VECTOR CONTROL PLAN

Demler Brothers, LLC
Manure Processing Facility
PDS2019-MUP-19-004

Project Address: 25818 Highway 78
APN: APN 286-031-01 (Portion of)

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1.0 INTRODUCTION

1.1 Purpose

This Vector Control Plan (Plan) has been prepared as a guide for the treatment and handling of animal waste, flies, and vectors associated with the Manure Processing Facility (proposed project) for Demler Brothers, LLC. This Plan establishes measures for daily removal of animal waste, minimization of mosquito and fly breeding habitat, insect and rodent control, and general waste management and sanitation practices. As this Plan is intended to serve as a guide for continued operation and maintenance of the on-site manure processing facility, measures given in this Plan do not preclude, and are in addition to, compliance with all local and State regulations.

1.2 Project Description

Demler Brothers, LLC (Applicant) proposes to construct a 16,200 square foot (sq. ft.) building to house a manure processing system (proposed project) which would allow the existing on-site egg ranch to become more efficient and sustainable. The project is an allowed use under the current A72 (General Agriculture) zone that applies to the property with approval of a Major Use Permit (MUP) from the County of San Diego. The proposed MUP area comprises an approximate area of 6.0-acre portion of the overall 362.1-acre existing egg ranch property; refer to Exhibit 1: Project Vicinity Map and Exhibit 2: MUP Plot/Grading Plan.

Exhibit 1: Project Vicinity Map
1. **GROSS AREA**: 362.1 ACRES
2. **MUP AREA**: 6.0 ACRES
3. **ZONING**: A72 (GENERAL AGRICULTURE)
4. **GENERAL PLAN LAND USE DESIGNATION**: RURAL LANDS (RL-40)
5. **WATER DISTRICT**: N/A - EXIST. EGG RANCH SERVED BY GROUNDWATER
6. **FIRE DISTRICT**: RAMONA FIRE PROTECTION DISTRICT
7. **EXISTING AGRICULTURAL BUILDINGS**: TO REMAIN
8. **EXISTING WELLS**: (10) & EXISTING WATER TANKS: (3)
9. **EXIST. HIGHWAY 78 ACCESS**: PRIMARY 24' DG
10. **EXIST. PRIMARY PROJECT ACCESS**
11. **PROJECT ACCESS**: INTO MARKETABLE ORGANIC PELLET FERTILIZER. ALL PELLETIZATION EQUIPMENT SHALL BE LOCATED WITHIN THE PROPOSED STRUCTURE. EGG PRODUCTION ACTIVITIES ARE CONSIDERED APPROXIMATE ONLY. METHODOLOGY IS NOT SUFFICIENT FOR MAPPING PURPOSES.

**LEGEND**
- PROPERTY OF EXIST. DEMLER BROTHERS EGG RANCH
- MAJOR USE PERMIT
- PROPERTY OF EXIST. DEMLER BROTHERS EGG RANCH (286-030-10)
- MAJOR USE PERMIT
- PROPERTY OF EXIST. DEMLER BROTHERS EGG RANCH (286-030-22 POR. & 286-031-01 POR.)
- MAJOR USE PERMIT
- EXIST. PARCEL LINE
- EXIST. ACCESS (PRIMARY)
- EXIST. ACCESS (SECONDARY)
- EXIST. WATER WELLS (10)
- EXIST. WATER WELL (1)
- EXIST. FIRE HYDRANT (10)

**NOTES**
1. PROPERTY OF EXIST. DEMLER BROTHERS EGG RANCH (286-030-10)
2. MAJOR USE PERMIT (6.0 AC) 286-030-22 POR. & 286-031-01 POR.
3. PROPERTY OF EXIST. DEMLER BROTHERS EGG RANCH (286-030-22 POR. & 286-031-01 POR.)
4. MAJOR USE PERMIT
5. PROPERTY OF EXIST. DEMLER BROTHERS EGG RANCH (362.1 AC)
6. MAJOR USE PERMIT
7. EXIST. ACCESS (PRIMARY)
8. EXIST. ACCESS (SECONDARY)
9. EXIST. WATER WELL (10)
10. EXIST. WATER WELL (1)
11. EXIST. FIRE HYDRANT (10)

