NPDES PERMIT NO. NM0023477
FACT SHEET

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

APPLICANT

Village of Fort Sumner Wastewater Treatment Plant
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ISSUING OFFICE

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DATE PREPARED

December 8, 2011

PERMIT ACTION

Proposed reissuance of the current permit issued June 4, 2007 with an effective date of July 1, 2007, and an expiration date of June 30, 2011.

RECEIVING WATER – BASIN

The Pecos River, Segment No. 20.6.4.207 - Pecos River Basin

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
µg/L	Micrograms per liter
MGD	million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
PCB	Polychlorinated Biphenyl
POTW	Publically owned treatment works
RP	Reasonable potential
SBR	Sequencing Batch Reactor
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SHPO	State Historic Preservation Officer (SHPO)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
THPO	Tribal Historic Preservation Officer (THPO)
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

In this document, references to State WQS and/or rules shall mean either the State of New Mexico and/or any Tribe.

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued June 4, 2007, with an effective date of July 1, 2007, and an expiration date of June 30, 2011:

A. Increase monitoring frequency for pH
B. Modify sample type for pH, TRC, and flow
C. Add percent (minimum) removal for BOD and TSS
D. Correct the facility coordinates
E. Update TRC limitation based on critical condition analysis
F. WET limit encompasses sublethal endpoint for both test species

II. APPLICATION LOCATION and ACTIVITY

LOCATION

As described in the application, the plant site is located between Salt Cedar Street and Sewer Plant Drive, in De Baca County, New Mexico. The Outfall is located at the following coordinates:

Outfall 001: Latitude 34° 26' 39" N; Longitude 104° 14' 5" W

The effluent from the treatment plant is discharged into the receiving water named Pecos River, in water body Segment Code No. 20.6.4.207 of the Pecos River Basin.

ACTIVITY

The facility consists of headworks (Grit chamber, pumps, and automatic rake), dual Sequencing Batch Reactor (SBR) system, one digester, three sludge beds, one drying bed, one equalization basin, and UV disinfection. Below is a detailed description of the wastewater treatment process.

There are three lifts stations throughout the Village's collection system. Flow from the village proceeds to the WWTP. The entrance works to the plant consist of a comminutor with a bypass to an automated bar screen which runs every 15 minutes. The grit is currently landfilled. The headworks also consist of an aerated grit chamber and a 6-inch Parshall flume. The influent is then lifted by two alternating submersible pumps to the two separate SBR basins.

Flow is cycled through the basins during phases which consists of fill/mix, settling and decant periods to treat the wastewater entering the plant. There are four small blowers which provide aeration to these two units. An aerobic sludge digester is located between the two SBR units. Decant water from the SBR units enter a flow equalization unit (Schreiber unit) which ensures an even flow to the disinfection system.

Disinfection of the wastewater is achieved through UV (ultraviolet) radiation. A single bank of lights is enclosed within the effluent flow to allow time for disinfection. Cleaning of the UV lights is accomplished using a food grade acid.

Once flow passes through the UV disinfection unit, it proceeds through the old chlorine contact chamber before entering a 6-inch Parshall flume for flow measurement. Chlorination capabilities continue to be maintained at the plant in case the UV disinfection system needs to go off line for repairs.

The plant's design flow is 0.21 MGD.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received April 6, 2011, are presented below:

POLLUTANT TABLE – 1

Parameter	Max	Avg
	(mg/L unless noted)	
Flow, million gallons/day (MGD)	0.105	0.088
pH, minimum, standard units (su)	7.1	N/A
pH, maximum, standard units (su)	7.4	N/A
Biochemical Oxygen Demand, 5-day (BOD_5)	1.83	N/A
E. coli (# bacteria /100 mL)		129.91 *
Total Suspended Solids (TSS) (mg/L)	2.13	
Temperature (Winter) (F)	19.6	
Temperature (Summer) (F)	24.2	

*geometric means.

A summary of the last 24-months of available pollutant data: July 31, 2009 through 30, 2011, taken from DMRs shows not exceedances of permit limits. See Pollutant Table 2.

