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# Odor Impact Minimization Plan

# **ODOR IMPACT MINIMIZATION PLAN**

*for the*

***Upper Valley Disposal Service  
Organics Blending Operations  
1285 Whitehall Lane  
St. Helena, California 94574***



Submitted to:

***Napa County Planning, Building, & Environmental Services  
Local Enforcement Agency  
Napa, California***

Prepared by:



Sacramento, California

March 21, 2017

**ODOR IMPACT MINIMIZATION PLAN**  
**UVDS Compostable Materials Handling Operations**  
**1285 Whitehall Lane, St. Helena, CA 94574**

**Regulatory Authority:**

California Code of Regulations (14CCR) Title 14, Section 17863.4 requires an Odor Impact Minimization Plan (OIMP) for all compostable material handling operations and facilities.

The following OIMP is being submitted to the Napa County Planning, Building, & Environmental Services, Local Enforcement Agency for compostable materials handling operations at Upper Valley Recycling's (UVR) Organics Blending Operations, where food waste and green material may be stored and processed.

Operation's Name: Upper Valley Disposal Service's Organics Blending Operations

Location: Upper Valley Disposal Service  
1285 Whitehall Lane  
St. Helena, CA 94574

Land Owner: Upper Valley Disposal Service  
Attn.: Robert Pestoni, President  
P.O. Box 382  
St. Helena, CA 94574  
Telephone: (707) 963-7319  
Facsimile: (707) 963-7641

Operator: Upper Valley Disposal Service  
Attn.: Robert Pestoni, President  
1285 Whitehall Lane  
St. Helena, CA 94574  
Telephone: (707) 963-7319  
Facsimile: (707) 963-7641

Engineer: Evan W.R. Edgar, Professional Civil Engineer  
Edgar & Associates, Inc.  
1822 21<sup>st</sup> Street  
Sacramento, CA 95811  
Phone (916) 739-1200  
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**Facility Overview**

Upper Valley has owned and operated a composting facility at 1285 Whitehall Lane, south of St. Helena, California, since 1974 (see Figure 1A). The facility composts grape pomace that consists of pressed grapes, stems, skins, and leaves from wineries in St. Helena and unincorporated Napa County (County). Composting operations and compostable materials handling operations are currently performed on approximately 20.0 acres of the 46-plus-acre site. An expansion of the composting facility has occurred since the issuance of the new Full Solid Waste Facility Permit in July 24, 1994, and a revised Solid Waste Facility Permit in October 13, 1998. An OIMP has been on file with the UVDS Compost Facility. The UVR

Organics Blending Operations will be part of a Solid Waste Facility Permit Revision to the UVDS Compost Facility.

**Material Type:**

The UVR Organics Blending Operation will be a compostable material handling operation as part of the UVDS Compost Facility that will receive the following feedstocks:

- Grape Pomace
- Grape pomace waste-by products
- Green waste
- Co-collected residential green waste with food waste
- Wood chips
- Compost overs
- Source-separated commercial food scraps
- Pre- and post-consumer food waste
- Additives
- Amendments

**Site Operations:**

Upper Valley Recycling has been composting grape pomace at their Whitehall Lane facility since the 1970's. The CUP has been modified over the years to increase recycling and composting to answer new state laws and regulations. Wood and yard waste was added with a modification to the Use Permit in 1998.

**Section 17863.4 (b) (1) - Odor Monitoring Protocol**

Properly managed organic material stockpiles should not create significant nuisance odors. Improper management of feedstock piles (either green waste or food materials), processed green material, containerized composting, or material transfer may cause nuisance odors. The compost operator and the community must be willing to work together to monitor, evaluate, and allow time to make changes should nuisance odors be emitted and an odor complaint be received. The best way to ensure that all parties work together is to implement an odor impact minimization plan that is agreed upon between the operator and the LEA.

