

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Vic Pal)  
MEETING DATE: September 13, 2017

- ITEM:** 6D
- SUBJECT:** Monterey Mushrooms, Inc., Morgan Hill, Santa Clara County – Update of Waste Discharge Requirements and Rescission of Order Nos. 85-128 and 86-69
- CHRONOLOGY:** 1985 – Waste Discharge Requirements (WDRs) adopted  
1986 – WDRs amended
- DISCUSSION:** Monterey Mushrooms is the largest mushroom grower in North America. It operates four facilities, all in California. Its Morgan Hill facility is the only one in our Region, and its three other facilities are located within the jurisdiction of the Central Coast Regional Water Board. We have inspected the Morgan Hill facility numerous times over the last two years and have been working closely with Monterey Mushrooms, who has implemented a number of significant improvements at its facility in order to address water quality concerns. The attached Tentative Order (Appendix A) reflects those improvements and would require additional improvements and investigations to bring the Morgan Hill facility into compliance.
- The Tentative Order rescinds and supersedes the 1985 and 1986 WDRs for the facility, as well as a 2003 staff letter that authorized discharges from a stormwater outfall to Fisher Creek. Additionally, the Tentative Order includes requirements necessary for compliance with the appropriate portions of the Water Code and California Code of Regulations title 27 and requires Monterey Mushrooms to investigate and determine whether operations at its facility are contributing to elevated nitrate concentrations in groundwater in Coyote Valley. Lastly, the Tentative Order incorporates relevant specifications and requirements from State Board’s General WDRs for Composting Operations and the General Permit for Storm Water Discharges Associated with Industrial Activities.
- No comments other than editorial recommendations were received on the Tentative Order during the public comment period. We have made minor formatting and editorial changes to the Tentative Order and anticipate it will remain uncontested.
- RECOMMEN-  
DATION:** Adoption of the Tentative Order
- FILE NO.:** CIWQS Place ID 223057
- APPENDIX A:** Tentative Order

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**ORDER No. R2-2017-XXXX**

**UPDATED WASTE DISCHARGE REQUIREMENTS and  
RESCISSION OF ORDER Nos. 85-128 AND 86-69 for:**

**MONTEREY MUSHROOMS, INC.  
MORGAN HILL, SANTA CLARA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Regional Water Board), finds that:

**DISCHARGER AND LOCATION**

1. Monterey Mushrooms, Inc. (MMI), owns and operates a 71.8-acre mushroom farm (Facility) at 642 Hale Avenue, Morgan Hill. The Facility encompasses all four quadrants of the intersection between Hale Avenue and Miramonte Avenue (Figure 1 and Figure 2). The Facility is bounded on the north, south, and east by agricultural land (orchards, flower growing and pasture), and on the west by the Santa Cruz Mountains. A small, seasonal drainage channel named Fisher Creek roughly parallels the base of the mountain, flows to the northwest, and passes through the Facility (Figure 2).
2. MMI purchased the property in 1983 from Ralston-Purina and has operated the Facility to grow mushrooms since that time. The Facility is a certified grower of U.S.D.A. organic mushrooms.
3. MMI, as owner and operator of the Facility, is hereby referred to as the Discharger and is responsible for complying with the requirements of these Waste Discharge Requirements (WDRs or Order).

**PURPOSE OF ORDER UPDATE**

4. This Order rescinds and supersedes the previous WDRs for this Facility (Order Nos. 85-128 and 86-69), as well as a letter dated October 28, 2003, that authorized discharges from the stormwater outfall to Fisher Creek.
5. This Order includes requirements necessary for compliance with the appropriate portions of the California Water Code (CWC) and California Code of Regulations (CCR) title 27.
6. The Order requires the submittal of technical information pertinent to protection of water quality as specified in the Provisions, Specifications, and Prohibitions of this Order and as authorized under CWC section 13267.
7. The Order requires the Discharger to investigate and determine whether operations at this facility are contributing to elevated groundwater nitrate concentrations within the boundaries of the Coyote Valley Recharge Area.
8. This Order incorporates relevant specifications and requirements from State Water Resources Control Board (State Water Board) Order No. 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations (General Order).

9. This Order incorporates relevant specifications and requirements from State Water Board Order No. 2014-0057-DWQ, General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit).

## **REGULATORY HISTORY**

10. In 1985, the Regional Water Board adopted WDRs for the Facility in Order No. 85-128 to prohibit discharges of high concentrations of total dissolved solids (TDS) into waters of the State. The 1985 WDRs required that high-TDS water (greater than 500 mg/l) be conveyed and stored in evaporation ponds.
11. In 1986, the Regional Water Board adopted Order No. 86-69, which amended Order No. 85-128 to require the Discharger to cease the discharge of wastewater containing greater than 500 mg/l TDS to any location other than the Facility's evaporation ponds and to report to the Board the feasibility of continued operation or closure of the Facility based on a wastewater treatment assessment.
12. On August 4, 2015, the State Water Board adopted the General Order, which established general WDRs for composting operations throughout California. The General Order sets forth standards for the siting, construction, operation, and maintenance of composting facilities to protect surface water and groundwater. These standards include specifications for setbacks from surface water and water supply wells, permeability of the ground underneath composting piles, drainage, and leachate collection and containment. Composting operations covered under the General Order are classified into two tiers based on type of feedstocks, volume, and a facility's hydrogeologic conditions. Tier II allows greater volumes and higher risk feedstocks than Tier I, so requirements for Tier II are more stringent than those for Tier I. MMI's Facility must meet the requirements for a Tier II facility; accordingly, Tier II requirements have been incorporated into this Order.
13. The Regional Water Board concurred with the Findings of the Salt and Nutrient Management Plan (SNMP) for the Santa Clara Groundwater Sub-Basin in Resolution No. R2-2016-0046. The SNMP provides a long-range strategy to remediate historic nitrate pollution in, and prevent further degradation of, the Santa Clara Sub-Basin. The Discharger is required to further investigate and continue to monitor groundwater at the Facility for salts and nutrients, including nitrate.

