

## **Comment 1 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Mark

Last Name: Hunt

Email Address: mhunt@co.riverside.ca.us

Affiliation: Riverside County Waste Management Dept.

Subject: Comments Regarding Draft Proposed Regulation Order- Methane Emissions from Landfills (3/18

Comment:

May 6, 2009

Richard Boyd, Manager  
Process Evaluation Section  
California Air Resources Board  
Stationary Source Division  
1001 I Street  
PO Box 2815  
Sacramento, CA 95812

RE: Comments Regarding Draft Proposed Regulation Order - Methane Emissions from Municipal Solid Waste Landfills (3/18/09 Version)

Dear Mr. Boyd:

The Riverside County Waste Management Department (RCWMD) has been conducting methane surface emissions at fourteen MSW landfills for over twenty years under South Coast Air Quality Management District's (SCAQMD) Rule 1150.1. SCAQMD has granted RCWMD several exemptions to Rule 1150.1 based on historical data from the RCWMD's extensive surface monitoring over decades that show little to no methane surface emissions and we believe it is critical that CARB adopt the same reasonable approach. The current draft regulation order inadequately addresses landfills that have extensive historical data documenting compliance and a provision should be made that would allow historical data to be used in lieu of the 25-foot grid spacing or 25 ppm integrated surface emissions monitoring requirement.

Additionally, if this regulation were to be adopted in its current form, RCWMD would have to double its current field staff to comply with the extra monitoring and reporting created by this regulation.

This would create an undue hardship on RCWMD because, due to the state of the economy, the Riverside County Board of Supervisors currently has implemented a hiring freeze.

The RCWMD is formally providing these comments on the draft proposed regulation order for the Methane Emissions from Municipal Solid Waste Landfills (MSW) (Article 4, Subarticle 6, Sections 95460 to 95477, Title 17, California Code of Regulations, 3/18/09 Version).

Section 95468(b) Alternative Compliance Plans

Section 95468(b) currently states, "Criteria that the Executive Officer may use to evaluate alternative compliance options requests include but are not limited to:..." The RCWMD requests that this language be changed as follows to be more affirmative:

"Criteria that the Executive Officer may use will use to evaluate

alternative compliance options requests include, but are not limited to:..."

The RCWMD believes that 20 years of quarterly, semi-annual and annual historical data of 100-foot spacing for integrated as well as instantaneous surface sampling is just as good or better than one-year's worth of quarterly 25-foot spacing. If allowed, the RCWMD intends on submitting decades of historic surface sampling data in lieu of one-year worth of quarterly monitoring at 25-foot spacing for integrated and instantaneous methane surface monitoring and go straight to 100-foot spacing for methane surface monitoring.

#### Section 95470(b)(1) Reporting Requirements

The RCWMD requests that Section 95470 (b)(1) Closure notification, be stricken from the regulation order. Closure notification is already reported to the California Integrated Waste Management Board (CIWMB), Regional Water Quality Control Board (RWQCB) and SCAQMD.

#### Section 95471(b) Test Methods and Procedures, Determination of Landfill Gas Heat Input Capacity

The RCWMD has discussed this section with CARB staff member Renaldo Crooks and sent several e-mails on this topic. The section was not clear on how to measure gas heat input capacity where an existing control device is in place, e.g. flares. It appears that the last line in Section 95471 (b)(1), "Site-specific data may be substituted when available", was added to the 3/18/09 version of the regulation order to try to address this concern. However, the RCWMD requests that this last sentence be changed as follows:

"Site-specific data may can be substituted when available."

The RCWMD has communicated with Mr. Crooks regarding adding a 4th option to section 95471 "Test Methods and Procedures" (b) "Determination of Landfill Gas Heat Input Capacity" to the order. Currently, the draft proposed order lists three types of devices: (1) Landfills Without Carbon Adsorption Systems; (2) Landfills With Carbon Adsorption Systems; and (3) Landfills with Passive Venting Systems. The RCWMD currently operates ten flares and believes that this data can be determined from annual flare source test reports. The RCWMD requests that the following be added to the final regulations to allow for the heat input capacity determination for flares:

95471(b)(4) Enclosed Flare: The landfill gas heat capacity must be determined by measuring the actual total landfill gas flow rate, in standard cubic feet per minute (scfm), using a flow meter or other flow measuring device such as a standard pitot tube and methane concentration (percent by volume) using a hydrocarbon detector meeting the requirements of 95471(a). The total landfill gas flow rate must be multiplied by the methane concentration and then multiplied by the gross heating value (GHV) of methane of 1,012 Btu/scf to determine the landfill gas heat input capacity.

#### Section 95471(e) Test Methods and Procedures, Determination of Expected Gas Generation Flow Rate

Section 95471(e) states, "The expected gas generation flow rate must be determined as prescribed in the 2006 Inter Governmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, Chapter 3, which is incorporated by reference herein, using a recover rate of 75 percent." The RCWMD requests that the text be changed as follows:

The expected gas generation flow rate must be determined as prescribed in the 2006 Inter Governmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, Chapter 3, which is incorporated by reference herein, using a recover rate of 75 percent. Site-specific data can be substituted when

available.

