PROPOSED RULE 415: ODORS FROM RENDERING FACILITIES

(a) Purpose

The purpose of this rule is to establish odor management practices and requirements to reduce odors from facilities rendering animals and animal parts.

(b) Applicability

This rule applies to new and existing facilities that receive and cook raw rendering materials, facilities that process kitchen trap grease in addition to rendering, and wastewater treatment processes at these facilities.

(c) Definitions

(1) BATCH COOKER means a cooking vessel used for rendering into which raw rendering material is loaded in discrete batches and cooked for a period of time before the batch is unloaded from the vessel at the end of the cooking cycle.

(2) CLOSED SYSTEM means a system handling solids, fluids or air at a rendering facility, from which odors are not allowed to escape.

(3) COLLECTION CENTER means a receiving area for the temporary storage of animal carcasses, packinghouse waste, or other products before transportation to a licensed rendering plant or pet food processor.

(4) CONFIRMED ODOR COMPLAINT is an odor complaint where the odor is verified by a District inspector and traced upwind to a facility or source.

(5) CONTINUOUS COOKER means a cooking vessel used for rendering where the raw material flows through the system at essentially constant speed without cessation or interruption.

(6) ENCLOSURE ENVELOPE means the total surface area of the enclosure's exterior walls, floor and horizontal projection of the roof on the ground.

(7) ENCLOSURE OPENING means any opening in an enclosure that is not connected to a duct in which a fan is installed.

(8) EXISTING FACILITY means a facility subject to the requirements of this rule that began operation prior to *(date of adoption).*

(9) FACILITY GROUNDS means any area of operations where rendering materials are transported, stored or handled other than within an enclosure.

(10) KITCHEN TRAP GREASE means cooking grease, food waste and wastewater from a restaurant grease trap or interceptor.

(11) NEW FACILITY means a facility subject to the requirements of this rule that begins operation on or after *(date of adoption)*, or for which permit applications for equipment subject to this rule have not been deemed complete on or before *(date of adoption)*.

(12) PERMANENT ENCLOSURE means an enclosure having a permanently installed roof and exterior walls which (a) are constructed of material impervious to odors, and (b) completely surround one or more odor-generating sources such that all odors from processes conducted within the enclosure are contained therein.

(13) RAW RENDERING MATERIALS means animal, poultry or fish carcasses and parts, packing house cuttings, out-of-date products from grocery stores, blood, viscera, offal, feces and other organic matter related to animal, poultry or fish.

(14) RECEIVING AREA means the area or pit within the rendering facility property where raw materials are unloaded from a transport vehicle for the purpose of processing or rendering operations.

(15) RENDERING OPERATIONS means all recycling, processing, and conversion of animal materials and carcasses into fats, oils, proteins, and other products that are used in the animal feed, poultry feed, pet food, cosmetics and other industries.

(16) RENDERING FACILITY means a facility engaged in rendering operations.

(17) ROUTINE ENCLOSURE OPENING means any of the following areas that may be open during normal operations at facilities subject to this rule, and through which odors have the potential to escape from a permanent enclosure:

(A) Vents for natural or forced-air ventilation, including but not limited to gable vents, eave vents, wall vents and rooftop vents;

(B) Windows, doors and doorways; and

(C) Spaces below metal sheathing where it does not reach the foundation.

(18) TALLOW means rendered fat, processed from beef or mutton fat which melts between 45°C and 50°C (113°F and 122°F) and congeals between 37°C and 40°C. (98.6°F and 104°F).

(19) VENTILATION SYSTEM means an air-handling system designed and operated to (a) draw air from within a permanent enclosure and deliver it

to approved odor control equipment; and (b) maintain negative air pressure through each enclosure opening.