POLLUTANT TABLE - 2

Date	BOD_5			pH		TSS			E. coli		TRC
	30 DAY AVG	30 DAY AVG	7 DAY AVG	Min	Max	30 DAY AVG	30 DAY AVG	7 DAY AVG	30 DAY AVG	Daily Max	INS Max
	lbs/day	mg/L	mg/L	s.u.	s.u.	lbs/day	mg/L	mg/L	cfu/100 mL	cfu/100 mL	ug/L
Limit	52.54	30	45	6.6	9	52.54	30	45	548	2507	11
7/31/09	**	**	**	**	**	**	**	**	**	**	**
8/31/09	**	**	**	**	**	**	**	**	**	**	**
9/30/09	**	**	**	**	**	**	**	**	**	**	**
10/31/09	1.8	2	2	7.2	7.3	2	2.5	2.49	18.44	170	NODI=9
11/30/09	1.7	2	2	7.3	7.3	2.2	2.55	3.03	2	2	NODI=9
12/31/09	3.6	4.1	6	7.1	7.3	3.5	4.06	4.51	42.43	900	NODI=9
1/31/10	3.9	5.8	8	7.2	7.2	4.9	7.09	10.7	43.82	240	NODI=9
2/28/10	2.3	3.8	4	7.1	7.3	3	4.65	5.62	7.75	30	NODI=9

3/31/10	2	5.3	5.6	7.1	7.2	2.4	6.92	7.62	54.68	130	NODI=9
4/30/10	1.7	2.5	3.3	7.1	7.2	2.2	3.35	3.89	2.83	4	NODI=9
5/31/10	3.1	4.7	4.8	7.1	7.3	4	5.84	7.23	5.66	8	NODI=9
6/30/10	1.5	2.9	3.6	7.2	7.2	2.5	4.95	6.75	6.78	23	NODI=9
7/31/10	1.3	2.7	2.8	7.3	7.4	1.9	3.89	4.36	2	2	NODI=9
8/31/10	1.2	2.4	2.7	7.2	7.3	1.5	2.93	2.96	14.14	50	NODI=9
9/30/10	1	2	2	7.3	7.3	2.1	4.28	5.49	2.83	4	NODI=9
10/31/10	1.5	2.5	2.9	7.3	7.3	2	3.49	3.67	22.58	30	NODI=9
11/30/10	2	4.8	7.3	7.3	7.3	2.7	6.38	8.53	282.31	900	NODI=9
12/31/10	2	5	6.2	7.2	7.2	1.7	4.13	5.26	84.85	240	NODI=9
1/31/11	4	5.24	5.97	7.2	7.2	2.42	3.72	3.8	187.6	1622	NODI=9
2/28/11	3	4.39	4.72	7.1	7.2	2.71	4.47	4.7	8.2	21	NODI=9
3/31/11	2	2.66	2.87	7.1	7.3	2.06	3.36	3.92	4	10	NODI=9
4/30/11	2	3.53	2.02	7.2	7.3	1.24	2.22	2.43	8	16	NODI=9
5/31/11	1	2.54	2.9	7.2	7.3	.7	2.35	2.95	90	455	NODI=9
6/30/11	2	3.49	4.66	7.2	7.4	.85	2.58	2.59	5.83	9.5	**

*-denotes exceedance of permit limit
** Not Received
ND- No discharge
NODI=9 Conditional Monitoring - Not Required This Period

IV. 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 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.

The permit application was received on April 6, 2011. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The existing NPDES permit initially issued June 4, 2007 with an effective date of July 1, 2007, and an expiration date of June 30, 2011.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

Regulations contained in 40 CFR §122.44 require that 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 BOD_5. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, TRC, and pH.

B. 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 BOD, TSS, fecal coliform, 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 Village of Fort Sumner facility is a POTW that has technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS, and percent removal for each. BOD limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELGs for pH are between 6-9 s.u. and are found at 40 CFR §133.102 (c).

