

Data Base Summary (Statement of Basis)

NSR Permit

Type of Permit Action: Regular-Significant Revision

PSD or Not	Minor or Title V	Portable or Not
Minor (not PSD)	Major-Title V	Stationary

Facility: Roadrunner Gas Processing Plant
Company: Lucid Energy Delaware, LLC
Facility Type: O&G-Gas Plant
Permit No. (NSR) 7200-M3
Operating Permit No. (TV) N/A
Agency Interest No. 36536 - PRN20200001
AIRS ID No. 350151662
SIC CODE: 1321: Natural gas liquids
Permit Writer: Vanessa Springer

Application Notarized Date: April 17, 2020
Receive Date: April 22, 2020
Timeliness of TV Application: N/A
Ruled Incomplete: N/A
Ruled Complete: May 22, 2020
APP. sent to Field Office: N/A
Public involvement Plan (PIP): TBD
PSD APP. Sent to EPA: N/A
Public Notice Date & Newspaper: May 27, 2020
Comments Due: June 26, 2020
Analysis Review Begins: N/A
Analysis Review Ends: N/A
Public Hearing: TBD
Proposed Permit to EPA Acknowledged: N/A
Permit Due: TBD
Permit Issued: TBD
PSD Permit to EPA: N/A

Facility Location: This facility is located approximately 1.5 mi. SW of Loving, in Eddy County, NM.
UTM Zone: 13 ; **Datum:** NAD83
UTM Easting: 569153 meters
UTM Northing: 3570129 meters
Elevation: 3,124 feet
County: Eddy
In a Sensitive Area: No

Contact Name: Matthew Eales
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Consultant Address: 7804 Pan American Fwy. NE
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NSR Agency* Notification:

Agency	Distance	Units	Date Email Sent
State - Texas	29.5	km	May 22, 2020

*As required by 20.2.72.206.A.(7): Mail a copy of the public notice at the same time it is sent for publication to the appropriate agency in the following locations if the source will locate within 50 kilometers (31.1 miles) of the boundary of other states, Bernalillo County, or a Class I Area.

Part II – Facility Specifications

Table 102.A: Total Pollutant Emissions from Entire Facility:

Pollutant	Emissions (tons per year)	Emission Type	Change in Emission since Permit NSR 7200-M2
Nitrogen Oxides (NOx)	130.8	Allowable	+4.1
Carbon Monoxide (CO)	230.1	Allowable	+36.1
Volatile Organic Compounds (VOC) ¹	194.6	Potential	+84.5
Sulfur Dioxide (SO ₂)	22.7	Allowable	-116.1
Particulate Matter (PM)	11.2	Potential	-5.0
Particulate Matter 10 microns or less (PM ₁₀)	11.2	Allowable	-3.9
Particulate Matter 2.5 microns or less (PM _{2.5})	10.8	Allowable	-3.9
Hydrogen Sulfide (H ₂ S)	2.9	Allowable	+1.4
Greenhouse Gas (GHG) as CO ₂ e	295,379	Potential	-212,501

Note: Total Potential Pollutant Emissions in Table 102.A, may include fugitive emissions; routine or predictable, startup, shutdown, and maintenance emissions (SSM); and permitted malfunction allowances if these are a sources of regulated air pollutants from this facility.

Table 102.B: Total Potential Hazardous Air Pollutants (HAPs)*

Pollutant	Emissions (tons per year)	Emission Type	Change in Emission since Permit 7200-M2
Benzene	2.8	Potential	+1.5
Total HAP	4.9	Potential	-4.6

* HAP emissions are included in the Table 102.A VOC emissions total.

** Total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs emitted at a rate greater than 1.0 ton per year are listed in Table 102.B.