The closest receptors will be operations staff and management who will be onsite during operating hours to monitor the compost materials handling operation. The operation is close to several sensitive receptors. The California Department of Resources Recycling and Recovery (CalRecycle) has identified 1000 feet as the distance required for identification of receptors on site documents submitted with Full Solid Waste Facility Permit applications which will occur with the upcoming Solid Waste Facility Permit revision process. County Planning will be notifying all land owners within 1000 feet of the project during the upcoming land use process to add the organic waste blending barn.

Possible nearby receptors are predominantly some rural, farm residences, the nearest of which is about 500 feet from the proposed operations. Our analysis of prevailing wind conditions for the site indicate wind is predominantly from the west and/or southwest, neither of which should significantly impact the residences, which are located due southeast of the UVDS site.

Each day the Operator will evaluate onsite odors, especially at the site boundaries, and evaluate planned operations for the potential to release objectionable odors. If the operator detects an objectionable onsite odor, he will take the following actions:

1. Investigate and determine the likely source of the odor.
2. Determine if onsite management practices could remedy the problem and immediately take steps to remedy the situation.
3. Determine whether or not the odor is traveling beyond the site by patrolling the site perimeter and noting existing wind patterns.
4. Determine whether or not the odor event is significant enough to warrant contacting the adjacent neighbors or the LEA.

In the event of significant odors where a complaint has been filed, the protocol is for the Operator and/or the LEA to inspect the location of a received complaint. The Operator and/or LEA shall attempt to determine if an offensive odor exists. In the event that the complaint cannot be verified in this manner, the Operator will continue to perform self-monitoring and continue the best management practices (BMPs) described in his operating document. In the event an offensive odor is detected, the Operator and LEA shall discuss additional or enhanced BMPs to minimize the likelihood of future odor detection.

#### **Section 17863.4 (b) (2) - Meteorological Data**

Climatic conditions are not expected to significantly affect the compostable materials handling operations. Napa County's climate has been characterized as Mediterranean with moderate temperatures. These temperatures range from a monthly average low of 36.4F in January to a monthly average high of 89.7 F in July, reported by the Western Regional Climate Center for the period of February 1931 to December 31, 2005 at the St. Helena Station, latitude N38 30' at elevation of 220 feet mean sea level (MSL). Rainfall is seasonal; approximately 95 percent of the precipitation occurs from October through April. Snowfall is unusual at the site.

The prevailing wind direction is from the west and southwest. A weather station is being proposed to monitor air direction and relative speed.

There is potential for increased odors existing when transferring piles, grinding materials, and mixing of food waste. If necessary, materials handling and processing activities will be altered during brief periods of higher winds towards any potential receptor.

A wind sock will be added on top of the blending barn to indicate the direction of the wind. When wind exceeds 20 miles per hour in the direction of sensitive receptors, organic waste handling will be curtailed to minimize odors.

#### **Section 17863.4 (b) (3) - Complaint Response Protocol**

Complaints may be received by either the Operator or the LEA.

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- Should the LEA receive a complaint, they will notify the Operator within 24 hours during the week, and 48 hours over the weekend or holidays, and file the complaint on the attached form.
- The Operator receives and reviews the complaint.
- The LEA and/or the Operator will go to the location of the complaint to verify that the site is responsible for the odor.
- The Operator documents complaints in the site operations log.
- The Operator assesses complaint and makes recommendations to the LEA within 24 hours of receiving the complaint or 48 hours should the citizen complaint be received on a weekend or holiday.
- The Operator implements reasonable recommendations and confers with by LEA. As long as the Operator continues to implement reasonable recommendations and proceeds in good faith to improve the operations to a level that meets the recommended changes and design goals, the Operator will continue operations utilizing best management practices.
- The Operator, LEA, and complainant (if known and choosing to participate) meet within a reasonable time frame to assess the original problem and results from implementing the recommendations.
- Results and actions must be documented in the site operations log, which serves as the operation's permanent record.

**Section 17863.4 (b) (4) - Design Considerations and Procedures to Minimize Odors.**

Facility Siting: The siting of the compostable materials handling operations in rural, agricultural area of Napa County. The Organics Blending Operation will take place within an enclosed building closed and will be placed on a biofilter to minimize odors.

