

Western Gallup  
Storage Tank Listing

ENTERED



New Mexico  
**ENVIRONMENT DEPARTMENT**

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**Air Quality Bureau**  
**TITLE V OPERATING PERMIT**  
Issued under 20.2.70 NMAC

Certified Mail No: 7013 0600 0001 8695 2541  
Return Receipt Requested

**Operating Permit No:** P021-R2  
**Facility Name:** Gallup Refinery  
  
**Permittee Name:** Western Refining Southwest, Inc.  
**Mailing Address:** 92 Giant Crossing Road  
Gallup, NM 87301  
  
**TEMPO/IDEA ID No:** 888-PRT20130002  
**AIRS No:** 35-031-0008  
**Permitting Action:** Renewal  
**Source Classification:** Title V Major and PSD Major  
**Facility Location:** 733,600m E by 3,930,100m N, UTM Zone 12  
**County:** McKinley

**Air Quality Bureau Contact:** Daren K. Zigich  
**Main AQB Phone No.** (505) 476-4300

**TV Permit Expiration Date:** MAR 27 2020

**TV Renewal Application Due:** MAR 27 2019

  
**Richard L. Goodyear, PE**  
Bureau Chief  
Air Quality Bureau

MAR 27 2015  
Date

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
EG-2	Emergency Generator (RICE)	Detroit Diesel/ DD8123740 5		>500 hp	1989
EG-3	Emergency Generator (RICE)	Detroit Diesel/ 16V-149T1		>500 hp	1989 <sup>2</sup>
EG-4	Emergency Generator (RICE)	Western Detroit Diesel Allison/ 16V-149T1		>500 hp	1989
Z-86-P2	Fire Pump (RICE)	Waukesha/ 145-GZ		<500 hp	1974
Z-91-DE10	Fire Pump (RICE)	Allis Chalmers/ 2100 MK II		<500hp	Before 4/1/2006
AC-8	Emergency Air Compressor (RICE)	Detroit Diesel/12V-71N		405 hp	1974 Reconstructed before 7/2005
BENSAT	Naphtha Splitter	Not Reported	Not Reported	Not Reported	Not Reported

<sup>1</sup> The Wastewater Treatment System (Unit WWS) consists of a Dissolved Gas Flotation System (DGF) followed by a Macro Porous Polymer Extraction Unit (MPPE) and will be used in conjunction with the existing API Oil/Water Separator. Some VOC sources are routed to the flare (Unit FL-1), while other sources are routed to carbon adsorption canister system(s). See Condition A213.A.

<sup>2</sup> Facility-wide fugitive emissions may be emitted from (but not limited to) the following processes and related process units: Crude Distillation, Alkylation, Isomerization, Platforming, Fluid Catalytic Cracking, Gas Concentrator, Saturated Gas, Sulfur Recovery, Hydrodesulfurization, Treating, Tank Farm/Truck Rack/Rail Rack, Terminals, Boiler House, BENSAT.

<sup>3</sup> ULSD = Ultra Low Sulfur Diesel fuel containing  $\leq 15$  ppmv total sulfur.  
RICE – Reciprocating Internal Combustion Engine

B. Table 104.B lists the regulated Equipment Group 1 ( Unit EG-1) Tanks

**Table 104.B: Tanks with potential to be subject to 40 CFR 60, Subparts K, Kb; 40 CFR 63, Subpart CC (Group 1 or Group 2); 20.2.37 NMAC; and 20.2.38 NMAC**

Tank No.	Date Constructed, Reconstructed, or Modified	Roof Type	Tank Capacity (bbl)*	NSPS K <sup>1</sup>	NSPS Kb <sup>1</sup>	MACT CC <sup>2</sup> Group 1	MACT CC <sup>2</sup> Group 2	20.2.37 <sup>3</sup>	20.2.38 <sup>4</sup>
T-1	1965	FX-V <sup>5</sup>	3000				X		X
T-2	1965	IFR <sup>6</sup>	4000			X			X
T-3	1965	IFR	4000			X			X
T-4	1970	IFR	4000			X			X
T-5	1963	FX-V	1802				X		X
T-6	1963	IFR	1800			X			X

