

Permit by Rule (PBR) Registration

Technical Review

Company:	Roadrunner One, LLC	Registration No.:	175348
Nearest City:	Pecos	Project No.:	370226
County:	Reeves	Project Type:	Initial
Project Reviewer:	Thomas Greinert	Regulated Entity No.:	RN110069226
Unit Name:	Infinium Roadrunner One	Customer Reference No.:	CN606122380
PBR No(s).:	106.512	Project Received Date:	February 9, 2024
Physical Location:	intx of I 20 & CR 419 or Shaw rd go n on CR 419 or Shaw rd 1.7 mi and turn left and site will be on r		

Project Overview / Process Description

Infinium operates the Roadrunner One Plant in Reeves County, Texas. Roadrunner One, authorized under NSR 150327, is an electrofuels plant that converts CO₂ and hydrogen into hydrocarbon fuels. With this project, Infinium is seeking authorization for a 268 hp generator used for non-operational needs of the site such as climate control, lighting, break room kitchen appliances, security monitoring, control room building water delivery pumps, and personal electrical devices (as needed by personnel) under PBR 106.512. The site is not currently connected to the electrical grid but is planning on connecting in the near future. Grid access is not currently readily available. The generator will be fueled by propane; however, it has the capability to also use natural gas. Therefore, for flexibility purposes, the emissions have been estimated assuming continuous operation of propane and natural gas. This project will not affect NSR Permit 150327.

Permit by Rule Requirements - 30 TAC Chapter 106

General Requirements

Registration Fee Reference No.:	Application fee: 687725 / 582EA000593230
Is this registration certified?	Yes
Is planned MSS included in the registration?	No
Are there affected NSR or Title V authorizations for the project?	No
Are there any upstream or downstream affects associated with this registration?	No
Are associated upstream/downstream emissions either included in the registration OR within current permitted limits with no changes to underlying air authorizations for the applicable units regarding BACT, health and environmental impacts, or other representations.	NA
Are emissions for each PBR authorized facility less than the § 106.4(a)(1) limits?	Yes
Are total emissions from all sitewide PBR authorized facilities less than the § 106.4(a)(4) limits, OR has the site been subject to public notice requirements?	Yes
Are there permit limits on using PBRs at the site?	No
Is the facility in compliance with all other applicable rules and regulations?	Yes

Federal Applicability

Does this project trigger a PSD or Nonattainment review?	No
Does the Major NSR applicability analysis include all associated upstream and/or downstream emissions?	NA
Are there any applicable standards under NSPS, NESHAP, or NESHAP for source categories (MACT)?	No

Permit by Rule Requirements - Compliance Demonstrations

PBR 106.512 Stationary Engines and Turbines

Gas or liquid fuel-fired stationary internal combustion reciprocating engines or gas turbines that operate in compliance with the following conditions of this section are permitted by rule.

(1) The facility shall be registered by submitting the commission's Form PI-7, Table 29 for each proposed reciprocating engine, and Table 31 for each proposed gas turbine to the commission's Office of Permitting, Remediation, and Registration in Austin within ten days after construction begins. Engines and turbines rated less than 240 horsepower (hp) need not be registered, but must meet paragraphs (5) and (6) of this section, relating to fuel and protection of air quality. Engine hp rating shall be based on the engine manufacturer's maximum continuous load rating at the lesser of the engine or driven equipment's maximum published continuous speed. A rich-burn engine is a gas-fired spark-ignited engine that is operated with an exhaust oxygen

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content less than 4.0% by volume. A lean-burn engine is a gas-fired spark-ignited engine that is operated with an exhaust oxygen content of 4.0% by volume, or greater. **268 hp**

(2) N/A – engine is rated >500 hp

(3) N/A – no turbine included in this registration

(4) Any engine or turbine rated less than 500 hp or used for temporary replacement purposes shall be exempt from the emission limitations of paragraphs (2) and (3) of this section. Temporary replacement engines or turbines shall be limited to a maximum of 90 days of operation after which they shall be removed or rendered physically inoperable. **0.009 g/hp-hr**

(5) Gas fuel shall be limited to: **sweet natural gas or liquid petroleum gas**, fuel gas containing no more than ten grains total sulfur per 100 dry standard cubic feet, or field gas. Liquid fuel shall be petroleum distillate oil that is not a blend containing waste oils or solvents and contains less than 0.3% by weight sulfur.

(6) There will be no violations of any National Ambient Air Quality Standard (NAAQS) in the area of the proposed facility. Compliance with this condition shall be demonstrated by the following method:

(6)(C) the total emissions of NO_x (nitrogen oxide plus NO₂) from all existing and proposed facilities on the property do not exceed the most restrictive of the following:

(6)(C)(i) 250 tpy;

(6)(C)(ii) the value (0.3125 D) tpy, where D equals the shortest distance in feet from any existing or proposed stack to the nearest property line.

200 ft (property line distance); 62.50 tpy (Allowable NO_x rate); 32.41 tpy (Actual NO_x rate)

(7) Upon issuance of a standard permit for electric generating units, registrations under this section for engines or turbines used to generate electricity will no longer be accepted, except for:

(7)(A) engines or turbines used to provide power for the operation of facilities registered under the Air Quality Standard Permit for Concrete Batch Plants;

(7)(B) engines or turbines satisfying the conditions for facilities permitted by rule under Subchapter E of this title (relating to Aggregate and Pavement); or

(7)(C) engines or turbines used exclusively to provide power to electric pumps used for irrigating crops.

Compliance History and Site Review

In accordance with 30 TAC Chapter 60, a compliance history report was reviewed on:

February 12, 2024

Site rating / classification: **Unclassified**

Company rating / classification: **Unclassified**

Has any action occurred on the basis of the compliance history or rating?

No

Did the Regional Office provide site approval and confirm distances?

NA

Emission Summary

EPN / Emission Source	VOC		NOx		CO		PM/PM ₁₀ /PM _{2.5}		SO ₂	
	Ib/hr	tpy	Ib/hr	tpy	Ib/hr	tpy	Ib/hr	tpy	Ib/hr	tpy
GEN-1 / Generator	0.05	0.23	0.01	0.02	0.23	1.01	1.41	6.16	0.11	0.47
TOTAL EMISSIONS (TPY):	-	0.23	-	0.02	-	1.01	-	6.16	-	0.47
MAXIMUM OPERATING SCHEDULE: Hours/Year										8,760

2/27/2024

Mr. Thomas Greinert
Permit Reviewer
Rule Registration Section

2/28/2024

Michael Partee, Manager
Rule Registrations Section
Air Permits Division
Section Manager