

Waste Compliance and Mitigation Program Staff Report
Solid Waste Facilities Permit Modification the South Valley Organics Composting Facility
SWIS No. 43-AA-0017
February 25, 2010

Background Information, Analysis, and Findings:

This report was developed in response to the Santa Clara County Local Enforcement Agency (LEA) request for Department of Resources Recovery and Recycling (Department) concurrence on the issuance of a proposed solid waste facilities permit modification for the South Valley Organics Composting Facility, SWIS No. 43-AA-0017, located in Santa Clara County and owned and operated by Recology Pacheco Pass. A copy of the proposed permit is attached. The report contains Waste Compliance and Mitigation Program (WCMP) staff's analysis, findings, and recommendations.

The proposed permit was received on January 4, 2010. Action must be taken on this permit no later than March 5, 2010. If no action is taken by March 5, 2010, the Department will be deemed to have concurred with the issuance of the proposed revised permit.

Proposed Changes

The following changes to the permit are being proposed:

	Current Permit (2002 SWFP)	Proposed Permit
Operator/Owner Name	Norcal Waste Systems Pacheco Pass Landfill, Inc.	Recology Pacheco Pass
Permit Condition 17 (k)	All food waste containing feedstock must remain in AG-BAG vessels until pathogen reduction timelines as described in the RCSI have been achieved, unless otherwise approved by the LEA.	All food waste containing feedstock must remain in AG-BAG vessels or under the approved tarp in-vessel system, until timelines described in the RCSI have been achieved, unless otherwise approved by the LEA.
Permit Condition 17 (m)	Only green material or properly composted (8 weeks) bagged material will undergo open windrow composting.	Only green material or properly composted 8 weeks bagged, or 5 weeks of tarped, material will undergo open windrow composting.

Findings:

Staff recommends concurrence with the issuance of the proposed modified Solid Waste Facilities Permit. All of the other required submittals and findings required by Title 27, Section 21685 have been provided and made. Staff has determined that California Environmental Quality Act requirements have been met to support concurrence. The findings are summarized in the following table. The documents on which staff's findings are based have been provided to the Assistant Director with this Staff Report and are permanently maintained in the facility files maintained by the Waste Compliance and Mitigation Program.

CCR Title 27 Sections	Findings	
21685(b)(1) LEA certified complete and correct Report of Facility Information	The LEA provided the required certification in their permit submittal letter dated December 30, 2009.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
21685 (b)(2) LEA Five Year Permit Review	The LEA completed a Five Year Permit Review on April 24, 2007 and provided a copy of the Permit Review Report to the Department on May 1, 2007.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
21685(b)(3) Solid Waste Facility Permit	The LEA submitted a proposed solid waste facilities permit on January 4, 2010	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
21685 (b)(4)(A) Consistency with Public Resources Code 50001	The LEA in their permit submittal package received on January 4, 2010 provided a finding that the facility is consistent with PRC 50001 and WCMP staff in the Jurisdiction Compliance and Audit Section found the facility is identified in the Countywide Siting Element as described in their memo dated February 8, 2010.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
21685(b)(7) Operations Consistent with State Minimum Standards	WCMP staff in the Compliance, Evaluations, and Enforcement Division found that the facility was in compliance with all operating and design requirements during an inspection conducted on February 23, 2010. See compliance history below for details.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
21685(b)(8) LEA CEQA finding	The LEA provided a finding in their permit submittal package received on November 30, 2009 that the proposed permit is consistent with and supported by the existing CEQA documentation. See details below.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
21650(g)(5) Public Notice and or Meeting, Comments	The required Public Notice was posted by the LEA at the subject Facility and at the County of Santa Clara Department of Environmental Health office. No written comments were received by the LEA or WCMP staff.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable
CEQA determination to support responsible agency's findings	The Department is a responsible agency under CEQA with respect to this project, a proposed modified solid waste facilities permit. WCMP staff has determined that the CEQA record can be used to support the Assistant Director's action on the proposed modified permit. See details below.	<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable

Compliance History:

The facility was inspected by WCMP staff in the Compliance, Evaluation, and Enforcement Division on February 23, 2010. No Violations were noted.

