

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX AIR DIVISION**

Technical Support Document  
for  
EPA's Notice of Proposed Rulemaking and Direct Final Rule  
for the  
California State Implementation Plan

South Coast Air Quality Management District, Rule 1150.1, Control of Gaseous  
Emissions from Municipal Solid Waste Landfills

Prepared by: La Weeda Ward

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**Agency:** South Coast Air Quality Management District (SCAQMD)

**Submitted Rule:** Rule 1150.1 - Control of Gaseous Emissions from Municipal Solid Waste Landfills  
Amended – April 1, 2011  
Submitted – September 27, 2011

**SIP Approved Rule:** Rule 1150.1 - Control of Gaseous Emissions from Municipal Solid Waste Landfills  
Amended - March 17, 2000  
Submitted – July 26, 2000  
EPA Approved – July 1, 2002 (67 FR 44062)

## **RULE SUMMARY**

SCAQMD Rule 1150.1, “Control of Gaseous Emissions from Municipal Solid Waste Landfills,” is an amended rule that regulates landfill gas emissions. The submitted rule applies to both active and inactive municipal solid waste (MSW) landfills and defines an active MSW landfill as one that has received solid waste on or after November 8, 1987.

The two previous versions of Rule 1150.1 (April 10, 1998 and March 10, 2000) focused on controlling non-greenhouse gas components of landfill gas, volatile organic compound (VOC) emissions, and toxic air contaminant (TAC) emissions. The intent was to reduce the contribution of these pollutants to atmospheric ozone, avoid public nuisance complaints from odorous compounds, and prevent the detriment to public health caused by such emissions.

During the last decade, increasing focus on controlling greenhouse gases (GHGs) led to the enactment by the California Legislature of Assembly Bill 32 (AB 32), the *Global Warming Solutions Act of 2006*. AB 32 requires, in part, that the California Air Resources Board (CARB) adopt discrete early action measures that were enforceable by January 1, 2010. Among these discrete early action measures is the Landfill Methane Regulation (California Code of Regulations, Title 17, Sections 95460 to 95476 ), which was adopted and effective on June 17, 2010 . Therefore, the primary purpose of the current rule revisions to SCAQMD Rule 1150.1 is to incorporate provisions to achieve equivalency with the Landfill Methane Regulation.

### Revisions to Rule 1150.1

Submitted Rule 1150.1 includes changes to the SIP-approved rule that incorporate the state requirements for controlling GHGs from landfills.

1. Section (a) incorporates revisions that modify the intent of the rule to regulate GHGs in addition to the traditional pollutants of concern (Non-Methane Organic Compounds [NMOC], VOCs, and TACs). The revisions thus extend the emission limits of the SIP-approved rule to include methane as prescribed by the Landfill Methane Regulation.
2. Section (d) incorporates revisions consistent with the Landfill Methane Regulation,

including: adding a gas collection efficiency requirement for methane of 99 percent by weight; lowering the monitoring emissions limit for landfill control systems from 50 ppmv to 25 ppmv; adding a leaking component and repair requirement for gas collection and control systems; and operating all wellheads under constant negative pressure. This section also allows limited use of non-enclosed (e.g. open flares) combustion devices.

3. Section (e) incorporates revisions pertaining to active landfill sampling and monitoring. Provisions were added to require monthly monitoring of wellheads to determine gauge pressure. Corrective actions are required for any positive wellhead gauge pressure readings. Language was also added to require quarterly leak monitoring for all components containing landfill gas under positive pressure.
4. Section (f) incorporates revisions to recordkeeping and reporting requirements. Recordkeeping provisions were added for use of non-enclosed combustion devices, waste acceptance activities, instances where solid waste material is exposed to the atmosphere, and positive wellhead gauge pressure measurements. Consistent with the Landfill Methane Regulation, provisions that require an Annual Report were also added.
5. Section (g) was revised to update the compliance schedule.
6. Section (h) was revised to reduce the surface leak threshold (measured in Total Organic Compounds) for inactive landfills without a gas collection and control system from 500 ppmv to 200 ppmv.
7. Section (i) was revised to include greater detail regarding criteria for alternate Compliance Plans.
8. Section (j) incorporate updates to the test method requirements.
9. Section (k) was revised to include a limited exemption for landfills that do not generate sufficient gas to support a gas control system.
10. Other rule revisions add definitions, improve enforceability, streamline and clarify requirements for currently installed control devices, and eliminate duplicative recordkeeping and reporting requirements.

CARB has approved the revisions to Rule 1150.1 and intends to enter into a Memorandum of Understanding with SCAQMD that approves the equivalency of the rule and allows the district to enforce the Landfill Methane Regulation.

## **RULE EVALUATION**

Rule 1150.1 was evaluated on basis of enforceability, stringency, and relaxation.

1. Enforceability - The Bluebook (*Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations*, EPA, May 25, 1988) and the Little Bluebook (*Guidance Document for*

*Correcting Common VOC & Other Rule Deficiencies*, EPA Region 9, August 21, 2001) were used to help evaluate compliance with the CAA §110(a)(2)(A) requirement for enforceability. Rule 1150.1 contains provisions that provide for clear, unambiguous and measurable testing, monitoring and recordkeeping requirements such that the rule is enforceable in practice.

2. Stringency – EPA’s *Standards of Performance for Municipal Solid Waste Landfills* (40 CFR Part 60, Subpart WWW), *Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills* (40 CFR part 60, Subpart Cc), *Federal Plan Requirements for Municipal Solid Waste Landfills* (40 CFR Part 62, Subpart GGG), and *National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills* (40 CFR Part 63, Subpart AAAA) were used to help evaluate the RACT requirements of CAA §182(b)(2). Rule 1150.1 provisions meet these standards as they pertain to applicability, testing, monitoring, reporting and recordkeeping requirements..
3. SIP Relaxation - We have evaluated this SIP revision to determine whether it would interfere with any applicable requirement concerning attainment and reasonable further progress (RFP) or any other applicable requirement of the Act (CAA §110(l)) or modify, in a nonattainment area, any SIP-approved control requirement in effect before November 15, 1990 (CAA §193). The submitted rule has more stringent limits than the current SIP-approved rule. Therefore, we propose to determine that an approval of the submittal would comply with CAA sections 110(l) and 193 because (1) the proposed SIP revision would not interfere with the on-going process for ensuring that requirements for RFP and attainment of the National Ambient Air Quality Standards are met, and (2) the submitted SIP revision is more stringent than the existing SIP requirements.

#### Net Effect on Emissions

SCAQMD projects no VOC emissions reductions from these rule revisions.

#### **RECOMMENDATION**

EPA staff recommends approval of SCAQMD Rule 1150.1 for incorporation into the California State Implementation Plan to replace the current SIP-approved version of Rule 1150.1.

#### **OTHER REFERENCES**

1. SCAQMD Rule 1150.1, Control of Gaseous Emissions from Municipal Solid Waste Landfills, amended April 1, 2011
2. Final Staff Report, *Proposed Amended Rule 1150.1 - Control of Gaseous Emissions from Municipal Solid Waste Landfills*, SCAQMD, April 2011