.0)(0.89) + 7.0] = 0.89

Chronic critical dilution = 0.89 * 100 = 89%

According to the NMIP, it is determined that this facility is to receive chronic biomonitoring requirements at a critical dilution of 89%.

iv. Reasonable Potential – New Mexico

A water quality screen was run to determine if pollutant concentrations exhibit RP to exceed WQS for the various designated uses. If RP exists, the screen would also calculate the appropriate permit limit needed to be protective of such designated uses. The screen is based on the NMIP as of March 15 2012, and based on the results, shown in Appendix A of the Fact Sheet, none of the pollutants tested demonstrate RP to violate NMWQS consistent with the designated uses for the receiving water. You can view these calculations in Appendix A of the Fact Sheet.

Monitoring Frequency for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). Changes to sample frequencies have been made based on the NMIP in order to ensure consistency with similar sized facilities.

Whole Effluent Toxicity

In Section E.3.d.3) iii above; "Critical Conditions", it was shown that the critical dilution, CD, for the facility is 89%, because the discharge is to a perennial (for 001) and intermittent (for 002). Based on the nature of the discharge; POTW, the design flow; more than 1.0 MGD, the nature of the receiving water; perennial, and the critical dilution; 89%, the NMIP directs the WET test to be a 7 day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a once per three-month frequency consistent with the NMIP. The test series will be 0% (control), 28%, 38%, 50%, 67%, and 89%. The critical dilution has been increased from 86% in the previous permit to 89% in the proposed permit due to the current 4Q3.

Out of 8 tests performed during the last permit the effluent exhibited no failures for the *Ceriodaphnia dubia* or *Pimephales promelas*. However, the EPA Reasonable Potential Analyzer Appendix recommends a WET limit, due to the failure to report on 12 tests, for the *Ceriodaphnia dubia* and *Pimephales promelas* test species be added to the permit. Therefore, a WET limit from the previous permit for *Ceriodaphnia dubia* and *Pimephales promelas* will be carried over into the proposed permit.

During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 101 Combination of Outfall 001 and 002) - the discharge to the **Rio Hondo for Outfall 001 and Berrendo Creek for Outfall 002**. Discharges shall be limited and monitored by the permittee as specified below:

Final Effluent Limits – 7.0 MGD design flow.

| Та | bl | le | 2 | |
|----|----|----|---|--|
| | | | | |

| Effluent Chereoteristic | Discharge Monitoring | | |
|---|----------------------|--------------|--|
| | 30-day Avg Min | 48hr Minimum | |
| Whole Effluent Toxicity (PCS 22414) (7-Day NOEC) ¹ | 89% | 89% | |
| Ceriodaphnia dubia | Report | Report | |
| Pimephales promelas | Report | Report | |

Table 3

| Effluent Characteristic | Monitoring Requirements | |
|---|-------------------------|------------------|
| Whole Effluent Toxicity (7-Day NOEC) ¹ | Frequency | Туре |
| Ceriodaphnia dubia | 1/Quarter | 24-Hr. Composite |
| Pimephales promelas | 1/Quarter | 24-Hr. Composite |

¹ *2 Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

6. FACILITY OPERATIONAL PRACTICES

SEWAGE SLUDGE

The permittee shall use only sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge". The Specific requirements in the permit apply as a result of the design flow of the facility, the type of waste discharged to the collection system and the sewage sludge disposal or reuse practice utilized by the treatment works. The permittee shall submit an annual Sludge Status report in accordance with NPDES Permit NM0020311, Part I and Part IV.

The City of Roswell sludge is treated through anaerobic digestion. All sludge generated is composted. All of the sludge produced at the treatment plant is currently given away to the public.

WASTE WATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has two (2) non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The facilities, their services process employed, process and non-process water flow rates and raw products are shown in Table 4 of the Fact Sheet.

The facility operates an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40 CFR 403) and the approved pretreatment program submitted by the permittee. The pretreatment program was originally approved on March 20 1985, and last modified on July 16, 1993. Contributions to the wastewater treatment plant will be limited according to the requirements detailed in Part II Section A of the proposed permit.

OPERATION AND REPORTING

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results monthly. The monitoring results will be available to the public at <u>http://www.epa-echo.gov/echo/</u>

7. 303(d) LIST

Section 303(d) of the Federal Clean Water Act requires states to develop a TMDL management plan for water bodies determined to be water quality limited. A TMDL documents the amount of a pollutant a water body can assimilate without violating a state's water quality standards. It also allocates a load capacity to known point sources and nonpoint sources at a given flow. EPA defines TMDLs in 40 CFR Part 130 as the sum of the individual WLAs for point sources and background conditions, and includes a margin of safety.

The NPDES regulations at 40 CFR 122.44(d)(1)(vii)(B) require that NPDES permits include effluent limitations developed consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL. Permit writers might also choose to consider

any pollutant associated with an impairment of the receiving water by a pollutant of concern, regardless of whether an approved TMDL has been developed for that pollutant, a WLA has been assigned to the permitted facility, or the permitted facility has demonstrated that the pollutant is present in its effluent. Permitting authorities might consider monitoring requirements to collect additional data related to the presence or absence of the impairing pollutant in a specific discharge to provide information for further analyses.

Neither the Rio Hondo River nor the Berrendo Creek are listed as impaired, according to the 2012 – 2014 State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report.

8. ANTIDEGRADATION

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of NMWQS. The limitations and monitoring requirements set forth in the proposed draft are developed from the appropriate State WQS and are protective of those designated uses. Furthermore, the policy's set forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water.

9. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l)(i)(A), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the mass loading requirements of the previous permit for BOD5 and TSS. Whole Effluent Toxicity has changed from 86% to 89% based on the 4Q3 and harmonic mean.

10. ENDANGERED SPECIES CONSIDERATIONS

EPA Region 6 is currently in discussion with the FWS regarding the listed species in Chaves County. EPA Region 6 will not issue the final permit until in concludes the consultation process.

11. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should not have an impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

12. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State or downstream Tribal water quality standards are promulgated or revised. In addition, if the State or downstream Tribes develops a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

13. VARIANCE REQUESTS

No variance requests have been received.

14. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

15. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

16. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

APPLICATION(s)

EPA Application Form 2A received June 20, 2011.

40 CFR CITATIONS

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