## **FACILITY DESCRIPTION AND HISTORY**

14. **Facility Operation and History:** The Facility, which operates year-round, has been a mushroom farm since 1966. The Facility currently occupies a mixture of developed land and undeveloped open space (Figure 2). Mushrooms are grown in buildings in the Northeast Section of the Facility, while compost is produced and stored in the Northwest Section of the Facility.
15. **Report of Waste Discharge:** The Discharger submitted a Report of Waste Discharge (ROWD) on March 15, 2017. The ROWD described current practices at the Facility, including water balance management, operational management, design details of the stormwater and process water ponds, and groundwater quality.

16. **Description of Mushroom Growing Process:** Mushrooms are grown indoors in a temperature-controlled environment which does not require sunlight or artificial lighting. The compost upon that mushrooms are grown is produced at the Facility in outdoor areas. Portions of the growing and composting process performed outdoors (described below) have the potential to negatively affect both surface water and groundwater quality.
17. **Compost Production:** Compost for use as mushroom substrate is prepared in the Northwest Section of the Facility in an area known as “the Wharf” (Figure 2). Compost production uses a mixture of virgin straw, trucked in from both in-State and out-of-State suppliers, and stable bedding straw trucked in from horse racetracks. Composting is performed outside in an uncovered area. Both the composting operations and the stable bedding straw storage area are located on concrete paved areas that range in thickness from six to twelve inches (see Finding 20 below). Virgin straw is stored on bare earth at the Southwest Section of the Facility. Additives such as dehydrated poultry manure, gypsum, cotton seed meal, soybean oil, and canola meal are added to this straw mixture to create compost of the quality needed to grow mushrooms. With the exception of the soybean oil, these additives are stored in covered storage areas located at the south end of the Wharf. Recycled process water, stored in two large tanks located at the Wharf, is used to wet the compost material to start the natural composting process. At the start of composting operations, the water content of the compost is roughly 23%, and at the end of composting operations the water content is roughly 72%. It takes 20 to 25 days to prepare the compost. The Discharger’s supplier of dehydrated poultry manure prepares manure by first screening the material to remove unwanted materials such as feathers, thrash, and rice hulls and then dries the material in a rotary kiln dryer to achieve a moisture content of 16-18%, at a minimum temperature of 165°F, prior to delivery to the Facility.
18. **Compost Use:** When the compost is mature and ready for use, it is transported from the Wharf to the “Fill Line Area” in the Northeast Section of the Facility, where soybean oil is added and the resulting mixture is placed in wooden trays. The compost-filled trays are then moved into the adjacent pasteurization/spawning/case holding buildings, where the newly filled compost trays are further pasteurized for roughly six days. After pasteurization, the trays are moved into “spawn rooms” where the mushroom culture is added to the compost trays. The compost trays stay in the spawn rooms for roughly two weeks to allow time for the fungus to colonize the compost. From the spawn rooms the colonized compost trays are moved to the case holding rooms, where peat moss, agricultural lime, and other proprietary amendments are added as a layer (referred to as a “case layer”) to the top of the colonized compost. The compost provides the nutrients required for growing the mushrooms, while the case layer acts like a sponge holding the water to keep the compost moist. The compost trays are kept in the case holding rooms for roughly nine days before being moved into mushroom growing rooms located in the Northwest or Northeast sections of the Facility. The peat moss, lime, and amendments are all stored at the Northeast Section of the Facility. The peat moss is stored outside in waterproof packaging material, but otherwise uncovered, on top of wooden pallets. The soybean oil is stored outside in an 8,000-gallon tank located at the north end of the Fill Line Area, and the agricultural lime and amendments are stored in a nearby indoors area.
19. **Harvesting and Removal of Spent Compost:** In the growing rooms, mushrooms are harvested from each tray for roughly four weeks, enough time for three to four mushroom

harvests to occur. After harvesting, the compost trays are removed from the growing rooms and transported to the “Post Crop” building, located in the Northeast Section of the Facility, where both the used compost and trays are sanitized with steam for roughly a half-day. From the Post Crop building, the compost trays are returned to the Fill Line Area, where the compost is removed and the trays are filled with fresh compost to repeat the entire process. The spent compost is moved into the Spent Compost Storage Area located in the southeast corner of the Northeast Section. All activities that occur at the Fill Line Area, at the Post Crop building area, and at the Spent Compost Storage Area are located on top of concrete pavement. The Fill Line Area, the Spent Compost Storage Area, and the intervening area where compost is handled are all uncovered.

Spent compost is removed from the Facility by commercial composters, who use it as a component of their compost products that they sell. In addition, local farmers can obtain spent compost from the Facility and use it as a direct soil additive.

Picked mushrooms are washed, sorted, and packaged at the Packing Building located at the Northwest Section for distribution to retail stores for sale to the public.

