

PERMIT # 3618

TECHNICAL SUPPORT DOCUMENT

September 2006

I. GENERAL COMMENTS:

A. Company Information

1. City of Tucson, Department of Solid Waste Management, Los Reales Municipal Solid Waste Landfill

2. Physical Address:

5300 E. Los Reales Road
Tucson, AZ 85706

Mailing Address:

City of Tucson
Environmental Services
100 N. Stone Avenue, 2nd Floor
Tucson, AZ 85701

B. Background

Due to a material mistake, Pima County Department Of Environmental Quality (PDEQ) reopened the permit on March 13, 2006 to include an applicable requirement which was not included during the last permit renewal process that ended in 2003. The regulation that was not included was the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills – Subpart AAAA.

C. Attainment Classification

The source is in an area that is in attainment for all pollutants.

II. SOURCE DESCRIPTION

A. Process Description

Los Reales Landfill is a Municipal Solid Waste (MSW) landfill serving the City OF Tucson and part of Pima County. The landfill footprint currently includes 220 acres. The current landfill gas collection and control system consists of an extraction wellfield, a blower/ flare station, and a compressor station. The primary control system is the off-site Tucson Electric Power – Irvington Generation Station (TEP-IGS) at which landfill gas is used as a supplementary fuel for burners that heat the Unit No. 4 boiler. The secondary control system is a John Zink Company candle flare located at Los Reales Landfill which is used when landfill gas cannot be delivered to TEP. The candle flare meets the requirements of 40 CFR Part 60.752(b)(2)(iii)(A).

B. Air Pollution Control Devices

COT – Los Reales Landfill transports the landfill gas to TEP as the primary control system. A secondary control system is the John Zink candle flare which has been rated to achieve a 98% destruction efficiency for non-methane organic compounds (NMOCs).

III. REGULATORY HISTORY

The source has been permitted since 1980.

A. Testing & Inspections

Inspections have taken place regularly and the Permittee is currently in compliance.

B. Excess Emissions There have been no reports of excess emissions by the Permittee.

IV. EMISSIONS ESTIMATES

There are no emission estimates with this revision. This is a reopening to revise the permit and include an applicable requirement that the Control Officer did not include in the last renewal process.

V. APPLICABLE REQUIREMENTS

The applicable requirement to be included with this revision is:

NESHAP – 40 CFR Subpart AAAA for MSW Landfills.

In addition to the subpart above, the source is also subject to New Source Performance Standards (NSPS) Subpart WWW and Title 17 of the Pima County Code (§17.16.390). These pertinent parts of these regulations are already in the permit and the source operator has met the requirements of these parts by installing a landfill gas collection system and a flare to dispose of landfill gas when it cannot be sold to Tucson Electric Power's Irvington Road power plant. The landfill gas collection and control system equipment is owned and operated by US Energy Biogas Corporation under contract to the City of Tucson.

VI. PERMIT CONTENTS

COT – Los Reales is already subject to 40 CFR 60 Subpart WWW and the applicable regulations for MSW landfills from Subpart WWW are already in the current permit. 40 CFR 63 Subpart AAAA requires affected sources to follow the requirements in 40 CFR 60 Subpart WWW for MSW Landfills. To satisfy this requirement, the references in NESHAP subpart AAAA that refer to NSPS subpart WWW were inserted in the appropriate parts of the permit. The following are the applicable regulations in NESHAP Subpart AAAA that refer to NSPS Subpart WWW.

A. Emission Limits/ Standards:

Municipal Solid Waste Landfill Gas Collection System

II.A.1	40 CFR 63.1955(a)(1)	Compliance with 40 CFR 60 Subpart WWW
II.A.2	40 CFR 63.1955(b)	Installation of gas collection & control system

B. Compliance Provisions for the MSW landfill gas collection system:

III.A	40 CFR 63.1955(c) & 40 CFR 63.1960	Compliance Requirements to satisfy subpart AAAA
III.B, III.C & III.D	40 CFR 63.1960	Compliance Requirements to satisfy subpart AAAA
III.F	40 CFR 63.1960 & 40 CFR 63.6(e)(3)	Develop & Implement a written start-up, shutdown & malfunction (SSM) plan

C. Specifications for Active MSW landfill gas collection systems:

IV.A 40 CFR 63 1960 Compliance Requirements to satisfy subpart AAAA

D. Monitoring:

V.A 40 CFR 63 1960 Monitoring requirements for MSW landfill gas collection systems

E. Recordkeeping Requirements

VI.A 40 CFR 63 1980 Recordkeeping requirements for MSW landfill gas collection systems

VI.A.7 40 CFR 63 1960 & 40 CFR 63 1980(b) Maintain copy of SSM plan & plan reports on site

F. Reporting Requirements:

VII.A 40 CFR 63 1980 Reporting requirements for MSW landfill gas collection systems

VII.A.6.g 40 CFR 63 1980(a) Semi-annual reporting of recorded information

E. Testing Requirements:

VIII.A 40 CFR 63 1980 Testing requirements for MSW landfill gas collection systems

F. Alternate Operating Scenarios:

The applicant has not requested any alternate operating scenarios.

G. Miscellaneous Comments: None

VII. IMPACTS TO AMBIENT AIR QUALITY

Not a major source and so no studies are required.

VIII. CONTROL TECHNOLOGY DETERMINATION

No control technologies needed to be determined. This is simply an MPE system used for soil/ liquid vapor extraction.

IX. PREVIOUS PERMIT CONDITIONS

None.