The RCWMD believes that using the existing flare flow rate multiplied by 133% (the inverse of 75%) is a much better determination of the gas generation flow rate than using the IPCC spreadsheet that many landfill gas industry members have documented as over estimating landfill gas flow rate in semi-arid and arid environments.

Please feel free to call me or Mark Hunt of my staff at (951) 486-3200 should you have any questions or would like to discuss any of the issues in our comment letter.

Sincerely,  
Hans W. Kernkamp  
General Manager-Chief Engineer

ACMD/MH:acmd/mh

cc: Renaldo Crooks, CARB  
Daniel E. Donohoue, CARB  
Joe McCannAngela DufresneMark HuntNoah Rau

PD# 77555

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2009-05-13 14:24:46

No Duplicates.

**Comment 2 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Frank

Last Name: Caponi

Email Address: fcaconi@lacsds.org

Affiliation:

Subject: Comments Proposed Regulation to Reduce Methane Emissions From MSW Landfills - Appendix D

Comment:

Comments are contained in the attached PDF file.

Attachment: [www.arb.ca.gov/lists/landfills09/2-05\\_09\\_carb\\_staff\\_rpt\\_appendix\\_d\\_final\\_comments.pdf](http://www.arb.ca.gov/lists/landfills09/2-05_09_carb_staff_rpt_appendix_d_final_comments.pdf)

Original File Name: 05 09 CARB Staff Rpt Appendix D Final Comments.pdf

Date and Time Comment Was Submitted: 2009-05-22 11:08:11

No Duplicates.

**Comment 3 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Michael

Last Name: Black

Email Address: one4michaelg@mindspring.com

Affiliation:

Subject: landfill09

Comment:

This proposal is ridiculous. It is costly to working people and tax payers alike-with negligible enviromental benifits.

I oppose this, and urge your agency to do the same.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2009-06-08 19:17:43

No Duplicates.

**Comment 4 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Lenore

Last Name: Lamb

Email Address: llamb@palatribe.com

Affiliation:

Subject: Proposed Methane Regulation for MSW Landfills Comment Letter

Comment:

Please accept our comment letter on the Proposed Regulation to Reduce Methane Emissions from Municipal Solid Waste Landfills.

Attachment: [www.arb.ca.gov/lists/landfills09/6-new\\_methane\\_regulation\\_comment\\_leter.pdf](http://www.arb.ca.gov/lists/landfills09/6-new_methane_regulation_comment_leter.pdf)

Original File Name: New Methane Regulation Comment Leter.pdf

Date and Time Comment Was Submitted: 2009-06-12 10:25:17

No Duplicates.

**Comment 5 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Marvin

Last Name: Rose

Email Address: Non-web submitted comment

Affiliation:

Subject: City of Sunnyvale

Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/landfills09/7-marvin\\_rose.pdf](http://www.arb.ca.gov/lists/landfills09/7-marvin_rose.pdf)

Original File Name: Marvin Rose.pdf

Date and Time Comment Was Submitted: 2009-06-16 09:38:11

No Duplicates.

**Comment 6 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Nina

Last Name: Danza

Email Address: Ndanza@cosbpw.net

Affiliation: Santa Barbara County RRWMD

Subject: Comments on AB32 GHG-Landfill Emissions

Comment:

Please see attached letter for comments.

Attachment: [www.arb.ca.gov/lists/landfills09/8-finalcommentletterjune19.pdf](http://www.arb.ca.gov/lists/landfills09/8-finalcommentletterjune19.pdf)

Original File Name: FinalCommentLetterJune19.pdf

Date and Time Comment Was Submitted: 2009-06-19 07:35:28

No Duplicates.



**Comment 7 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Robert

Last Name: Smith

Email Address: Non-web submitted comment

Affiliation:

Subject: Pala Band of Mission Indians

Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/landfills09/9-robert.pdf](http://www.arb.ca.gov/lists/landfills09/9-robert.pdf)

Original File Name: Robert.pdf

Date and Time Comment Was Submitted: 2009-06-22 10:35:35

No Duplicates.

**Comment 8 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Frank  
Last Name: Caponi  
Email Address: fcaponi@lacsds.org  
Affiliation: SWICS

Subject: SWICS Comments on Landfill Methane Reduction Staff Report and Regulation  
Comment:

see attachment for comments

Attachment: [www.arb.ca.gov/lists/landfills09/10-swics\\_06\\_19\\_09\\_comments\\_staff\\_report\\_final.pdf](http://www.arb.ca.gov/lists/landfills09/10-swics_06_19_09_comments_staff_report_final.pdf)

Original File Name: SWICS\_06\_19\_09 Comments\_Staff Report\_FINAL.pdf

Date and Time Comment Was Submitted: 2009-06-22 15:05:30

No Duplicates.

**Comment 9 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Mark

Last Name: Hunt

Email Address: mhunt@co.riverside.ca.us

Affiliation: RCWMD

Subject: Comment on draft methane rules for landfills

Comment:

This is a re-submittal of a letter already posted. The previous letter which was cut and pasted on this form lost some of the nomenclature (strikeout and boldface) which made some of the text eligible. See attachment.

Attachment: [www.arb.ca.gov/lists/landfills09/11-rc\\_comments\\_carb\\_methane\\_rules\\_for\\_lf.pdf](http://www.arb.ca.gov/lists/landfills09/11-rc_comments_carb_methane_rules_for_lf.pdf)

Original File Name: RC comments CARB methane rules for LF.pdf

Date and Time Comment Was Submitted: 2009-06-24 10:05:02

No Duplicates.

**Comment 10 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Renee A.

Last Name: Voyt

Email Address: Non-web submitted comment

Affiliation:

Subject: Montauk Energy Capital

Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/landfills09/12-renne\\_voyt.pdf](http://www.arb.ca.gov/lists/landfills09/12-renne_voyt.pdf)

Original File Name: Renne Voyt.pdf

Date and Time Comment Was Submitted: 2009-06-24 10:15:48

No Duplicates.

**Comment 11 for Landfill Methane Control Measure (landfills09) - 45 Day.**

First Name: Vicky

Last Name: Gallagher

Email Address: Vicky.Gallagher@sdcounty.ca.gov

Affiliation: San Diego County, Dept of Public Works

Subject: Landfill Regulations

Comment:

Please consider the attached comments from the County of San Diego, Department of Public Works, regarding the proposed landfill regulations. Thank you.

Attachment: [www.arb.ca.gov/lists/landfills09/13-arbcomment6.24.2009.pdf](http://www.arb.ca.gov/lists/landfills09/13-arbcomment6.24.2009.pdf)

Original File Name: ARBcomment6.24.2009.pdf

Date and Time Comment Was Submitted: 2009-06-24 11:44:06

No Duplicates.

## **Comment 1 for Landfill Methane Control Measure (landfills09). (At Hearing)**

First Name: Tim

Last Name: Reed

Email Address: Non-web submitted comment

Affiliation:

Subject: Kern County Waste Management Department

Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/landfills09/14-tim\\_reed.pdf](http://www.arb.ca.gov/lists/landfills09/14-tim_reed.pdf)

Original File Name: Tim Reed.pdf

Date and Time Comment Was Submitted: 2009-06-30 09:49:42

No Duplicates.

**Comment 2 for Landfill Methane Control Measure (landfills09). (At Hearing)**

First Name: Jill

Last Name: Whynot

Email Address: Non-web submitted comment

Affiliation:

Subject: SCAQMD

Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/landfills09/15-jill\\_whynot.pdf](http://www.arb.ca.gov/lists/landfills09/15-jill_whynot.pdf)

Original File Name: Jill Whynot.pdf

Date and Time Comment Was Submitted: 2009-06-30 09:50:20

No Duplicates.

### **Comment 3 for Landfill Methane Control Measure (landfills09). (At Hearing)**

First Name: Nick

Last Name: Lapis

Email Address: Non-web submitted comment

Affiliation:

Subject: Californians Against Waste

Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/landfills09/16-nick\\_lapis.pdf](http://www.arb.ca.gov/lists/landfills09/16-nick_lapis.pdf)

Original File Name: Nick Lapis.pdf

Date and Time Comment Was Submitted: 2009-06-30 09:51:03

No Duplicates.



## **Comment 1 for Landfill Methane Control Measure (landfills09) - 15-1.**

First Name: Dale  
Last Name: Solheim  
Email Address: dsolheim@ebagroup.com  
Affiliation: EBA Engineering

Subject: Clover Flat Landfill - Landfill Gas System  
Comment:

Appendix F of the new regulations indicate that the Clover Flat Landfill located in Napa County does not have an active landfill gas system in place. A landfill gas extraction system was installed at the landfill in 2004 and includes 18 vertical extraction wells, horizontal collectors, collection system piping, and an enclosed vertical ground flare.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2009-10-20 14:38:10

No Duplicates.

**Comment 2 for Landfill Methane Control Measure (landfills09) - 15-1.**

First Name: Frank  
Last Name: Caponi  
Email Address: fcaponi@lacsds.org  
Affiliation: SWICS

Subject: SWICS Comments - Proposed 15-Day Modifications; Methane Reduction from MSW Landfills

Comment:

SWICS Comments; 15-Day Modifications

Attachment: [www.arb.ca.gov/lists/landfills09/19-swics\\_10\\_09\\_15\\_day\\_comments.pdf](http://www.arb.ca.gov/lists/landfills09/19-swics_10_09_15_day_comments.pdf)

Original File Name: SWICS\_10\_09\_15 day comments.pdf

Date and Time Comment Was Submitted: 2009-10-21 15:39:52

No Duplicates.