Regulations at 40 CFR §122.45(f)(1) require 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 * 8.345 lbs/gal * design flow in MGD

30-day average BOD_5 = 30 mg/L * 8.34 lbs/gal * 0.21 MGD
30-day average BOD_5 = 52.54 lbs/day

7-day average BOD_5 = 45 mg/L * 8.34 lbs/gal * 0.21 MGD
7-day average BOD_5 = 78.81 lbs/day

30-day average TSS loading = 30 mg/L * 8.34 lbs/gal * 0.21 MGD
30-day average TSS loading = 52.54 lbs/day

7-day average TSS loading = 45 mg/L * 8.34 lbs/gal * 0.21 MGD
7-day average TSS loading = 78.81 lbs/day

The proposed permit calculated the mass loading for BOD_5 and TSS based on 0.21 MGD flow.

Technology-Based Effluent Limits - 0.21 MGD design flow

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/Day		mg/L (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
BOD_5	52.54	78.81	30	45
BOD_5, % removal, minimum	≥ 85% (*)	---	---	---
TSS	52.54	78.81	30	45
TSS, % removal, minimum	≥ 85% (*)	---	---	---
pH	N/A	N/A	6.0 – 9.0 s.u.	

(*) Percent removal is calculated using the following equation: (average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technology-based 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 the PSWQS, State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

2. 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.

3. Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC amended through January 14, 2011). The facility discharges into the Pecos River in Segment No. 20.6.4.207 of the Pecos River Basin. The designated uses of the Pecos River (Seg. No 20.6.4.207) are irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

4. Permit Action – Water Quality-Based Limits

Regulations promulgated at 40 CFR 122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

To protect "Marginal Warmwater Aquatic Life" designated use, the State of New Mexico stream segment specific WQS require pH to be between 6.6 and 9 s.u. NMWQS (20.6.4.207 NMAC and 20.6.4.900 NMAC). The water quality-based limits for pH will be used in the permit since they are more stringent than the technology-based limits.

b. Bacteria

To protect "Secondary Contact" designated use, New Mexico stream segment specific WQS require *E. coli* of 548 cfu/100 mL monthly geometric mean and 2507 cfu/100 ml daily maximum, end-of-pipe. The draft permit will maintain the *E. coli* bacteria limits of 548 cfu/100 mL monthly geometric average and 2507 cfu/day daily maximum.

c. 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 to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, 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 as a minor, and does not need to fill out the expanded pollutant testing section Part D of Form 2A. Derivation of permit limits will be discussed below.

(ii) Critical Conditions

Critical conditions are used to establish certain permit limitations and conditions. The State of New Mexico WQS allow a mixing zone for establishing pollutant limits in discharges. The state establish 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 Village of Fort Sumner 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 (0.21 MGD)
Qa = critical low flow of the receiving waters (0.36 MGD [= 0.56 cfs])
F = fraction of stream allowed for mixing (1.0)

$CD = 0.21 \text{ MGD}/[(1.0)(0.36) + 0.21]$
$= 0.37$
$= 37\%$

(iii) TRC

The WQS for TRC is 11 µg/l for chronic conditions and 19 µg/l for acute. Since acute conditions do not allow dilution; the limit must be met at end-of-pipe, but chronic standards do allow dilution, the permit shall use the most stringent WQS for the permit limit. Previously, the CD was calculated at 37 %. The in-stream TRC concentration after allowing for dilution is; 11 µg/l ÷ 0.37= 29.7 µg/l. Since this value is greater than the 19 µg/l end-of-pipe acute standard, the 19 µg/l is more stringent and will be more protective. The draft permit include a value of 19 µg/l as a limit.

The facility uses UV disinfection for pathogen control, with a chlorination/dechlorination system for backup. The facility is required to monitor for TRC when chlorine is used as a bacteria

control chemical or when chlorine is used to disinfect process equipment. TRC limitations will apply when chlorine is used in the treatment process, either alone, or in combination with ultraviolet light treatment. The effluent limitation for TRC is the instantaneous maximum and can not be averaged for reporting purposes.