20. **Compost Pad:** The compost processing area (Wharf Area) in the Northwest Section occupies roughly 4 acres, or 174,300 square feet (ft<sup>2</sup>), immediately adjacent to Fisher Creek (Figure 2). This includes 116,200 ft<sup>2</sup> of composting area, 41,600 ft<sup>2</sup> of compost additive area, and 16,500 ft<sup>2</sup> of stable bedding storage area. The entire compost processing area is located on top of curbed concrete pavement. The thickness of the concrete pavement ranges from six to twelve inches. The quality of the concrete pavement, when inspected by Water Board staff in 2016, was poor to fair, with visible cracks and fissures on the surface. Composting operations have the potential to degrade water quality with nutrients such as nitrate, salts (sodium chloride), biological pathogens, oxygen-reducing materials, sediment, and other waste constituents. Since water that is added to compost piles to maintain necessary moisture content becomes leachate after coming in contact with the compost, any runoff into Fisher Creek or percolation into the subsurface through cracked pavement is prohibited. Implementation of best practical treatment or control (BPTC) can prevent or limit degradation of water quality. Provision C.5 of this Order requires submittal of a Corrective Action Plan to assess the pad integrity, repair the existing cracks and fissures in the concrete pavement, and prevent stormwater from discharging to surface water bodies such as Fisher Creek.
21. **Spent Compost Pad:** The Spent Compost Storage Area is a roughly 10,000 square foot concrete paved area in the Northeast Section, with four-foot-tall concrete walls located at three of the four sides. All concrete is reinforced, and the paved area is 12 inches thick and was newly built in 2016.
22. **Leachate Management:** Runoff from the compost and spent compost pads, as well as from the mushroom washing area (inside the Packing Building), is managed using a dedicated process water collection system that includes trench drains, area catch basins, piping, sumps, and storage tanks. Excess process water gathered by this collection system is pumped through vibratory screens for solids removal prior to discharging to the Process Water Pond in the Northeast Section. As needed, water can be pumped from this pond back to the Wharf for use in compost generating operations.

23. **Process Water and Leachate Pond:** The Process Water Pond was constructed in 2001 and has a 4.6 million gallon holding capacity, assuming that the required two feet of freeboard is maintained. The active pond is considered a Class II waste water pond that is regulated under CCR title 27. As referenced in the ROWD, the pond is lined with a 60-millimeter-thick high density polyethylene (HDPE) liner.

To reduce the volume of water that must be managed, the Title 27 compliant pond is equipped with six evaporators with a reported combined average daily evaporation rate of 80,000 gallons. Evaporation is necessary because during major storm events the Process Water Pond has exceeded its freeboard and even overtopped its levee, discharging wastewater to the environment. As such, decreasing leachate levels in the pond is considered a BPTC strategy. Provision C.6 requires a Process Water/Leachate Management Plan to investigate other ways to reduce wastewater levels in the pond, which may include, but is not limited to, construction of an additional pond, increasing the storage capacity of the existing pond, or installing storage tanks. Water that is collected and stored in the Process Water Pond has elevated nitrate concentrations and high TDS.

24. **Stormwater Management:** Stormwater that runs off building rooftops, parking lots, and open space areas drains through a network of catch basins, sumps, and collection pipes into the Stormwater Pond located in the Northeast Section. Stormwater does not intermingle with process wastewater or leachate because the collection and conveyance systems used for each system are different.
25. **Stormwater Pond:** The unlined Stormwater Pond has a 1.3 million gallon holding capacity, assuming that two feet of freeboard is maintained. Stormwater at the Facility is managed using a dedicated stormwater collection system that pumps collected stormwater to the Stormwater Pond. The stormwater collection system and the Stormwater Pond convey and store stormwater exclusively. However, in the event of a Facility upset condition, individual area stormwater sumps can divert water to process water sumps and discharge the collected stormwater into the process water system. This BPTC provides a layer of redundancy in the protection of water quality.
26. **Stormwater Drainage:** The Stormwater Pond can be drained by pumping through a four-inch underground PVC line directly to Fisher Creek via a permitted outfall.

## **GEOLOGICAL AND HYDROGEOLOGICAL SETTING**

27. **Geology:** The Facility is located in the southern portion of the Santa Clara Valley, which is a northwest-trending structural trough, bound on the southwest by the Santa Cruz Mountains and on the northeast by the Diablo Range. The Santa Clara Valley is an alluvium-filled structural depression underlain by igneous, metamorphic, and sedimentary rocks, which range from Jurassic to Pliocene in age. Valley fill in the Morgan Hill area is composed of several hundred feet of alluvium consisting of clay, silt, sand, and gravel (Helley et al, 1979).
28. **Seismicity:** The Facility is located near and between two major, active fault systems, the San Andreas and the Calaveras faults. The San Andreas Fault is located approximately nine miles to the west and has an expected maximum credible earthquake (MCE) Richter magnitude of 8.5. It has displayed significant movement as recently as October 17, 1989, during the Loma Prieta Earthquake (Richter magnitude = 7.1), the epicenter of which was located nine miles

west of the Facility. The Calaveras Fault is located approximately four miles to the east and has a MCE Richter magnitude of 7.25. Both faults are considered active faults and could damage structures.

