

US EPA ARCHIVE DOCUMENT

**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"),

Navajo Tribal Utility Authority
Cane Valley Wellhead Treatment
P.O. Box 37
Kayenta, Arizona 86033

Is authorized to discharge backwash water from its Cane Valley potable water system located in Cane Valley, north of Dennehotso, Apache County, Arizona, in the Navajo Nation, from Discharge Outfall Number 001,

Latitude: 36° 54' 59.31" N
Longitude: 109° 52' 6.87" W

to receiving waters named Cane Valley Wash, a tributary to San Juan River, in accordance with effluent limitations, monitoring requirements and in the attached 15 pages of U.S. EPA Region 9 *Standard Federal NPDES Permit Conditions*, dated July 27, 2011.

This permit shall become effective on December 1, 2011.

This permit and the authorization to discharge shall expire at midnight, November 30, 2016.

Signed this 28th day of November, 2011.

For the Regional Administrator,

/s/

Alexis Strauss, Director
Water Division
EPA, Region 9

SECTION A. EFFLUENT LIMITATIONS AND SELF-MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the date of the permit expiration, the permittee is authorized to discharge backwash water from Outfall Serial Number 001.

1. The effluent shall be sampled after final treatment prior to discharge to Cane Valley Wash, a tributary to San Juan River.
2. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Parameter	Units	Monthly Average	Weekly Average	Daily Maximum	Monitoring Frequency ⁽²⁾	Sample Type
Flow ⁽¹⁾	GPD	--	--	--	Once/discharge	Instantaneous
Arsenic	µg/l	-- ⁽¹⁾	--	-- ⁽¹⁾	Once/discharge	Discrete
Selenium	µg/l	-- ⁽¹⁾	--	-- ⁽¹⁾	Once/discharge	Discrete
Total Residual Chlorine	µg/l	-- ⁽¹⁾	--	-- ⁽¹⁾	Once/discharge	Discrete
Total Suspended Solids	mg/l	-- ⁽¹⁾	--	-- ⁽¹⁾	Once/discharge	Discrete
pH	std. units	between 6.5 to 9.0			Once/discharge	Discrete
Turbidity	NTU	-- ⁽¹⁾	--	-- ⁽¹⁾	Once/discharge	Discrete

Footnotes:

- (1) No effluent limits are set at this time, but monitoring and reporting are required.
- (2) Samples shall be taken only when discharging. The monitoring frequency shall be once per discharge and no more than once per month, in the event of a continuous discharge lasting several days.

SECTION B. GENERAL DISCHARGE SPECIFICATIONS

1. All Waters of the Navajo Nation shall be free from pollutants in amounts or combinations that, for any duration:
 - a. Cause injury to, are toxic to, or otherwise adversely affect human health, public safety, or public welfare.
 - b. Cause injury to, are toxic to, or otherwise adversely affect the habitation, growth, or propagation of aquatic life and wildlife.
 - c. Settle to form bottom deposits, including sediments, precipitates and organic materials, that cause injury to, are toxic to, or otherwise adversely affect the habitation, growth, or propagation of aquatic life and wildlife.
 - d. Cause physical, chemical, or biological conditions that promote the habitation,

growth or propagation of undesirable, non-indigenous species of plant or animal life in the water body.

- e. Cause solids, oil, grease, foam, scum, or any other form of objectionable floating debris on the surface of the water body; may cause a film or iridescent appearance on the surface of the water body; or that may cause a deposit on a shoreline, on a bank, or on aquatic vegetation.
 - f. Cause objectionable odor in the area of the water body.
 - g. Cause objectionable taste, odor, color, or turbidity in the water body.
 - h. Cause objectionable taste in edible plant and animal life, including waterfowl that reside in, on or adjacent to the water body.
 - i. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, or propagation of other aquatic life or that impair recreational uses.
2. All waters of the Navajo Nation shall be free of toxic pollutants from other than natural sources in amounts, concentrations, or combinations which affect the propagation of fish or which of toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or which will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish, or other aquatic organisms to levels which will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers.
 3. No person shall place animal carcasses, refuse, rubbish, demolition or construction debris, trash, garbage, motor vehicles, motor vehicle parts, batteries, appliances, tires, or other solid waste into waters of the Navajo Nation or onto their banks.

SECTION C. PERMIT REOPENER

At this time, there is no reasonable potential to establish any other water quality-based limits. Should any monitoring indicate that the discharge cause, has the reasonable potential to cause, or contributes to excursion above a water quality criteria, the permit may be reopened for the imposition of water quality-based limits and/or whole effluent toxicity limits. In accordance with 40 CFR 122 and 124, this permit may be modified to include appropriate conditions or effluent limits, monitoring, or other conditions to implement new regulations, including U.S. EPA-approved new Tribal water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedences of water quality standards.

