# RULE 1127. EMISSION REDUCTIONS FROM LIVESTOCK WASTE

(a) Purpose

The purpose of this rule is to reduce ammonia, VOC, and PM10 emissions from livestock waste.

(b) Applicability

This rule applies to dairy farms and related operations such as heifer and calf farms and the manure produced on them. It also applies to manure processing operations, such as composting operations and anaerobic digesters.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) ALTERNATIVE MANURE COMPOSTING OPERATION means an in-vessel composting operation that does not meet the requirements of subdivision (d) of Rule 1133.2 and that composts either livestock manure only, or manure and green material amendments only. Biosolids and food waste cannot be used as feedstocks.

(2) ANAEROBIC DIGESTER is a tank or vessel system that excludes oxygen and in which a sludge or liquid effluent is modified by the action of anaerobic bacteria. The remaining solids from the process can be used as a soil amendment or further composted or otherwise processed.

(3) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, which is directly related to raising cows or producing milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are included in this definition of dairy farms.

(4) ENGINEERED WASTE MANAGEMENT PLAN is a plan for a wastewater management system that is designed, constructed, operated and maintained to comply with the wastewater containment requirements of the Santa Ana Regional Water Quality Control Board.

(5) EXISTING DAIRY OPERATION is a dairy farm being operated as of (the date of rule adoption).

(6) GREEN MATERIAL means any plant material that is separated at the point of generation and contains no greater than 1.0 percent of physical

contaminants by weight, and meets the requirements of the California Code of Regulations – Title 14, section 17868.5. Green materials includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processes from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.

(6) MANURE PROCESSING OPERATION is an operation that receives manure from livestock operations and processes it for use. Such processing includes, but is not limited to, composting operations producing fertilizer and/or soil amendments, and anaerobic digesters.

(7) OPERATOR is any person, people, or entity that owns or operates a dairy farm or manure processing operation subject to the requirements of this rule.

(d) Best Management Practices

On or after December 1, 2004, a dairy operator shall:

(1) Use one of the following procedures when removing manure from a corral:

(A) Scrape or harrow before 9 am only unless the moisture content of the manure is greater than 20% throughout the corral, as determined by an moisture meter in accordance with paragraph (h)(1); OR

(B) Clear corrals such that an even surface of compacted manure remains on top of the soil and do not scrape down to soil level; OR

(C) Water corral before manure removal to reduce dust through increased surface moisture. This measure is not required for lactating cows.

(2) Minimize excess water in corrals by:

(A) identifying and eliminating water leaks from trough and trough piping; and

(B) complying with corral drainage standards specified in the dairy's Engineered Waste Management Plan.

(3) Pave feedlanes, where present, at least 8 feet on the corral side of the feedlane fence.

(4) Effective January 1, 2005, a dairy operator shall clear any accumulated manure in excess of 3 inches in height in each corral at least 4 times per year with at least 60 days between clearings. The operator of a dairy farm shall keep a record of each clearing.

(5) Effective January 1, 2005, a dairy operator shall remove all on-dairy stockpiles within three months of the last corral clearing day and no more than three months after date that the previous stockpiles were last completely cleared. The operator of the dairy farm shall keep a record of each removal, including date(s) of removal, hauler (if applicable), and manure destination.

(e) Manure Disposal Requirements

(1) Effective January 1, 2006, a dairy operator disposing of manure within jurisdiction of the South Coast Air Quality Management District shall only remove or contract to remove manure from their dairy to:

(A) A manure processing operation that has been approved in accordance with the requirements of subdivision (f); OR

(B) Agricultural land within the South Coast Air Quality Management District approved by local ordinance and/or regional water quality board for the spreading of manure; OR

(C) A combination of destinations in paragraphs (A) and (B).

(f) Rule 1127 Manure Processing Operation (1127 MPO) Approval Requirements

(1) A manure processing operator shall only process manure by one or a combination of the following methods:

(A) An anaerobic digester permitted by the District.

