



**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT NO. 64381
COCHISE COUNTY REGIONAL LANDFILL**

I. INTRODUCTION

This Class I air quality control renewal permit 64381 is issued to Cochise County Solid Waste Department for the continued operation of the Cochise County Western Regional Landfill. This permit supersedes Permit No. 53067

1. Company Information: Cochise County Western Regional Landfill
2. Facility Location: ½ mile north of SR82 and 4 miles east of SR90
Cochise County, AZ
3. Mailing Address: 2595 N. Sagebrush Road
Huachuca City, AZ 85616

II. ATTAINMENT CLASSIFICATION

The facility is located on an area that is classified as attainment or unclassified for all criteria pollutants.

III. PROCESS DESCRIPTION

Cochise County Western Regional Landfill has been in operation since 2000, and accepts non-hazardous waste materials including household, municipal, industrial and construction & demolition waste. A defined area of the landfill is excavated and prepared to receive waste prior to acceptance of refuse. Cell construction continues as a cut-and-fill operation, and compacted soil or approved alternate daily cover (ADC) is 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, constitutes the primary sources of emissions. The landfill gas (LFG) that is emitted from the landfill mainly consists of methane (CH₄) and carbon dioxide (CO₂), with a fraction containing non-methane organic compounds (NMOCs) and hazardous air pollutants (HAPs). Fugitive particulate matter (PM) emissions are due to traffic on unpaved roads, application of a cover layer of soil, soil stockpiling, cover layer distribution, and wind erosion.

As the current emissions of NOMCs is below 50 mega grams per year (Mg/year), the landfill is not subject to LFG collection and control system.

IV. EMISSIONS

Based on average waste acceptance rate of 75,985 tons per year, the facility-wide emissions are provided in Table 1 below. The NMOC emissions are projected for year 2022.

**Table 1: Potential Emissions**

Pollutant	Emissions (Tons per year)
PM	42.49
PM₁₀	11.48
PM_{2.5}	1.15
NO_x	0.11
CO	0.02
SO₂	0.01
VOC	7.31
HAPs	4.80
NMOCs	17.06 Megagrams/year

V. MINOR NEW SOURCE REVIEW

There are no new emission sources at the facility. Hence, minor NSR review is not triggered for the facility.

VI. APPLICABLE REGULATIONS

Table 2 displays the applicable requirements for each permitted piece of equipment along with a explanation of why the requirement is applicable.

Table 2: Verification of Applicable Regulations

Unit	Control Device	Rule	Discussion
MSW Landfill	Required when NMOC > 50 Mg/yr	40 CFR §60, Subpart WWW	40 CFR 60 Subpart WWW regulates emissions of landfill gas from MSW landfills.
Emergency Engine	N/A	A.A.C R18-2-719 40 CFR §63Subpart ZZZZ	This standard applies to all stationary rotating machinery & Reciprocating Internal Combustion Engines (RICE) located at major and area sources of HAP emissions, and installed before April 2006.
Asbestos Handling	N/A	40 CFR §61.154 Subpart M	These standards for disposal of asbestos-containing waste are applicable only if asbestos-containing waste materials are accepted.



Unit	Control Device	Rule	Discussion
Fugitive dust sources	Water Trucks Dust Suppressants	A.A.C. R18-2 Article 6	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	This standard is 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.
Mobile sources	None	A.A.C. R18-2-801	These are applicable to off-road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.

VII. PREVIOUS PERMIT CONDITIONS

Permit No. 53067 was issued on, for the continued operation of this facility. Table 3 below illustrates if a section in Permit No. 53067 was revised, kept, or deleted.

Table 3

Section No. in Permit No. 53097	Determination			Comments
	Revised	Keep	Delete	
Attachment "A"	X			General Provisions - Revised to represent most recent template language.
Attachment "B"				
Condition I.A	X			Condition I.A is revised to include Alternative Method-082 (Digital Camera Operating Technique)
Condition I.B		X		Reporting requirement for recordkeeping, monitoring activities, and maintenance activities is retained.
Section II		X		Landfill requirements for Tier1/2/3 evaluation are retained,



Section III			X	The requirements for Landfill Gas Collection and Control System are deleted as these will not be required during the term of this renewal permit. LandGEM calculations indicate that the landfill will not exceed 50 Megagram per year threshold until year 2064.
Section IV		X		The requirements for handling asbestos containing material are retained.
Section V		X		Requirement for emergency diesel engine are retained.
Section VI		X		Fugitive dust requirements are retained.
Section VII		X		Mobile Source requirements are retained.
Section VIII		X		Requirements for other periodic activities are retained.

VIII. MONITORING REQUIREMENTS

A. Landfill Gas Emissions

The Permittee is required to monitor and estimate NMOC emissions on an annual basis, per 40 CFR Part 60, Subpart WWW, to determine if and when the 50 Mg/year threshold will be reached. When the threshold is reached, then a collection and control system is required, and additional monitoring requirements are triggered. The Permittee is, then, required to apply for a significant permit revision to include the requirements for collection and control system. LandGEM (Landfill Gas Emission Model) calculations indicate that Cochise County Western Regional Landfill is not expected to reach the 50 Mg/year threshold until year 2064.

B. Emergency Engine

1. The Permittee is required to conduct a quarterly survey of visible emissions emanating from the stack of the engine, when in operation. If the opacity of the emissions observed appears to exceed the opacity limit, the observer must conduct a certified EPA Reference Method 9 observation. The Permittee is required to keep records of the survey and any EPA Reference Method 9 observations performed, including date, time, and name of the observer, and results of the survey or observation. If the observation results in an exceedance of the opacity limit, the Permittee must take corrective action and log all such actions.
2. The Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Records shall include the hours spent for emergency operation, including what classified the operation as emergency and hours spent for non-emergency operation.
3. The Permittee is required to comply with the operation and maintenance requirements (oil change, filter change and belt inspection) as specified in the permit.

C. Fugitive Dust

1. The Permittee is required to keep record of the dates and types of dust control measures employed.



2. The Permittee is required to show compliance with the opacity standards by having a Method 9 certified observer perform bi-weekly survey of visible emission from fugitive dust sources in accordance with the Department-approved observation plan. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

D. Periodic Activities

1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.
2. The Permittee is required to record the date, duration, quantity of paint used, any applicable MDS, and pollution control measures of any spray painting project.
3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

E. Mobile Sources

The Permittee is required to keep records of all emission related maintenance performed on the mobile sources.

IX. COMPLIANCE HISTORY

15 inspections, including report reviews were conducted since the issuance if Permit No. 53067 and no cases were generated as a result of these inspections.

X. LIST OF ABBREVIATIONS

A.A.C	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
CFR	Code of Federal Regulations
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
EPA	Environmental Protection Agency
HAP	Hazardous Air Pollutants
LandGEM	Landfill Gas Emission Model
LFG	Landfill Gas
MG/yr	Megagram per Year
MSW	Municipal Solid Waste (Landfill)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMOC	Non Methane Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
PM _{2.5}	Particulate Matter Smaller than 2.5 Microns
PM ₁₀	Particulate Matter Smaller than 10 Microns



PM.....Particulate Matter
PTE.....Potential to Emit
SDS.....Safety Data Sheets
SO₂Sulfur Dioxide
VOCVolatile Organic Compounds