Proper Drainage: Standing water is a potential source of odors. The facility will be covered where rainwater will be collected on the roof top and directed around the operations where the Stormwater Pollution Prevention Plan is reviewed annually.

On-site drainage is controlled by use of drainage ditches surrounding the perimeter of the facility and directing all surface water flow toward the storm water drainage system, that is maintained to prevent sedimentation and organic loading that could potentially cause odors.

Feedstock Characteristics: Green waste and food waste will be managed to minimize odors utilizing the following procedures during the composting process:

- Load Check Program  
The workers at the facility are trained to screen incoming vehicles for presence of unacceptable wastes. All loads will be checked prior to blending of the material. Unacceptable material that does not pose an immediate threat to public health and safety and the environment will be collected at the composting facility and segregated, handled,

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and disposed of by trained personnel in accordance with applicable law and regulation. Bins shall be maintained at all times for placement of unacceptable materials. These bins shall be removed for disposal at the nearby landfill and replaced within 7 days of initial placement.

The facility personnel training programs will include instruction in methods to observe incoming loads and to check for the receipt of unacceptable materials. The key employees include the scale personnel, composting facility load check personnel, equipment operators, and the site manager.

- Food waste to be load checked, blended, and placed into composting vessels within 48 hours of receipt. Composting vessels will be removed from site within 48 hours of loading.
- Proper handling/blending to maintain proper carbon/nitrogen ratios to reduce ammonia levels; maintenance of turning schedule—by use of a compost turner—will maintain aerobic conditions.
- Proper temperature/moisture control through timely turning of windrows, monitoring of temperatures and moisture, and appropriate application of water, in accordance with Title 14 requirements for pathogen reduction and Best Management Practices for compost operations.

If at any point during the compostable materials handling process verifiable odor problems occur, identified source materials will be removed and transported to Clover Flat Landfill (CFL) active face for disposal and/or composting.

Equipment Reliability: On-site equipment is well-maintained and reliable. Minor equipment breakdowns will be managed by UVDS mechanics and typically is corrected within 24 hours. UVDS maintains an equipment maintenance shop at the facility, or at their affiliated CFL operations. Mechanics in the equipment shop will be utilized for equipment repair and maintenance. In the event of severe mechanical failure, similar processing equipment can be rented from nearby vendors. The facility maintains good relationships with nearby equipment vendors who can provide back up and temporary equipment on very short notice.

Personnel Training: Personnel assigned to the operation or facility will be adequately trained in subjects pertinent to site compostable materials handling operations and maintenance, physical contaminants and hazardous materials recognition and screening, use of mechanized equipment, environmental controls, emergency procedures and the requirements of Article 6.

Personnel will be trained in the proper use of facility equipment. Potential hazards and safety features will be stressed. No employee will be permitted to operate equipment until the employee has demonstrated that he or she is competent to operate that equipment. Annual review and training ensuring continued safe operations of the facility and compliance with regulations will be conducted.

Utility Service Interruptions:

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- Electric and Gas: critical on-site equipment is diesel-powered, or may be powered by onsite power generation (from diesel generators, as necessary) and not impacted by local power failures.
- Water: with an active onsite well producing over 25 gpm, the facility is self-sufficient in its water needs, when backup electrical generation is in use.
- Telephone: the office staff and the key employees on site utilize cellular telephones and/or radios to communicate and coordinate their daily and routine operating practices.

**Section 17863.4 (b) (5) - Operation Considerations and Procedures to Minimize Odors.**

Odor Control: Odor control measures are noted in the above description of operational activity occurring at the facility where the operation will take place within a fully enclosed building, and with storage of food waste limited to 48 hours.

