# REGULATION 13 CLIMATE POLLUTANTS RULE 2 ORGANIC MATERIAL HANDLING OPERATIONS

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# REGULATION 13 CLIMATE POLLUTANTS RULE 2 ORGANIC MATERIAL HANDLING OPERATIONS

(Adopted Date)

#### 13-2-100 GENERAL

- **13-2-101 Description:** The purpose of this rule is to minimize emissions of methane and volatile organic compounds (VOCs) from material recovery facilities, transfer stations, and chipping and grinding facilities that handle or store municipal solid waste, organic material, or mixture thereof. This rule does not address emissions from actively composting organic material.
- **13-2-102 Applicability:** This rule applies to the owner or operator of any material recovery facility, transfer station, or chipping and grinding facility that receives, handles, stores, distributes, or transfers municipal solid waste, organic material, or mixture thereof.
- **13-2-103 Exemption, Recycling Facilities:** This rule shall not apply to facilities that solely accept material that contains less than 1 percent by weight putrescible material and does not create more than 10 percent by weight residual of solid waste.
- **13-2-104** Limited Exemption, Annual Material Throughput: Neither the Standards (Sections 13-2-301 et seq.) nor the Administrative Requirements (Sections 13-2-401 through 13-2-405) shall apply to any material recovery facility, transfer station or chipping and grinding facility that handles less than 500 tons in any 12-month period of municipal solid waste, organic material or mixture thereof, provided the requirements of Section 13-2-406 are satisfied.
- **13-2-105** Limited Exemption, Green Material Handling Facilities: Section 13-2-301 shall not apply to facilities that handle exclusively green material containing less than 1 percent by weight putrescible material.

#### 13-2-200 DEFINITIONS

- **13-2-201** Active Compost: Organic material that is in the process of rapid decomposition, and meets one of the following conditions:
  - **201.1** The organic material is emitting more than fifteen (15) milligrams carbon dioxide per gram of organic material (CO<sub>2</sub>-C) per day; or
  - **201.2** The organic material is generating temperatures of at least 122 degrees Fahrenheit during decomposition.
- **13-2-202 Biofilter:** An air pollution control technology that oxidizes and/or removes organic compounds, methane and ammonia through the action of microorganisms.
- **13-2-203 Biosolids:** Solid, semi-solid, or liquid residue generated from the treatment of domestic sewage, sludge, or waste water.
- **13-2-204 Bulking Agent:** Carbon-based material, including but not limited to wood chips, wood shavings, straw, hay, and shredded paper or cardboard that adds structure or bulk to organic material in order to increase both porosity and the ratio of carbon to nitrogen in the subsequent mixture.

- **13-2-205** Chipping and Grinding Operation: An operation that mechanically reduces the size or otherwise engages in the handling of compostable material that does not produce compost.
- **13-2-206** Compost: A product resulting from the managed biological decomposition of organic material.
- **13-2-207** Compostable Material: Any organic material that when accumulated will become active compost.
- **13-2-208 Construction, Demolition, and Inert (CDI) Debris:** Source separated or separated for reuse solid waste and recyclable materials that result mainly from construction work, that are not hazardous, that contain no more than 1 percent of putrescible material by volume, and that are separated from non-CDI material to be reused or disposed.
- **13-2-209** Debagging: Separation of film plastic from organic material.
- **13-2-210 Digestate:** The material that remains following in-vessel anaerobic digestion of organic material.
- **13-2-211 Facility Summary Report (FSR):** A report that describes a facility subject to this rule and details best management practices, equipment, abatement equipment, and procedures that the owner or operator employs at the facility at the time of FSR submittal to meet the requirements of Sections 13-2-301 and 13-2-302 and any additional measures the owner or operator takes to minimize methane and VOC emissions from the facility's operations.
- **13-2-212** Feedstock: Material that is fed into processes or operations including, but not limited to, green material, food material, biosolids, digestate, solid waste, or a mixture thereof.
- **13-2-213** Food Material: Organic material of plant or animal origin that results from preparation of processing of food for animal or human consumption that is separated from the municipal solid waste stream. Food material includes, but is not limited to, food waste from food service or food processing industries, grocery stores, institutional cafeterias (such as prisons, schools and hospitals) and residential food scrap collection.
- **13-2-214 Green Material:** Any plant material that is separated at the point of generation. Green material includes, but is not limited to, tree and yard trimmings, natural fiber products, woody material from silviculture, manufacturing, and construction and demolition wood waste. Green material does not include food material, biosolids, material separated from commingled solid waste, treated or painted wood, or CDI debris.
- **13-2-215 Handling:** Processing, transferring, and manipulating organic material. Handling includes screening, chipping and grinding, tipping, sorting, and debagging of organic material.
- **13-2-216** Leachate: Any liquid that, in the course of passing through or originating from organic material or solid waste containing organic material, extracts soluble or suspended solids, or any other component of the material through which it has passed or originated.
- **13-2-217** Local Enforcement Agency (LEA): An agency certified pursuant to Chapter 2 of Part 4 of Division 30 of the California Public Resources Code to carry out the powers and duties prescribed therein.
- **13-2-218 Manure:** An agricultural material consisting of accumulated herbivore and avian excrement that includes feces and urine, and any livestock bedding material, spilled feed, or soil that is mixed with feces or urine.