Air Pollution Control Devices:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s) ¹
BTEX-1, BTEX-2, BTEX-3, BTEX-4	BTEX condenser	VOC, HAP	EP-7, 2-EP-7, 3-EP-7, 4-EP-7
EP-9	Thermal Oxidizer	VOC, HAP	EP-8 and BTEX-1, BTEX-2, BTEX-3, BTEX-4
COMB-1	Combustor	VOC	T-1, T-2, T-3, T-4, and T-5
EP-1, 2/3-EP-1, 4-EP-1	Flare	VOC, HAP	Facility SSM Emissions

Equipment Specifications (Active):

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
EP-1	SSM Flare (Pilot with Auto Ignition)	Zeeco Inc.	FL5100	31927	2017	2017	0.005 MMScf/day
EP-2	Trim Reboiler	Fabsco Shell & Tube	E-207	516-11764-2	2017	2017	15.95 MMBtu/hr
EP-3A	Amine Reboiler	Patrick	2BKU30/5A-312	717-5145A	2017	2017	55 MMBtu/hr
EP-3B	Amine Reboiler	Patrick	2BKU30/5A	TBD	TBD	TBD	55 MMBtu/hr
EP-4	Glycol Reboiler	Reset Energy	H-2801	F-9	2017	2017	3 MMBtu/hr
EP-5	Regen Reboiler	Heatec	HCI5010-40-G	HI16-201	2017	02/2017	5.61 MMBtu/hr
EP-6	Stabilizer Heater	Phoenix	PX-180	17169	2017	2017	18 MMBtu/hr
EP-7	Glycol Dehydrator	Reset Energy	T-2707	153	2017	2017	220 MMScf/day
EP-8	Amine Vent	PBP Fabrication	V-5520	493	2017	2017	220 MMScf/day
EP-9	Thermal Oxidizer	Zeeco Inc.	TO-55	32339	2017	2017	71 MMBtu/hr
2/3-EP-1	SSM Flare (Pilot with Auto Ignition)	Zeeco Inc.	FL5100	TBD	TBD	TBD	0.01 MMScf/day

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
2-EP-2	Trim Reboiler	Fabsco Shell &Tube	E-207	TBD	TBD	TBD	17.55 MMBtu/hr
2-EP-4	Glycol Reboiler	TBD	TBD	TBD	TBD	TBD	3 MMBtu/hr
2-EP-5	Regen Reboiler	TBD	TBD	TBD	TBD	TBD	5.61 MMBtu/hr
2-EP-6	Stabilizer Heater	TBD	TBD	TBD	TBD	TBD	18 MMBtu/hr
2-EP-7	Glycol Dehydrator	TBD	TBD	TBD	TBD	TBD	220 MMScf/day
3-EP-2	Trim Reboiler	Fabsco Shell &Tube	E-207	TBD	TBD	TBD	17.55 MMBtu/hr
3-EP-4	Glycol Reboiler	TBD	TBD	TBD	TBD	TBD	3 MMBtu/hr
3-EP-5	Regen Reboiler	TBD	TBD	TBD	TBD	TBD	5.61 MMBtu/hr
3-EP-7	Glycol Dehydrator	TBD	TBD	TBD	TBD	TBD	220 MMScf/day
4-EP-1	SSM Flare (Pilot with Auto Ignition)	Zeeco Inc.	FL5100	TBD	TBD	TBD	0.005 MMScf/day
4-EP-2	Trim Reboiler	Fabsco Shell &Tube	E-207	TBD	TBD	TBD	17.55 MMBtu/hr
4-EP-4	Glycol Reboiler	TBD	TBD	TBD	TBD	TBD	3 MMBtu/hr
4-EP-5	Regen Reboiler	TBD	TBD	TBD	TBD	TBD	5.61 MMBtu/hr
4-EP-7	Glycol Dehydrator	TBD	TBD	TBD	TBD	TBD	220 MMScf/day
COMB-1	Combustor	Zeeco Inc	VCU-7.5.40 Flare	31974-001	2017	2017	0.00156 MMScf/day
LOAD	Loadout Emissions	NA	NA	NA	NA	NA	2,920,000 bbl/year
T-1	Condensate Tank	Tank &Vessel Boilers LP	NA	201723	2017	2017	1000 bbl
T-2	Condensate Tank	Tank &Vessel Boilers LP	NA	201724	2017	2017	1000 bbl
T-3	Condensate Tank	Tank &Vessel Boilers LP	NA	201720	2017	2017	1000 bbl
T-4	Condensate Tank	Tank &Vessel Boilers LP	NA	201721	2017	2017	1000 bbl
T-5	Condensate Tank	Tank &Vessel Boilers LP	NA	201722	2017	2017	1000 bbl

