NON-TITLE V AIR PERMIT EVALUATION SHEET
(Technical Support Document – TSD)

PERMIT NO.: 16##

MINOR MOD. ☐
NON-MINOR MOD. ☐
RENEWAL ☐

PERMIT ENGINEER: Ryan Eberle **DATE PREPARED:** #######

BUSINESS NAME: Akimel Smoke Shop
BUSINESS TYPE: Retail Fuel Station

		Yes	No
SOURCE TYPE:	NSPS	☐	☒
	BACT	☐	☒
	MACT	☐	☒
	NESHAP	☒	☐
	BRDT	☐	☒
	Synthetic Minor	☐	☒

DESCRIPTION OF SOURCE

Non-Title V permit for an existing facility. The Akimel Smoke Shop is a retail fuel station that includes one (1) 15,000 gasoline underground storage tank (UST), one (1) 12,000-gallon UST, and one (1) 200 kilowatt emergency diesel generator. Based on the information presented in the permit application, the SIC code for the facility is 5541 and the facility will operate up to 24 hours per day, 7 days per week, and 52 weeks per year with a maximum annual gasoline throughput of **10,470,000** gallons.

The USTs are equipped with a Stage I vapor recovery system. The dispensers are not equipped with a Stage II vapor recovery system.

Permitted Equipment

A list of permitted equipment is included in Table 1.

Table 1. Permitted Equipment

Equipment Description	Rated Capacity (ea.)	Quantity
Underground Storage Tanks (Regular Gasoline)	15,000 gal.	1
Underground Storage Tank (Premium Gasoline)	12,000 gal.	1

A list of insignificant activities are included in Table 2. Insignificant activities are defined in the Gila River Indian Community (GRIC) Code: Title 17 Chapter 9, Part II, Section 1.0 and emissions from insignificant activities are excluded from the permit.

Table 2. Insignificant Activities

Equipment Description	Rated Capacity (ea.)	Quantity
Underground Storage Tank (Diesel)	15,000 gal.	1
Emergency Diesel Generator	200 kW	1

ALLOWABLE EMISSIONS

The emission limits for the facility are presented in Table 3.

Table 3. Emission Limits (pounds)

Pollutant	Twelve Month Rolling Total
Volatile Organic Compounds (VOC)	31,500.00
Total Hazardous Air Pollutants (HAPs)	680.00

APPLICABLE GRIC REGULATIONS

Part II

Section 1: Definitions
Section 2: Applicability of Permit Requirements
Section 4: Non-Title V Permit Requirements
Section 5: Permit Revisions at a Non-Title V Source
Section 10: Confidentiality of Information
Section 11: Fees

Part VI

Section 1: Visible Emissions
Section 2: VOC Usage, Storage & Handling

FEDERAL REGULATORY APPLICABILITY

NSPS – Based on the information provided in the permit application, the emergency generator was manufactured on 1/29/13 and, therefore, is subject to the New Source Performance Standards (NSPS) Subpart IIII (Stationary Compression Ignition Internal Combustion Engines).

NESHAP/MACT - Based on the information provided in the permit application, this source dispenses gasoline and emits Hazardous Air Pollutants (HAPs) from the tank vents and vehicle gas tank openings. The facility (a gasoline dispensing facility - GDF) is not a major source; however, the facility is subject to the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart CCCCCC (Gasoline Dispensing Facilities). Subpart CCCCCC applies to each gasoline cargo and storage tank at the facility during delivery of product. Since the facility will be permitted at an annual throughput of greater than 1,200,000 gallons of gasoline, the facility may have a monthly throughput of greater than 100,000 gallons of gasoline. Subpart CCCCCC requires facilities with average monthly throughputs greater than or equal to 10,000 gallons and less than 100,000 gallons to use of submerged fill pipes in tanks. Subpart CCCCCC requires facilities with average monthly throughputs greater than or equal to 100,000 gallons to use submerged fill pipes and operate and maintain a vapor balance (Stage I vapor recovery) system on the tank. Equipment used for refueling of motor vehicles (e.g., pump nozzles, Stage II vapor recovery) is not covered by Subpart CCCCCC. Since the emergency generator was installed at the facility after June 12, 2006, it is not subject to NESHAP Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. The federal HAPs list is fully incorporated into Part II, Section 1.0, and a GRIC HAP is defined as any Federally-listed HAP.