29. **Surface Water:** The closest main surface water body is Chesbro Reservoir, which is located upslope roughly 2.3 miles to the south of the Facility. Other nearby surface waterways include Fisher Creek, an intermittent stream that flows northwesterly through the western half of the Facility. Fisher Creek drains into the Coyote Valley's Laguna Seca seasonal freshwater lake.
30. **Hydrogeology:** The Facility is located in the area where the southern edge of the Coyote Valley Groundwater Basin meets the Llagas Groundwater Basin. The Coyote Valley Basin's southern boundary with the Llagas Basin is defined by a topographic high and a groundwater mound where Coyote Creek enters the valley. The Coyote Valley is a tributary basin of the larger Santa Clara Valley Basin and is hydraulically connected to the Santa Clara Valley Basin at the Coyote Narrows, located north of the Facility. Depth to groundwater is between 8 and 14 feet below ground surface. Groundwater flows towards the northwest, towards the San Francisco Bay. Groundwater beneath the facility has TDS concentrations below 490 mg/l and is considered a source of drinking water (see Finding 35).
31. **Nitrates in Groundwater:** The Facility is situated within the boundaries of the Coyote Valley Recharge Area. The Santa Clara Valley Water District (SCVWD), the water purveyor and manager in the region, has identified high nitrates in certain portions of the Coyote Valley Recharge Area. Nitrate is a regulated drinking water contaminant and has a Maximum Contaminant Level (MCL) of 10 mg/l nitrate measured as nitrogen. The presence of elevated nitrates in this basin is documented in the SNMP and Regional Water Board Resolution No. R2-2016-0046. SCVWD has tested approximately 600 domestic wells in the southern part of Santa Clara County for nitrate and recommends that growers use best management practices by applying fertilizers at optimal agronomic rates.

The groundwater quality in Facility monitoring wells has consistently improved over time with respect to nitrate concentrations, which have shown a consistent downward trend. In the most recent Self-Monitoring Report (April 2017), nitrate concentrations (measured as nitrogen) ranged from 10 mg/l to 32 mg/l. This Order requires the Discharger to further investigate and determine whether operations at the Facility are contributing to a nitrate problem within the boundaries of the Coyote Valley Recharge Area. Additional monitoring and sampling points are needed to assess whether nitrate concentrations in groundwater have been impacted by mushroom growing operations at the Facility.

## MONITORING PROGRAMS

32. **Groundwater Monitoring:** Groundwater beneath the Facility is monitored by six shallow monitoring wells (G-1, G-8, G-9, G-10, G-11, and G-13) as shown in Figure 2. Wells G1, G-8, G-9, G-10, and G-11 were installed in 1986. Well G-13 was installed in 1997. The Facility monitors groundwater levels and nitrate concentrations on a quarterly basis and has been submitting quarterly Self-Monitoring Reports. Provision C.3 of this Order requires submittal of an updated Self-Monitoring Program (SMP) that shall be designed to identify significant groundwater quality impacts from Facility operations, including installation of additional groundwater wells and monitoring for nitrates.

33. **Facility Inspections:** The following portions of the Facility will be inspected by the Dischargers as required by Provision C.8:
- a. Surface water monitoring points;
  - b. Groundwater monitoring wells; and
  - c. Stormwater and leachate conveyance systems.

**BASIN PLAN, ANTIDegradation POLICY, AND BENEFICIAL USES**

34. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Board, U.S. EPA, and the Office of Administrative Law where required.
35. Regional Water Board Resolution No. 88-63, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas containing high TDS, high background contaminant levels, or those areas with a low-yield. Any groundwater at the Facility meeting Resolution No. 88-63 requirements of TDS concentrations below 3,000 mg/L, electrical conductivities below 5,000 micro-Siemens per centimeter, and with production yields greater than 200 gallons per day is considered a potential drinking water source. Shallow groundwater at the Facility has TDS concentrations below 3,000 mg/L and is therefore considered a potential drinking water source. There is no current use of the Facility's shallow groundwater, nor any anticipated plans for its use.

Title 40 of the Code of Federal Regulations, part 131.12, requires that State water quality standards include an anti-degradation policy consistent with federal policy. The State Water Board established California's anti-degradation policy through Resolution 68-16, which is deemed to incorporate the federal anti-degradation policy where federal policy applies. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal anti-degradation policies. This Order is consistent with both the State and federal anti-degradation policies because it does not allow degradation and requires management practices that are likely to improve the quality of the waters of the State.

36. **Beneficial Uses:** The potential beneficial uses of groundwater in Coyote Valley are:
- a. Industrial process and service supply;
  - b. Agricultural water supply; and
  - c. Municipal and domestic supply.

The existing and potential beneficial uses of surface water in Fisher Creek are:

- a. Warm freshwater habitat;
  - b. Wildlife habitat; and
  - c. Non-contact water recreation.
34. **Safe Drinking Water Policy:** It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption,



cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet MCLs to protect human health and ensure that water is safe for domestic use.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

35. The actions required by this Order, including repairs to the compost pad and drilling of monitoring wells, are categorically exempt from CEQA under CCR title 14, sections 15302, 15303, 15304, and/or 15306. If the Regional Water Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Regional Water Board will conduct the necessary and appropriate environmental review prior to the Executive Officer's approval of the applicable plan. The Discharger will bear the costs, including the Regional Water Board's costs, of determining whether implementing any plan required by this Order will have a significant effect on the environment, and, if so, in preparing and handling any documents necessary for environmental review. There is no expansion of use beyond that existing under prior orders. For these reasons, the project is exempt from the application of CEQA pursuant to CCR title 14, section 15301.

### **NOTIFICATIONS AND MEETING**

36. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prepare WDRs and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

37. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this update of WDRs.