The following violations were recorded on the LEA's inspection reports for the last 5 years:

In 2005, the LEA noted thirty three (33) violations; nine were for PRC 44014 (b), Operator Complies with Terms and Conditions of Permit; five were for section 17866, General Design Requirements; seven were for section 17867 (a) (2), Vectors/Odors/Litter/Hazards/Nuisance; one

was for section 17867 (a) (10), Physical Contamination Refuse Removed from Feedstock, Compost and Chipped & Ground Material; ten were for section 17863, Report of Composting Site Information; and 1 was for section 17869 (b), Special Occurrences.

In 2006, the LEA noted twenty four (24) violations; eight were for PRC 44014 (b), Operator Complies with Terms and Conditions of Permit; one was for PRC 44014, Significant Change; two were for section 17866, General Design Requirements; five were for section 17867 (a) (2), Vectors/Odors/Litter/Hazards/Nuisance/Noise; four were for section 17863, Report of Composting Site Information; 2 were for section 17867 (a) (8), Fire Prevention, Protection, Control; and two were for section 17863.4, Odor Impact Minimization Plan.

In 2007, the LEA noted three violation; one was for section 17867 (a) (8), Fire Prevention, Protection, Control and two were for section 17867 (a) (2), Vectors/Odors/Litter/Hazards/Nuisance.

In 2008, the LEA noted three violations; two for PRC 44014 (b), Operator Complies with Terms and Conditions of Permit and one for section 17863, Report of Composting Site Information.

No violations were noted in all of 2009 and none for the first month of 2010

The violations for compliance with the Terms and Conditions of the Permit (LEA Permit Condition 17 q.) were due to continued composting, curing and stockpiling of materials on a dirt surface that was saturated with water. Violations for not complying with the Report of Compost Site Information (RCSI) were due to material on site remaining unprocessed for longer than the specified duration on the RCSI. This was due to repeated breakdown of the facilities grinder. Litter violations because of the migration of litter off of the site. Compliance was established after a litter fence was installed. Vector issues were because of flies present in the composting areas. Nuisance and occasional odor complaints were filed with the LEA which resulted in the LEA noting violations of the Odor Impact Minimization Plan requirements. Updates to the RCSI and OIMP to include changes in design and operation for processing of all incoming materials in a timely manner, adding water to the compost, and discontinued practice of pond spraying (with efficient microbes solution). These measures resulted in better compliance.

Environmental Analysis:

State law requires compliance with the California Environmental Quality Act either through the preparation, circulation and adoption/certification of an environmental document and mitigation reporting or monitoring program, or by determining that the proposal is categorically or statutorily exempt.

The Santa Clara County Planning Department, acting as Lead Agency, has prepared a Mitigated Negative Declaration, State Clearinghouse No. 2002022005. This document was circulated for a 45-day review period from February 4, 2002 through March 5, 2002. The document was adopted by the County of Santa Clara Planning Commission on April 19, 2002. The document analyzed for the expansion and operation of the South Valley Organics Composting Facility located at 3675 Pacheco Pass Hwy., Gilroy, Santa Clara County, California.

For the proposed modifications to the current permit, an Addendum to the Mitigated Negative Declaration (see attached) was prepared by the Local Enforcement Agency, the Santa Clara County Department of Environmental Health, to review the use of a tarp system for the composting of food waste composting in addition to the Ag-Bag system. The environmental

impacts of the proposed compost tarp system were found to be less than those posed by the currently used Ag-Bag system.

Staff recommends that the Department, acting as a Responsible Agency under CEQA, utilize the environmental document prepared by the Santa Clara County Planning Department as amended by the Santa Clara County Department of Environmental Health, in that there are no grounds under CEQA for the Department to prepare a subsequent or supplemental environmental document or assume the role of the Lead Agency for its consideration of the Permit.

Local Issues:

A review from the public process indicates that environmental justice issues were not identified by the surrounding community (Census Tract 5124.02). According to the 2000 census, the population of Census Tract 744.05 indicates that the surrounding population is approximately 88.3% white, 0.6% black or African American, 7.3% Asian and 3.8% some other race. 31.1% of the total population in Census Tract 5124.02 identify themselves as Hispanic or Latino. 8% of the families in the Census Tract were below the poverty level. Staff has not identified any environmental justice issues related to this item. Staff finds the project and permit process to be consistent with Government Code Section 65040.12, as there has been fair treatment of people of all races, cultures, and incomes with respect to the proposed action being recommended above.

Public Comments:

No public comments have been received by Department or LEA staff.

