



**Region 6**  
**1445 Ross Avenue**  
**Dallas, Texas 75202-2733**

**NPDES Permit No NM0030520**

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**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"),

Jicarilla Apache Utility Authority – Dulce Wastewater Treatment Plant  
P.O. Box 916  
Dulce, NM 87528

is authorized to discharge from the Dulce Wastewater Treatment Plant located at 290 Narrow Gauge Road, Dulce, Rio Arriba County, New Mexico, to Amargo Creek, thence to the Navajo River in the San Juan River Basin, from a point located approximately

Outfall 001: Latitude 36° 52' 30" North, Longitude 106° 52' 30" West

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, and IV hereof.

This permit shall become effective on

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

Issued on

Prepared by

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## 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**

1. Outfall 001 - Final Effluent Limits – 0.6 MGD Design Flow

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge treated municipal wastewater to Amargo Creek from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS |         | MONITORING REQUIREMENTS |             |
|--------------------------|-----------------------|---------|-------------------------|-------------|
|                          | Standard Units        |         | MEASUREMENT FREQUENCY   | SAMPLE TYPE |
| POLLUTANT                | MINIMUM               | MAXIMUM |                         |             |
| pH                       | 6.6                   | 9       | 1/Day                   | Grab        |

| EFFLUENT CHARACTERISTICS                                 | DISCHARGE LIMITATIONS |            |                     |           |                             | MONITORING REQUIREMENTS |                |
|--|-----------------------|------------|---------------------|-----------|-----------------------------|-------------------------|----------------|
|  | lbs/day, unless noted |            | mg/l, unless noted  |           |                             | MEASUREMENT FREQUENCY   | SAMPLE TYPE    |
| POLLUTANT  | 30-DAY AVG            | 7-DAY AVG  | 30-DAY AVG          | 7-DAY AVG | DAILY MAX                   |                         |                |
| Flow   | Report MGD            | Report MGD | N/A                 | N/A       | N/A                         | 1/Day                   | Instantaneous  |
| Biochemical Oxygen Demand, 5-day                         | 150                   | 225        | 30                  | 45        | N/A                         | 2/Month (*1,*3)         | 6-Hr Composite |
| Biochemical Oxygen Demand, 5-day Percent Removal (*2)    | 85% Removal           | N/A        | N/A                 | N/A       | N/A                         | 2/Month (*1)            | Calculation    |
| Total Suspended Solids                                   | 150                   | 225        | 30                  | 45        | N/A                         | 2/Month (*1,*3)         | 6-Hr Composite |
| Total Suspended Solids Percent Removal (*2)              | 85% Removal           | N/A        | N/A                 | N/A       | N/A                         | 2/Month (*1)            | Calculation    |
| <i>Escherichia coli</i> Bacteria (*4)                    | N/A                   | N/A        | 206 cfu/100 ml (*5) | N/A       | 940 cfu/100 ml              | 1/week                  | Grab           |
| Total Dissolved Solids, Waste Water Plant Discharge (*6) | N/A                   | N/A        | Report (*8)         | N/A       | Report (*8)                 | 1/Quarter               | Grab           |
| Total Dissolved Solids, Drinking Water Plant Intake (*7) | N/A                   | N/A        | Report (*8)         | N/A       | Report (*8)                 | 1/Quarter               | Grab           |
| Total Dissolved solids, Net Increase (*9)                | N/A                   | N/A        | 400 (*10)           | N/A       | N/A                         | 1/Quarter               | Grab           |
| Total Residual Chlorine                                  | N/A                   | N/A        | N/A                 | N/A       | 0.011 instantaneous maximum | Daily (*11)             | Grab           |

FOOTNOTES:

N/A not applicable

\*1 Samples shall be taken at least 10 days apart.

\*2 Percentage Removal Requirements (TSS and BOD<sub>5</sub> Limitation): In addition to the concentration limits for TSS and BOD<sub>5</sub>

indicated above, the arithmetic mean of the concentration for effluent samples collected in a 30-day consecutive period shall not exceed 15% of the arithmetic mean of the concentration for influent samples collected at approximately the same times during the same period (85% removal). [% Removal = (Inflow Concentration monthly average – Effluent Concentration monthly average) / Inflow Concentration monthly average].

- \*3 Includes a sample collected at the intake and effluent. Influent results are to be reported with the 85% removal calculation.
- \*4 Site-specific criteria.[NMAC 20.6.4.99]
- \*5 Geometric monthly mean. Colony forming units per 100 milliliters (cfu/100 ml).
- \*6 Total Dissolved Solids measured at the Dulce Waste Water Treatment Plant Outfall 001.
- \*7 For permit compliance purposes, the TDS intake sample shall be taken at the intake of the drinking water plant.
- \*8 If one sample is collected, then it will be reported as the daily maximum and the 30-day average. If additional samples are collected, then the average of all samples will be reported as the 30-day average.
- \*9 Net total dissolved solids incremental increases in salinity shall be 400 mg/l or less. The increase shall be difference between the TDS measured from Outfall 001 discharge and the TDS measured at the drinking water plant intake.
- \*10 If one sample is collected, then the increase shall be the difference between the TDS measured from Outfall 001 and the TDS measured at the drinking water plant intake. If additional samples are collected, then the increase shall be the difference between the 30-day average TDS measured from Outfall 001 and the 30-day average TDS measured at the drinking water plant intake.
- \*11 Applies when chlorine is used in the process. Instantaneous Maximum. After dechlorination and prior to final disposal, the effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

### **Oil and Grease:**

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

Samples taken in compliance with the monitoring requirements specified above shall be taken from the discharge water after the final treatment unit and prior to discharge into the receiving stream from Outfall 001. The sample point shall be clearly marked by the facility if it is not at the final outfall location. There shall be no flow from any source into the piping system after the sample point and prior to the final outfall.

**B. SCHEDULE OF COMPLIANCE**

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

None

**C. MONITORING AND REPORTING (MINOR DISCHARGERS)**

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](http://www.epa.gov/netdmr) and contact the [R6NetDMR@epa.gov](mailto: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 other agencies as required (See Part III.D.IV of the permit). Reports shall be submitted quarterly.

1. The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge.
2. The permittee is required to submit regular quarterly reports as described above postmarked no later than the 28<sup>th</sup> day of the month following each reporting period. Reporting periods shall end on the last day of the months March, June, September, and December.
3. 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.
4. If any 7-day average, 30-day average, or maximum daily 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.
5. Any 7-day average, 30-day average, or maximum daily 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.

6. Other measurements of oxygen demand (e.g., TOC and COD) may be substituted for the five-day Biochemical Oxygen Demand (BOD<sub>5</sub>), or for the five-day Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>), as applicable, where the permittee can demonstrate long-term correlation of the method with BOD<sub>5</sub> or CBOD<sub>5</sub> values, as applicable. Details of the correlation procedures used must be submitted and prior approval granted by the permitting authority for this procedure to be acceptable. Data reported must also include evidence to show that the proper correlation continues to exist after approval.

#### **D. OVERFLOW REPORTING**

The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in a tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; action taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary).

Overflows which endanger health or the environment shall be orally reported to EPA at (214) 665-6595 within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment shall be provided within five (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:

1. The influent loadings, flow and design capacity;
2. The effluent quality and plant performance;
3. The age and expected life of the wastewater treatment facility's equipment;
4. Bypasses and overflows of the tributary sewerage system and treatment works;
5. New developments at the facility;
6. Operator certification and training plans and status;
7. The financial status of the facility;
8. Preventative maintenance programs and equipment conditions; and,
9. An overall evaluation of conditions at the facility.