

February 5, 2004

**Republic Services Vasco Road**

P.O. Box 2125

Livermore, CA 94551-2125

Attention: Mr. Eric Horton, General Manager

**ALAMEDA COUNTY**

Roberta Cooper  
Scott Haggerty  
(Chairperson)  
Nate Miley  
Shelia Young

**Application Number: 2630**  
**Plant Number: A5095**  
**Equipment Location: 4001 N. Vasco Road**  
**Livermore, CA 94551**

**CONTRA COSTA COUNTY**

Mark DeSaulnier  
Mark Ross  
Gayle Uilkema  
(Secretary)

Dear Mr. Horton:

The requirement for public and EPA review of the proposed Major Facility Review (MFR) Permit for the facility identified above has been completed. No comments from EPA or the public were received.

**MARIN COUNTY**

Harold C. Brown, Jr.

The District has reviewed your July 17, 2003 comment letter and provides the following responses to your comments.

**NAPA COUNTY**

Brad Wagenknecht

Response to Comment 1

**SAN FRANCISCO COUNTY**

Willie Brown, Jr.  
Chris Daly  
Jake McGoldrick

You requested corrections to your facility and mailing addresses. These corrections have been made to the final MFR Permit.

**SAN MATEO COUNTY**

Jerry Hill  
Marland Townsend  
(Vice-Chairperson)

Response to Comment 2

You requested that the MFR Permit reflect that the tonnage limit in Condition # 818, Part 14b is based on an assumed density that may change over time and that the facility can exceed this tonnage limit without needing to modify the Title V permit.

**SANTA CLARA COUNTY**

Liz Kniss  
Patrick Kwok  
Julia Miller  
Dena Mossar

The District uses this tonnage limit along with waste placement history and other site-specific data to calculate the maximum organic emissions due to waste decomposition at the landfill. As explained in the discussion of grandfathered sources in the Statement of Basis (pages 10-13), this emission rate is necessary for future permit applications to determine whether or not a proposed alteration of the landfill will trigger preconstruction review and new source review requirements.

**SOLANO COUNTY**

John F. Silva

**SONOMA COUNTY**

Tim Smith  
Pamela Torliatt

For landfills, the permitted capacity has often been expressed in terms of volumetric air space (cubic yards), while the organic emission calculation procedures use the mass (tons) of decomposable waste. Consequently, the District must rely on assumptions about the waste density, compaction practices, cover ratio, and waste composition to convert from air space volume to mass of decomposable waste and to calculate the resulting maximum organic emissions. The District recognized that the assumed waste density and other parameters might vary. Therefore, the District stated in Part 14b that this tonnage limit is a presumptive limit. The Permit Holder will be given an opportunity to demonstrate that the higher than expected mass of waste in place was due to changes in waste density or other assumptions rather than a

Jack P. Broadbent  
EXECUTIVE  
OFFICER/APCO

horizontal or vertical expansion, which would be a New Source Review triggering event.

Regarding your statement about not needing to modify the Title V permit, the District wants to clarify that the establishment of a presumptive limit in Part 14b does not mean that you can exceed this limit without needing to modify the MFR permit. If you are approaching this limit and find through your calculations that you will exceed this limit before waste acceptance ceases, then you should submit an application to modify the limit and explain whether you believe that this change will or will not trigger New Source Review and why. If the District concurs that the change is not a modification as defined in Regulation 2-1-234, the MFR Permit will be changed and the application will not be subject to preconstruction or new source review requirements. As explained in the Statement of Basis, if you unexpectedly exceed this limit you must report the excess and then apply to have the limit changed. If the District concurs that the excess was not due to a New Source Review triggering event, then the excess of the Part 14b limit would not be considered a violation. However, failing to report the excess will be considered a violation of the MFR Permit.

The District believes that the current language in Condition # 818, Part 14b explains that this limit is a presumptive limit and adequately identifies your compliance options. Therefore, the District is not making any changes to Part 14b at this time.

#### Response to Comment 3

You requested that the MFR Permit reflect that you have requested to install 46 vertical wells.

This request for additional wells is being handled in Application # 2244 along with the review of the Design Plan for this site. Application # 2244 will also be considered an application for a modification of the MFR Permit. The MFR Permit will be revised to reflect any changes necessary to include the District's approval of an Authority to Construct for new wells or any related permit condition changes. The District expects to have a final decision on Application # 2244 shortly.

At this time, the District is not proposing any changes to the MFR Permit in response to this comment. However, the District does expect to revise the MFR Permit pursuant to Application # 2244.

#### Response to Comment 4

You indicated that the flare temperature limit in Table II-B was inconsistent with the flare temperature limit in Condition # 818, Part 5. This error has been corrected in Table II-B. Part 5 has also been revised to clarify this requirement.

#### Response to Comment 5

You requested that Condition # 818, Part 1 be reworded to make it clear that component or surface leaks that are not considered violations of Regulation 8, Rule 34 (because the leaks were discovered by the operator and repaired in compliance with the rule) would not be considered violations of Part 1. The District has revised Part 1 per your request.

### Response to Comment 6

You requested that Condition # 818, Part 7 be revised to allow the A-3 flare to burn propane as a start-up fuel in addition to landfill gas. Condition # 818, Part 7 and Table II-B have been revised to allow propane and other clean-burning fuels to be used during flare start-up periods.

### Response to Comment 7

You requested that the flare heat input limits in Condition # 818, Part 13 be revised to reflect a maximum capacity of 2600 scfm at 50% methane (new limits of 1896 MM BTU/day and 692,163 MM BTU/year).

From Permit Application # 16282, the maximum capacity of the A-3 Flare was stated to be 71 MM BTU/hour and 2600 scfm at a heat input rate of 455 BTU/scf. For a methane heat content of 1013 BTU/ft<sup>3</sup> at 60 F (993.9 BTU/scf at 70 F), a heat input rate of 455 BTU/scf is equivalent to a methane concentration of about 45.8% (not 50%). The heat input limit of 71 MM BTU/hour is equal to a landfill gas flow rate of 2381 scf at 50% methane.

The current daily and annual heat input limits are based on the maximum reported firing rate of 71 MM BTU/hour and operating times of 24 hours/day and 365 days/year. From Application # 16282, the cumulative emission increases were all based on emission factors expressed in units of pounds/MM BTU times the maximum reported firing rate (71 MM BTU/hour) and maximum operating times. Therefore, the current heat input limits are reflective of the current maximum emission limits. Increasing the daily or annual BTU limit will result in increases in emissions that would be subject to New Source Review. This type of request requires a permit application per Regulation 2-1-301.

The District is not making any changes to the MFR Permit based on this comment. Please submit a permit application, if you wish to pursue this request further.

### Response to Comment 8

This comment is about Condition # 818, Part 14a, which states:

14. The Permit Holder shall comply with the following waste acceptance and disposal limits and shall obtain the appropriate New Source Review permit, if one of the following limits is exceeded:
  - a. Total waste accepted and placed at the landfill shall not exceed 2,518 tons in any day. (Basis: Regulation 2-1-301)

You expressed concern that the terms “accepted and placed” might be inconsistent with definitions used in conjunction with your Solid Waste Facility Permit. You requested that a specific definition for “disposed” be added to the glossary.

The limit in Part 14a is intended to reflect the current maximum permitted particulate emission rate for the Vasco Road Landfill. The District will use this emission rate to determine if future proposed changes to the landfill operations will result in particulate emission increases and will therefore be subject to preconstruction review (permitting requirements including the need to obtain an Authority to Construct) and new source review requirements (BACT, Offsets, and PSD).

Active landfills have many sources of particulate emissions including: off-site vehicle travel on on-site roadways (both paved and unpaved), on-site heavy equipment traffic, excavation activities, waste dumping and compaction, cover operations, wind erosion, and others. Of these activities, vehicle traffic on on-site roadways is usually the largest contributor to the landfill's total particulate emissions. Vehicle traffic emissions often account for 80% or more of the total particulate emissions.

The District understands that some types of wastes that are accepted at the site may be reused as cover material (i.e. green waste or shredded tires) or diverted to other operations (recycled materials) rather than "disposed" of in the landfill. However, the on-site vehicle traffic associated with delivering waste materials to the landfill will occur whether the material is later used as cover, recycled, or disposed of in the landfill. For the evaluation of particulate emissions, the District is more appropriately concerned with the amount of waste materials accepted at the site rather than the amount of waste disposed of at the site.

The vast majority of the particulate emissions from landfills can be correlated to the amount of solid waste accepted at the site. For instance, vehicle traffic emissions are calculated using the total miles traveled by vehicles on-site, roadway parameters, and the average vehicle fleet weight. Increasing the amount of waste accepted by the site would either require more vehicle trips (which would increase the vehicle miles traveled) or larger vehicles (which would increase the fleet weight). Increasing either the miles traveled or the fleet weight will increase particulate emissions due to off-site vehicle traffic. Increasing the amount of solid waste accepted will also increase particulate emissions from on-site heavy equipment traffic, waste dumping and compaction, and cover operations. Since increasing the maximum amount of solid waste accepted above the current permitted level will result in particulate emission increases, this type of change in the landfill operation would be subject to preconstruction review and new source review.

Note that increasing the amount of solid waste accepted per day is not the only type of change that might increase particulate emissions and trigger new source review. For instance, increasing the length of the main roadway will increase the vehicle miles traveled and will cause particulate emissions to increase unless additional particulate control measures are implemented. As stated in the Statement of Basis (page 10), compliance with throughput limits on grandfathered sources (such as the limits in Part 14) is not a "safe harbor" for the facility. If evidence clearly shows that a grandfathered source has undergone a "modification" as defined in Regulation 2-1-234.3, the District would consider that a preconstruction review-triggering event, regardless of compliance with the throughput limit in the Title V permit.

The District is proposing revisions to Part 14a to clarify that the daily limit applies to the amount of waste accepted at the site. Since the reference to the amount of waste placed will be deleted, a definition for "disposed" is not necessary. To further clarify what is meant by "waste", the District will change this term to "solid waste" and reference the definition of solid waste in Regulation 8-34-202. As a number of other landfills have requested, the District is also adding a provision to allow a higher daily waste acceptance rate in the event of an emergency.

Since particulate emissions may also occur from the transport of materials that may not be identified as "solid waste" (because these materials will be reused rather than disposed), the District is also adding a limit on vehicle traffic at the facility. The total number of vehicles transporting incoming and outgoing waste is limited to 625 tons/day in the Solid Waste Facility Permit. This limit will be added to Part 14a and Table VII-A.

### Response to Comment 9

You stated that Vasco Road Landfill is authorized to accept soil containing more than 50 ppmw of VOC (contaminated soil as defined in Regulation 8, Rule 40). Therefore, Regulation 8, Rule 40 should be included as a source-specific applicable requirement for the landfill and the conditions should be modified accordingly.

Based on District telephone conversations with Republic Services prior to issuance of the draft MFR Permit, it was the District's understanding that this site had discontinued the acceptance of contaminated soil (soil containing more than 50 ppmw of VOC). The permit conditions and tables in the draft MFR Permit were prepared based on this understanding.

The District now understands that Republic Services may have permits from other agencies that still allow the acceptance of contaminated soil and that Republic Services is now indicating that contaminated soil acceptance has not been discontinued. However, the District feels that adding the ability to accept contaminated soil to the final MFR would constitute a substantive change to the MFR Permit, because contrary statements were made in the publicly and EPA noticed versions of the draft MFR Permit and Statement of Basis. Therefore, the District cannot make this change at this time.

In order for the District to properly handle your request to be allowed to accept contaminated soil, please submit a permit application for a Change of Conditions and a Revision of your MFR Permit. In your application package, please include detailed information about your past acceptance of contaminated soil prior to March 1, 2000 and also for the last three years. This information should include the amounts of contaminated soil accepted per day and per year, the VOC content for each soil lot accepted and the average annual VOC content for all the soil lots accepted during a year. Please specify the maximum daily and maximum annual contaminated soil acceptance rates that you would like to be permitted for and specify the maximum VOC content that you would like to be allowed to accept. Please provide the maximum soil concentrations (ppm by weight in the soil) for any volatile toxic air contaminants that might be present in the soil. The information requested above will be used to determine whether or not your request will be subject to New Source Review and whether your request will be considered a minor or significant revision of the MFR Permit. The maximum throughput rates, VOC concentrations, and toxic air contaminant concentrations in the soil will be used to establish permit conditions for this operation.

### Response to Comment 10

You requested that the District delete the annual source testing requirement for SO<sub>x</sub> at the flare from Condition # 818, Part 20 in favor of the annual landfill gas sulfur content testing in Part 21.

The District agrees that annual testing for both SO<sub>x</sub> at the flare outlet and total reduced sulfur content at the flare inlet is redundant. The District agrees to delete the SO<sub>2</sub> testing requirements from Part 20.

### Response to Comment 11

This comment concerns Condition # 818, Part 21, which is the annual landfill gas characterization test to determine concentrations of toxic air contaminants in landfill

gas. You requested that the District clarify the procedures for determining when compounds no longer need to be tested for. You also requested to reduce the testing frequency to five years or less if a formal risk assessment is provided.

During comment periods for other sites, the District has received comments from several other facilities and the public about the gas characterization testing requirement, which was similar to Part 21 as it was proposed in your draft MFR Permit. Your Part 21 will be revised to reflect the District's new standard language for landfill gas characterization tests.

The District has revised Part 21 by directly listing the compounds that should be tested for (instead of referencing AP-42 and Table 2-1-316). The list of compounds needing analysis has been shortened by eliminating compounds that are on the AP-42 list but that are not toxic air contaminants or that were predicted to have no measurable impact on the cancer risk or hazard index for the site based on AP-42 concentration data and the District's risk screen trigger levels. Rather than trying to describe in the permit condition when a compound will no longer be subject to testing, the District has eliminated this option in favor of requiring an MFR permit modification. This permit modification process will ensure that all parties who wish to review such testing changes will be notified of the proposed change in accordance with Regulation 2, Rule 6 procedures. The District is retaining the annual testing frequency, because insufficient data is available to justify less frequent testing. The District would consider a request to reduce the testing frequency after you have collected at least three years of data. Any requests to reduce testing frequency should be submitted as permit applications and will be considered significant revisions to the MFR Permit and will require a public notice.

#### Response to Comment 12

This comment concerns the recordkeeping requirements in Condition # 818, Part 22. Republic Services requested to use a written set of procedures and daily verifications that these procedures were followed to satisfy the daily record keeping requirements for watering activities (Part 22d). For part 22g, Republic Services requested that the landfill gas flow rate chart recorder be used to satisfy the daily operating time records requirement for the flare.

The District has modified Part 22d to explicitly allow the use of written watering procedures and daily verification check lists to satisfy the daily record keeping requirements for site watering activities.

Since the landfill gas flare is the only control device for the site and all collected landfill gas is monitored at the flow meter and then burned in the flare, the flow meter chart recorder should correctly indicate the flare operating times. On a monthly basis, the permit holder should summarize the operating times that were recorded by the landfill gas flow chart recorder. No changes to Part 22g were deemed necessary.

#### Response to Comment 13

For Condition # 818, Part 23, you stated that it was unclear whether the different reports could be combined into a single document. It was the District's intention that submitting one single document could satisfy all three reporting requirements, provided that all elements required by each reporting requirement are included in the document. The District is adding language to Part 23 to clarify this intention. In your transmittal letter for the document, the District recommends that you state that the

single document is being submitted to satisfy three reporting requirements and identify the citations for these three reporting requirements.

#### Response to Comments 14 and 15

Republic Services stated that the District's proposed monitoring requirements for visible emissions from the S-5 Pugmill and S-6 Ash Silo and A-6 Baghouse were too onerous. You requested a quarterly monitoring frequency instead of the proposed requirement to observe these operations for visible emissions during each ash transfer operation.

The District will clarify in Condition # 12203, Part 8 and Condition # 12204, Part 4 that the visible emission monitoring requirement applies only when ash is being transferred into the source, because this is when particulate emissions are highest. It is the District's understanding that the S-5 Pugmill, S-6 Ash Silo, and A-6 Baghouse are not currently operating and that the visible emissions monitoring frequency is no longer an issue. These sources will continue to be included in the permit until Republic Services submits a written request to remove this equipment from the District and MFR permits for this site.

#### Response to Comment 16

Republic Services requested that alternative wellhead limits be identified in permit conditions.

The District is evaluating your request for alternative wellhead limits pursuant to Application # 2244. If the District approves any alternative wellhead limits, these alternative limits and the wells these alternative limits apply to will be identified in Condition # 818. The MFR Permit for this site will be modified in accordance with the procedures in Regulation 2, Rule 6 to reflect any District approvals associated with Application # 2244.

No changes to the MFR Permit are being made at this time in response to this comment.

#### Response to Comment 17

Republic Services indicated that the Statement of Basis contained several typographical errors and requested that the facility name be correctly called Republic Services Vasco Road.

The District does not re-issue the Statement of Basis when the final permit is issued. The District has reviewed the final MFR Permit for typographical errors and has made corrections, whenever such errors were found.

#### Conclusion

The following changes have been made to the permit based on your comments and District staff comments.

- Corrected addresses and APCO name on the title page.
- Corrected the description of the A-3 Landfill Gas Flare and the minimum combustion temperature required for A-3 in Table II-B.
- Added Regulation 8, Rule 40 and 47 and 40 CFR Part 61, Subpart A to Table III.

- Deleted future effective dates for requirements that are now in effect in Tables IV-A, IV-D, VII-A, and VII-D.
- Corrected the description of Condition # 818, Part 14 and the basis for Condition # 818, Part 21 in Table IV-A.
- Deleted the older SIP versions of Regulation 8, Rules 5 and 7 in Table IV-D and Table VIII, because EPA amended the SIP in 2003 to include the most recent amendments of these rules.
- Revised Condition # 818, Parts 1, 5, 7, 14, 20, 21, 22, and 23.
- Revised Condition # 12203, Parts 5, 6, and 8.
- Revised Condition # 12204, Part 4.
- Corrected the SO<sub>2</sub> monitoring requirement for Regulation 9-1-302 in Table VII-A.
- Added the daily vehicle traffic limit and clarified the waste acceptance limits in Table VII-A.
- Clarified the monitoring requirements for the pugmill, ash silo and baghouse in Tables VII-B and VII-C.
- Corrected errors in Tables VII-E, VII-F, and VII-G concerning the federal enforceability of Regulation 9-1-304.
- Corrected the test method references for Condition # 818, Parts 20 and 21 in Table VIII.
- Deleted Method ST-19B, Total Sulfur Oxides, Integrated Sample, from Table VII because it is obsolete.

The above changes to the permit are described in detail in ~~strikeout~~ and underline format in Attachment 1. Your comment letter is included as Attachment 2.

The District has decided to issue the Major Facility Review Permit.

Enclosed is a copy of the final permit. Please note that the first monitoring report for this permit will be due on August 31, 2004, and the first compliance certification will be due on February 28, 2005.

If you have any questions regarding this permit, please call Carol S. Allen, Senior Air Quality Engineer, at (415) 749-4702.

Sincerely yours,

---

Jack P. Broadbent  
Executive Officer / APCO

Attachments:

Attachment 1: Final Revisions to MFR Permit for Site # A5095

Attachment 2: Comment Letter from Republic Services Vasco Road

Attachment 3: Final MFR Permit for Site # A5095

JPB:BFB:myl

H:\pub\_data\title\permit\issue-P\2004\04Jan\A5095\issuance.doc

# **ATTACHMENT 1**

**Final Revisions To MFR Permit for Site # A5095**

## **ATTACHMENT 2**

### **Comment Letter from Republic Services Vasco Road**

## **ATTACHMENT 3**

**Final MFR Permit for Site # A5095**