Bioaerosols: A primary feedstock for the compost process is green waste. Potential adverse health effects associated with airborne fungal spores, specifically *Aspergillus fumigatus* and or *Aspergillus flavus*, have raised concerns by some Californians during the siting and operation of compost facilities. The staff of the California Integrated Waste Management Board (now CalRecycle) in cooperation with the California Department of Health Services, and Cal/EPA's Office of Environmental Health Hazard Assessment prepared a technical bulletin during 1993, and released the summary of findings in LEA Advisory No. 6 dated December 16, 1993. A properly operated compost facility should not present a health risk from *Aspergillus fumigatus*. Sound management practices include maintaining moisture, temperature and pH levels, aerating, turning and mixing. Reducing the dispersal of dust and spores is best to control exposure. The uses of water sprays or mists while turning piles, and refraining from turning on windy days will help accomplish this. The operator plans to follow the best management practices (BMP's) outlined in LEA Advisory No 6. These include:

- Maintaining the containers and curing piles in an aerobic condition through regular aeration and mixing.
- Maintaining moisture content between 45 and 60 percent.
- Maintaining adequate composting temperatures (above 55 C) throughout the pathogen reduction period (as mandated by 14 CCR §17868.3).

Operations Procedures: Composting vessels will be removed from site within 48 hours of loading. Should complaints be filed and verified, the storage times and processing activities could be modified, as noted in the above operations description.

Contingency plans for minimizing odor:

- Equipment - In the event of breakdown, the operator will continue operations with replacement of affected equipment by:
  - renting from reputable, local equipment rental companies and/or;
  - borrowing equipment from nearby Clover Flat Resource Recovery Park operations, or those of other affiliated companies in the region and/or; purchase of new equipment.
- Water - with an active onsite well, the facility is self-sufficient in its water needs.



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- Power - Critical on-site equipment is diesel-powered and not subject to local power failures. A diesel generator may be acquired for temporary power if needed. Site personnel carry mobile telephones for communication.
- Personnel – Additional personnel are available from other affiliated companies in the area.
- Biofiltration – Compost covers may be utilized on stockpiles, and will be used on composting containers, which provides an in situ biofilter.
- Tarping – Food waste feedstocks will be mixed with compost in the receiving bunker. Once processed and mixed, and prior to the materials being loaded into composting containers (within 8 hours), they may also be tarped to minimize any potential odors.

As a last resort, materials determined to be the source of excessive odors, will be removed and transported to the adjacent landfill active face for disposal or use as alternative daily cover.

**Section 17863.4 (d) – Annual Review of OIMP**

The OIMP will be reviewed annually by the operator, and revised as necessary.

A copy of this OIMP will be kept at the facility's administrative office. The OIMP will be revised within 30 days to reflect significant changes to operations that affect the OIMP, with a copy provided to the LEA, when appropriate.

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Today's date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
\_\_\_\_\_

Attachment 1 Control No. \_\_\_\_ - \_\_\_\_ - \_\_\_\_

**ODOR COMPLAINT RESPONSE LOG**

Complaint Received From: \_\_\_\_\_

Name of Complainant: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Zip code: \_\_\_\_\_

Phone number: (\_\_\_\_) \_\_\_\_\_

Facility/Operation Name: \_\_\_\_\_

SWIS# (if applicable): \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_

Facility Address: \_\_\_\_\_

City: \_\_\_\_\_ Zip code: \_\_\_\_\_

Date Complaint Received (if applicable): \_\_\_\_/\_\_\_\_/\_\_\_\_

Date(s) and Time(s) Alleged Odors Detected: \_\_\_\_/\_\_\_\_/\_\_\_\_ \_\_\_\_:\_\_\_\_AM/PM

Detected by: \_\_\_\_\_

Description of Alleged Odor(s) and/or Attachments \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of LEA Representative Contacted (if applicable) \_\_\_\_\_

Date/time LEA Notified: \_\_\_\_/\_\_\_\_/\_\_\_\_ \_\_\_\_:\_\_\_\_AM/PM

Inspection performed by LEA? \_\_\_\_\_ Other Agencies Present at Inspection? \_\_\_\_\_

\_\_\_\_\_

Inspection Resolution/Results (include date) \_\_\_\_\_

Follow-up:

To Complainant? \_\_\_\_\_

To Other Agencies? \_\_\_\_\_

Form Completed By: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Attach Copy of Complaints or Referral From Other Agencies.