**ZONING**
- **ZONE**: A72 (GENERAL AGRICULTURE)
- **ALLOWABLE U.S.W.S.**: 6.0 AC
- **MAX. BUILDING COVERAGE**: 20% (FOR ALL U.S.W.S.)
- **FLOOR AREA RATIO**: 1.00 (FOR ALL U.S.W.S.)
- **LOT SIZE**: 160' X 160'
- **LOT COVERAGE**: 10% (FOR ALL U.S.W.S.)
- **DENSITY**: 1 unit/acre (FOR ALL U.S.W.S.)
- **HEIGHT**: 40' (MAX.)
- **SETBACKS**
  - **MIN. REAR SETBACK**: 15'
  - **MIN. INTERIOR SIDE YARD**: 60'
  - **MIN. DOORWAY CLEARANCE**: 60'
  - **MIN. ROOM CLEARANCE**: 60'
  - **MIN. EXIST. ACCESS SETBACK**: 15'

**PROJECT**
- **LEGAL DESCRIPTION**
- **BASIS OF BEARINGS**
- **COORDINATES**: BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE CALIFORNIA BENCHMARK
- **GEODETIC VERTICAL DATUM**: 1929 (NGVD29) PER NGS DATA

**SHEET INDEX**
- SHEET 1: PLOT PLAN
- SHEET 2: FLOOR PLAN
- SHEET 3: ELEVATION
- SHEET 4: SITE PLAN

**OWNER/ENGINEER**
- **DEMELER BROTHERS EGG RANCH RAMONA, CA**
- **MANURE PROCESSING FACILITY PROJECT PDS 2019-MUP-19-004**

**PLANNING ENGINEER**
- **ROBERT A. BORON, P.E.**
- **RAGU W/LORENZI SCADE"**

**SURVEYOR**
- **STEVE WRAGG**
- **MICHAEL BAKER INTERNATIONAL**
The proposed manure processing system would be capable of converting poultry manure into organic fertilizer pellets. Processing the manure on-site and converting the waste into pellets would lower storage and transportation costs, reduce dust and odors generated and allow the Applicant to sell a more valuable product.

Currently, the existing egg ranch has one method for manure collection for both the older and newer hen houses located on-site. Conveyor belts inside the existing hen houses transport the manure into semi-truck trailers, which then haul the manure off-site. The existing egg ranch currently houses roughly 2 million chickens. At ultimate capacity (3 million chickens) as is allowed under the existing permits that regulate on-site operations, the egg ranch would produce approximately 48 truckloads of manure per week.

With the proposed project, the Applicant would purchase prefabricated all-inclusive manure processing units that could be scaled in phases to accommodate future growth. The units would be shipped directly to the site and the Applicant would assemble the units inside of the proposed building within 2-3 weeks of delivery. Once the units are assembled, the proposed manure processing system would require limited maintenance and could operate automatically without supervision if necessary. However, the proposed project would have 3-5 full-time employees (3 employees currently employed on-site; 2 additional employees may be hired) who would monitor the equipment to ensure the system is operating properly and to assist with loading the pellets onto delivery trucks.

With the proposed manure treatment system, loading time would be reduced from 2-3 hours to approximately 15 minutes per truck. This would reduce the estimated truckloads generated per week from 48 to 30 (at full capacity; 3 million chickens) which would substantially cut down on traffic and emissions associated with the transport of manure from the site (see Table 1, Change in Total Manure Site Output).

<table>
<thead>
<tr>
<th></th>
<th>Final Output of Manure per Chicken per Week (lbs.)</th>
<th>Total Manure per Week (tons)</th>
<th>Truckloads per Week (25 tons per truck)</th>
<th>Truckloads per Day (Monday-Saturday)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Conditions - Unprocessed Manure (2 million chickens)</td>
<td>.75</td>
<td>750</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Existing Conditions - Unprocessed Manure (3 million chickens)</td>
<td>.75</td>
<td>1,125</td>
<td>48</td>
<td>8</td>
</tr>
<tr>
<td>Proposed Conditions – Pelleted Manure (3 million chickens)</td>
<td>.5(^1)</td>
<td>750</td>
<td>30</td>
<td>5</td>
</tr>
</tbody>
</table>

\(^1\) Proposed manure processing operations would reduce final manure volume by ~30%.
The manure drying system would also reduce the amount of ammonia and dust in the air which would improve odor and health conditions at the project site. Furthermore, as part of the drying and pelleting process the dried manure would be converted into organic fertilizer which is highly desirable to farmers due to the substantial levels of nitrogen, phosphorus and potassium. To produce a marketable and easily transportable product, the dried poultry manure would be pelleted on-site as part of the proposed project.

