



REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

NPDES Permit No NM0031071

**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"),

Western Refining Gallup Refinery
Route 3
Box 7
Gallup, NM 87301

is NOT authorized to discharge from a facility located at I-40, Exit 39, in the City of Jamestown, in McKinley County, New Mexico.

to an unnamed arroyo leading to Puerco River in Segment No. 20.6.4. 97 of the Lower Colorado River Basin, from

Outfall 001: Latitude 35° 29' 26.3"; Longitude 108° 26' 26.01"

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II and Part III.

This is a first-time permit.

This permit shall become effective on

This permit and the authorization to not discharge shall expire at midnight,

Issued on

Prepared by

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PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

Internal Outfall 101 – 0.402 MGD

During the period beginning on the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee **is authorized** to discharge process wastewater including process stormwater^{*1}, and reverse osmosis unit reject water into a series of aeration lagoon, and finally into a series of evaporation ponds.

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		Standard Units			
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
PH	00400	6.6	9.0	2/ week	Grab

EFFLUENT CHARACTERISTICS		MONITORING REQUIREMENTS					
		Lbs/day, unless noted		mg/l unless noted			
POLLUTANT	STORET CODE	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	MGD	MGD	***	***	2/week	Estimate
BOD ₅	00310	153.514	277.189	N/A	N/A	Monthly	Grab
TSS	00530	123.676	193.455	N/A	N/A	Monthly	Grab
Oil & Grease	00556	45.307	85.895	N/A	N/A	Monthly	Grab
COD	00340	1064.033	2074.106	N/A	N/A	Monthly	Grab
Ammonia as N	00610	57.815	127.193	N/A	N/A	Monthly	Grab
Sulfide as S	00745	0.559	1.253	N/A	N/A	Monthly	Grab
Total Phenolics	32730	0.996	2.053	N/A	N/A	Monthly	Grab
Total Chromium ^(*2)	01034	1.335	3.792	N/A	N/A	1/year	Grab
Hexavalent Chromium ^(*2)	01032	0.126	0.285	N/A	N/A	1/year	Grab

Footnotes:

- *1 Process stormwater is contaminated and is subject to Effluent Limitation Guidelines (see Statement of Basis for calculation). This facility also has coverage under the Multi-Sector General Permit for allowable “uncontaminated” stormwater discharges, not subject to ELG.
- *2 See Part II for MQL.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Internal Outfall 101, at the point of discharge from the final treatment, prior to combining with effluent from the sanitary wastewater.

2. FINAL Effluent Limits Outfall 001– 0.004 MGD

During the period beginning on the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is **NOT authorized to** discharge process wastewater including process stormwater^{*1}; sanitary wastewater, and reverse osmosis unit reject water via a series of evaporation ponds into an unnamed arroyo, thence to Puerco River, an ephemeral waterbody Segment No. 20.6.4.97 of the Lower Colorado River Basin, from Outfall 001. The permittee shall take all reasonable steps to prevent a discharge. In the event of emergency discharges, the permittee shall be subject to the limitations and monitoring requirements specified below and in Part II. A:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		Standard Units			
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	00400	6.6	9.0	Once/day (*2)	Grab

EFFLUENT CHARACTERISTICS		MONITORING REQUIREMENTS					
		Lbs/day, unless noted		mg/l unless noted			
POLLUTANT	STORET CODE	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	Report, MGD	Report, MGD	***	***	Once/Day (*2)	Estimate
BOD ₅	00310	172.98	306.388	30	45	Once/Day (*2)	Grab
TSS	00530	143.141	222.653	30	45	Once/Day (*2)	Grab
E. coli Bacteria (*3)	51040	N/A	N/A	126	410	Once/Day (*2)	Grab
Benzene	34030	N/A	N/A	N/A	0.005	Twice/week (*2)	Grab

Footnotes:

- *1 Process stormwater is contaminated and is subject to Effluent Limitation Guidelines (see Statement of Basis for calculation). This facility also has coverage under the Multi-Sector General Permit for allowable “uncontaminated” stormwater discharges, not subject to ELG.
- *2 If discharge occurs
- *3 Colony forming units (cfu) per 100 ml.