## **ODOR COMPLAINT RESPONSE**

(at Composting Operations and Facilities)

To All Local Enforcement Agencies

### Purpose

This advisory presents strategies for responding to odor complaints at composting operations or facilities. It is a follow-up to LEA Advisory # 32 which focused on the jurisdiction over odor complaints by the Enforcement Agencies' (EA) and the Air Pollution Control Districts' and/or Air Quality Management District (Air District).

To summarize from Advisory # 32, the EA is lead for enforcement regarding odor complaints at composting operations and facilities. The California Environmental Protection Agency recommends an approach whereby the EAs and Air Districts develop working relationships to investigate and coordinate inspections regarding odor complaints. Any composting activities which fall outside of California Integrated Waste Management Board (CIWMB) regulatory requirements pursuant to Title 14, California Code of Regulations (14 CCR), Section 17855 et seq., are under the jurisdiction of the Air District. However, pursuant to 14 CCR, Section 18102, EAs may investigate and take enforcement actions at these activities to verify that they qualify as an excluded operation. EAs may use local nuisance and code enforcement laws, Health and Safety, Penal, or Civil Codes, or refer the odor complaint to the Air District.

### Odor Complaint Response

Odors are excessive at a composting operation or facility if they are detected at objectionable levels by the inspector at a property boundary bordered by residences or other sensitive receptors. Please consider these suggestions when developing an EA/Air District compliance and enforcement strategy for responding to complaints.

- Mutual Understanding of Jurisdictional Areas
- Complaint Referral Process
- Documentation of Odor Complaint Response Including Follow-ups
- Solving the Problem

### Mutual Understanding of Jurisdictional Areas

EAs are encouraged to prepare for their local Air District a list of all known compost operations, facilities and excluded composting activities so that the Air Districts may either refer a composting odor complaint to the EA or investigate the complaint. A list of all known composting facilities and operations shared within the EA jurisdiction will help to clarify the responsible enforcement agency.

### Complaint Referral Process

14 CCR. Section 17867 (a) (2) requires that composting facilities and operations be conducted in a manner that minimizes odor impacts.

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This section allows flexibility in determining the appropriate way of dealing with odor impacts at a compost facility or operation. If the EA has received an odor complaint and it is determined to have originated from an excluded activity, the EA should refer the complaint to the local Air District.

If the odor is determined to be derived from a composting facility or operation, the EA may elect to contact the local Air District when conducting an inspection of the site. Air Districts have knowledge of odor mitigation techniques that have proven successful. Some Air Districts may also have the ability to provide the EA with laboratory analysis of odorous air emissions.

Documentation of Odor Complaint Response Including Follow-ups

To assist in maintaining an effective enforcement program for handling odor complaints, EAs may wish to log all odor complaints and referrals received since October 16, 1995. A sample odor complaint response log is included as Attachment 1 of this advisory. EAs utilizing this log should note five unique components to the log:

- 1) Tracking of Air District odor complaint referrals, and/or a
- 2) Record of odor complaint in which the complainant contacted the EA directly,
- 3) Record of whether a multi-agency inspection was performed.
- 4) Record of inspection resolution and results.
- 5) Record of inspection follow-ups sent to the complainant and other agencies.

Solving the Problem

Working with the operator in a manner that both achieves compliance and enhances the ability of the facility or operation to process and market organic materials is key to the success of any strategy that is developed for odor complaints. The operator knows the operation and can usually identify changes which would help to reduce odor impacts. Resolution of the problem should be documented. For specific odor mitigation methods, see the selected references included as Attachment 2 of this Advisory.

Summary

Although the primary responsibility to respond to odor complaints from compost operations or facilities lies with the EA, and the responsibility of addressing odor complaints at excluded facilities lies with the Air Districts, this does not preclude either Agency from entering into working relationships to investigate complaints, analyze the source of the complaint, make determinations, and formulate coordinated compliance and enforcement strategies to ensure that performance standards are met. Strategies for enforcement include knowledge of mitigating methods and working with the operator and the local Air District. EAs are encouraged to utilize reference materials developed by industry to aid in mitigating odor problems at compost facilities.