**IT IS HEREBY ORDERED**, pursuant to the authority in CWC §§13263 and 13267 and Title 27, that the Discharger shall meet the applicable provisions contained in Title 27 and shall comply with the following:

#### **A. PROHIBITIONS**

1. Any feedstock, additive, amendment, or compost (active, curing, or final product) stored, processed, or composted outside of the designated composting operation areas, as those boundaries are specified in the ROWD, is prohibited.
2. Discharge of any feedstock, additive, amendment, or other waste to lands not owned, leased, or otherwise controlled by the Discharger is prohibited.
3. Discharge of wastes to surface waters is prohibited, except as authorized by an NPDES permit.
4. The use of treated sewage sludge, or bio-solids, as an additive or amendment is prohibited.
5. Migration of pollutants through subsurface transport to waters of the State or of the United States is prohibited.
6. The treatment, discharge, or storage of materials that may impact the beneficial uses of groundwater or surface water shall not be allowed to create a condition of pollution or

nuisance as defined in CWC §13050(l) and (m), nor degrade the quality of waters of the State or of the United States.

7. The discharge of hazardous waste at the Facility is prohibited. For the purpose of this Order, the term “hazardous waste” is as defined in Title 27 §20164.
8. The discharge of leachate or wastewater (including from process waters and runoff from the Facility’s operation areas) that: 1) has the potential to cause corrosion or decay, or otherwise reduce or impair the integrity of the containment structures; 2) if mixed or commingled with other wastes, could produce a violent reaction including heat, pressure, fire, explosion, or the production of toxic by-products; 3) are "restricted hazardous wastes", or 4) impair the integrity of the containment structures, is prohibited pursuant to Title 27 §20200(2)(b).
9. Waste materials shall not be stored or disposed of where they can migrate from the Facility to adjacent geologic materials, neighboring properties, waters of the State, or waters of the United States.
10. The Discharger shall not perform any intrusive activities at the Facility that have the potential to negatively affect the integrity and proper function of the compost pad, such as digging or trenching, without prior Regional Water Board approval. Minor surface excavation or reconfiguration activities for routine maintenance and repair do not require prior concurrence.
11. Surface drainage water shall not be allowed to pond on the compost pad and shall not be allowed to percolate through the compost pad, through soils, and eventually into groundwater during the operational life of the Facility. Additionally, all surface drainage water that contacts the compost pad shall be contained and recycled, treated, or drained to the leachate pond and not allowed to drain to Fisher Creek.
12. The Discharger, or any future owner or operator of the Facility, shall not cause the following conditions to exist in waters of the State or of the United States at any place outside existing waste management units:
  - a. Surface Waters:
    - i. Floating, suspended, or deposited macroscopic particulate matter or foam;
    - ii. Bottom deposits or aquatic growth;
    - iii. Adverse changes in temperature, turbidity, or apparent color beyond natural background levels;
    - iv. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or
    - v. Toxic or other deleterious substances to exist in concentrations or quantities that may cause deleterious effects on aquatic biota, wildlife, or waterfowl, or that render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
  - b. Groundwater:
    - i. Degradation of groundwater quality; or
    - ii. Significant migration of pollutants through subsurface transport.

## **B. SPECIFICATIONS**

### **Reporting Specifications**

1. All technical reports submitted pursuant to this Order shall be prepared under the supervision of and signed under penalty of perjury by a California registered civil engineer, registered geologist, and/or certified engineering geologist.
2. The Discharger shall prepare and implement a Detection Monitoring Program (DMP) for groundwater beneath the Facility, pursuant to Title 27 §20430. The Discharger shall periodically evaluate the DMP to determine if monitoring is achieving the program goals. The SMP previously submitted shall be reconfigured and expanded to meet the requirements, specifications, and goals of the DMP.
3. At any time, the Discharger may file a written request (including supporting documentation) with the Executive Officer, proposing modifications to the DMP. If the proposed modifications are acceptable, the Executive Officer may issue a letter of approval that incorporates the proposed revisions into the DMP.

### **Compost Pad and Process Water Pond Specifications**

4. The Facility shall comply with specifications and requirements of the General Order.
5. The compost pad shall be protected from any washout or erosion of wastes or covering material and from inundation that could occur during a 25-year, 24-hour peak storm event. The compost pad shall be graded and maintained to promote lateral runoff and prevent ponding and infiltration of water.
6. Berms must be designed, constructed, and maintained to prevent run-on and runoff from a 25-year, 24-hour peak storm event. Berms must be adequately protected from erosion and must not cause, threaten to cause, or contribute to conditions resulting in contamination, pollution, or nuisance.
7. The Discharger shall notify the Regional Water Board immediately of any failure that threatens the integrity of any containment and/or control facilities, structures, or devices. Any such failure shall be promptly corrected after approval of the method and schedule by the Executive Officer.
8. The Discharger shall maintain the compost pad and the Process Water Pond so as to prevent a statistically significant increase in water quality parameters at Points of Compliance (POCs) as defined in Title 27 §20420.
9. To prevent potential impacts to waters of the State or waters of the United States, the Discharger must design, construct, and maintain control of all run-on, runoff, and precipitation that could fall on feedstock, additives, amendments, or compost areas from a 25-year, 24-hour peak storm event, at a minimum.

