TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT NO. 36937

I. INTRODUCTION

This Class I air quality control renewal permit is for the operation of a Municipal Solid Waste Landfill. The facility is owned and operated by Cochise County. This is a renewal of Permit 1001041.

Company Information

Facility Name:	Cochise County Western Regional Landfill
Facility Address:	½ mile north of SR82 and 4 miles east of SR90 Cochise County, AZ
Mailing Address:	1415 West Melody Lane, Building C Bisbee, AZ 85602

Background

This source is a Municipal Solid Waste Landfill, located in Cochise County. The landfill has been in operation since July of 2000. No modifications have been made during the previous permit period that would affect the air emissions of the facility.

II. FACILITY DESCRIPTION

Process Description

The primary activities of Cochise County Western Regional Landfill are the transportation and deposition of refuse along with the excavation of cover material and soil. A defined area of the landfill is excavated and prepared to receive waste prior to acceptance of refuse. Cell construction will continue as a cut-and-fill operation, and compacted soil will be used for daily, intermediate, and final cover.

The natural decomposition of the waste materials, and to some extent the evaporation of volatile organic compounds (VOCs) in the waste materials, constitute the primary sources of emissions. The landfill gas (LFG) that is emitted from the landfill is fundamentally 50 percent methane (CH4) and 50 percent carbon dioxide (CO2), with a fraction containing non-methane organic compounds (NMOCs) and hazardous air pollutants (HAPs). Particulate matter (PM) emissions due to traffic on unpaved roads, application of a cover layer of soil, soil stockpiling, cover layer distribution, and wind erosion make up a significant amount of PM10 pollution.

The facility operates 8 hours per day, 6 days per week. The landfill is operating 312 days per year.

III. EMISSIONS

Table 1, below, shows the uncontrolled emissions from the Cochise County Western Regional Landfill

Table 1: Uncontrolled Emissions

Pollutant	Emissions (tpy)
Non-Methane Organic Compounds (NMOC)	2.43
Single Hazardous Air Pollutant (HAP)	0.97
Total Hazardous Air Pollutant (HAP)	2.31
Particulate Matter less than 10 Microns (PM_{10})	5.15

A. Particulate emissions are produced by unpaved road traffic, scraper operations and operation of construction vehicles. Dust control is accomplished by watering traffic areas with two water trucks. In addition, properly maintaining roads and reducing vehicle speeds to 15 mph help to reduce dust. The projected total controlled PM_{10} emissions from the facility is 5.15 tons per year. The average annual increase of waste disposal from 2002-2004 was 4%. Using the 4% growth rate, the expected PM_{10} emissions (with controls) from the facility at the end of the permit term will be approximately 6.27 TPY.

B. Estimates of non-methane organic compound (NMOC) emissions were calculated using the equation specified in 40 CFR §60.754(a)(1)(i). Using Tier 1 calculations, the facility has an NMOC generation rate at the beginning of the permit term of 19.4 Mg/yr. Tier 1 calculations use default values in the equation referenced above. Using this NMOC generation rate and an annual growth rate of 4%, the landfill is expected to exceed the 50 Mg/yr threshold during this permit period. Based on 4% annual growth, the NMOC emissions at the end of this permit period will be approximately 55.2 Mg/yr. If the annual calculations demonstrate that the facility will reach the 50 Mg/yr threshold, then the Permittee must either install a landfill gas collection and control system, or use Tier 2 or Tier 3 calculations with site-specific data in place of the default values.

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, below, 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	2000	Required when NMOC > 50 Mg/yr	40 CFR §60, Subpart WWW	Subpart WWW regulates emissions of landfill gas from MSW landfills
Generators	2001	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, using Tier 1 calculations, that Cochise County Western Regional Landfill will trigger the additional requirements during this permitting period; however, Subpart WWW allows the facility to use Tier 2 or Tier 3 calculations and, potentially, still avoid installation of the control system. To cover all scenarios, the collection and control system provisions are included in the permit.

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
1001041	Title V Air Quality Permit