SECTION D. MONITORING AND REPORTING

1. Reporting of Monitoring Results

- a. The results of all monitoring required by this permit shall be submitted in such a

format as to allow direct comparison with effluent limitations and permit requirements. Monitoring results shall be reported during the previous three (3) months on monthly Discharge Monitoring Report (“DMR”) forms (EPA No. 3320-1) supplied by the U.S. EPA Director, to the extent that the results reported may be entered on the forms. The DMR forms shall be submitted quarterly on the 28th day of the month following the previous quarterly reporting period; for example, the three (3) monthly DMR forms for the reporting period January through March shall be submitted by April 28th. In the case of no discharge, the permittee shall submit a DMR indicating no discharge as required. Duplicate, signed copies of these, and all other reports required herein, shall be submitted to the U.S. EPA Director and the Navajo Nation EPA at the following addresses:

NPDES Data Team
U.S. Environmental Protection Agency
Region IX, Attn: WTR-7
75 Hawthorne Street
San Francisco, CA 94105

Navajo Nation EPA
NPDES Program
P.O. Box 339
Window Rock, AZ 86515

- b. The Discharger has the option to submit all monitoring results in the electronic reporting format approved by U.S. EPA. The Discharger may submit DMRs electronically using EPA’s NetDMR application. NetDMR is a national tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA. By using NetDMR, dischargers can discontinue mailing hard copy forms under 40 CFR 122.41 and 403.12.
- c. For effluent analyses, the permittee shall utilize an analytical method with a published Method Detection Limit (“MDL”; as defined in Section G of this permit) that is lower than the effluent limitations (or lower than applicable numeric water quality criteria). If all published MDLs are higher than the effluent limitations or water quality criteria, then the permittee shall utilize the analytical method with the lowest published MDL. The permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the minimum level (“ML”), as defined in Section G (Definitions) of this permit.

For samples collected during the monthly reporting period, report on the DMR form:

- (1) The maximum value, if the maximum value is greater than the ML; or NODI (Q)¹, if the maximum value is greater than or equal to the laboratory’s MDL, but less than the ML; or NODI (B)¹, if the maximum value is less than the laboratory’s MDL; and

¹ NODI(Q) means “No discharge/No data” (not quantifiable); NODI(B) means “No discharge/No data” (not detected).

- (2) The average value of all analytical results where 0 (zero) is substituted for NODI (B) and the laboratory's MDL is substituted for NODI (Q), if more than one sample is collected during the monthly reporting period.
- d. As an attachment to each DMR form submitted during this permit term, the permittee shall report for all parameters with monitoring requirements specified under Section A.3. of this permit: the analytical method number or title, preparation and analytical procedure utilized by the laboratory, and published MDL or ML; the laboratory's MDL, the standard deviation (S) from the laboratory's MDL study, and the number of replicate analyses (n) used to compute the laboratory's MDL; and the ML.

2. Monitoring and Records

In addition to the information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: Laboratory(ies) which performed the analyses and any comments, case narrative or summary of results produced by the laboratory. These should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR Part 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, holding times, and preservation.

3. Twenty Four-Hour Reporting of Noncompliance

- a. In accordance with 40 CFR 122.41(l)(6)(i), (ii) and (iii), the following condition is expressly incorporated into this permit. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to the following persons or their offices:

Manager	Patrick Antonio
CWA Compliance Office (WTR-7)	Navajo Nation EPA
U.S. EPA Region 9	(928) 871-7185
(415) 972-3577	

If the permittee is unsuccessful in contacting the person above, the permittee shall report by 9 a.m. on the first business day following the noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the date and/or time it is expected to be corrected; and, steps and/or plans to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- b. The following information shall be included as information which must be reported within 24 hours under this paragraph.

- (1) Any unanticipated bypass which exceeds any effluent limit in the permit (see 40 CFR 122.44(g)).
- (2) Any upset which exceeds any effluent limit in the permit.
- (3) Violation of a maximum daily discharge limit for any of the pollutants listed by the Director in the permit to be reported within 24 hours [see 40 CFR 122.44(g).]

SECTION E. INSPECTION AND ENTRY

The permittee shall allow the U.S. EPA Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to perform inspections under authority of Section 10: Inspection and Entry of the EPA Region 9 “*Standard Federal NPDES Permit Conditions*”, dated June 3, 2002, as attached.

SECTION F. DEFINITIONS

The following definitions shall apply unless otherwise specified in this permit:

1. A “daily discharge” means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar 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.
2. A “daily discharge determination of concentration” made using a composite sample shall be the concentration of the composite sample. When the grab sample technique is used, the “daily discharge” determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that sampling day.
3. A “daily maximum discharge effluent limitation” means the highest allowable “daily discharge” during the calendar month.
4. A “daily average discharge limitation” means the highest allowable average of “daily discharges” over 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.
5. A “discrete sample” means any individual sample collected in less than 15 minutes.
6. The “EPA” means the United States Environmental Protection Agency.
7. An “instantaneous” measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
8. The “method detection limit” or “MDL” is the minimum concentration of an analyte that

can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by the specific laboratory method listed in 40 CFR Part 136. The procedure for determination of a laboratory MDL is in 40 CFR Part 136, Appendix B.

9. The “minimum level” or “ML” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). Published method-specific MLs are contained in 40 CFR Part 136, Appendix A, and must be utilized if available. If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor an MDL are available under 40 CFR Part 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than for non-metals:
 - a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
 - b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) x 10ⁿ, where n is zero or an integer. (For example, if an MDL is 2.5 µg/l, then the calculated ML is: 2.5 µg/l x 3.18 = 7.95 µg/l. The multiple of (1, 2, or 5) x 10ⁿ nearest to 7.95 is 1 x 10¹ = 10 µg/l, so the calculated ML, rounded to the nearest whole number, is 10 µg/l.)
10. A “monthly average” limitation means the highest allowable discharge of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measure during that month.
11. The “Regional Administrator” means EPA Region 9’s Regional Administrator.

SECTION H. EPA REGION IX STANDARD CONDITIONS

See the attached 15 pages of EPA Region 9 “Standard Federal NPDES Permit Conditions,” dated July 27, 2011.