10. The Process Water Pond must be operated to maintain a minimum of two feet of freeboard and be designed to capture and store water during a 25-year, 24-hour peak storm event.
11. The Process Water Pond shall maintain a dissolved oxygen concentration of at least 1mg/l in the upper 1-foot of the pond surface area.
12. Pipelines connecting the compost and spent compost pad to the Process Water Pond shall be either equipped with devices, or fail-safe operating procedures, to prevent backflow of leachate.
13. The Discharger shall have continuing responsibility for correcting any problems that arise in the future as a result of waste discharge or related operations or Facility use.
14. If the Executive Officer determines the existence of an imminent threat to the beneficial uses of surface or subsurface waters of the State, the Discharger may be required to install additional groundwater monitoring wells and/or undertake corrective action measures, including submittal of a Facility investigation report.
15. The Discharger shall install, maintain in good working order, and operate efficiently any monitoring system necessary to assure compliance with these WDRs.
16. If it is determined by the Executive Officer, based on groundwater monitoring information, that water quality at or beyond the POC wells becomes degraded, the Discharger will be required to submit and implement a Facility-specific groundwater corrective action proposal.
17. The Discharger shall operate the Facility according to a detailed operating, maintenance, and contingency plan that will include at a minimum, procedures for routine inspection of the compost pad and the Process Water Pond, contingency measures if problems with the containment structures are found, and the notification of agencies if such problems are found.

### **Monitoring Specifications**

18. The Discharger shall conduct monitoring activities according to Provision C.3 of this Order. The SMP may be amended by the Executive Officer to ensure that the capability exists to verify Facility compliance with these regulations.
19. Any additional monitoring wells installed at the Facility shall be constructed in a manner that maintains the integrity of the drill hole, prevents cross-contamination of saturated zones, and produces representative groundwater samples from discrete zones within the groundwater zone each well is intended to monitor.
20. All borings for monitoring wells shall be continuously cored. The drill holes shall be logged during drilling under the direct supervision of a California professional geologist whose signature appears on the corresponding well log. Logs of monitoring wells shall be filed with the State Department of Water Resources. All information related to well construction shall be submitted to the Regional Water Board upon well completion.

21. The groundwater sampling and analysis program shall ensure that groundwater quality data are representative of the groundwater in the area that is monitored.
22. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Order.

### C. PROVISIONS

1. **DUTY TO COMPLY:** The Discharger shall comply immediately, or as prescribed by the time schedule below, with all Prohibitions, Specifications, and Provisions of this Order. All required submittals must be acceptable to the Executive Officer. The Discharger must also comply with all conditions of these WDRs. Violations may result in enforcement actions, including Regional Water Board orders or court orders requiring corrective action or imposing civil monetary liability or in modification or revocation of these WDRs by the Regional Water Board.
2. **AUTHORITY:** All technical and monitoring reports required by this Order are requested pursuant to CWC §13267. Failure to submit reports in accordance with schedules established by this Order or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to CWC §13268.
3. **SELF-MONITORING PROGRAM:** The Discharger shall submit an updated SMP, which is intended to constitute a DMP pursuant to Title 27 §20420. The SMP shall identify significant water quality impacts from the Facility and demonstrate compliance with the WQPS. The Discharger shall monitor quarterly and submit semi-annual monitoring reports, acceptable to the Executive Officer, no later than March 30 and September 30 of each year in accordance with the SMP. The SMP shall also include a sufficient number of monitoring points installed at appropriate depths and locations to yield groundwater samples from other aquifers or perched zones not already monitored to provide the earliest possible detection of a release from the waste management unit [Title 27, § 20415(b)(1)(B)3 and 4, and §20420(b)]. The SMP shall propose new monitoring wells as necessary to provide adequate detection capability. Additionally, the SMP shall include relevant updates to the monitoring objectives, sampling procedures and frequency, and analytical methods used.

**COMPLIANCE DATE: 90 days after adoption of this Order**

**REPORT DUE DATES: Semi-Annual Monitoring Reports are due March 30, and September 30 of each year; a Constituent of Concern (COC) Monitoring Report is due once every five years, and the next COC report is due March 30, 2018.**

4. **DEVELOPMENT PLAN:** The Discharger shall submit a Development Plan acceptable to the Executive Officer that describes proposed major capital improvement projects and significant changes in operations at the Facility. The plan shall describe the project; identify key design components that may impact existing containment, existing handling, or monitoring structures; and specify components of the design necessary to maintain integrity of those structures and prevent water quality impacts or impacts to human or ecological health.

**COMPLIANCE DATE: 60 days prior to start of construction**

5. **CORRECTIVE ACTION PLAN:** The Discharger shall submit a Corrective Action Plan acceptable to the Executive Officer that describes the preferred technique(s) that will be used to repair cracks in the Wharf Area compost pad and improve stormwater controls to eliminate discharges to surface or groundwater. Additionally, this plan shall include a time schedule when repair work will be completed and appropriately documented.

**COMPLIANCE DATE: 120 days after adoption of this Order**

6. **PROCESS WATER/LEACHATE MANAGEMENT PLAN:** The Discharger shall submit a technical report, acceptable to the Executive Officer, that provides details on how process water/leachate is managed and specifies ways to reduce the amount of leachate collected and stored at the Facility. This plan shall the evaluate water balance and re-evaluate the sizing of the existing Process Water Pond, construction of additional ponds, or using additional tanks to store excess process water.

**REPORT DUE DATE: 120 days after adoption of this Order**

7. **STORMWATER POND MANAGEMENT PLAN:** The Discharger shall submit a technical report, acceptable to the Executive Officer, that provides details on when a stormwater discharge can be made to Fisher Creek and on how each discharge is to be monitored, which includes monitoring objectives, sampling procedures and frequency, and analytical methods used. Testing of stormwater discharges to Fisher Creek shall comply with protocols established in the Industrial General Permit.

