TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT No. 82755

I. INTRODUCTION

This Class II Renewal permit is for the continued operation of Musket Corporation's Kingman Bulk Terminal. Permit No. 82755 renews and supersedes Permit No. 63257.

A. Company Information

Facility Name:	Kingman Bulk Terminal
Mailing Address:	2929 Allen Parkway, Suite 4100
	Houston, Texas 77019
Facility Location:	4400 Industrial Boulevard, Kingman,
	Mohave County, Arizona 86401

B. Attainment Classification

The facility is located in an attainment area for all criteria pollutants.

II. PROCESS DESCRIPTION

The facility stores and handles diesel, biodiesel, Jet-A fuel, isobutanol, and denatured ethanol products received by rail tank cars. Each 30,000 gallon tank car delivers approximately 27,500 gallons of product. The facility transloads up to 450 million gallons of diesel fuel and 76.7 million gallons of Jet A fuel per year, from railroad tanker cars to tanker trucks without storing in tanks, using a diesel powered transloader pump.

The facility handles up to 76.7 million gallons per year of biodiesel. Biodiesel is unloaded into a 30,000 barrel fixed roof storage tank and then loaded via a bulk loading rack to tank trucks for distribution.

The facility handles up to 200 million gallons per year of food grade and non-food grade denatured ethanol. Food grade denatured ethanol is transloaded from railcars into tanker trucks using a mobile transloader and taken offsite. Non-food grade denatured ethanol is unloaded into a 20,000 barrel internal floating roof tank and then loaded via a bulk loading rack to tank trucks for distribution. For operational flexibility, the facility is permitted to use the internal floating roof storage tank for storing diesel, if required. A mobile transloader is used to transfer up to 1.5 million gallons per year of isobutanol from railcars to tanker trucks that contain gasoline. The blended product is taken off-site.

All vapors from loading of denatured ethanol and blending the isobutanol with the gasoline at the terminal is routed to the vapor combustion unit (air assisted flare) currently located at the facility.

The facility may operate 24 hours per day, 365 days per year.

III. LEARNING SITE EVALUATION

This permit renewal will not result in any increase in emissions as there are no changes to any equipment. Hence the facility is exempt from the learning sites evaluation.

IV. COMPLIANCE HISTORY

During this permit term there were 8 compliance certifications report reviews and 2 facility inspections conducted for this bulk terminal. There were no compliance issues for this source during this permitting period.

V. EMISSIONS

Emissions were calculated using AP-42 Chapter 5.2: Transportation and Marketing of Petroleum Liquids for loading losses; Chapter 3: Stationary Internal Combustion Sources for engines; manufacturer's guaranteed emission factors for the combustion flares. Tanks emissions are based on existing emission calculations.

The facility uses flare to control VOC emissions and has an overall control efficiency of 96.7%.

The facility has a potential-to-emit (PTE) more than the significant thresholds of VOC. The facility's controlled PTE is provided in Table 1 below:

Table 1: Potential to Emit (tpy)

Pollutant	Controlled Emissions from (latest permitting action)	Change in Emissions	Controlled Emissions
NO_X	12.61	0	12.61
PM_{10}	0.65	0	0.65
$PM_{2.5}$	0.65	0	0.65
CO	16.65	0	16.65
SO_2	0.07	0	0.07
VOC	12.81	0	12.81
HAPs	2.71	0	2.71

VI. APPLICABLE REGULATIONS

Table 2 identifies applicable regulations and verification as to why that standard applies. The table also contains a discussion of any regulations the emission unit is exempt from.

Table 2: Applicable Regulations

Unit & year	Control Device	Rule	Discussion
Denatured Ethanol Storage Tank	Internal Floating roof	40 CFR 60 Subpart Kb	New Source Performance Standards (NSPS) 40 CFR 60 Subpart Kb is applicable to denatured ethanol storage tanks.
Biodiesel Storage Tank, Transloading operations for Biodiesel, Diesel and Jet A fuel.	N/A	A.A.C. R18-2-730	These requirements for unclassified sources are applicable to biodiesel storage tank, and transloading operations for biodiesel, diesel and Jet A fuel.
Diesel-fired transloader, MFG. date: 2005	N/A	A.A.C. R18-2-719 40 CFR 63 Subpart ZZZZ	Existing stationary rotating machinery is subject to requirements under A.A.C. R18-2-719. Existing stationary RICE are also subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) requirements under 40 CFR 63 Subpart ZZZZ.
Diesel-fired transloaders, MFG. Dates: 2011 & 2018	N/A	40 CFR 60 Subpart IIII	This NSPS are applicable to this transloader IC engine manufactured April 11, 2006.
Fugitive dust sources	Water Trucks, Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2-702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	These standards are applicable to any spray painting operation.
Demolition/renovation Operations	N/A	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

VII. PREVIOUS PERMIT REVISIONS AND CONDITIONS

A. Previous Permit Revisions

Table 3 provides a description of the permit revisions made to Permit No. 63257 during the previous permit term.

Table 3: Permit Revisions to Permit No. 63257

Permit Revision No.	Permit Revision Type	Brief Description
64028	Minor Permit Revision	Addition of a 64 hp trasnloader engine and an isobutanol transloading operation. Isobutanol will be transloaded from railcars into trucks containing gasoline for mixing. The facility will transload up to 1.5 million gallons isobutanol, and vapors generated from this operation will be controlled by the flare. Requirements from 40 CFR 60, Subpart IIII for the engine. Additionally, 40 CFR 63, Subpart BBBBBB requirements were removed as this regulation is applicable to gasoline transloading and not applicable to isobutanol transloading. Facility ceased gasoline operations.
64601	Facility Change Without a Permit Revision (317 Change)	Replacement of an existing rental flare with a substantially similar, permanent flare.
83832	Minor Permit Revision	Addition of a mobile transloader engine 74 hp and a denatured food grade ethanol transloading operation. Total ethanol, both food grade and non-food grade, handled at the facility remained unchanged (200 million gallons per year).

B. Changes to Current Renewal

Table 4 addresses the changes made to the sections and conditions from Permit No. 63257:

Table 4: Previous Permit Conditions

Section No.	Determination			Comments
	Added	Revised	Deleted	
Att. "A"		X		General Provisions: Revised to represent the most recent template language
Att. "B" Section I		X		Facility Wide Requirements: Revised to represent the most recent template language
Att. "B" Section VIII			X	Requirements for mobile sources were removed because the facility is not subject to those requirements.
Att. "B" Section IX		X		Other periodic activities section was renumbered as section VIII.
Att. "C"		X		Equipment List: Revised to reflect the most recent equipment operating at the facility and to include equipment information provided.

VIII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Table 5 contains an inclusive but not an exhaustive list of the monitoring, recordkeeping and reporting requirements prescribed by the air quality permit. The table below is intended to provide insight to the public for how the Permittee is required to demonstrate compliance with the emission limits in the permit.

Table 5: Permit No. 82755

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Facility Wide Requirements			Conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources as specified in the respective sections of this permit.	Keep records of instantaneous surveys and if applicable six-minute observation of the visible emission conducted using Method 9.	Submit reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Section VII of Attachment "A."
Denatured Ethanol Storage Tank	VOCs			Keep readily accessible records showing the dimension of the storage tank and an analysis showing the capacity of the storage vessel.	Notification in writing at least 30 days prior to the filling or refilling of the storage vessel for which an inspection is required as specified in Attachment B, Section II of the permit.
Diesel Storage Tanks, transloader Unit and Loading Racks	PM	20% Opacity	A Method 9 observer is required to conduct a Monthly survey of visible emissions.		
Diesel Fired Transloader Pump	PM	40% opacity not allowed for more than consecutive	A Method 9 observer is required to conduct a	Method 9 observations.	

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Subject to NESHAP		seconds except cold starting for thje first 10 minutes	Monthly survey of visible emissions.		
	SO_2	Fuel sulfur content 0.9% by weight maximum		Fuel supplier certifications.	Report any daily period during which the sulfur content of the fuel being fired in the engine exceeds 0.8%.
Diesel Fired Transloader Engine Subject to NSPS	SO_2	Fuel sulfur content 15 ppm maximum			
Fugitive Dust	PM	40% Opacity	A Method 9 observer is required to conduct a Monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	
Abrasive Blasting	PM	20% Opacity		Record the date, duration and pollution control measures of any abrasive blasting project.	
Spray Painting	VOC	20% Opacity		Maintain records of the date, duration, quantity of paint used, any applicable	

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
		Control 96% of the overspray		SDS, and pollution control measures of any spray painting project.	
Demolition/ Renovation	Asbestos			Maintain records of all asbestos related demolition or renovation projects including the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents	

IX. ENVIRONMENTAL JUSTICE ANALYSIS

Environmental Justice (EJ) analysis for permitting is meant to ensure the public has ample opportunity to provide comment during the public notice period and that the permit is protective of human health. This is a renewal of an existing facility and EJ analysis was not conducted as there are no changes in emissions.

X. LIST OF ABBREVIATIONS

A.A.C. ..... Arizona Administrative Code
ADEQ ..... Arizona Department of Environmental Quality
CFR ..... Code of Federal Regulations
CO ..... Carbon Monoxide
EPA ..... Environmental Protection Agency
HAP ..... Hazardous Air Pollutant
hp ..... Horsepower
IC ..... Internal Combustion
NO_X ..... Nitrogen Oxides
NSPS ..... New Source Performance Standards
Pb ..... Lead
PM ..... Particulate Matter
PM10 ..... Particulate Matter less than 10 µm nominal aerodynamic diameter
PM2.5 ..... Particulate Matter less than 2.5 µm nominal aerodynamic diameter
PTE ..... Potential to Emit
SO_2 ..... Sulfur Dioxide Significant Impact Levels
TPY ..... Tons per Year
VOC ..... Volatile Organic Compound
yr ..... Year