OUTFALL 001

During the period beginning on the effective date of the permit and lasting through the expiration date of the permit, the permittee is **NOT authorized** to discharge process wastewater including process stormwater; sanitary wastewater, and reverse osmosis unit reject water via a series of evaporation ponds into an unarmmed arroyo, thence to Puerco River, an ephemeral waterbody Segment No. 20.6.4.97 of the Lower Colorado River Basin, from Outfall 001. The permittee shall take all reasonable steps to prevent a discharge. In the event event of emergency, the permittee shall be subject to the limitations and monitoring requirements specified below and in Part II.D:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-DAY AVG MINIMUM</u>	<u>24-Hr. MINIMUM</u>
Whole Effluent Toxicity Testing (24 Hr. Static Non-Renewal) 1/		
<u>Daphnia pulex</u>	REPORT	REPORT

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>FREQUENCY</u>	<u>TYPE</u>
Whole Effluent Toxicity Testing (24 Hr. Static RNon-enewal) 1/		
<u>Daphnia pulex</u>	1/ 6 months	Grab

FOOTNOTES

1/ 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.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment from Outfalls 001 prior to the receiving stream.

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

B. SCHEDULE OF COMPLIANCE

None, compliance with the terms and conditions of the permit shall start on the permit effective date.

C. MONITORING AND REPORTING (MINOR DISCHARGERS)

Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of the reporting period.

1. Reporting periods shall end on the last day of the months March, June, September, and December.

2. The permittee is required to submit regular monthly reports as described above postmarked no later than the 28th day of the month following each reporting period.

3. NO DISCHARGE REPORTING

If there is no discharge from any outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

PART II - OTHER CONDITIONS

A. DISCHARGE REPORTING

Should any discharge occur, the permittee is required to sample within one hour of beginning of discharge for the pollutants listed in 40 CFR 122, Appendix D, Tables III and Table IV (See list below), plus flow, pH, hardness, TDS, and TSS and the results submitted to EPA and NMED/SWQB. Should the discharge continue for more than one day, additional samples and analyses results shall be submitted for each additional day.

Other Toxic Pollutants (Metals and Cyanide) and Total Phenols

Pollutant	MLL ug/l	Pollutant	MLL ug/l
Antimony, Total	60	Nickel, Total	0.5
Arsenic, Total	0.5	Selenium, Total	5
Beryllium, Total	0.5	Silver, Total	0.5
Cadmium, Total	1	Thallium, Total	0.5
Chromium, Total	10	Zinc, Total	20
Chromium (6+)	10	Cyanide, Total	10
Copper, Total	0.5	Phenols, Total	10
Lead, Total	0.5		
Mercury, Total*	0.0005 0.005		

Conventional and Nonconventional Pollutants Required to Be Tested by Existing Dischargers if Expected to be Present

Pollutant	MLL ug/l	Pollutant	MLL ug/l
Bromide		Sulfite	
Chlorine, Total Residual	33	Surfactants	
Color		Aluminum, Total	2.5
Fecal Coliform		Barium, Total	100
Fluoride		Boron, Total	100
Nitrate-Nitrite		Cobalt, Total	50
Nitrogen, Total Organic		Iron, Total	
Oil & Grease		Magnesium	
Phosphorus		Molybdenum, Total	10
Radioactivity		Manganese, Total	
Sulfate		Tin, Total	
Sulfide		Titanium, Total	

Footnotes:

*1 Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005.

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40 CFR 136. For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to the EPA Region 6 NPDES Permits Branch (6WQ P) a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$\text{MQL} = 3.3 \times \text{MDL}$$

B. PERMIT MODIFICATION AND REOPENER

In accordance with 40 CFR Part 122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or new State of New Mexico water quality standards are established and/or remanded.

In accordance with 40 CFR Part 122.62(s)(2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

C. AFFIRMATIVE DEFENSE FOR EMERGENCY DISCHARGE

This is a "No Discharge" permit. The permittee shall take all reasonable steps to prevent a discharge. In case a discharge occurs due to emergency conditions, the permittee shall submit an affirmative defense which includes:

The cause of emergency conditions occurring;

The operating logs or relevant evidences which demonstrate that the facility was at the time being properly operated;

Documentation showing that all reasonable steps have been taken to minimize the discharge; and
Whether or not any flow reached the Puerco River.

D. WHOLE EFFLUENT TOXICITY TESTING (24-HOUR ACUTE NOEC FRESHWATER)

In the case of emergency discharge, the permittee shall collect a sample for evaluation of whole effluent toxicity.

It is unlawful and a violation of this permit for a permittee or his designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by EPA Region 6 or the State NPDES permitting authority.