- **13-2-219** Material Recovery Facility (MRF): A facility where solid waste or recyclable materials are sorted or separated manually or mechanically for the purposes of recycling, composting, and/or offsite disposal of residual waste.
- **13-2-220 Modified Facility:** For the purposes of this rule, a transfer station or MRF in operation prior to XXXX XX, 2020 (*date of rule adoption*) with a complete application on file with the Air District for an increase in permitted throughput on or after XXXX XX, 2020 (*date of rule adoption*) that provides :
  - **220.1** An incremental increase in permitted material throughput of more than 50,000 tons in any consecutive 12-month period; or
  - **220.2** A cumulative permitted material throughput after modification of more than 150,000 tons in any consecutive 12-month period.
- **13-2-221 Municipal Solid Waste (MSW):** All solid wastes generated by residential, commercial, and industrial sources, and all solid waste generated at construction and demolition sites, at food processing facilities, and at treatment works for water and waste water, which are collected and transported under authorization of a jurisdiction or are self-hauled.
- **13-2-222** New Facility: For the purposes of this rule, a transfer station or MRF with a complete application on file with the Air District for an authority to construct with a material throughput of more than 150,000 tons in any consecutive 12-month period on or after XXXX XX, 2020 (*date of rule adoption*).
- **13-2-223 Organic Material:** Material composed of carbon-based compounds derived from organisms such as plants and animals and their waste products. Organic material includes, but is not limited to, food material, green material, wood material, biosolids, manure, or a mixture thereof.
- **13-2-224 Overs:** The oversized organic material screened out from compost by particle size.
- **13-2-225 Putrescible Material:** Organic material capable of decomposition by microorganisms with sufficient rapidity as to cause odors, vector attraction, or other offensive conditions. Putrescible material may include, but is not limited to food material, offal, and dead animals.
- **13-2-226 Recycling Centers:** Facilities that accept material that has been kept separate from the solid waste stream for the purpose of additional sorting and processing for recycling or reuse.
- **13-2-227** Screening: Separating material into grades by particle size.
- **13-2-228** Solid Waste: All decomposable and non-decomposable solid, semisolid, and liquid wastes, including, but not limited to, garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, CDI debris, organic material.
- **13-2-229** Stockpile: A storage pile that contains organic material or a mixture of organic and non-organic material.
- **13-2-230 Tipping:** Unloading of material from a truck, trailer, or container.
- **13-2-231 Tipping Floor:** The area where tipping takes place.
- **13-2-232 Transfer Station:** A facility that receives, stores, or handles solid waste or organic material. Such facilities may also include separation, processing, or other operations, but typically only store and handle material for transport to another destination.