(B) A composting operation registered according to the requirements of Rule 1133 and operating in compliance with Rule 1133.2 subdivision (d).

(C) Alternative manure composting operations registered according to the requirements of Rule 1133 and operating in compliance with the requirements of paragraphs (f)(3) and (f)(4).

(2) Application Submittal and Approval Process

(A) Any person who operates a manure processing operation shall submit an application including the following information:

(i) The name and location address of the operation;

(ii) The name(s), mailing address(es), and phone number(s) of the person(s) responsible for process operations and submittal of the application;

(iii) Registration status, if applicable, in accordance with Rule 1133 requirements;

(iv) A list of AQMD permits and permit status, if applicable;

(v) For alternative manure composting operations, a manure composting compliance plan prepared in accordance with paragraph (f)(3).

(B) After the receipt of a complete application submitted pursuant to subparagraph (f)(2)(A), the Executive Officer will either approve or disapprove the application, in writing, in accordance with paragraph (f)(1).

(C) If the application submitted pursuant to subparagraph (f)(2)(A) is disapproved by the Executive officer:

(i) The reasons for disapproval shall be given to the applicant in writing.

(ii) The applicant may resubmit a compliant application at any time after receiving a disapproval notification.

(D) An approved application shall be valid for a period of three years from the date of approval and may be renewed.

(i) Applications for renewal must be submitted at least 60 days prior to the expiration date.

(ii) If all elements in the currently approved application are the same, the re-submittal may contain the information in clauses (f)(2)(A)(i) and (f)(2)(A)(ii) and a statement of no-change to the previous approved application information concerning clauses (f)(2)(A)(iii), (f)(2)(A)(iv), and (f)(2)(A)(v). Otherwise, the re-submittal must contain all the items specified in subparagraph (f)(2)(A).

(E) An approved application may be modified prior to its expiration provided an amendment request is received and approved by the Executive Officer prior to its implementation.

(3) Alternative Manure Composting Operation Plan Requirements

The operator of an alternative manure composting operation shall submit an alternative manure composting operation plan (plan), as required

pursuant to clause (f)(2)(A)(v). The plan must contain the following required elements:

(A) Compost technology specifications in accordance with following:

(i) Identify the compost technology and manufacturer. Only in-vessel systems are allowed for the purposes of subparagraph (f)(1)(C).

(ii) Describe the aeration system, including blower specifications and aeration cycle.

(iii) Describe any openings in the in-vessel system, including doors, vent holes, gas permeable membranes, etc. Describe expected frequency and duration of venting through doors, vents, or other openings.

(iv) The operator shall operate in-vessel systems in compliance with conditions specified in the approved plan.

(B) Feedstock specifications and preparation in accordance with the following:

(i) Identify feedstock and projected annual throughput. Only livestock manure and green material amendments are allowed for the purposes of subparagraph (f)(1)(C). No other amendments or feedstocks are allowed.

(ii) Composting of incoming manure feedstock must begin within 2 working days of arrival on-site.

(C) Compost cycle specifications in accordance with the following:

(i) Describe length of time for in-vessel composting. Composting within the in-vessel system must occur at least 60 days from the last introduction of feedstock into the system.

(ii) Describe length of time for final curing and storage of compost. Open final curing and storage more than 2 months after removal of compost from the in-vessel system is not allowed.

(4) Alternative Manure Composting Operation Testing Requirements

(A) The operator of an alternative manure composting operation shall perform a source test in accordance with the guidelines and source test methods in Rule 1133.2, Attachment A, no later than 2 months after the beginning of operations and each year thereafter.

(B) The operator of an alternative manure composting operation that has performed a source test as required pursuant to subparagraph (f)(4)(A) shall submit the results of the source test to the Executive Officer within 60 days of the completion of testing.

(5) A manure processing operator who fails to comply with an approved Rule 1127 MPO application, including an alternative manure composting plan, if applicable, shall be in violation of this rule.

(6) A manure processing operator who accepts manure for processing without an approved 1127 MPO application or renewal shall be in violation of this rule.

