ROGERS AVENUE TRANSFER STATION ODOR IMPACT MINIMIZATION PLAN

1 PURPOSE/CONTEXT OF THE ODOR IMPACT MINIMIZATION PLAN

This Odor Impact Minimization Plan (OIMP) is intended to provide guidance to on-site personnel in the handling, storage, and removal of compostable materials. This OIMP will be maintained on-site and revised as necessary to reflect any changes in the design or operation of this site. A copy of the revisions will be provided to the enforcement agency within 30 days of significant changes. In addition, this OIMP will be reviewed annually to determine if any revisions are necessary.

This site receives mixed municipal waste, commercial and residential waste, organic and compostable materials, non-hazardous industrial waste, and construction and demolition debris. Waste materials will be removed within 48 hours in most instances, but may remain onsite for up to 72 hours (e.g., over a holiday weekend). .

An OIMP is not required for a transfer facility. However, this OIMP has been prepared to be generally consistent with the requirements for an OIMP contained in Title 14, Section 17863.4 of the California Code of Regulations (14 CCR 17863.4).

2 ODOR MONITORING PROTOCOL

2.1 Proximity of Odor Receptors

The closest on-site receptors are site personnel and truck drivers who are working directly with the material. The closest off-site receptors are neighboring industrial and commercial businesses located immediately adjacent to the site. The facility is located in an area zoned Heavy Industrial.

2.2 Method for Assessing Odor Impacts

Each operating day, the operator evaluates on-site odors and operations for the potential release of objectionable odors. Operational best management practices will be implemented to minimize the release of objectionable odors.

However if questionable or objectionable on-site odors are detected by site personnel, facility operations personnel will implement the following protocol:

- Investigate and determine the likely source of the odor
- Determine if on-site management practices could remedy the problem and take steps to remedy the situation
- Determine whether or not the odor is traveling beyond the site by patrolling the site perimeter and noting existing wind patterns
- Determine whether or not the odor event is significant enough to warrant contacting the adjacent neighbors
- Record the event for further operational review

3 METEOROLOGICAL CONDITIONS

3.1 Wind Velocity

Climatic conditions in San Jose are not expected to significantly affect the Rogers Avenue Transfer Station operation. San Jose's climate has been characterized as warm and dry. These temperatures range from a monthly average low of 40.94° F in January to a monthly average high of 79.0° F in July, reported by the Western Regional Climate Center for the period of January 1, 1893 to July 9, 2016 at the San Jose Station, latitude N37 21', longitude 121 541, elevation 70 feet above mean sea level. Rainfall is seasonal; approximately 95 percent of the precipitation occurs from October through April.

Historical wind data indicates prevailing wind is from the north/northwest with an average wind speed of approximately 6 miles per hour. See the wind rose in Figure 1 for data from San Jose Airport, 2013. During the winter, winds from the south and southeast occur more frequently. The transfer building is fully enclosed to minimize the potential for odors to be carried off-site.

3.2 Wind Direction

See the attached wind rose (Figure 1).

4 COMPLAINT RESPONSE PROTOCOL

Complaints may be received by either the operator, the local enforcement agency (LEA) at the City of San Jose, the Bay Area Air Quality Management District (BAAQMD), or other agencies. It is expected that the majority of complaints will be received, not by the operator, but by regulatory agencies.

Should the LEA or BAAQMD receive a confirmed complaint, they will notify the operator within 24 hours. Should the operator receive a complaint, the complaint will be logged and filed on the attached form.

Initial Documented Complaints:

- The operator receives and reviews the complaint on a standard form. The operator documents complaints in the facility operations log.
- The operator assesses the complaint and makes recommendations to the LEA within 48 hours of receiving the complaint or 96 hours should the complaint be received on a weekend or holiday.
- The operator implements approved recommendations. The operator will continue operations utilizing best management practices while responding to less frequent complaints.
- The operator and complainant (if known and choosing to participate) meet within a reasonable time frame to assess the original problem and results from implementing the approved recommendations.
- Results and actions will be documented in the facility operations log, which serves as the facility's permanent record.

Response to Successive Documented Complaints:

- Should complaints continue to where up to 10 confirmed complaints are received in a 90-day period, the operator may:
  - Reduce the amount of storage time
  - Obtain additional misting equipment
  - Engage in other appropriate solutions

- During the time period of concern, the operator shall fully assess the situation and make appropriate changes in the amount of material, type of equipment, training of personnel, or method of operations.
- During the time period of concern, at least weekly, the operator will meet with the LEA and/or complainants to conduct an odor evaluation to:
  - Determine whether the odors generated by the facility are adverse to the local community by both intensity and character.
  - This interactive process would allow the facility to operate while continuing to act in good faith with the recommended improvements and practices.
- Should the operator receive two or more Violation Notices from the BAAQMD for "Public Nuisance" in any consecutive 12-month period, the operator shall implement at least one of the following control measures, as applicable, or any other reasonable control measures that the BAAQMD deems necessary and appropriate within the time period specified by the BAAQMD. If requested by the BAAQMD, the operator shall submit an application to modify the Permit to Operate and/or the permit conditions within 30 days of notification.
  - Reduce the total materials received.
  - Reduce the amount of food waste, wood waste, and greenwaste materials received.
  - Apply odor inhibitor solutions to odorous operations.
  - Install an odor abatement system such as a perimeter misting system to mitigate odors from traveling off-site.
  - Enclose odor nuisance operations in a building that is kept under negative pressure with emissions vented to an air quality control system.
  - Use chemical suppressants to control fugitive dust emissions from roadways associated with any dust nuisance operation.
  - Enclose any dust nuisance operations in a warehouse-like building

5 OPERATING PROCEDURES TO MINIMIZE ODORS

In order to minimize the development of conditions that could lead to odor problems, the organic and compostable material handling areas of the facility were designed based on the nature and quantity of materials to be received and stored, as well as the availability of drainage controls.