**REPORT DUE DATE: 120 days after adoption of this Order**

8. **ANNUAL MONITORING AND MAINTENANCE REPORT:** The Discharger shall submit an Operations and Maintenance Plan, acceptable to the Executive Officer, that includes:
  - a. Specifications for wet season preparations, including for stormwater drainage infrastructure inspection, construction, and maintenance;
  - b. The periodic assessment of stormwater, including monitoring, or demonstration that monitoring stormwater at the Facility is not necessary;
  - c. The semiannual inspection of the compost pad and implementation, including subsidence or other disturbance that might increase infiltration of stormwater; and
  - d. The periodic inspection and maintenance of the monitoring system.

The Annual Monitoring and Maintenance Report must summarize all monitoring and maintenance activities and adverse conditions noted since the prior reporting with respect to all berms, ditches, working surfaces, detention ponds, and monitoring systems.

**REPORT DUE DATE: September 31, 2018, and each year thereafter**

9. **CHANGE IN OPERATIONAL CONDITIONS:** The Discharger shall immediately notify the Regional Water Board of any flooding, ponding, settlement, significant seismic event, or other change in operational conditions that could impair the integrity of the compost pad,

leachate containment systems, and/or drainage control structures and shall immediately make repairs. Within 30 days, the Discharger shall prepare and submit a technical report, acceptable to the Executive Officer, documenting the corrective measures taken.

**NOTIFICATION DUE DATE: Immediately upon occurrence**

**REPORTING DUE DATE: 30 days after initial notification**

10. **WELL INSTALLATION REPORT:** The Discharger shall submit a technical report, acceptable to the Executive Officer, that provides well construction details, geologic boring logs, and well development logs for all new wells installed as part of the present or future SMP.

**COMPLIANCE DATE: 90 days after completion of well installation activities**

11. **Availability:** A copy of these WDRs shall be maintained by the Discharger and shall be made available by the Discharger to all employees or contractors performing work (maintenance, monitoring, repair, construction, etc.) at the Facility.
12. **Change in Ownership:** The Discharger must notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the Discharger and the new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the Discharger and the new discharger. This agreement shall include an acknowledgment of which dischargers are liable for violations up to the transfer date and which dischargers are liable from the transfer date on.
13. **Report of Waste Discharge Reporting:** When a Discharger becomes aware that it failed to submit any relevant facts in its ROWD or submitted incorrect information in a ROWD or in any report to the Regional Water Board, it shall promptly submit such facts or information.
14. **Revision:** This Order is subject to review and revision by the Regional Water Board.
15. **Vested Rights:** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property; do not protect the Discharger from liability under federal, State, or local laws; nor do they create a vested right for the Discharger to continue the waste discharge.
16. **Severability:** Provisions of this Order are severable. If any provision of these WDRs is invalid, the remainder of these WDRs shall not be affected.
17. **Operation and Maintenance:** The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.

18. **Reporting of Hazardous Substance Release:** If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the Discharger shall report such discharge to the Regional Water Board by calling (510) 622-2369. A written report shall be mailed or submitted electronically to the Regional Water Board within five business days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.
19. **Entry and Inspection:** The Discharger shall allow the Regional Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at any location.
20. **Analytical Methods:** Unless otherwise permitted by the Executive Officer, all analyses shall be conducted at a laboratory-certified for such analyses by the California Department of Public Health. The Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State's boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" promulgated by U.S. EPA.
21. **Discharges To Navigable Waters:** Any person discharging or proposing to discharge to navigable waters from a point source (except for a discharge of dredged or fill material subject to section 404 of the federal Clean Water Act and discharges subject to a general NPDES permit) must file an NPDES permit application with the Regional Water Board.
22. **Endangerment of Health or the Environment:** The Discharger shall report any event of noncompliance that may endanger human health or the environment. Any such information shall be provided orally to the Executive Officer, or an authorized representative, within 24 hours from the time the Discharger becomes aware of the circumstances by calling (510) 622-2369. A written submission to the Regional Water Board shall also be provided within five days of the time a Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or



an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

23. **Document Distribution:** Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:

- a. Regional Water Board and
- b. Santa Clara County Department of Environmental Health (Local Enforcement Agency).

The Executive Officer may modify this distribution list as needed.

24. **Reporting Requirements:**

- a. Hard copies:

- i. Technical reports/plans submitted by the Discharger in compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be submitted to the Regional Water Board on the schedule specified herein. Hard copies of these reports/plans shall consist of a letter report that includes the following:

- a) Identification of any obstacles that may threaten compliance with the schedule;
- b) In the event of non-compliance with any Prohibition, Specification, or Provision of this Order, a written notification that clarifies the reasons for non-compliance and that proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order;
- c) In the self-monitoring reports, an evaluation of the current groundwater monitoring system and a proposal for modifications as appropriate; and
- d) A signed transmittal letter and professional certification by a California-licensed civil engineer or a professional geologist.

- ii. All application reports or information to be submitted to the Executive Officer shall be signed and certified as follows:

- a) For a corporation – by a principal executive officer or the level of vice-president or an appropriate delegate;
- b) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively; or
- c) For a municipality, State, federal, or other public agency – by either a principal executive officer or ranking elected official.

- b. Electronic Submittals:

- i. The State Water Board has adopted regulations requiring electronic report and data submittal to Geotracker [<http://www.geotracker.swrcb.ca.gov/>].