ALLOWABLE EMISSION CALCULATIONS

For retail gasoline dispensing stations, volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) are the primary pollutants of concern. The point sources for VOC and HAP emissions include the tank vents (controlled via Stage I vapor recovery) and vehicle fuel tank openings (controlled via Onboard Refueling Vapor Recovery systems in the vehicles). Tank vent emissions come from filling the tank and dispensing from the tank (i.e., working losses) and expansion and contraction of vapors caused by temperature fluctuations (i.e., breathing losses). Vehicle fuel tank emissions come from vapors displaced from the automobile tank by dispensed gasoline. Fugitive sources of VOC and HAP emissions include contributions from prefill and postfill nozzle drip and from spit-back and overflow from the vehicle's fuel tank filler pipe during filling.

The emission calculations for the facility were based on AP-42 emission factors, EPA TANKS Version 4.0.9d emission estimation software results, EPA documents, and material throughputs provided in the permit application and subsequent correspondence with the applicant. Non-fugitive emissions will be generated from the following sources:

- Tanks vents; and
- Vehicle fuel tank openings.

The calculations for the emission limits are included as an attachment to this TSD.

Major Source/Synthetic Minor Determination

Based on the permitted throughput, the facility's potential-to-emit (PTE) does not exceed the major source threshold of 100 tpy for VOCs or 10 tpy of a single HAP or 25 tpy of total HAPs.

According to the definition of "major source" in Part II, Section 1.0 and 40 CFR 70.2, the fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source unless the source is listed or is being regulated by NSPS or NESHAP as of August 7, 1980. The facility type is not listed, but is subject to NESHAP Subpart CCCCCC and NSPS Subpart IIII. NESHAP Subpart CCCCCC was enacted in 2008, and NSPS Subpart IIII was initially enacted in 2006. Therefore, fugitive emissions do not need to be added to the point source emissions to determine if the source will be considered a major source.

BEST REASONABLE AND DEMONSTRATED TECHNOLOGY (BRDT) ANALYSIS

Based on the information provided in the permit application and the attached emissions calculations, the facility emissions will not exceed the BRDT thresholds identified in Table 4 below. Therefore, a BRDT analysis is not required.

Table 4. BRDT Applicability

Pollutant	Annual Emissions (tons)	BRDT Threshold (tons)	BRDT Applicable?	Trigger Compound
NOx	N/A	**>75 but <100**	**No**	- - -
VOC	15.7	**>75 but <100**	**No**	- - -
CO	N/A	**>75 but <100**	**No**	- - -
SOx	N/A	**>75 but <100**	**No**	- - -
PM10	N/A	**>75 but <100**	**No**	- - -
PM	N/A	**>75 but <100**	**No**	- - -
Lead	N/A	**>75 but <100**	**No**	- - -
Single HAP	<0.34	**3**	**No**	- - -
Total HAPs	0.34	**5**	**No**	- - -
Ultra HAPs	N/A	**300***	**No**	- - -

* = pounds per year
N/A = not applicable / not assessed

MODELING ANALYSIS

A modeling analysis was not conducted because facility emissions were below the BRDT thresholds.

ANALYSIS OF IMPORTANT PERMIT CONDITIONS

Condition 26: Sets the emission limits for the facility, which were established based on information provided by the Permittee in the permit application. Describes the methods used to calculate the permitted emissions from the facility and how actual 12-month rolling total emissions are to be calculated for reporting purposes. The emission limitations reflect the policies contained in Part II, Section 4.2.

Conditions 27 through 29: Sets the throughput limitations, visible emission limitations, and operational restrictions for the facility. The production limits were based on the throughputs provided by the Permittee in the application. The visible emission limitations reflect the policies contained in Part VI, Section 1.0.

Condition 30: Sets the general notification, recordkeeping and reporting requirements for facilities, and reflects the policies contained in Part VI, Section 2.0.

Condition 31: Sets the limitations and requirements for VOC usage, storage, and handling. These conditions reflect policies contained in Part VI, Section 2.0.

Condition 32: Sets the limitations and requirements for the emergency generator. These conditions reflect the requirements contained in 40 CFR 60 (NSPS Subpart IIII).

Condition 33: Sets the limitations and requirements for fugitive dust generating operations. These conditions include requirements for dust control plans, emission control systems, compliance determination, monitoring and recordkeeping, control measures, and visible emission limitations, which reflect the policies contained in Part V, Section 2.0.

Conditions 34 through 39: Summarizes the Federally enforceable-only requirements for gasoline dispensing facilities contained in 40 CFR §63 Subpart CCCCCC – operational restrictions; notification, recordkeeping, and reporting requirements; and control and performance testing requirements.