(d) Requirements for New and Existing Facilities

(1) Core Requirements for all Facilities

(A) Odor Best Management Practices (BMP)

Upon startup for a new facility, or within 90 days after *(date of adoption)* for an existing facility, all applicable Odor Best Management Practices (BMP) identified in subdivision (e) shall be implemented. Odor BMP contained in paragraphs (e)(15) through (e)(17) shall cease to be required after *(36 months after date of adoption)* if the affected area or process complies with the applicable requirements of subparagraphs (d)(1)(B) and (d)(1)C).

(B) Permanent Enclosure or Operation in Closed Systems

Upon startup for a new facility, or within 36 months after *(date of adoption)* for an existing facility, equipment and processes listed in paragraph (f)(1) shall not be operated except in a closed system or located within the confines of a permanent enclosure subject to subdivision (f).

(C) Ventilation of Odors to Odor Control

Upon startup for a new facility, or within 36 months after *(date of adoption)* for an existing facility, facility operations shall not be conducted unless a permanent enclosure subject to subdivision (f) is exhausted through a ventilation system to odor control equipment operating in good condition.

(D) Wastewater Treatment

Upon startup for a new facility, or within 24 months after *(date of adoption)* for an existing facility, wastewater treatment operations shall not be conducted except in a closed system or located within the confines of a permanent enclosure subject to subdivision (f).

(E) Installation of Odor Complaint Contact Sign at Rendering Facilities

Upon startup for a new facility, or within 6 months after *(date of adoption)* for an existing facility, an odor complaint contact sign shall be installed at each facility subject to this rule, pursuant to the requirements of subdivision (i).

(F) Prohibition of Batch Cookers

Upon startup for a new facility, or within 36 months after *(date of adoption)* for an existing facility, batch cookers shall not be permitted to operate at any facility subject to this rule.

(2) Submittal of Odor Mitigation Plan (OMP).

The owner or operator of a facility shall submit an Odor Mitigation Plan (OMP) to the Executive Officer within 90 days after notification by the Executive Officer, pursuant to the requirements of subdivision (h), if:

(A) The owner or operator of a facility subject to this rule receives a Notice of Violation for Public Nuisance subject to Rule 402; or

(B) Two or more confirmed odor complaints for a facility are received per day for any consecutive 3-day period; or

(C) Twelve or more confirmed odor complaints for a facility are received over any consecutive 180-day period.

The owner or operator shall comply with all terms and conditions of an approved Odor Mitigation Plan. A violation of any term of an approved Odor Mitigation Plan is a violation of this rule. Submittal of an Odor Mitigation Plan shall be in addition to any settlement of the Notice of Violation triggering such submittal.

(3) Recordkeeping

Upon startup for a new facility, or within 30 days for an existing facility, the owner of operator of a facility subject to this rule shall collect and maintain records of all information required under subdivision (j).

(e) Odor Best Management Practices (BMP)

(1) Covering of Incoming Transport Vehicles

Transport vehicles delivering raw rendering materials to a rendering facility shall not be permitted to enter the facility unless the cargo area of the vehicle is completely enclosed or fully covered with a durable non-porous covering (at a minimum, 18-oz vinyl tarp or the equivalent); impervious to odors that is free of holes, gaps, cracks, or tears. The cargo area of the vehicle shall be uncovered only during the transfer of raw rendering materials from the transport vehicle, and while the cargo area is being washed;

(2) Spilled Raw Rendering Materials

Raw rendering materials that fall onto the ramp or edge of the receiving area of a rendering facility as they are being transferred from a transport vehicle shall be collected and placed into the receiving area within 5 minutes after spill occurs;

(3) Direct Transfer of Raw Rendering Materials

All raw rendering materials delivered to a rendering facility shall be transferred directly from the transport vehicle into a receiving area located within an enclosure that meets the requirements of subdivision (f);

(4) Standards for Washing

All washing of facility grounds enclosure interiors, delivery trucks, and drums and containers shall be conducted with water at a temperature of not less than 120 degrees Fahrenheit and pressure of not less than 1000 pounds per square inch (psi).