The placement of the proposed project on the subject site would adhere to the required 1,000-foot setback from the nearest pool, tennis court, public playground or residential dwelling units, as outlined under San Diego County Zoning Ordinance Section 6902, Animal Waste Processing Setback.

Provisions of this Vector Control Plan are considered design elements and shall be adhered to by the operator of the manure processing facility. The manure processing facility will contain the following features:

- Manure transport (existing)
- Manure drying system (dryer)
- Pelleting mill
- Sanitation device
- Cooler
- Bagging device (optional)

Portions of the property will continue to be used as an egg ranch, with no changes, upgrades, modifications, or additions proposed to the existing egg ranch operations other than the addition of the proposed manure processing facility.

1.3 Environmental Setting/Existing Conditions

The proposed project is located in the Ramona Community Planning Area within unincorporated San Diego County. The project site is located at 25818 State Route 78 (SR 78) (also known as Julian Road) between Rancho Santa Teressa Drive and Casner Road. Access to the site from SR 78 is provided by a private driveway located approximately 1,000 feet west of Rancho Santa Teressa Drive. The overall property on which the existing egg ranch is located spans five contiguous parcels [County Assessor Parcels (APN) 286-030-21, 286-030-22, 286-030-09, 286-031-01, and 286-040-10]. The proposed project would be located on a portions of APN 286-031-01 and 286-030-21; refer to Figure 2, MUP Plot Plan.

The location for the proposed building has been selected because of its proximity to the existing farm operations on-site. The building will be placed on a graded pad that was previously used as a location for additional hen houses. The hen houses have since been removed and the site remains heavily disturbed. The project site is predominately barren landscape composed of previously-disturbed dirt surfaces and sparse vegetation due to historic and ongoing use by
trucks and farming equipment traffic. Site topography is essentially flat open space that gradually slopes to the east and south beyond the development limits of the proposed improvements.

2.0 VECTOR MANAGEMENT

2.1 Management Practices

2.1.1 Operational Guidelines

The following guidelines shall be adhered to by the operator of the manure processing facility to ensure human and animal health and safety:

- Remove animal waste daily from hen houses and either temporarily store manure in a covered storage container or transport directly to the manure processing facility.
- Control the presence and reproduction of flies, mosquitoes, and rodents while minimizing the use of chemical agents.
- Properly manage on-site manure processing facility to ensure sanitary premises and to minimize the potential for nuisances according to practices in conformance with Title 6. Health and Sanitation, Division 4. Disease Control, Chapters 1-3 of the San Diego County Code of Regulatory Ordinances. Enforcement of public health and safety codes is the responsibility of the County of San Diego Department of Environmental Health.

2.1.2 Operational Practices

A. Animal Waste Management

The following measures shall continue to be applied on-site to manage animal waste:

- Animal waste will be collected daily from the hen houses and either placed into an on-site dry well for temporary storage or directly transported to the manure processing facility via conveyor belt or on-site trucks.
- The dry well will be rinsed out weekly (following manure removal) to prevent conditions that would support fly larvae, and adequate drainage would be provided for the rinse water.
- The manure in the on-site dry well will be stored for approximately 2-4 days before being trucked to the proposed manure processing building. Manure will not be kept in the dry well for a period exceeding one week. Under high temperature conditions, the manure will be removed prior to one week to prevent potential fly larvae development.
- Animal waste will not be stored in an open storage mound on-site.
B. **Mosquito Control**

Stagnant ponds (poor water quality) and high levels of organic matter and/or nutrients (e.g., ammonia, nitrogen) from the presence of animal waste provide the conditions for bacteria and algae growth used as a food sources by mosquito larvae. The following measures shall continue to be applied to minimize/manage mosquito larvae and adult mosquito occurrence on-site:

- Adequate drainage will be maintained, including rapid discharge of captured/pooled water, within the manure processing facility to promote drying and minimize the potential for ponding of water.
- Any water ponding on-site will not be allowed to remain standing for a period of more than 72 hours to avoid stagnation.
- Spilled animal waste will be disposed of promptly to minimize damp areas that may serve as insect breeding grounds.

C. **Rodent Control**

The following measures shall continue to be applied on-site to minimize/manage rodent occurrence onsite:

- Rodent traps and/or bait will be used (as needed) within the manure processing facility.
- Spilled manure will be promptly wetted to prevent airborne particles, swept up, and properly disposed of to discourage pest occurrence.

D. **Fly Breeding Control**

The following measures shall continue to be applied on-site to minimize/manage fly breeding occurrence on-site in accordance with Title 6. Health and Sanitation, Division 4. Disease Control, Chapter 3. Prevention and Control of Fly Breeding on Commercial Poultry Ranches of the San Diego County Code of Regulatory Ordinances:

- Adequate equipment and personnel to implement the manure management program for fly prevention and control shall be maintained at the manure processing facility.
- Appropriate pesticides, including traps and baits, shall be used to control adult fly operations. Pesticides to control all life stages of fly populations shall be approved by the State of California.
- Dropping boards and other equipment used in the drying process shall be cleaned frequently enough so that any larvae and pupae present cannot complete their life cycles.

2.1.3 **Additional Sanitary Methods**
The following additional sanitary methods shall continue to be applied on-site during general day-to-day operation of the manure processing facility to minimize/manage water use and pest occurrence:

- Any organic debris, trash or garbage generated by on-site users will be promptly and properly collected, removed, and disposed of immediately.
- General and ongoing education (e.g., posting of notices and signs) for users of the on-site facilities will minimize the presence of animal wastes, organic debris, trash or garbage; and reinforce proper methods of self-management and disposal.

### 2.2 Education

Employees of the proposed facilities/operations will be responsible for implementing the vector control measures as identified herein to control breeding sources during daily operation and maintenance activities for the proposed manure processing facility. This Vector Management Plan will serve as a guidance tool for employees to be used in carrying out the vector control activities to ensure conformance with County Department of Environmental Health (DEH) vector control measures and to minimize or avoid the potential for vector breeding to occur on-site.

### 3.0 LONG-TERM MAINTENANCE

Long-term maintenance on-site will include ongoing application and adherence to the operational guidelines and practices included in this Plan on a daily basis (or as otherwise appropriate). Long-term use of appropriate chemicals for pest control is expected to be minimal and if necessary, will be applied by trained, licensed professionals. The guidelines and best management practices in this Plan are intended to provide cost-effective use of the on-site manure processing facility, minimizing the requirement for high maintenance needs. The owner will be responsible for daily and long-term maintenance of the facility. Therefore, the frequency, level of quality, and thoroughness of maintenance of facilities will be assured over the long term.

### 4.0 SUMMARY OF MITIGATION MEASURES TO MINIMIZE VECTORS

As indicated in Section 2.0 above, this Vector Control Plan identifies standard management practices to be employed in order to minimize vector breeding sources. Such measures shall be adhered to by the operator of the proposed manure processing facility to ensure human and animal health and safety. Standard operational guidelines identified include removal of animal waste daily from hen houses and management of on-site manure processing facility in conformance with Title 6. Health and Sanitation, Division 4. Disease Control, Chapters 1-3 of the San Diego County Code of Regulatory Ordinances. The Plan also outlines measures to
control the presence and reproduction of flies, mosquitoes, and rodents while minimizing the use of chemical agents.

Standard operational practices will include measures for animal waste management (i.e., daily collection of manure from the hen houses and weekly rinsing of manure storage containers); mosquito control (i.e., avoid water stagnation); rodent control (i.e., rodents traps and/or baits); and fly breeding control (i.e., the use of pesticides). Additional measures for sanitary methods (i.e. removal of organic debris and trash) and employee education will also be implemented.

5.0 REFERENCES

https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/vector_guidelines.pdf

https://www.sandiegocounty.gov/deh/

6.0 LIST OF PERSONS AND ORGANIZATIONS CONTACTED

Anthony Demler, Property Owner
County of San Diego, Department of Environmental Health

7.0 SIGNATURES

The measures identified herein are considered part of the proposed project design and will be carried out as part of project implementation. I will permit the County of San Diego, Vector Surveillance and Control program to enforce this document as needed.

Property Owner ______________________

Project Applicant ______________________
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