Department Staff Actions:

Staff have not taken any additional actions relative to the proposed permit.

County of Santa Clara

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#43-NA-0017



USE OF A PRIOR CEQA DOCUMENT / ADDENDUM PROGRAM MITIGATED NEGATIVE DECLARATION (MND)

Pursuant to Section 15162 of the CEQA Guidelines, the County of Santa Clara has determined that the project described below is pursuant to or in furtherance of a Mitigated Negative Declaration Report which has been previously adopted and does not involve new significant impacts beyond those analyzed in the previous Mitigated Negative Declaration.

File Number	APN(s)	Date
2102-86-17-01P-01A	841-41-010 & 016	12/9/09
Project Name	Project Type	
Pacheco Pass Landfill Composting Facilities	Use Permit & ASA	
Owner	Applicant	
Recology Pacheco Pass	Recology Pacheco Pass	
Project Location		
3675 Pacheco Pass Hwy., Gilroy, California. The project site is located at the uppermost elevations of the Norcal Waste Systems Pacheco Pass Landfill, now known as Recology Pacheco Pass. The site is located in a sparsely populated area used for cattle grazing. The nearest residence is about ½ mile to the west. The site is accessed from State Highway 152, which is the same as Pacheco Pass Highway. The road leading up to the facility is an eastward extension of Bloomfield Rd. The site is 0.7 miles east of Hwy 152.		
Project Description		
The Architectural and Site Approval and Use Permit modification application previously approved was to modify the existing composting facility approved in 1997 for an increase of site acreage and to include the acceptance of food waste in addition to green and agricultural material already accepted. The project considered the nuisance factors associated with composting and concluded that food waste from curbside collection programs and certain types of agricultural waste may be composted in the open windrows only after a sufficient time in the AgBag type of in-vessel system. Part of the approved process for food composting involves the requirement to typically process and 'bag it' by the end of each operating day, or within 48 hours in the event of a breakdown. The ground food and green material had to be composted in the bag for a minimum of 8 weeks to achieve the level of composting sufficient to minimize nuisances and fly breeding. This condition was a mitigation measure and thus placed specifically into the permit. The proposed project involves the use of the Compostex® compost cover system, in place of the Ag-Bag in-vessel system for food waste for 5 weeks before the tarp can remain off instead of the 8 weeks necessary for compost to remain in the AgBag system. The testing even used high food volume feedstock and kept it under the tarp for only 4 weeks and the result was compost that could easily be considered free of putrescible waste and fit for being allowed as open style windrows. The five week under the tarp proposed gives an extra week for a safety factor. The research project to test the tarp technology is currently in use for up to 5,000 cubic yards. It will be allowed to expand immediately upon approval by the LEA and the concurrence by the CIWMB for the permit modification.		

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Background and Summary of Findings

Per the California Environmental Quality Act (CEQA) of 1970 (as amended), all development permits processed by the County Planning Office which require discretionary approval are subject to environmental review. A new Negative Declaration or EIR is not required if a previous CEQA document has been prepared and adopted or certified which adequately address all the possible environmental impacts of the proposed project and (a) no substantial changes are proposed in the project which will result in new significant environmental effects, (b) no substantial changes have occurred with respect to the circumstances under which will result in the identification of new significant impacts, or (c) no new information is available which shows that the project will have new significant impacts or mitigation measures and alternatives which were previously found to be infeasible would now in fact be feasible (CEQA Guidelines 15162).

The Department of Environmental Health as a Responsible Agency has evaluated the project described above and has determined that none of the circumstances exist which would require additional environmental review. As such the environmental impacts of the project have been adequately evaluated in the Mitigated Negative Declaration adopted by the Planning Commission on April 19, 2002 for the project entitled "Pacheco Pass Landfill Composting Facilities Expansion Project" and that no further environmental review is required under the California Environmental Quality Act. Currently, an application for another use permit modification is undergoing review for the permitting of a new Transfer/Processing Facility and Landfill Closure. This Addendum will be included in the overall project description for this project already in progress.