#### 13-2-300 STANDARDS

# 13-2-301 Organic Material Handling Requirements:

- **301.1** Existing Transfer Stations and MRFs: As of XXXX XX, 2021 (one year after date of *rule adoption*), the owner or operator of a transfer station or MRF that handles more than 150,000 tons per year of green material, food material, MSW, or any mixture thereof, shall:
  - 1.1 Conduct all tipping and sorting in an enclosure that consists of a tipping floor and at least three walls that act as a wind barrier, and an attached permanent roof with the same dimensions of the tipping floor;
  - 1.2 Operate an overhead misting system designed and operated to minimize emissions at all times during handling operations within and at the openings of the partial enclosure;
  - 1.3 At the end of the last shift of each operating day, clean all areas where organic material is handled such that the floor is visible in all areas after scraping or sweeping, except for material in stock piles.
- **301.2** New or Modified Transfer Station or MRFs: As of XXX XX, 2023 (*three years after date of rule adoption*), the owner or operator of a new or modified (as defined in this rule) transfer station or MRF shall conduct all handling operations of material within an enclosure that meets all the following requirements:
  - 2.1 The combined cross-sectional area of all openings including but not limited to vents, windows, doorways, and openings used for ingress and egress of vehicles, in the enclosure through which air can enter shall not exceed 5 percent of the total surface area of the enclosure's exterior walls, floor and horizontal projection of the roof;
  - 2.2 The ventilation system is designed and operated to achieve a negative pressure differential of no less than 0.013 millimeters mercury (0.007 inches water) across any opening greater than 10 square feet of cross-sectional area;
  - 2.3 The ventilation system is designed and operated to direct the interior air through a control device that achieves no less than 80 percent by weight reduction of methane and VOC emissions.
- **13-2-302** Storage and Stockpiling Requirements: As of XXXX XX, 2020 (*six months after date of rule adoption*), the owner or operator of a transfer station, MRF, or chipping and grinding operation that stores or stockpiles organic material or solid waste containing organic material shall control and contain leachate from stockpiles to prevent visible accumulation and:
  - **302.1 Green Material:** Process all green material within three (3) operating days of receipt by chipping and grinding, utilizing on-site, or removing from the facility; utilizing on-site may include active phase composting, anaerobic digestion, or mulch and erosion control;
  - **302.2 Putrescible Material:** Process all putrescible material within two (2) operating days of receipt by utilizing on-site or removing from the facility. Putrescible material stored at the facility overnight, at the end of the last shift of each operating day, shall be stored in accordance with one of the following:
    - 2.1 Stored within an enclosure that meets all the requirements of Section 13-2-301.2,
    - 2.2 Stored in a truck or container covered with a solid material, or 18-oz vinyl tarp, or equivalent,
    - 2.3 Covered with a bulking agent, finished compost, or overs to a thickness of no less than six (6) inches and misted with water or odor neutralizer,
    - 2.4 Covered with a solid material, 18-oz vinyl tarp, or equivalent securely anchored to ensure that no putrescible material is visible, or
    - 2.5 Blended with other materials to begin active phase composting.

### 13-2-400 ADMINISTRATIVE REQUIREMENTS

- **13-2-401 Facility Summary Report Submittal:** Within180 days of the Effective Date of this Rule [XXXX XX, 2020 (*six months after date of rule adoption*)], the owner or operator of any facility subject to this Rule shall submit a Facility Summary Report (FSR) to the APCO that covers all operations listed in Section 13-2-402 that are conducted at the facility. The FSR shall include all of the required information set forth in Section 13-2-403.1 13-2-403.3 and shall comply with the requirements of Section 13-2-403.4. The owner or operator of any facility subject to this Rule that commences operation after the effective date of the rule, shall submit the FSR to the APCO within 180 days from the date the owner or operator commences such operation. The owner or operator shall certify in writing that the FSR contains completely and accurately all information required under Sections 13-2-402 and 13-2-403.
- 13-2-402 Operations Subject to a Facility Summary Report: The FSR shall address all of the following operations that are conducted at the facility:
  402.1 Organic Material Handling;
  402.2 Storage and Stockpiling;
- **13-2-403 Contents of the Facility Summary Report:** The owner or operator of any facility subject to this Rule shall prepare an FSR that details best management practices, control measures, equipment and procedures taken to minimize methane and VOC emissions and that are employed at the time of the FSR's submittal. The FSR shall include all of the following:

# 403.1 Facility Information

- 1.1 Facility name;
- 1.2 Facility street address;
- 1.3 Facility mailing address;
- 1.4 Facility owner and operator contact information: name or and type of entity, phone number, and mailing and email address;
- 1.5 Facility contact information: name, title, phone number, and mailing and email address;
- 1.6 District assigned facility ID number, if applicable;
- 1.7 Name of each operation, contrivance, or equipment subject to this Rule identified by District Source number, if applicable; and
- 1.9 CalRecycle solid waste information system (SWIS) number, if applicable.