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
T-6	Wastewater Tank	Palmer	NA	ST-1711323	2017	08/2017	400 bbl
D-1	Electric Driven Residue Compressor	Ariel	KBZ/6	F54680	2017	9/1/2017	60 MMscf/d
D-2	Electric Driven Residue Compressor	Ariel	KBZ/6	F54701	2017	9/1/2017	60 MMscf/d
D-3	Electric Driven Residue Compressor	Ariel	KBZ/6	F54720	2017	9/1/2017	60 MMscf/d
D-4	Electric Driven Residue Compressor	Ariel	KBZ/6	F54750	2017	9/1/2017	60 MMscf/d
2-D-1	Electric Driven Flash Gas Compressor	Ariel	JGH/4	F54483	2017	8/1/2017	40 MMscf/d
2-D-2	Electric Driven Flash Gas Compressor	Ariel	JGH/4	F54484	2017	8/1/2017	40 MMscf/d
2-D-3	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
2-D-4	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
3-D-1	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
3-D-2	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
3-D-3	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
3-D-4	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
4-D-1	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
4-D-2	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
4-D-3	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
4-D-4	Electric Driven Residue Compressor	Ariel	KBZ/6	TBD	TBD	TBD	TBD
FUG	Fugitive Emissions	NA	NA	NA	NA	NA	NA
FUG2	Fugitive Emissions	NA	NA	NA	NA	NA	NA
SSM-misc	Startup, Shutdown, Maintenance Miscellaneous Emissions	NA	NA	NA	NA	NA	NA
SSMB	Startup, Shutdown, Maintenance Blowdown Emissions	NA	NA	NA	NA	NA	NA

Equipment Specifications (Inactive/Retired/Removed):

Unit No.	Source Description	Make	Model	Serial No.	Constructio n/ Reconstructi on Date	Manufactur e Date	Manufactur er Rated Capacity / Permitted Capacity
2-EP-9	Thermal Oxidizer	Zeeco Inc.	TO-55	TBD	TBD	TBD	71 MMBtu/hr
2-EP-8	Amine Vent	PBP Fabrication	V-5520	TBD	TBD	TBD	220 MMScf/day
2-EP-3A	Amine Reboiler	Patrick	TBD	TBD	TBD	TBD	55 MMBtu/hr
2-EP-3B	Amine Reboiler	Patrick	TBD	TBD	TBD	TBD	55 MMBtu/hr

Emissions: Pollutant Permitted (Allowable and SSM) Emissions per piece of equipment or Subject Item as represented by applicant.

Unit No.	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy	PM10 pph	PM10 tpy	PM2.5 pph	PM2.5 tpy	H ₂ S pph	H ₂ S tpy
EP-2	1.6	6.8	1.3	5.8	<	<	-	-	<	<	<	<	-	-
2-EP-2	1.7	7.5	1.4	6.3	<	<	-	-	<	<	<	<	-	-
3-EP-2	1.7	7.5	1.4	6.3	<	<	-	-	<	<	<	<	-	-
4-EP-2	1.7	7.5	1.4	6.3	<	<	-	-	<	<	<	<	-	-
EP-3A	1.7	7.6	3.5	15.5	<	1.3	-	-	<	1.8	<	1.8	-	-
EP-3B	1.7	7.6	3.5	15.5	<	1.3	-	-	<	1.8	<	1.8	-	-
EP-4	<	1.3	<	1.1	<	<	-	-	<	<	<	<	-	-
2-EP-4	<	1.3	<	1.1	<	<	-	-	<	<	<	<	-	-
3-EP-4	<	1.3	<	1.1	<	<	-	-	<	<	<	<	-	-
4-EP-4	<	1.3	<	1.1	<	<	-	-	<	<	<	<	-	-
EP-5	<	2.4	<	2.0	<	<	-	-	<	<	<	<	-	-
2-EP-5	<	3.1	<	2.6	<	<	-	-	<	<	<	<	-	-
3-EP-5	<	3.1	<	2.6	<	<	-	-	<	<	<	<	-	-
4-EP-5	<	3.1	<	2.6	<	<	-	-	<	<	<	<	-	-
EP-6	1.8	7.7	1.5	6.5	<	<	-	-	<	<	<	<	-	-
2-EP-6	1.8	7.7	1.5	6.5	<	<	-	-	<	<	<	<	-	-
EP-7	-	-	-	-	*	0.5	-	-	-	-	-	-	*	0.0
2-EP-7	-	-	-	-	*	0.5	-	-	-	-	-	-	*	0.0
3-EP-7	-	-	-	-	*	0.5	-	-	-	-	-	-	*	0.0