Consistency of Project (Environmental Impacts) with Program MND

In order to evaluate the specific environmental impacts from the proposed Tarp Technology In-Vessel System and consistency of the impacts with previously conducted analysis and MND, a technical report was prepared for this project. This report was entitled *South Valley Organics Research Composting Operation Report*, dated August 2009, prepared by Alta Environmental Services, Inc. for South Valley Organics Composting Facility. This report summarized the findings of a trial operation of the use of the tarp systems. This research operation was authorized and overseen by this department staff under Notification Tier Permitting that was issued by this Department. The research was conducted over the period from July 2008 through June 2009 and was limited to 5,000 cubic yards of active composting onsite at any one time. The timeframe allowed for this research permit is two year limit and this permit will conclude on June 30, 2010.

The proposal and summary of the new food waste composting process is described in the following provided by the operator:

"The Tarp-Type In-Vessel composting system proposed for implementation at South Valley Organics in Gilroy, CA is for use during the active composting of food material feedstock. The system uses a tarp-type vessel made from non-woven synthetic polypropylene fibers that are permeable to oxygen, carbon dioxide, and water vapor but can shed up to 100% of rain during storm events. In addition to being permeable to gas exchange, the tarp is ultraviolet light stabilized, durable, reusable, and lightweight. Feedstock materials are placed into elongated piles and covered with the tarp for approximately five (5) weeks. The tarp may be removed for turning and then placed back over the windrow until food materials are adequately composted.

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The tarp-type system has also proven to be a more sustainable process and has a smaller carbon footprint than the current Ag-Bag system. At the Recology Pacheco Pass facility, the Ag-Bag system requires the use of a diesel grinder, diesel powered bagging machine, diesel powered generator to operate the blowers and leachate collection system, and single use of the plastic bags and aeration piping. The tarp-type in-vessel system eliminates the need for the diesel powered bagging machine, diesel generator, and aeration piping and utilizes reusable tarps that can be removed and replaced during the process to optimize material moisture and porosity.

The facility recently completed a research project to evaluate the effectiveness of the tarp-type in-vessel composting system; the final results were submitted to Santa Clara County Department of Environmental Health on August 05, 2009.

The research project reviewed the functionality of the tarp-type cover to create a comparable product to what is being produced using the Ag Bag system. Monitoring and testing included compost process timeframes, temperature, metal and pathogen requirements per 14 California Code of Regulations (CCR) and a comparison of odors and vectors to the current system.

The results of the research project demonstrate that the tarp-type vessel provides excellent conditions for food material composting in terms of temperature, oxygen, and moisture. In addition, a reduction of leachate generation and vectors were observed. The reduction in odor from the tarp-type in-vessel system was also indicated by decreasing volatile fatty acids (VFAs) and through the Nasal Ranger, pH, and oxygen monitoring results. The monitoring results of the tarp-type vessel also confirmed compliance with the pathogen reduction and metal concentrations requirements (14CCR, Division 7, Chapter 3.1, Section 17868.2 & 17868.3) for the material at 4-weeks, 6-weeks, and 8-weeks.

The results of this research project indicate that the tarp-type vessel is functionally equivalent to the Ag Bag system for the food material composting operation at South Valley Organics. The research concluded that processing of food material feedstock for a minimum of 5 weeks under cover followed by a 30-day open windrow process results in a comparable compost product while minimizing nuisance conditions."

As the LEA, who inspected and observed the research operation, we concur with the above summary and conclude that the new process has considerably less impacts than the previously approved in vessel technology approved for the composting of food waste and green material. The operator does not intend to entirely remove the use of the AgBag in-vessel technology from their allowed procedures. The intent is to allow the addition of the new tarp-type technology on a larger and full time scale as the predominant technology for composting food waste. The change will also include a reduced the time in vessel under the tarps from a minimum of 8 weeks deemed necessary for the bag system to 5 weeks for the tarp system.

This change will be further processed as follows:

- *The proposed project will result in the use of this new technology to be incorporated into the Solid Waste Facility Permit by mean of the Permit Modification process. The Modified Permit will reflect*

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the change to the Enforcement Agency conditions #17k and #17m on page 4 of the permit. The proposed modified permit will be submitted to the CIWMB, Executive Director, for concurrence that the LEA has followed proper procedures in approving this change.

- *The relevant pages of the Report of Compost Site Information will be revised to reflect this change. The previously approved amendment to the RCSI dated February 2008 detailed the description of the process for the use of the tarp technology that was necessary so that the research operation could be allowed.*
- *A notice to the public will be posted as required to inform them of the changes*

Approved by:
Chris Rummel, Senior LEA

Chris Rummel
Signature

12/10/09
Date