

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
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(530)757-3650

TITLE V PERMIT STATEMENT OF BASIS

PERMIT NUMBER: F-01059-7

ENGINEER: Courtney Graham

DATE: November 30, 2010

Facility Name: Recology Hay Road
Mailing Address: 6426 Hay Road
Vacaville, CA 95687

Location: 6426 Hay Road
Vacaville, CA 95687

Responsible Official: Greg Pryor
Title: General Manager

Application Contact: Greg Pryor
Phone: 707-678-4718

I. FACILITY DESCRIPTION

Recology Hay Road (formerly Norcal Waste Systems Hay Road Landfill, Inc.) operates the Municipal Solid Waste (MSW) landfill located at 6426 Hay Road in Vacaville, CA. The current design capacity for the landfill is 35.6 million cubic yards (17.0 million megagrams).

The majority of the landfilling process consists of placing waste into active waste management cells that are covered daily with soil or chipped greenwaste. Once a cell is filled to capacity, it is covered with a final layer of soil and the waste is allowed to degrade naturally. In general, as the waste decomposes it produces landfill gases that contain large amounts of methane (CH₄) and carbon dioxide (CO₂), as well as, relatively small amounts of non-methane organic compounds (NMOC) and hazardous air pollutants (HAP's). Overtime these gases migrate upward through the waste cells and are emitted as fugitive emissions. Conservatively, this evaluation assumes that all of the NMOC emissions are volatile organic compounds (VOC's).

II. PROPOSED REVISIONS

The applicant is proposing to modify the current Title V Permit by proposing to permit an existing operation in which non-hazardous waste (digested biosolids) are received, placed into a lined holding pond, dried, and then stockpiled for use in construction of new waste cells. The applicant is not proposing to increase the design capacity of the landfill or proposing to amend the landfill gas related parameters.

This addendum to the Title V Statement of Basis reflects only the Title V Permit modifications proposed by Authority to Construct (ATC) application C-10-42. Emissions units that are not affected by the proposed changes were evaluated in the original (or any subsequent) statement of basis and will not be included here.

III. SIGNIFICANT EMISSIONS UNIT INFORMATION

Each of the sources has been constructed pursuant to issuance of an ATC in accordance with District Rules 3.1 (Exemptions) and 3.4 (New Source Review). Upon Recology complying with the requirements of ATC C-10-42, the construction permit will be implemented into Permit to Operate (PTO) P-81-10.

Identification Number: P-81-10

Equipment Description: Waste pile 9 (approximately 7 acre lined containment pond) and various drying areas, including 2 adjacent drying areas and drying on top of lined waste cells.

Control Equipment: None

IV. TITLE V APPLICABILITY

The total potential to emit (PTE) for all of the Recology equipment permitted at this location exceeds the VOC major source threshold of 25 tons per year. Therefore, Recology is subject to the requirements of District Rule 3.8 (Federal Operating Permits). The facility's emission totals are listed below in Table 1 on a per pollutant basis

Table 1 - Total Potential to Emit for Criteria Pollutants

Criteria Pollutant Emissions (tons per year)					
Emission Unit Name	VOC	CO	NO _x	SO _x	PM ₁₀
P-28-98	0.01	-	-	-	-
P-64-00	13.00	-	-	-	0.82

P-85-06(a3)	35.53	39.95	9.99	27.20	3.36
P-81-10	Neg.	-	-	-	-
P-86-06	0.01	0.03	0.14	0.01	Negligible
Total	48.55	39.98	10.13	27.21	4.18

V. APPLICABLE FEDERAL REQUIREMENTS

RULE 2.3 Ringelmann Chart

Rule Description

This rule specifies the allowable opacity limit for sources in the District.

Compliance Status

The rule applies to any fugitive emissions associated with the landfilling process. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California State Implementation Plan (SIP). The source is currently in compliance with the requirements of the rule.

Requirement

The Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the United States Bureau of Mines; or
- b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection a. of this condition. [District Rule 2.3]

Streamlined Demonstration

The requirements of the rule can be streamlined by a condition required by District Rule 3.1. The streamlining demonstration is shown below:

Streamlined Condition: The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.1]

RULE 2.5 Nuisance

Rule Description

This rule requires that sources are not a public nuisance.

Compliance Status

The rule applies to the landfilling operation. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP. The source is currently in compliance with the rule.

Permit Condition

The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property. [District Rule 2.5]

It should be noted that this permit condition is Federally enforceable because it derives from District Rule 2.5 (Nuisance) that is currently part of the California SIP. The District is taking steps to remove Rule 2.5 from the SIP. Once the U.S. EPA has taken final action to remove District Rule 2.5 from the SIP, this permit condition will become state-enforceable only.

RULE 2.17 Circumvention

Rule Description

This rule prevents sources from concealing emissions to the atmosphere.

Compliance Status

The rule is applicable to all emission units at the facility. The source is currently in compliance with the rule.

Permit Condition

The Permit Holder shall not build, erect, install or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an

emission which would otherwise constitute a violation of Division 26, Part 3 and Part 4 of the Health and Safety Code of the State of California (H&SC) or District Rules or Regulations.

RULE 3.1 General Permit Requirements

Rule Description

The purpose of this rule is to provide an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

Compliance Status

The source is currently in compliance with the rule.

Permit Conditions

No person shall build, erect, alter, or replace any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, without first obtaining an authorization to construct from the Air Pollution Control Officer (APCO) as specified in Section 401 of District Rule 3.1. [District Rule 3.1, §301.1]

No person shall operate any facility, article, machine, equipment, or other contrivance, for which an authorization to construct is required by District Rules and Regulations without first obtaining a written permit from the APCO. [District Rule 3.1, §302.1]

No person shall operate any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, without obtaining a permit from the APCO or the Hearing Board. [District Rule 3.1, §302.2]

The owner or operator of any facility, article, machine, equipment, or other contrivance for which a permit to operate is in effect shall notify the District office whenever a breakdown, malfunction, or operational upset condition exists which would tend to increase emissions of air pollutants or whenever any operating condition contrary to any provision of the permit to operate exists. Such notice shall be given to the District no later than four hours after occurrence during regular workday hours or no later than two hours of the District workday following an occurrence not during regular District workday hours. The notice shall provide the

District information as to causes and corrective action being taken, with a schedule for return to required operating conditions. [District Rule 3.1, §405.3]

The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.1]

RULE 3.4 New Source Review

Rule Description

This rule applies to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which are subject to Rule 3.1 (General Permit Requirements) and which, after construction or modification, emit or may emit any affected pollutants. This rule shall not apply to prescribed burning of forest, agriculture or range land, road construction or any other non-point source common to timber harvesting or agricultural practices. The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.

Compliance Status

The source has satisfied the provisions of NSR and the applicable requirements are contained in ATC C-10-42. The NSR requirements are shown below:

Permit Conditions

Permitted Emission Limits:

The VOC emissions from the non-hazardous liquid waste operation shall not exceed 0.1 lb/day, 1 lb/1st calendar quarter, 1 lb/2nd calendar quarter, 1 lb/3rd calendar quarter, 1 lb/4th calendar quarter, and negligible tons/calendar year. [District Rule 3.4/ C-10-42]

Permitted Process Limits:

The amount of non-hazardous liquid waste received, stored, and dried shall not exceed 1,000 tons/day, 27,000 tons/1st calendar quarter, 18,000 tons/2nd calendar quarter, 10,000 tons/3rd calendar quarter, 26,000 tons/4th calendar quarter, and 81,000 tons/year. [District Rule 3.4/ C-10-42]

Operational, Monitoring and Testing, and Record Keeping

The facility shall implement and maintain an odor control plan for prevention of nuisance odors. The plan shall be updated as necessary, or as required by the District, and any changes to the plan shall be approved by the District prior to implementation. [District Rule 3.4/C-10-42]

The Permit Holder shall maintain daily records (in tons) of the amount of non-hazardous liquid waste with odor potential received. [District Rule 3.4/C-10-42]

RULE 3.8 Federal Operating Permits

Rule Description

This rule implements the requirements of Title V of the Federal CAA as amended in 1990 for permits to operate. Title V provides for the establishment of operating permit programs for sources which emit regulated air pollutants, including attainment and non-attainment pollutants.

Compliance Status

The source is in compliance with the requirements of this rule. The source currently has one proposed change for which the District is issuing an ATC, which is being processed according to the District's Enhanced NSR guidelines in District Rule 3.4, Section 404.

The proposed permit modification is considered a minor permit modification, since the modifications do not meet the definitions of "significant permit modification" or "administrative permit amendment." Section 228 of the rule defines a "significant permit modification" as any modification to a federally enforceable condition that: is defined in Title I of the Clean Air Act; significantly changes any monitoring requirement; relaxes any reporting or recordkeeping requirement; includes a permit term or condition which allows the source to avoid applicable federal requirement; involves a case-by-case determination of any emission standard; or involves an ambient impact analysis. Section 203 of the rule defines an "administrative permit amendment" as any amendment that: corrects a typographical error; identifies a minor administrative change; requires more frequent monitoring or reporting by the permit holder; transfers ownership of an affected source; or incorporates into the Title V permit conditions of an approved "preconstruction permit." Per Section 402.4 of the rule, minor permit modifications can include changes in the permitted emissions, and/or the addition of federally applicable requirements.

In accordance with District Rule 3.8, section 409, a minor permit modification requires that the District provide written notice, proposed permit, and District Analysis to the USEPA, Air Resources Board, all interested parties and agencies, and the source within 5 working days of the proposed decision.

Upon implementation of the District ATC into a PTO, the source may submit a written request for District action to amend the Title V operating permit pursuant to District Rule 3.8, section 404.1. Since the District ATC has been processed according to enhanced NSR guidelines, upon written request by the source, the District shall incorporate the changes into the Title V permit as an administrative permit amendment pursuant to District Rule 3.8, section 412.1.

Permit Conditions

The Permit Holder shall maintain all records on site for a period of five (5) years from the date of entry and these records shall be made readily available to District personnel upon request. [District Rule 3.8, §302.6(b)/C-10-34]

Right of Entry:

The permit shall require that the source allow the entry of the District, ARB, or U.S. EPA officials for the purpose of inspection and sampling, including:

- a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
- b. Inspection and duplication of records required by the permit to operate; and
- c. Source sampling or other monitoring activities. [District Rule 3.8, §302.10]

Compliance with Permit Conditions:

The Permit Holder shall comply with all Title V permit conditions. [District Rule 3.8, §302.11a]

The permit does not convey property rights or exclusive privilege of any sort. [District Rule 3.8, §302.11b]

Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [District Rule 3.8, §302.11c]

The Permit Holder shall not use the “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition. [District Rule 3.8, §302.11d]

A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [District Rule 3.8, §302.11e]

Within a reasonable time period, the Permit Holder shall furnish any information requested by the APCO, in writing, for the purpose of determining:

- a. Compliance with the permit; or
- b. Whether or not cause exists for a permit or enforcement action. [District Rule 3.8, §302.11f]

Emergency Provisions:

Within two weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:

- a. An emergency occurred;
- b. The Permit Holder can identify the cause(s) of the emergency;
- c. The facility was being properly operated at the time of the emergency;
- d. All steps were taken to minimize the emissions resulting from the emergency; and
- e. Within two working days of the emergency event, the Permit Holder provided the District with a description of the emergency and any mitigating or corrective actions taken.

In any enforcement proceeding, the Permit Holder has the burden of proof for establishing that an emergency occurred. [District Rule 3.8, §302.12]

Severability:

If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of these conditions. [District Rule 3.8, §302.13]

Compliance Certification:

The responsible official shall submit a compliance certification to the U.S. EPA and the APCO every 12 months unless required more frequently by an applicable requirement. The twelve (12) month period will begin on January 1 of each calendar year, and will be due within thirty (30) days after the end of the reporting period, unless otherwise approved in writing by the District. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [District Rule 3.8, §302.14a]

The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of Rule 3.8. [District Rule 3.8, §302.14b]

The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [District Rule 3.8, §302.14c]

The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal CAA. [District Rule 3.8, §302.14d]

Permit Life:

The Title V permit shall expire five years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [District Rule 3.8, §302.15]

Payment of Fees:

An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [District Rule 3.8, §302.16]

Permit Revision Exemption:

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit. [District Rule 3.8, §302.22]

Application Requirements:

An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than 18 months and no later than six months before the expiration date of the current permit to operate. [District Rule 3.8, §402.2]

An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall

submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [District Rule 3.8, §402.3]

An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:

- a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
- b. Proposed permit terms and conditions; and
- c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [District Rule 3.8, §402.4]

Permit Reopening for Cause:

Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:

- a. The need to correct a material mistake or inaccurate statement;
- b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;
- c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is three (3) years or greater, no later than 18 months after the promulgation of such requirement (where less than three (3) years remain in the authorized life of the permit, the APCO shall incorporate the requirements into the permit to operate upon renewal); or
- d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [District Rule 3.8, §413.1]

Monitoring, Testing and Analysis:

Additional monitoring, testing and analysis is covered under the section heading 40 CFR Part 60, Subpart WWW.

Recordkeeping:

The Permit Holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:

- a. Date, place, and time of sampling;

- b. Operating conditions at the time of sampling;
- c. Date, place, and method of analysis; and
- d. Results of the analysis. [District Rule 3.8, §302.6a]

The Permit Holder shall retain records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application. [District Rule 3.8, §302.6b]

Reporting Requirements:

Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than 10 days after detection.[District Rule 3.8, §302.7a]

A semi-annual monitoring report shall be submitted at least every six (6) consecutive calendar months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8. The six (6) month period will begin on January 1 and July 1 of each calendar year, and will be due within thirty (30) days after the end of the reporting period, unless otherwise approved in writing by the District. [District Rule 3.8, §302.7b]

All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [District Rule 3.8, §302.7c]

Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [District Rule 3.8, §302.7e]

40 CFR Part 60, Subpart A General Provisions

Rule Description

This regulation contains general provisions for affected facilities that are subject to the New Source Performance Standards (NSPS) listed in the 40 CFR Part 60. As defined in Section 60.2, an affected facility is a stationary source (or apparatus) that is subject to a standard of performance contained in 40 CFR Part 60.

Compliance Status

Since the enclosed landfill flare is not currently subject to the emission standards of Subpart WWW (60.752(b)(2)(iii)(B)), the source is not subject the requirements of Subpart A. As such, the landfill is not subject to the provision of this subpart.

Permit Condition

No permit conditions are required.

40 CFR Part 60, Subpart Cc Emission Guidelines and Compliance Times for MSW Landfills

Rule Description

This regulation contains emission guidelines and compliance times for certain designated MSW landfills in accordance with the requirements of Section 111(d) of the Federal CAA.

Compliance Status

The regulation applies to all existing MSW landfills for which construction, reconstruction, or modification was commenced before May 30, 1991. Although the Recology landfill began accepting waste in 1964, the landfill was authorized to increase its design capacity on May 17, 1996. As a result the capacity increase has made the landfill subject to the requirements of 40 CFR part 60, Subpart WWW. As such, the landfill is not subject to the provision of this subpart.

Permit Condition

The source is not subject to the requirements of the subpart. No permit conditions are required.

40 CFR Part 63, Subpart A National Emission Standards for HAPs, General Provisions

Rule Description

The subpart establishes the general provisions for major sources of HAP's.

Compliance Status

The regulation applies to any source that emits or has the potential to emit 10 tons per year or more of any single HAP, or 25 tons per year or more of any combination of HAPs. Under the proposed operations, the source's HAP emissions are not expected to exceed 10 tons of any single HAP or 25 tons of any combination of

HAPs prior to the landfill's closure in 2042. As such, the landfill is not subject to this regulation.

Permit Conditions

No permit conditions are required.

40 CFR Part 82, Subpart F Recycling and Emission Reduction

Rule Description

The purpose of the regulation is to implement the Montreal Protocol on Substances that Deplete the Ozone Layer and applies to any person that produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product.

Compliance Status

The subpart is applicable to the entire facility. The source is currently in compliance with this subpart.

Permit Condition

The Permit Holder shall comply with the applicable requirements for the handling and the disposal of the affected appliances and equipment containing ozone depleting substances, as set forth in 40 CFR Part 82, Subpart F - Recycling and Emission Reduction. [40 CFR Part 82.150/C-10-34]