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S):	001
REPORTED AS FINAL OUTFALL:	001
CRITICAL DILUTION (%):	100%
EFFLUENT DILUTION SERIES (%):	0%, 100%
SAMPLE TYPE:	Grab
TEST SPECIES/METHODS:	40 CFR Part 136

Daphnia pulex acute static non-renewal 24-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The LC₅₀ is defined as the effluent concentration which causes 50% or greater mortality at the end of the exposure period. Test failure is defined as a demonstration 50% or greater mortality at test completion (24 hours).
- c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- d. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple test failures. However, upon failure of any WET test, the permittee must report the test results to NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification the test failure. NMED will review the test results and determine the appropriate action necessary, if any.

2. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.
- ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent).
- iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

The statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the LC₅₀ EPA-821-R-02-012 or the most recent update thereof.

c. Samples and Composites

- i. The permittee shall collect one grab composite sample from the outfall(s) listed at Item 1.a above.
- ii. The maximum holding time for any effluent sample shall not exceed 36 hours. The toxicity test must be initiated within 36 hours after the collection of grab sample. Samples shall be chilled to 6 degrees Centigrade during collection, shipping, and/or storage.
- iii. The permittee must collect samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

3. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA-821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The

permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.

- b. A valid test for each species must be reported during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached for review.
- c. The permittee shall report the following results of each valid toxicity test. Submit retest information, if required, clearly marked as such. Only results of valid tests are to be reported.
 - i. Daphnia pulex
 - (A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.
 - (B) Report the NOEC value for survival, Parameter No. TOM3D.
 - (C) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.
- d. If retests are required by NMED, enter the following codes:
 - i. For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - ii. For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

E. STORM WATER POLLUTION PREVENTION

Stormwater has been identified by the applicant/permittee as a component of the discharge through Outfall 001. This section applies to all stormwater discharges from the facility through permitted outfalls. The language below has been included in this permit to control stormwater from the facility subject to NPDES regulation:

1. The permittee shall prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit.
2. A visual inspection of the facility shall be conducted and a report made annually as described in Paragraphs E.2.d and E.2.e below. The annual report shall be retained on site and available upon request.

The following conditions shall be included in the SWP3 for this facility.

- a. The permittee shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the facility; describe and ensure implementation of practices which will be used to reduce pollutants in storm water discharges from the facility; and assure compliance with the terms and conditions of this permit.
- b. The permittee must document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s). The permittee must document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the date you prepare or amend your SWPPP.

Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

- c. Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural condition of (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters, the SWP3 should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

d. The permittee shall maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the SWP3 and the permit, and identifying any incidents of noncompliance. The summary report should contain, at a minimum, the date and time of inspection, name of inspectors(s), conditions found, and changes to be made to the SWP3.

e. The summary report and the following certification shall be signed and attached to the SWP3 and provided to the Environmental Protection Agency and the New Mexico Environment Department, Surface Water Quality Bureau upon request.

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Signatory requirements for the certification may be found in Part III, Section D.11 of this permit.

f. The permittee shall make available to the Agency, the NMED, and/or the USFWS, upon request, a copy of the SWP3 and any supporting documentation.

3. The following shall be included in the SWP3, if applicable.

a. The permittee shall utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to:

- i. maintaining adequate road and driveway surfaces;
- ii. removing debris and accumulated solids from the drainage system;
and
- iii. cleaning up prior to the next storm event, any spill by sweeping, absorbent pads, or other appropriate methods.

b. All spilled product and other spilled wastes shall be immediately cleaned up and disposed of according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. Use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with State or Federal safety regulations (i.e., requirement for non-slippery work surface). In all such cases, initial cleanup shall be done by physical removal and chemical usage shall be minimized.

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- c. All equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other materials exposed to stormwater shall be maintained in a manner which prevents contamination of stormwater by pollutants.
- d. All waste fuel, lubricants, coolants, solvents, or other fluids used in repair or maintenance of vehicles or equipments shall be recycled or contained for proper disposal. Spills of these materials are to be cleaned up by dry means whenever possible.
- e. Stormwater Pollution Prevention Plan must be consistent with the requirements of the current Oil Pollution Prevention regulations.
- f. Prior to discharge of uncontaminated stormwater from a secondary containment area, the permittee will conduct a visual inspection of the containment area for a visible sheen, an odor associated within the tanked products, and/or a stain pattern within the contained area that is indicative of a spill or leak into that area. No dewatering of the area is allowed under the condition of this permit, if evidence exists of a spill or leak, unless the discharge will not exceed 50 mg/l TOC, 15 mg/l Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units.
- g. The permittee shall assure compliance with all applicable regulations promulgated under 40 CFR Part 257. Management practices required under regulations found in this Part shall be referenced in the SWP3.
- h. The permittee shall amend the SWP3 whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.
- i. If the SWP3 proves to be ineffective in achieving the general objectives preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements.