TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT NO. 36285

I. INTRODUCTION

This Class I air quality control renewal permit is for the operation of a Municipal Solid Waste Landfill. The facility is owned by Mohave County and operated by Mesa Disposal, Inc. Permit No. 36285 is a renewal of Permit No. 1000818.

Company Information

Facility Name:	Mohave Valley Landfill
Facility Address:	2.5 miles south of Bullhead City on SR95 Fort Mohave, Mohave County, AZ 86426
Mailing Address:	3999 El Rodeo Road Fort Mohave, AZ 86426

Background

This source is a Municipal Solid Waste Landfill. No modifications have been made during the previous permit period that would affect the air emissions of the facility.

II. FACILITY DESCRIPTION

Process Description

Mohave Valley Landfill accepts household waste (including yard clippings and other green waste), white goods (void of CFCs), construction and demolition debris, tires (segregated and temporarily stored until they are shipped off-site) and wastewater treatment plant sludge (conditionally accepted).

Solid waste is generally placed in lifts ranging from 5 to 20 feet in thickness, depending on the incoming waste volume. The working face is constructed at a slope of 3 (horizontal) to 1 (vertical), or flatter, in order to maintain stability and compaction.

Hours of operation are 7AM to 5PM Monday through Friday, and Saturdays 8AM to 12PM. The landfill is operating 310 days per year.

III. EMISSIONS

Table 1, below, shows the uncontrolled emissions from the Mohave Valley Landfill.

Table 1: Uncontrolled Emissions

Pollutant	Emissions (tpy)
Non-Methane Organic Compounds (NMOC)	6.3 (Mg/yr)
Volatile Organic Compounds (VOC)	4.28
Total Hazardous Air Pollutant (HAP)	1.70
Particulate Matter less than 10 Microns (PM_{10})	13.91

A. Particulate emissions are produced by unpaved road traffic, scraper operations and operation of construction vehicles. Dust control is accomplished by use of a water truck. Using AP-42, the total controlled PM_{10} emissions from the facility is 4.22 tpy. The average annual increase of

waste disposal from 1990-2004 was 12%. Using the 12% growth rate, the expected PM_{10} emissions (with controls) from the facility at the end of the permit term will be approximately 7.44 tpy.

B. Estimates of non-methane organic compound (NMOC) emissions were calculated using the equation specified in 40 CFR §60.754(a)(1)(i). Tier 2 sampling was conducted in 2004 resulting in an NMOC generation rate of 6.3 Mg/yr. Using this NMOC generation rate and an annual growth rate of 12%, the landfill is not expected to exceed the 50 Mg/yr threshold during the current permit period. Based on 12% annual growth, the NMOC emissions at the end of the permit period will be approximately 13.2 Mg/yr.

At this point in time, Mohave Valley Landfill is well below 50 Mg/yr for NMOC. When the landfill does approach the threshold, it will implement a landfill gas collection system. It is anticipated that his system will reduce NMOC emissions to less than 2 Mg/yr.

IV. APPLICABLE REGULATIONS

The applicable regulations were identified by the agency as part of the application packet. If necessary, the source is required to list any additional regulations that may be applicable. Table 2 displays the applicable requirements for each piece of equipment under this proposed permit.

Table 2: Verification of Applicable Regulations

Unit	Date of Constr./Mod.	Control Device	Rule	Verification
MSW Landfill	Modified in 1999	Required when NMOC > 50 Mg/yr	40 CFR §60, Subpart WWW	Subpart WWW regulates emissions of landfill gas from MSW landfills
Generators	N/A	N/A	R18-2-719	This standard applies to all stationary rotating machinery
Fugitive dust sources	N/A	Water and other reasonable precautions.	Article 6 of the AAC	These standards are applicable to all fugitive dust sources.
Asbestos Handling	N/A	N/A	40 CFR §61.154 (Subpart M)	Standards for disposal of asbestos-containing waste
Mobile sources	N/A	Water Sprays/Water Truck for dust control	Article 8 of the AAC	Opacity requirements for smoke and dust for mobile sources (construction equipment, etc.).
Stratospheric Ozone	N/A	N/A	40 CFR §82, Subpart F	Requirements for control of ozone-depleting substances

V. MONITORING AND RECORDKEEPING REQUIREMENTS

Monitoring Requirements

The permit contains requirements for calculating and monitoring NMOC emissions on an annual basis, per 40 CFR §60, Subpart WWW. The Permittee is required to keep track of NMOC emissions in order to determine when and if the 50 Mg/yr threshold will be reached. When the threshold is reached, then a collection and control system is required, and additional monitoring requirements are triggered. It is anticipated that Mohave Valley Landfill will not trigger the additional requirements until 2035; however, they are included in the permit.

Landfill gas monitoring wells installed at the property boundary are sampled on a quarterly basis and measurements are taken using a portable GA-90 Gas Analyzer. In addition, measurements of gas probe pressure, ambient temperature, barometric pressure and rainfall quantities within a week prior to gas sampling are recorded.

Opacity Monitoring Requirements:

The permit specifies opacity limitations for the various emission sources found within the facility. The permit requires the source to perform bi-weekly observations of the various fugitive dust emissions plumes, and if a plume appears to exceed the opacity standard, a 6-minute Method 9 observation is to be conducted. Bi-weekly surveys are to be conducted for any stationary rotating machinery stacks, and Method 9 observations performed if opacity appears to exceed the standard.

Recordkeeping Requirements

The Permittee is to keep records of the date, time, and results of any Method 9 observation made, as well as the name of the observer who conducted the test.

Compliance Assurance Monitoring (CAM)

CAM requirements do not apply to this facility, because the facility does not currently have any kind of pollution control device, and pre-control emissions are below the major source threshold.

VI. PREVIOUS PERMIT

Permit No.	Permit Type
1000818	Title V Air Quality Permit