Tank No.	Date Constructed, Reconstructed, or Modified	Roof Type	Tank Capacity (bbl)*	NSPS K <sup>1</sup>	NSPS Kb <sup>1</sup>	MACT CC <sup>2</sup> Group 1	MACT CC <sup>2</sup> Group 2	20.2.37 <sup>3</sup>	20.2.38 <sup>4</sup>
T-7	2012	IFR	2000				X		X
T-8	2012	IFR	2000				X		X
T-101	1957	IFR	80000			X		X	X
T-102	1991	EFR	80000		X	X		X	X
T-105	1957	FX-V	254				X		
T-106	1957	FX-V	5000				X		X
T-107	1957	FX-V	5000				X		X
T-108	1957	IFR	5000			X			X
T-111	1957	FX-V	5000				X		X
T-112	1957	FX-V	5000				X		X
T-115	1957	FX-V	5000				X		X
T-116	1957	FX-V	5000				X		X
T-225	1957	FX-V	25000				X	X	X
T-226	1957	FX-V	25000				X	X	X
T-227	1957	FX-V	5000				X		X
T-228	1957	FX-V	5000				X		X
T-231	1957	FX-V	5000				X		X
T-232	1957	FX-V	5000				X		X
T-235	1957	FX-V	5000				X		X
T-337	1977	IFR	20000	X		X		X	X
T-338*	1964	EFR or IFR	25000		*		X	X	X
T-339*	1957	EFR or IFR	25000		*		X	X	X
T-342	1957	FX-V	5000				X		X
T-343	1957	FX-V	5000				X		X
T-344	2014	EFR	22700		X	X		X	X
T-345	1977	IFR	20000	X		X		X	X
T-567	1969	EFR	20000			X		X	X
T-569	1957	EFR	25000			X		X	X
T-570	1957	EFR	25000			X		X	X
T-571	1957	EFR	25000			X		X	X
T-572	1957	EFR	25000			X		X	X
T-574	1968	EFR	40000			X		X	X
T-575	1957	FX-V	8000				X	X	X
T-576	1968	EFR	40000			X		X	X
T-577	1957	FX-V	10000				X	X	X
T-579	1957	FX-V	20000				X	X	X
T-581	1957	IFR	25000			X		X	X
T-582	1957	IFR	25000			X		X	X
T-583	1996	FX-V	55000				X	X	X
T-701	1963	FX-V	37000				X	X	X
T-702	1963	FX-V	25000				X	X	X
T-703	1963	FX-V	25000				X	X	X
T-704	1963	FX-V	10000				X	X	X

Tank No.	Date Constructed, Reconstructed, or Modified	Roof Type	Tank Capacity (bbl)*	NSPS K <sup>1</sup>	NSPS Kb <sup>1</sup>	MACT CC <sup>2</sup> Group 1	MACT CC <sup>2</sup> Group 2	20.2.37 <sup>3</sup>	20.2.38 <sup>4</sup>
T-705	1963	FX-V	10000				X	X	X
T-706	1963	FX-V	10000				X	X	X
T-707	1963	FX-V	1700				X		X
T-714	1969	FX-V	29000				X	X	X
Chevron	1965	FX-V	238						
Western	1982	FX-V	238						
Texaco	1989	FX-H <sup>8</sup>	48						
Conoco	1987	FX-H	24						
Exxon	1974	FX-H	36						
Total	1991	FX-H	190						
Mobil	1993	FX-H	190						
Shell	1963	FX-H	190						
Amoco	1965	FX-H	4						
O.C. Diesel	1957	FX-H	71						
O.C. Gasoline	1957	FX-H	71						
Z-81-T9	1974	FX-H	60						
Z-81-T13	1989	FX-V	11						
Z-81-T14	1989	FX-H	12						
Z-81-T15	1989	FX-H	90						
Fire Pump	1969	FX-H	12						
Z-83-T3	2002	FX-V	238						
T27	1995	IFR	5000		X		X		X
T28	1995	IFR	5000		X		X		X
SWS-TK1	2006	FX	931				X		X
AM-TK1	1984	FX-V	60						
Z84-T35	2010	IFR	27234		X		X		

<sup>1</sup> Tanks marked in these columns have the potential to be subject to NSPS Subpart K or Kb based on construction date and capacity. (Subpart K applies for tanks with construction dates between June 11, 1973 and May 19, 1978 and capacity  $\geq 40,000$  gal or 952 bbl; Subpart Kb applies for tanks with construction dates after July 23, 1984 and capacity  $\geq 75$  m<sup>3</sup> or 471.7 bbl). Potential NSPS K tanks would only be subject to this Subpart when storing a petroleum liquid as defined in 40 CFR 60.111(b). Potential NSPS Kb tanks with a capacity  $\geq 75$  m<sup>3</sup> but  $< 151$  m<sup>3</sup> would only be subject to Subpart Kb when storing a volatile organic liquid as defined in 40 CFR 60.111(b) with a maximum true vapor pressure  $\geq 15.0$  KPa. Potential NSPS Kb tanks with a capacity  $\geq 151$  m<sup>3</sup> would only be subject to Subpart Kb when storing a volatile organic liquid as defined in 40 CFR 60.111(b) with a maximum true vapor pressure  $\geq 3.5$  KPa. There are no potential NSPS Subpart Ka tanks at this facility. Pressure vessels (pressurized tanks) are exempt from these regulations.

