TITLE V OPERATING PERMIT
STATEMENT OF BASIS

Facility Name: Sycamore Landfill, Inc.

Title V Application Number: APCD2012-APP-002330

Facility ID: APCD1989-SITE-03596

Equipment Address: 8514 Mast Blvd., Santee, CA 92071

Facility Contact: Tom Gardner
Contact Phone: (619) 449-9156

Permit Engineer: Doug Erwin
Date Completed:

1.0 Purpose/Introduction

The subject permit action is a renewal of the facility’s Title V Permit #APCD2008-PTO-971226, which contains District Permit #APCD2008-PTO-971111, covering a solid waste landfill. This statement of basis describes this non-hazardous solid waste landfill, the applicable air quality requirements, and the associated permit.

2.0 Facility Description

The facility comprises a non-hazardous solid waste landfill. As part of its landfill gas capture and control system, the facility is equipped with two (2) flares through which the captured gas is routed. Additionally, two combustion turbines are operated from landfill gas to generate electricity. These turbines are owned and permitted separately.

The following table summarizes annual emissions from this facility based on the District’s 2011 emissions inventory (EI). The District’s EI estimates actual facility air emissions.

<table>
<thead>
<tr>
<th>Criteria Pollutants</th>
<th>tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>18.0</td>
</tr>
<tr>
<td>VOC</td>
<td>38.3</td>
</tr>
<tr>
<td>PM10</td>
<td>242</td>
</tr>
<tr>
<td>SO2</td>
<td>3.3</td>
</tr>
<tr>
<td>CO</td>
<td>3.5</td>
</tr>
</tbody>
</table>
3.0 Primary Regulatory Consideration(s)

Emissions of landfill gas mainly comprise methane and carbon dioxide, but also contain volatile organic compounds and toxic pollutants. Management of landfill gas generation by targeted location of wells and other design endeavors, and effective capture and control of the gas are the focus of regulations for limiting landfill gas emissions. Fugitive emissions of particulate matter occur from vehicle traffic and surface activities typical of a landfill. As mentioned above, the landfill is subject to federal requirements. These and other applicable standards are discussed in the following sections.

4.0 Background and Permit History

The Sycamore landfill has been operating under a Title V permit since approximately 2001. The NSPS at Title 40 CFR 60 Subpart WWW -- Standards of Performance for Municipal Solid Waste Landfills (§§60.750 – 60.759) was promulgated in 1996 for landfill that commenced construction, reconstruction or modification on or after May 30, 1991 (i.e., new or modified sources). Sycamore landfill was an existing source at that time and remains an existing source at the time of this review, and is therefore not subject to Subpart WWW. However, District Rule 59.1 was promulgated in 1998 to apply to existing landfills. This rule applies to Sycamore LF and it cites many of the requirements from 40 CFR 60 Subpart WWW as its core requirements. The objective of Rule 59.1 appears to have been to subject existing landfills to the requirements of Subpart WWW.


The landfill is currently regulated under the above rules. These comprise the most notable limitations on air emissions of the applicable rules, and are cited accordingly in the permit.

5.0 Applicable Regulations

Landfill Rules: District Rule 59.1 and the Federal NESHAPs

As mentioned above, the landfill is subject to Rule 59.1 and thereby required to meet many of the requirements of the New Source Performance Standards (NSPS) at 40 CFR 60 Subpart WWW. The permittee has designed, installed and now operates a landfill gas collection and control system (CCS) in conformance with § 60.752(b) of Subpart WWW. The permit includes conditions pertaining to the CCS, as well as the other applicable requirements under Rule 59.1. The landfill is also subject to 40 CFR 63 Subpart AAAA – National Emission Standards for Hazardous Air Pollutants (NESHAP): Municipal Solid Waste Landfills. Compliance with this NESHAP is met in large part by complying
with the aforementioned NSPS as given in District Rule 59.1. The permit includes conditions requiring compliance with this rule.

The permittee is also subject to 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) for onsite stationary RICE with a power rating less than 50 brake horsepower. Provisions are included in the body of the Title V permit to ensure compliance with applicable requirements under this rule. Because of their size, requirements applicable to these engines are limited to periodic maintenance and record-keeping.

17 CCR Subarticle 6 (AB 32)

California’s greenhouse gas rule, as it pertains to landfills, addresses methane emissions and its provisions borrow extensively from the federal rules discussed above. This rule is commonly referred to as AB 32 – the legislative assembly bill that preceded its development. Because of the distinctions between this rule and the aforementioned federal landfill rules, conditions for Subarticle 6 are listed almost entirely separate in the operating permit, beginning at Condition 47 of the District permit. The permittee is expected to comply with this rule through the same mechanisms it complies with District Rule 59.1 (which effectively requires compliance with key sections of Subpart WWW). The most notable differences with this rule, compared to Rule 59.1 and Subpart WWW, are the tighter surface monitoring grid, and therefore the potential for more effective gas capture; and additional detail throughout the monitoring, record-keeping and reporting requirements of the rule.

District Rules

District Rules 50 (visible emissions), 53 (specific air contaminants), 59.1 (municipal solid waste landfills) and 62 (sulfur content of fuels) apply to the landfill, and conditions are included in the permit covering these rules.

Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM) applicability was considered for this review pursuant to 40 CFR Part 64. Sources that are subject to emissions standards under either Section 111 or 112 of the federal Clean Air Act (CAA) are exempted at § 64.2(b)(1)(i). As discussed above, the landfill is subject to emissions standards under both Sections 111 and 112 (NSPS and NESHAP) of the CAA. Moreover, other applicability criteria are not met at the landfill, most notably, the one pollutant for which the site is a major source (one of the CAM applicability criteria), PM10, is not controlled with an emissions reduction device to meet any applicable emissions standard pursuant to § 64.2(a)(2). On these bases, the landfill is not subject to CAM.

6.0 Permit Shield
Pursuant to District Rule 1410(p) and 40 CFR § 70.6(f), a Title V permit may include a provision stating that compliance with the conditions of the permit are deemed compliance with any applicable requirements as of the permit issuance date. The applicant did not request a permit shield and one is not included for this renewal.

7.0 Outside Review

In accordance with District Rule 1415, the District will provide notice to the public and notice to the Environmental Protection Agency - Region 9.

8.0 Conclusions / Recommendations

The applicant is expected to comply with all applicable requirements including those cited in the current District permits and those under District Rule 1401 and Title V. Therefore, the recommendation of this report is for the subject Title V permit renewal to be issued following public notice and EPA review.