(g) Reporting and Recordkeeping Requirements

(1) No later than January 1, 2005, the operator of an existing dairy farm shall submit a Rule 1127 notification to the Executive Officer in writing. The Rule 1127 notification shall include:

(A) Dairy farm operator's name;

(B) Name of contact person, if different from operator's name;

(C) Farm name, if applicable;

(D) Farm street address;

(E) Farm mailing address, if different from the street address;

(F) Telephone number for the contact person.

(2) No later than 30 days after operations begin at a new dairy farm or at an existing farm under a new operator, the operator shall submit to the Executive Officer the information required in paragraph (g)(1).

(3) An operator shall submit an annual report to the Executive Officer in writing by January 15$^{th}$ of each year after January 1, 2007. The report shall include:

(A) Information required in paragraph (g)(1); and

(B) Animal population for the previous calendar year, broken out by number of adult cows, heifers, and calves;

(C) Amount of manure removed from the dairy in the preceding calendar year, broken out by the following destinations:

(i) agricultural lands within the jurisdiction of the South Coast Air Quality Management District;

(ii) manure processing operation(s) within the jurisdiction of the South Coast Air Quality Management District, reporting amount to each manure processing operation;

(iii) a location out of the jurisdiction of the South Coast Air Quality Management District.

(4) The dairy operator shall maintain copies of all manure manifests, tipping fee invoices, manure moisture test records, corral clearing records, and stockpile removal records, at the dairy farm for three years or for five years if the dairy farm is a Title V facility. These records shall be supplied to the Executive Officer upon request.

(5) The operator of an alternative manure composting operation shall maintain for three years, or five years if a Title V facility, all of the following records:

(A) Logs of feedstock arrival, including date and amount;

(B) Starting and ending date of each in-vessel compost cycle, and removal date of final compost; and

(C) Logs of aeration and venting events for each compost cycle.

(h) Test Methods

(1) The moisture content of manure shall be determined with an electrical conductivity or microwave moisture meter, or other method approved by South Coast Air Quality Management District, California Air Resources Board and U. S. Environmental Protection Agency. Moisture readings shall be taken by introducing the probe three inches into the manure. All readings shall be recorded. Moisture content samples shall be taken in such a manner as to be representative of the corral or stockpile, with a minimum of 5 readings per corral or stockpile.

(i) Fees

(1) Operators of dairies or manure processing operation shall accompany the submittals required by subdivisions (f) or (g) with applicable filing and evaluation fees pursuant to District Rule 306.

(j) Exemptions

(1) This rule shall not apply to a dairy farm with less than 50 cows, heifers, and/or calves.

(2) An approved alternative manure composting operation is exempt from Rule 1133.2 if the operation is in compliance with subdivision (f).

(3) An operator can be exempted from one of the corral clearings required by paragraph (d)(4) per calendar year, if the operator meets all of the following requirements:

(A) At 60 days after the previous corral clearing, notifies the Executive Officer that the moisture content of the corral manure is above 50%, as determined by an electrical conductivity moisture meter in accordance with paragraph (h)(1).

(B) Upon notification, tests the moisture content of the corral manure at least weekly.

(i) If the moisture content of the corral manure is less than 50%, the corral must be cleared as specified in paragraph (d)(4).

(ii) If the moisture content is greater than 50%, the operator shall record the test results and keep the records required by paragraph (g)(4).

(C) If the moisture content remains greater than 50% after 90 days since the previous corral clearing, the operator shall notify the Executive Officer that the operator is claiming an exemption from a clearing required by paragraph (d)(4).

(4) Dairies that are removing all feedlane manure to a digester, no fewer than 6 days per week, are exempt from the requirements in paragraphs (d)(4) and (d)(5).

(k) Alternative Control Options

(1) In lieu of complying with the provisions of subdivision (e), a person may comply with a plan for achieving equivalent emissions reductions through alternative control measures. To be effective, such a plan shall be approved in writing by the Executive Officer, the California Air Resources Board, and the U.S. Environmental Protection Agency.