# 403.2 Technical Data

- 2.1 Facility <u>Process Flow Diagram</u>: A detailed process flow diagram that clearly and accurately describes all facility operations listed in Section 13-2-402, and the flows of materials handled or produced in those operations, starting from the point of material receipt from off site to the point of on-site utilization or removal from the facility. The process flow diagram shall identify the monitoring, processes, and controls that minimize and monitor emissions, including, but not limited to best management practices, biofilters, baghouses, baghouse leak detectors, scrubbers, and temperature monitors. The diagram shall identify all organic material handling operations, abatement devices, and control devices either by the operation's District Source Numbers according to their District Permit or by listing them as exempt from District Permit requirements.
- 2.2 <u>Facility Layout/Floor Plan</u>: The facility layout/floor plan that clearly and accurately indicates the locations of all items identified in Section 13-2-403.2.1, including all equipment and permitted and exempt sources at the facility, all building walls, partitions, doors, windows, vents, and openings, and indicate all areas that have VOC or methane emissions or abatement, all organic material handling equipment, and any other source(s) that may contribute to emissions. The facility layout/floor plan shall identify all organic material handling

operations, abatement devices, and control devices either by the operation's District Source Numbers according to their District Permit or by listing them as exempt from District Permit requirements.

- **403.3 Breakdown of Feedstock and Throughput:** Provide both an estimate of total facility throughput of organic material and MSW typically received in tons per day (TPD) and an estimate of the percentage of the following facility feedstock that comprise the total throughput:
  - 3.1 Biosolids;
  - 3.2 CDI debris and other non-decomposable material;
  - 3.3 Digestate;
  - 3.4 Green Material;
  - 3.5 Food Material;
  - 3.6 Manure; and
  - 3.7 Solid waste.
- **403.4 Designation of Confidential Information:** The owner or operator of the facility shall designate in the FSR submission, and in any updated or revised FSR submitted thereto, all information claimed to be confidential and exempt from public disclosure as trade secrets or as confidential under [other specific provisions of] law. The owner or operator shall include a written justification for each of the items designated 'confidential, together with a separate copy of the submission marked as "public copy" with the information claimed to be confidential redacted.
- **13-2-404 Two-Year Review of the Facility Summary Report:** The owner or operator of a facility subject to Section 13-2-401 shall submit an updated FSR to the APCO within 90 days of the two (2) year anniversary date of the submittal of the initial complete and accurate FSR and each updated FSR thereafter.
- **13-2-405** Initial and Annual Demonstration of Control Efficiency: No later than 30 operating days after XXXX XX, 2020 (six months after *date of rule adoption*), the owner or operator of any facility subject to Sections 13-2-301.2, or 13-2-302.1 shall conduct an initial demonstration of control efficiency by conducting a source test according to the methods referenced in Section 13-2-604. Annually thereafter, the owner or operator shall demonstrate compliance with Sections 13-2-301.2, and 13-2-302.1 by conducting a source test within 15 months after the date of the previous demonstration of compliance.
- **13-2-406 Annual Material Throughput Petition:** A person seeking a limited exemption for the facility pursuant to Section 13-2-104 shall comply with the following requirements for each year that the person seeks the exemption:
  - 406.1 Submit a written petition to the APCO specifying the exemption sought and the year for which the exemption is sought, together with one-year projected throughput of material at the facility.
  - 406.2 Receive the APCO's written approval of the limited exemption for that year.
  - 406.3 Maintain at the facility all records listed in, and required by, Section 13-2-502.