(5) Washing of Outgoing Transport Vehicles

Where raw rendering materials come directly into contact with a transport vehicle, the cargo area and exterior of the vehicle shall be thoroughly washed to prevent trackout of raw rendering materials from a rendering facility;

(6) Washing of Drums and Containers

Drums or containers holding raw rendering materials shall be thoroughly washed to remove raw rendering materials prior to leaving a rendering facility;

(7) Holding Time of Incoming Raw Rendering Materials

By the end of a standard work shift or within 4 hours after arrival, whichever is less, incoming loads of raw rendering materials to the facility shall be processed in a cooker or placed in a sealed, odor-tight container for temporary storage;

(8) Cleanup of Spilled Raw Rendering Materials

All raw rendering materials washed out of a transport vehicle at a rendering facility shall be placed into the receiving area of the rendering plant for processing within one hour after the transport vehicle is washed.

(9) Repair of Facility Grounds

Notwithstanding the time limit of subparagraph (d)(1)(A), within 180 days after *(date of adoption)*, all areas of broken concrete or asphalt, including but not limited to divots, cracks, potholes and spalled concrete on the facility grounds of an existing facility shall be patched, repaired or

repaved to prevent standing water with a surface area greater than one square foot from accumulating.

(10) Holding Time of Raw Materials after Size-reduction
Within one hour after size-reduction or grinding activities, raw rendering materials shall be processed in a cooker or placed in a sealed, odor-tight container for temporary storage;

(11) Holding Time of Cooked Materials
Within one hour after being removed from a cooker, cooked materials shall be placed in downstream processing equipment to be separated into meal and oil or placed in a sealed, odor-tight container for temporary storage;

(12) Trap Grease Delivery Trucks
Trap grease from delivery trucks shall not be delivered to or transferred within a facility except through a closed system;

(13) Venting Trap Grease Delivery Vehicles to Odor Control
The pressure relief valve on a grease delivery vehicle containing trap grease with an internal vacuum or pressure pump shall be vented to odor control equipment operating in good condition prior to unloading of trap grease;

(14) Preventing Accumulation of Processed Materials within Enclosures
Standing water, fat, drippings, grease, oil, tallow or other liquids shall not be permitted to accumulate on floors or equipment;

(15) Washdown of Receiving Area
Walls, floors, and other surfaces of the receiving area of a rendering facility and any equipment operated in the receiving area, including screw conveyors, pumps, shovels, hoses, etc., shall be thoroughly washed at least once per shift, with a minimum of three hours between washdowns;

(16) Washing of Floor Drains
Accessible interior and exterior floor drains shall be flushed and cleaned at least once per week; and

(17) Repair of Leaking Components
All leaking valves, flanges, fittings, conveyor troughs, or any other device holding or conveying liquids, drippings, kitchen grease or tallow at a rendering facility shall be repaired within 72 hours after the actual discovery of a leak of more than 3 drops per minute, or within 72 hours after a reasonable person would have first discovered the leak.

(f) Enclosure Standards and Odor Control Standards

(1) The following equipment and processes at a rendering facility shall not be operated except that the equipment or process is operated in a closed system or located within the confines of a permanent enclosure:

(A) Raw material receiving areas at rendering facilities;

(B) Conveyors associated with raw material transfer operations that are not completely covered;

(C) Size reduction and conveying equipment, including but not limited to:

(i) Breakers;

(ii) Crushers;

(iii) Hoggers;

(iv) Grinders; and

(v) Conveyors associated with raw rendering material sizing that are not completely covered.

(D) Raw material cookers;

(E) Process equipment for separating rendered fat from protein materials (meat and bone meal), including but not limited to:

(i) Centrifuges;

(ii) Presses;

(iii) Separators;

(iv) Pumps;

(v) Screens;

(vi) Tanks that are not completely enclosed;

(vii) Bins and hoppers; and

(viii) Conveyors used to transport materials between process equipment that are not completely covered.

(2) An odor control method listed in Appendix B: Menu of Control Options for Equipment at Rendering Facilities shall be used for each permanent enclosure.

