

NPDES PERMIT NO. NM0029165

FACT SHEET

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

APPLICANT

City of Ruidoso Downs and Village of Ruidoso WWTP
313 Cree Meadows Drive
Ruidoso, NM 88345

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
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PREPARED BY

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DATE PREPARED

April 24, 2017

PERMIT ACTION

Renewal of a permit previously issued on July 17, 2012, with an effective date of August 1, 2012, and an expiration date of July 31, 2017.

RECEIVING WATER – BASIN

Rio Ruidoso – Pecos River Basin (20.6.4.208 NMAC)

E. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 42) of the NMIP outlines the type of WET testing for different types of discharges. The receiving water, a perennial stream, has a 4Q3 of 3.67 cfs (2.37 MGD). With the facility design flow rate of 2.7 MGD and mixing fraction of 100%, a CD is calculated about 53%, which was about 61% previously. WET testing species for this major POTW are: Ceriodaphnia dubia (Cd) and Pimephales promelas (Pp). All the required WET tests passed at 80% or 81% in the previous permit; no RP exists in the attached WET RP Analyzer. The existing permit carried over the previous-established limit for Pp; during the previous permit renewal review, EPA found no failure of the required WET tests. In 2006-permit renewal review stated the RP existed at the time, that led to the limitation. Based on the submitted current WET data, EPA removes the previous-established limit for Pp. This limit relaxation complies with the Antibracksliding because the current data were not available previously pursuant to 40 CFR 122.44(l)(2)(i).

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 must be 22%, 30%, 40%, 53% and 71%. The low-flow effluent concentration (critical low-flow dilution) is defined as 53% effluent. The permittee shall monitor discharge(s) as specified below:

| Effluent Characteristic | Discharge Limitations | Monitoring Requirements | |
|---|-----------------------|-------------------------|-----------------|
| | | Frequency | Type |
| WET Testing (7-day Static Renewal) ¹ | NOEC | | |
| Ceriodaphnia dubia | Report | 1/3 months ² | 24-hr Composite |
| Pimephales promelas | Report | 1/3 months ² | 24-hr Composite |

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

² Once/3 months shall be for the first year after the permit effective date; if all the test pass, frequencies would be once/6 months for Cd and once/year for Pp for the remaining term. If any WET test fails, frequency returns to once/3 months for the remaining term.

VI. TMDL REQUIREMENTS

The receiving water segment 20.6.4.208 NMAC, Rio Ruidoso (Eagle Creek to US Hwy 70 Bridge) is listed as impaired in the 2016-2018 303(d) List. Coldwater aquatic life and primary contact are not supported. Causes of the impairments are nutrient/eutrophication, turbidity and E. coli. EPA must ensure the permit conditions are consistent with assumptions/requirements of any available WLA in the approved TMDLs pursuant to 40 CFR 122.44(d)(1)(vii)(B).

TMDLs for E. coli and turbidity were approved by the EPA on September 2, 2015. A new loading limit (monthly average basis only) for E. coli (1.29×10^{10} cfu/day) is established in accordance with the TMDL. For TSS, new concentration limits of 18.6 mg/L for 30-day average (720 hours) and 29 mg/L for 7-day average (168 hours) with 30-day average loading limit of 419 lbs/day and 7-day average loading limit of 653 lbs/day (more stringent than the above technology-based limits) are established in this permit based on the TMDL. EPA provides no compliance schedule for these newly established limits because DMRs show the new limits have been met for these two pollutants.

A revised TMDL for nutrients was approved by EPA on December 12, 2016. All existing limits for nutrients (total phosphorus, "TP" and total nitrogen, "TN") are superseded by newly established loading limits (monthly average basis) for the nutrients of 1.64 lbs/day for TP and 37.1 lbs/day for TN. The 30-day average and daily maximum concentrations for TP and TN also must be reported. For future growth,

if the facility's average discharge increases, a portion of the "future" WLA may be included in the permit limit up to inclusion of the full WLAs (at design capacity) of 2.36 lbs./day TP and 53.3 lbs./day TN. These limits have been developed in accordance with the revised 2016 TMDL and are in compliance with the CWA Section 303(d)(4) for Anti-backsliding.

In 1987, Congress passed amendments to the Clean Water Act (CWA) that included "anti-backsliding" provisions to restrict the circumstances under which NPDES permit limits may be relaxed upon permit renewal, reissuance, or modification. Section 303(d)(4) identifies further grounds for backsliding for water quality-based permits. For non-attainment waters, 303(d)(4) allows backsliding only where the existing permit limit sought to be revised is based on a TMDL or other WLA, and the revised permit limit assures attainment of the water quality standard at issue. The revised 2016 nutrient TMDL is calculated using the same protective, in-stream targets from the original TMDL, and the revised WLAs assigned to this facility are consistent with the TMDL. Therefore, if the conditions in the TMDL (i.e., WLAs) are met, attainment of the water quality standard is assured.

EPA has established a compliance schedule to meet the newly established TN limit and need to develop and implement additional sampling procedures and/or additional internal controls to ensure consistent treatment to remove nutrients and maintain water quality. In accordance to 40 CFR 122.47(a) a year is provided to comply with the new limit due to some months the reported data exceed 37.1 lbs./day (30-day avg.). Compliance schedule for the new TP limit is not provided because DMRs show it has been met. The permittee has begun developing scope of works to replace onsite systems, which presumably will reduce nutrient loadings from these non-point source facilities to the receiving water; please see attached letter dated April 21, 2017 for more information. EPA requests the permittee to submit a copy of the complete scope of works to EPA and NMED by end of the permit term.

The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new/revised TMDLs or temporary standards are completed.

VII. ANTIDegradation

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets 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 water, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the list updated on January 31, 2017 for Lincoln County, NM obtained from <http://ecos.fws.gov>, there are endangered (E)/threatened (T) species that were listed in the previous permit: Mexican spotted owl (T) and Kuenzler hedgehog cactus (E). These species were determined with "no effect". Since then, there have been 2 additional threatened/endangered species: Yellow-billed Cuckoo (T) and Southwestern willow flycatcher (E).

There has been no recovery plan for Yellow-billed Cuckoo. According to the Federal Register on 8/15/2014 (79 FR 48547 48652) the primary constituent elements specific to the western yellow-billed