Odors at the facility are likely to occur during the hours of 3 am to 10 pm, when there is activity in the facility area. As a result, site personnel will assess materials upon receipt for odor generation potential. Site personnel have been trained to manage all organic and compostable material handling in a manner that minimizes the development of conditions that could lead to objectionable odors.

5.1 Aeration

Material will be aerated by equipment and personnel on the tipping floor. Rubber tired loaders will aerate material by turning and mixing with front load buckets.

5.2 Moisture Content of Materials and Moisture Management

Waste containing greater than 50 percent moisture or wastes where free liquid is present will not be accepted. Any excess moisture from waste stored on the tipping floor flows via gravity out of the waste into floor drains to the clarifier.

5.3 Material Characteristics and Quality

The incoming material consists of mixed municipal waste, residential waste, organic and compostable materials, and other materials, as defined in 14 CCR 17852. Incoming materials are checked for contaminants and prohibited material after unloading on the tipping floor.

5.4 Airborne Emission Controls

In order to reduce airborne emissions, unnecessary handling of waste will be minimized to limit dust formation. RSV will periodically use a mechanical sweeper and hand broom sweeping to clean the facility of dirt and dust, which will reduce dust propagation.

5.5 Drainage Controls

Since waste will be handled inside the transfer station building, it will not come into contact with precipitation. Moisture in the waste on the tipping floor will flow to floor drains that are piped to a clarifier. The floor drains have inserts to trap sediment and debris. Storm water on paved surfaces flows to on-site drain inlets that are equipped with filters to trap sediment, debris, trash, and oil/grease. All runoff is then routed to two coalescing plate separators for treatment.

5.6 Tipping Floor Maintenance

The tipping floor is designed to drain moisture from the waste to prevent a buildup of liquids that would produce excessive odor. In addition, the tipping floor will be cleaned daily to manage any residual liquids from the incoming material. Cleaning includes pushing material into appropriate bunkers, rinsing the floor as needed, and/or scraping the floor when appropriate.

As noted above, material will not be stored on the tipping floor for excessive periods of time. In order to limit waste holding times, material is removed from the facility on a first in first out basis. If any particularly odorous materials remain on the tipping floor at the end of the day, facility staff will close the doors to the building at the end of daily operations.

Other areas of the facility are kept clear of odorous waste.

5.7 Process/Wastewater Controls

The tipping floor is housed in an enclosed building with a sloped floor, which protects it from any precipitation or outside storm water. The interior of the building drains into a clarifier before flowing to the sanitary sewer system. All storm water from storm events is handled by the site's drainage features, which directs water to two coalescing plate separators for treatment before being discharged to the San Jose Municipal Storm Water System.

5.8 Material Handling and Storage Practices

5.8.1 Incoming Material

Waste material will be removed within 48 hours of arrival on site in most instances, but may remain onsite for up to 72 hours (e.g., over a holiday weekend).

Facility staff will inspect incoming loads to identify higher odor risk loads, and will direct the unloading of these loads such that they are not mixed with the general waste stream. Higher odor risk loads will be moved through the facility on a priority basis, and the truck/trailer dropping off that load will be cleaned prior to leaving the site for new waste collection.

5.8.2 Material Handling

After unloading, materials are checked for contaminants and prohibited items. Within 48 hours in most cases, waste material is loaded into transfer trucks by a rubber-tired loader. No processing of material occurs onsite.

If possible, loads with particularly strong odors will be transferred directly to transfer trailers and not allowed to remain in the tipping area. Once loaded in the transfer trailers, these loads will be covered with other wastes to temporarily "cap" the wastes from emitting odors. Those trailers will then be made a priority to move that load from the facility.

If any particularly odiferous materials cannot be transferred offsite on a given day, any remaining

materials will be isolated on the tipping floor and facility staff will undertake measures to minimize the odors. Such measures could include the following, as appropriate:

- An odor neutralizing spray can be sprayed directly onto the material,
- A layer of less odorous waste can be used to cover the material,
- Doors to the building can be shut at the end of daily operations.

As appropriate during storage onsite, if strong odors are observed, odiferous waste piles will be sprayed with neutralizer and then covered with less odorous materials.

5.9 Truck/Trailer Cleaning

All trucks and trailers will be enrolled in a periodic detailed cleaning process, and those that are involved in a particularly odoriferous load will be cleaned as soon as practical after that load has been emptied.

5.10 Use of Odor Neutralizers

As noted above, odor neutralizers can be used as appropriate to reduce odors within the building and transfer trailers. Historically odor masking agents have often been a source of complaints. There are many new generation odor neutralizing chemicals on the market, and some experimentation at this facility may need to be done to determine the best ones for the waste streams present at this site.

Odor Impact Minimization Plan
Recology Silicon Valley
Rogers Avenue Transfer Station 1675
Rogers Avenue, San Jose, CA 95112

Today's Date:_____/_____/_____
Control No.: / /
(year/juris./#)

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.

Figure 1. San Jose Wind Rose