(3) Permanent Enclosure and Ventilation Standards

(A) A permanent enclosure shall be ventilated by a system designed and operated to maintain a minimum inward face velocity through each enclosure opening of not less than 200 feet per minute.

(B) Minimum inward face velocities for each permanent enclosure shall be determined by placing an anemometer, or an equivalent device

approved by the Executive Officer, at the center of the plane of any opening of the permanent enclosure.

(C) In lieu of meeting the requirements for minimum face velocity under subparagraph (f)(3)(B), a permanent enclosure shall be ventilated such that each opening, including but not limited to, vents, windows, passages, doorways, bay doors, and roll-up doors is continuously maintained at a negative pressure of at least 0.02 mm of Hg (0.011 inches H_2O) by a digital differential pressure monitor, installed and operated pursuant to paragraph (f)(4).

(4) Digital Differential Pressure Monitoring System

For each permanent enclosure, the owner or operator shall install, operate and maintain a digital differential pressure monitoring system as follows:

(A) A minimum of one building digital differential pressure monitoring system shall be installed and maintained at each of the following three walls in each permanent enclosure having a total ground surface area of 10,000 square feet or more:

(i) The leeward wall;

(ii) The windward wall; and

(iii) An exterior wall that connects the leeward and windward wall at a location defined by the intersection of a perpendicular line between a point on the connecting wall and a point on its furthest opposite exterior wall, and intersecting within plus or minus ten ($\pm$10) meters of the midpoint of a straight line between the two other monitors specified in clauses (f)(5)(A)(i) and (f)(5)(A)(ii). The midpoint monitor shall not be located on the same wall as either of the other two monitors.

(B) A minimum of one building digital differential pressure monitoring system shall be installed and maintained at the leeward wall of each permanent enclosure that has a total ground surface area of less than 10,000 square feet.

(C) Digital differential pressure monitoring systems shall be certified by the manufacturer to be capable of measuring and displaying negative pressure in the range of 0.01 to 0.2 mm Hg (0.005 to 0.11 inches H_2O) with a minimum increment of measurement of plus or minus 0.001 mm Hg (0.0005 inches H_2O).

(D) Digital differential pressure monitoring systems shall be equipped with a continuous strip chart recorder or electronic recorder approved by the Executive Officer. If an electronic recorder is used, the recorder shall be capable of writing data on a medium that is secure and tamper-proof. The recorded data shall be readily accessible upon request by the Executive Officer.

(E) Digital differential pressure monitoring systems shall be calibrated in accordance with manufacturer's specifications at least once every 12 calendar months or more frequently if recommended by the manufacturer.

(g) Wastewater Treatment

(1) The following wastewater treatment equipment and processes shall not be operated except that the equipment or process is operated in a closed system or located within the confines of a permanent enclosure subject to subdivision (f):

(A) Screens;

(B) Skimmers;

(C) Clarifiers, including dissolved air flotation;

(D) Settling tanks;

(E) Sludge dewatering equipment;

(F) Sludge drying equipment; and

(G) Wastewater treatment outlet to city sewer.

(2) Within 180 days after *(date of adoption)*, the owner or operator of an existing facility complying with paragraph (g)(1) shall submit all necessary permit applications to the Executive Officer.

(h) Odor Mitigation Plan (OMP) Requirements

(1) An Odor Mitigation Plan submitted prior to *(36 months after date of adoption)* shall address the following:

(A) All facility-specific information required in Appendix A - Rule 415 Odor Mitigation Plan;

(B) Prioritization of odor-emitting areas within the facility, in order of highest-to-lowest odor intensity;

(C) For each odor-emitting area designated in subparagraph (h)(1)(B):

(i) Description of odor mitigation activities proposed to address odor within the odor-emitting area;

(ii) Intent to either enclose odor-emitting area within a permanent enclosure or operate processes within the odor-emitting area in one or more closed systems, for all equipment and processes subject to paragraph (f)(1) or paragraph (g)(1) within the odor-emitting area that are not located within the confines of a permanent enclosure or operated in a closed system; and

(iii) Detailed construction schedule for each proposed permanent enclosure.