Unit No.	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy	PM10 pph	PM10 tpy	PM2.5 pph	PM2.5 tpy	H ₂ S pph	H ₂ S tpy
4-EP-7	-	-	-	-	*	0.5	-	-	-	-	-	-	*	0.0
EP-8	-	-	-	-	*	1.7	-	-	-	-	-	-	-	-
EP-9	5.5	24.1	3.0	13.0	<	1.7	4.0	17.3	<	2.6	<	2.6	<	<
EP-1 (pilot/purge)	0.17	0.76	0.79	3.46	1.68	7.37	0.31	1.35	-	-	-	-	0.16	0.72
2/3 EP-1 (pilot/purge)	0.35	1.52	1.58	6.92	3.37	14.74	0.61	2.69	-	-	-	-	0.33	1.43
4-EP-1 (pilot/purge)	0.17	0.76	0.79	3.46	1.68	7.37	0.31	1.35	-	-	-	-	0.16	0.72
T1-T5	-	-	-	-	*	5.5	-	-	-	-	-	-	-	-
T6	-	-	-	-	*	<	-	-	-	-	-	-	<	<
COMB-1	3.7	<	7.3	<	53.68	6.1	<	<	<	<	<	<	<	<
LOAD	-	-	-	-	*	46.0	-	-	-	-	-	-	-	-

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂.

2 Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.

3 Compliance with emergency flare emission limits is demonstrated by limiting combustion to pilot and/or purge gas only.

“-” indicates the application represented emissions are not expected for this pollutant.

<” indicates that the application represented the uncontrolled mass emission rates are less than 1.0 pph. or 1.0 tpy. for this emissions unit and this air pollutant. The Department determined that allowable mass emission limits were not required for this unit and this pollutant.

“*” indicates hourly emission limits are not appropriate for this operating situation.

Pollutant Unpermitted (Potential) Emissions (Non-regulated, without permitted emission limits)

Unit No.	VOC (pph)	VOC (tpy)	PM ₁₀ (pph)	PM ₁₀ (tpy)	PM _{2.5} (pph)	PM _{2.5} (tpy)
FUG*	2.80	12.25				
FUG2*	2.80	12.25				
HAUL ROAD			0.11	0.39	0.01	0.04

*Note: FUG and FUG2 appear to be all part of the same emission count of valves, connectors, etc. The combined fugitive emissions are 24.5 tpy, just below the AQB policy of 25 tpy for inserting an LDAR condition.

POTENTIAL HAPS EMISSIONS FROM TEMPO, Table has the most common HAPS – it is not inclusive of all HAPS that might be entered in TEMPO. All emissions are in tons/year

Unit No.(s)	Total HAPs		Benzene		Toluene		Hexane		2,2,4-Trimethylpentane	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Facility Total	99.7	4.9	5.3	0.9	2.0	0.3	92.1	2.8	0.2	0.0

* Totals are for information only and may not match the totals in the table "TOTAL HAPS and NM TAPS"