5. 303(d) List Impacts

The current 2010-2012 State of New Mexico Integrated Clean Water 303(d)/305(b) Report shows that the Pecos River segment from Salt Creek to Sumner Reservoir (Assessment Unit NM-2207_00) in Segment 20.6.4.207 NMAC is not supporting marginal warmwater aquatic life use. The potential sources for impairment are diversions and rangeland grazing and the probable cause of impairment is dissolved oxygen. The dissolved oxygen impairment may indicate excessive nutrients. A TMDL for this segment has not been finalized.

The Pecos River segment from Salt Creek to Sumner Reservoir (Assessment Unit NM-2207_00) in Segment 20.6.4.207 is fully supporting irrigation, livestock watering, wildlife habitat, secondary contact uses.

No additional limitations are required to address 303(d) concerns and if at a later time a TMDL is completed, the standard reopener clause will allow additional limitations to be placed in the permit.

D. 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).

Technology based pollutants; BOD_5 and TSS, are proposed to be monitored two (2) times per month using grab samples. Flow shall be sampled continuously (daily) by totalizing meter. The monitoring type and frequency is consistent with the NMIP.

Water quality-based pollutant monitoring frequency for *E. coli* shall be sampled two (2) times per month using grab samples. When TRC is used as a bacteria control chemical for the effluent, the maximum dechlorinated TRC shall be monitored daily by instantaneous grab, when chlorinating. TRC shall be measured within fifteen (15) minutes of sampling. The pollutant pH shall be monitored five (5) times per week by instantaneous grab consistent with the NMIP. Regulations at 40 CFR Part 136 define instantaneous grab as being analyzed within 15-minutes of collection.

E. WHOLE EFFLUENT TOXICITY LIMITATION REQUIREMENTS

OUTFALL 001

Based on the nature of the discharge; wastewater treatment plant (POTW), the production flow; more than 0.1 MGD but less than 1.0 MGD, the nature of the receiving water; perennial, and the critical dilution; 37%, the NMIP directs the WET test to be a 7 day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas.* A once per 6 months frequency would be consistent with the NMIP since a WET limit has been established for both species.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 16%, 21%, 28%, 37%, and 49% as the dilution series. The low-flow effluent concentration (critical low-flow dilution) is defined as 37% effluent.

Based on the information taken from DMR reports and OTIS (Online Tracking Information System), a reasonable potential (RP) to exceed water quality standards for the State of New Mexico has been found to exist (See Appendix A). Whole Effluent Toxicity Limits will be included in this permit for both the lethal and sublethal endpoint for both test species. Since the previous permit did not have a limit for the sublethal endpoint, a compliance schedule will be established for *C. dubia* only. The most recent failure for *C. dubia* was only a year ago. The permittee has not failed a WET test for *P. promelas* in four (4) years. This would suggest that even though RP exists, the permittee is already capable of meeting the WET limit for the sublethal endpoint for *P. promelas*. Therefore a compliance schedule will be granted for the *C. dubia* test species but not the *P. promelas* test species. The permittee will be expected to comply with the WET limit for both endpoints for *P. promelas* when the proposed permit is made effective.

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 001 - the discharge to the Pecos River of the Pecos River Basin. Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS	
	30-DAY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity (PCS 22414) (7-Day NOEC) 1/	37%	37%
Ceriodaphnia dubia	REPORT	REPORT
Pimephales promelas	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	
	FREQUENCY	TYPE
Whole Effluent Toxicity (7-Day NOEC) 1/		
Ceriodaphnia dubia	1/6 months	24-Hr. Composite
Pimephales promelas	1/6 months	24-Hr. Composite

FOOTNOTES

1/ Monitoring and reporting requirements begin on the effective date of this permit. Compliance with the Whole Effluent Toxicity limitations is required on the effective date of the permit with the exception of the *C. dubia's* sublethal endpoint which is required to comply 3 years after the effective date of the permit. See PART I, Compliance Schedules, and PART II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE PRACTICES

The permittee shall use only those 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". EPA may at a later date issue a sludge-only permit. Until such future issuance of a sludge-only permit, sludge management and disposal at the facility will be subject to Part 503 sewage sludge requirements. Part 503 regulations are self-implementing, which means that facilities must comply with them whether or not a sludge-only permit has been issued. Part IV of the draft permit contains sewage sludge permit requirements.

B. 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.

C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the POTW subject to pretreatment standards under Section307(b) of the CWA and 40 CFR Part 403.

D. 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 quarterly. The monitoring results will be available to the public.

VIII. ANTIDEGRADATION

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of its WQS. 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 proposed permit renewal retains the mass loading for BOD and TSS based on 0.21 MGD flow, as requested by previous NMED's conditions of certification. 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.

IX. 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 2007 permit for BOD_5 and TSS. The 2007 permit maintained the lass loading for BOD and TSS based on 0.21 MGD flow, as required in NMED's conditions of certification. All of the changes represent permit requirements that are consistent with the States WQS and WQMP.

X. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://www.fws.gov/endangered/, three species in DeBaca County are listed as endangered or threatened. Federally listed as Endangered are the black-footed ferret *(Mustela nigripes)* and least tern *(Sterna antillarum)*. Listed as Threatened is the Pecos bluntnose shiner *(Notropis simus pecosensis).*

The facility currently holds a permit with USEPA. The proposed permit will be for the re-issuance of the current permit issued on June 4, 2007, with controls to meet the current state water quality standards for the area of discharge. The proposed permit ensures that the discharge does not cause or contribute to an exceedance of water quality criteria for irrigation, livestock watering, wildlife habitat, marginal warmwater aquatic life, and secondary contact.

The EPA has made a determination in the 2002 permit cycle, which was concurred on by the Fish and Wildlife Service. This determination is as follows:

That the re-issuance of the Village of Fort Sumner Wastewater Treatment Facility (WWTF) permit will result in no effect on the threatened bald eagle, the Pecos bluntnose shiner, endangered black-footed ferret and least tern.

However, the United State Fish and Wildlife Service (USFWS) did express concern on the Pecos bluntnose shiner (*Notropis simus perosensis*), a Federally threatened species, which is present in the Pecos River from Fort Sumner to Artesia, New Mexico. The Service recommended that the no measurable total residual chlorine limitation be adhered to in order to avoid adverse impact to this species. The proposed permit includes requirements to continue monitoring for total residual chlorine. Total residual chlorine shall monitor TRC daily by instantaneous grab sample, when chlorinating

The proposed permit also includes limitations and monitoring requirements for Biochemical Oxygen Demand, Total Suspended Solids, E.coli bacteria, and pH. The permit also includes WET limits for *Ceriodaphnia dubia* and *Pimephales promelas* consistent with EPA's Post Third Round Policy and Strategy as well as State's Implementation Guidance.

After review, EPA has determined that the reissuance of this permit will not change the environmental baseline established by the previous permit, and therefore, EPA concludes that reissuance of this permit will have "*no effect*" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. EPA determined a "No effect" during previous permit, issued on December 14, 2006.

2. Except for the bald eagle which was delisted in 2007 from the US FWS list of threatened and endangered species, no additional changes have been made to the US FWS list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.

3. EPA has received no additional information since December 14, 2006, previous permit effective date, which would lead to revision of its determinations.

4. EPA determines that Items 1, 2, and 3 result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological since no construction activities are authorized by its issuance.

XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of either States WQS are revised or remanded. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the States Water Quality Standards are either revised or promulgated. Should either State adopt a new WQS, and/or develop or amend a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard and/or water quality management plan, in accordance with 40 CFR 122.44(d). Modification of the permit is subject to the provisions of 40 CFR 124.5.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. CERTIFICATION

The permit is in the process of certification by the State of New Mexico following regulations promulgated at 40 CFR §124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; 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.

XV. FINAL DETERMINATION

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

XVI. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Form 2A received April 6, 2011.

B. 40 CFR CITATIONS

Citations to 40 CFR as of February 9, 2012.

Sections 122, 124, 125, 133, 136

C. STATE WATER QUALITY REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through January 14, 2011.

Procedures for Implementing NPDES Permits in New Mexico, May 2011.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2010 -2012.