(D) Explanation of why construction and commissioning of proposed permanent enclosures cannot be expedited prior to *(36 months after date of adoption)*.

(2) An Odor Mitigation Plan submitted after *(36 months after date of adoption)* shall address all information required under subparagraphs (h)(1)(A) and (h)(1)(B) and clause (h)(1)(C)(i).

(3) Approval and Disapproval of an OMP

(A) Within 90 days after submittal of an OMP to the District, the Executive Officer will approve or disapprove the OMP.

(B) The Executive Officer will notify the owner or operator in writing if an OMP is disapproved. If an OMP is disapproved, the owner or operator shall resubmit the OMP to the Executive Officer within 60 days after notification of disapproval. The resubmitted OMP shall include any information necessary to address deficiencies identified.

(4) OMP Plan Fees

An OMP submitted or resubmitted under this subdivision shall constitute a plan for the purpose of fees assessed under Rule 306 – Plan Fees.

(i) Odor Complaint Contact Sign and Tracking of Odor Complaints at Rendering Facilities

(1) An odor complaint contact sign shall specify 1-800-CUT-SMOG as the SCAQMD contact number for odor complaints. The sign may also include the name of a contact person at the rendering facility to call for questions or to whom odor complaints may be reported. The sign shall meet all of the following requirements, unless otherwise approved by the Executive Officer:

(A) The sign shall be installed within 50 feet of the main entrance to the facility;

(B) The dimensions of the sign shall be at least 48 inches wide by 48 inches tall;

(C) Lettering on the sign shall be at least 4 inches tall;

(D) Lettering color shall contrast with the sign background;

(E) The lower edge of the sign shall be located between 6 and 8 feet above grade; and

(F) The sign shall be unobstructed and clearly visible to a person outside the facility property.

(2) Notify the SCAQMD by telephone at 1-800-CUT-SMOG no more than three hours after receiving an odor complaint.

(j) Recordkeeping Requirements

The owner or operator of a facility subject to the requirements of this rule shall maintain on the premises for at least three years and make available upon request by the Executive Officer the following records:

(1) A legible written log recording the date and time of discovery of any leaking valves, flanges, fittings, conveyor troughs, or any other device holding or conveying liquids subject to paragraph (e)(16); the name of the individual who detected the leak; the date and time the leak was repaired; and the name, phone number and company affiliation of the individual who repaired the leak;

(2) Records of all readings taken by anemometer to demonstrate compliance with the inward face velocity requirement of subparagraph (f)(3)(A);

(3) Records from the continuous strip chart recorder or electronic recorder for differential pressure monitoring, as required under subparagraph (f)(4)(D);

(4) A legible written log of all odor complaints received by the rendering facility contact person pursuant to paragraph (i)(1). The odor complaint log shall contain, at a minimum, the following information:

(A) Date and time of complaint event;

(B) Date and time complaint was received;

(C) Outdoor ambient temperature at time of complaint;

(D) Odor description and intensity (i.e., week, moderate, strong);

(E) Weather conditions;

(F) Wind speed and direction;

(G) Name and contact phone number of complainant, if provided;

(H) Determination of cause for odor emissions that generated the complaint, if found;

(I) Processes or conditions that may have triggered the alleged odor event;

(k) Exemptions

(1) Facilities conducting only edible rendering operations that do not conduct inedible rendering or handle or process kitchen grease.

(2) Collection centers that do not conduct inedible rendering or handle or process kitchen grease.

(3) Facilities that process kitchen trap grease but do not conduct animal rendering operations.

APPENDIX A

RULE 415 ODOR MITIGATION PLAN (OMP)

APPENDIX B

MENU OF CONTROL OPTIONS FOR EQUIPMENT AT RENDERING FACILITIES