<sup>2</sup> Tanks marked under this column have the potential to be subject to 40 CFR 63, Subpart CC based on having a capacity  $\geq 10,567$  gallons or 252 bbl. Fixed roof tanks with capacities  $\geq 10,567$  gallons or 252 bbl and floating roof tanks with capacities  $\geq 10,567$  gallons or 252 bbl but  $< 46,758$  gallons or 1113 bbl are identified as potential Group 2 storage vessels and floating roof tanks with capacities  $\geq 46,758$  gallons or 1113 bbl are identified as potential Group 1 storage vessels. Potential Group 2 storage vessels would only be subject to MACT CC Group 2 requirements when storing organic liquids. Potential Group 1 storage vessels would only be subject to MACT CC Group 1 requirements when storing an organic liquid with a stored-liquid maximum true vapor pressure  $\geq 10.4$  kPa

and stored-liquid annual average true vapor pressure  $\geq 8.3$  kPa and annual average HAP liquid concentration  $> 4$  percent by weight total organic HAP. Pressure vessels are exempt from this regulation.

<sup>3</sup> Tanks "existing facility" marked under this column have the potential to be subject to 20.2.37.205.A.(1) or (2) NMAC based on having a capacity  $\geq 250,000$  gallons or 5952 bbl. Potential 20.2.37 tanks "existing facility" would only be subject to 20.2.37.205.A.(1) NMAC when storing an organic compound with true vapor pressure greater than 11.0 pounds per square inch under maximum actual storage pressure conditions. Potential 20.2.37 tanks "existing facility" would only be subject to 20.2.37.205.A.(2) NMAC when storing an organic compound with true vapor pressure greater than or equal to 3.0 and less than or equal to 11.0 pounds per square inch under maximum actual storage pressure conditions.

<sup>4</sup> Tanks marked under this column have the potential to be subject to 20.2.38.109 NMAC based on having a capacity  $\geq 20,000$  gallons or 476 bbl. Potential 20.2.38 tanks would only be subject to 20.2.38.109 NMAC when storing hydrocarbon liquids containing hydrogen sulfide at a throughput  $\geq 30,000$  gallons per week.

<sup>5</sup> FX-V = Fixed Roof, Vertical

<sup>6</sup> IFR = Internal Floating Roof

<sup>7</sup> EFR = External Floating Roof

<sup>8</sup> FX-H = Fixed Roof, Horizontal

\*See Conditions A114.A and A203.D. Tanks are subject to NSPS Kb inspection requirements upon installation of IFR or EFR to verify with emissions reductions.

#### A105 Facility: Control Equipment

A. Table 105.A lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 105.A: Control Equipment List:**

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s) <sup>1</sup>
FL-EGF	Emergency Ground Flare	VOC, HAPs	ALKY
FL-1	Process Flare	VOC, HAPs, H <sub>2</sub> S	Various
VRU	Vapor Recovery Unit	VOC, HAPs	TRUCK
Z-84-T5/F1/F2	Carbon adsorption for covered API separator and DGF Feed Tank	VOC, HAPs	WWS
Z-84-V26 Z-84-V27	Carbon adsorption for DGF Unit (except DGF Feed Tank)	VOC, HAPs	WWS
SRU/TV-1 (SWAATS)	Sulferox Sulfur Recovery Unit and Sour Water Amine Ammonium Thiosulfate Gas Processing Unit	H <sub>2</sub> S	H <sub>2</sub> S generated from all process units at the facility
FB-1	CO Boiler	CO	FCCU
N/A	Flue Gas Recirculation	NO <sub>x</sub>	Z-81-B102
N/A	Flue Gas Recirculation	NO <sub>x</sub>	Z-81-B106
N/A	Flue Gas Recirculation	NO <sub>x</sub>	FB-1
ESP	Electrostatic Precipitator,	PM	FCCU