#### 13-2-500 MONITORING AND RECORDS

- **13-2-501 Pressure Differential Monitoring:** The owner or operator of any new or modified transfer station or MRF subject to Section 13-2-301.2 shall provide, properly install, maintain in good working order, and operate a differential pressure gauge for each enclosure opening having a cross-sectional area greater than 10 square feet.
- **13-2-502 Recordkeeping Requirements:** The owner or operator of any facility subject to this Rule shall

maintain at the facility an operations log, in which all of the following information shall be recorded on a daily basis with a monthly summation, as applicable:

#### 502.1 Throughput Records

- 1.1 Each type of material received (*e.g.*, green material, putrescible material, solid waste, etc.), reported as a percentage of the total material throughput received; and
- 1.2 The weight of each type of material received, reported in wet tons.
- **502.2** Organic Material Handling Operations: The date and time of each operation's cleaning, as required by Section 13-2-301.1.3.
- **502.3 Pressure Differential for New or Modified Transfer Stations and MRFs**: At least once each operating day, the owner or operator of any facility subject to section 13-2-301.2 shall record the pressure differential across each enclosure opening having a cross-sectional area greater than 10 square feet.

# 502.4 Storage or Stockpiling of Organic Material or Putrescible Material

- 4.1 The date and time the material was received on site;
- 4.2 The date and time of utilization or removal of the material;
- 4.3 The method of overnight covering for any putrescible material stockpile; and
- 4.4 The average temperature of each stockpile using the method provided in Section 13-2-605.

**502.5 Records Retention:** The owner or operator of any facility subject to the requirements of this Rule shall maintain all records at the facility for a minimum of five (5) years and shall make them available to the APCO or a designee of the APCO upon request.

**13-2-503 Records, Low Throughput:** An owner or operator seeking exemption from the requirements of Sections 13-2-301 or 13-2-302 pursuant to Section 13-2-104, shall maintain a daily throughput log that accounts for all material processed in wet tons and the composition of the feedstock processed expressed in percentages. The daily throughput log shall be available to the APCO or a designee of the APCO upon request for the last two years from the date of entry.

# 13-2-600 MANUAL OF PROCEDURES

- **13-2-601** Determination of Pressure Drop and Capture Efficiency: For the purposes of determining compliance with the pressure drop requirements of Section 13-2-301.2.2, pressure measurements will be obtained using an anemometer or other equivalent method approved in writing by the APCO. Alternatively, the capture efficiency shall be assumed to be 100 percent provided all relevant criteria of EPA Method 204 of 40 CFR part 51 as determined by the APCO are met.
- **13-2-602 Determination of VOC Concentration:** For the purposes of determining compliance with the control efficiency requirements of Sections 13-2-301.2, VOC concentration shall be determined using South Coast Air Quality Management District Method 25.3 or other equivalent method approved in writing by the APCO.
- **13-2-603 Determination of Methane Concentration**: For the purposes of determining compliance with the control efficiency requirements of Sections 13-2-301.2, Methane concentration shall be determined using South Coast Air Quality Management District (SCAQMD) Method 25.3, EPA method 18, or other equivalent method approved in writing by the APCO.
- **13-2-604 Determination of Biofilter Efficiency:** For the purposes of determining compliance with the control efficiency requirements of Sections 13-2-301.2.3, VOC and Methane concentrations shall be determined by the methods in Sections 13-2-602 and 13-2-603 both at a sampling port upstream to the biofilter and at the biofilter surface. Emission rates shall be determined using

ST-16 (Stack Gas Velocity and Volumetric Flowrate) and EPA Measurement of Gaseous Emission Rates from Land Surfaces Using an Emission Isolation Flux Chamber User's Guide, as modified in Attachment A of SCAQMD Rule 1133.3, or other equivalent methods approved in writing by the APCO.

**13-2-605 Determination of Stockpile Temperature:** For the purposes of determining the average temperature of stockpiles of organic material, at least one temperature reading shall be taken on each operating day for every 200 cubic-yards of material, or fraction thereof. Temperature measurements shall be monitored at a depth of 12 to 24 inches below the pile surface and at a depth of at least 12 inches from the point where any cover material meets the organic material.