- ii. The Discharger is responsible for submitting the following via the internet:

- a) Groundwater analytical data;
- b) Surveyed locations of monitoring wells;

- c) Boring logs describing monitoring well construction;
  - d) Portable data format (PDF) copies of all reports identified in C.24.a above (the document, in its entirety [signature pages, text, figures, tables, etc.] must be saved to a single PDF file); and
  - e) Any additional submittal to GeoTracker the Executive Officer requires.
- iii. Upon request, monitoring results shall also be provided electronically in Microsoft Excel® to allow for ease of review of data and to facilitate data computations and/or plotting that Regional Water Board staff may undertake during the review process. Data tables submitted in electronic spreadsheet format will not be included and should therefore be submitted on CD and included with the hard copy of the report. Electronic tables shall include the following information:
- a) Well designations;
  - b) Well location coordinates (latitude and longitude);
  - c) Well construction (including top of well casing elevation, total well depth, screen interval depth below ground surface, screen interval elevation, and a characterization of geology of subsurface the well is located in);
  - d) Groundwater depths and elevations (water levels);
  - e) Current analytical results by constituent of concern (including detection limits for each constituent);
  - f) Historical analytical results (including the past five years, unless otherwise requested); and
  - g) Measurement dates.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of and Order adopted by the California Regional Water Quality Control Regional Water Board, San Francisco Bay Region on September 13, 2017.

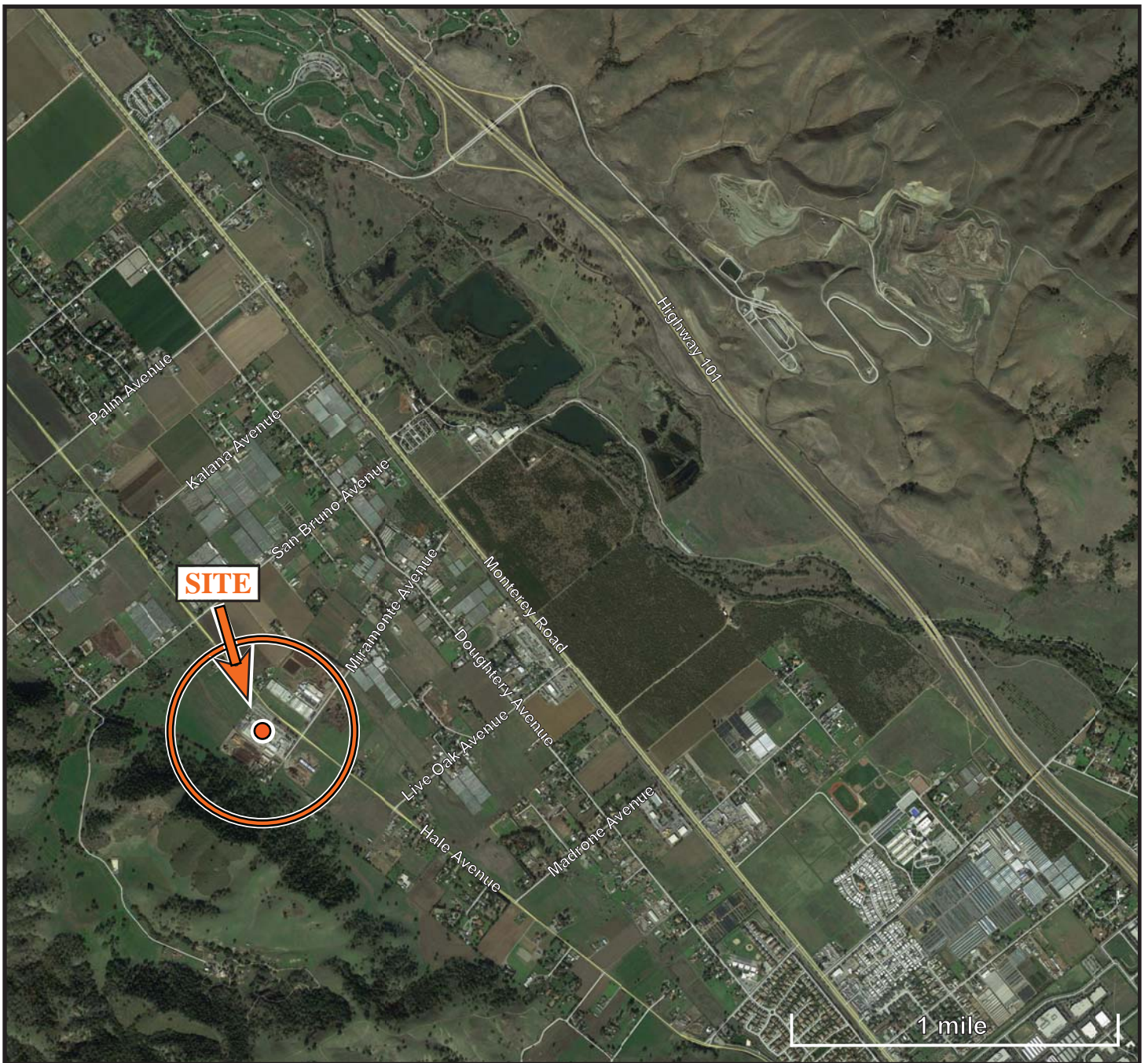
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Bruce H. Wolfe  
Executive Officer

Attachments:

Figure 1 - Monterey Mushrooms Vicinity Map

Figure 2 - Monterey Mushrooms Site Map



0 1700 ft.  
Approximate Scale



Base Map from Google Maps



**Vicinity Map - Monterey Mushrooms, Inc.**  
Morgan Hill Farm - 642 Hale Avenue  
Morgan Hill, California

Figure No. 1  
Date: 6/22/2017



**Site Map - Monterey Mushrooms, Inc.**  
 Morgan Hill Farm - 642 Hale Avenue  
 Morgan Hill, California

Figure No. 2  
 Date: 6/22/2017

