

California Code of Regulations

Title 14. Natural Resources
Division 7. California Integrated Waste Management Board

DRAFT LANGUAGE FOR DISCUSSION – Apply the transfer/processing and compostable material handling and design and operational requirements to all types of in-vessel digestion activities, including anaerobic digestion.

Anaerobic digestion is currently regulated under the compostable materials handling regulations or the transfer/processing regulations, depending on the nature of the feedstock and how it is handled. If the feedstock is compostable material, the facility is regulated as a compostable material handling facility; if feedstock is not compostable material, the activity is regulated as a transfer and processing facility. Staff intended to develop initial discussion draft regulatory text for anaerobic digestion but became aware of several in-vessel digestion technologies that do not utilize anaerobic digestion. Consequently, staff decided to broaden the scope of the regulations to cover other types of “in-vessel digestion” activities, including anaerobic digestion.

Several approaches to regulating this emerging technology have been discussed at informal CalRecycle workshops in 2011 and 2012. The main operational phases of in-vessel digestion are pre-processing, digestion, and post-digestion handling. CalRecycle staff feels the pre-processing and post-digestion handling phases present the greatest need for regulatory oversight. Activities that would occur during the pre-processing phase at an in-vessel digestion operation or facility are similar to the activities that occur at a transfer/processing operation or facility; activities that would occur during the post-digestion handling phase at an in-vessel operation or facility are similar to those that occur at a compostable material handling operation or facility. Consequently, staff believes the most feasible approach to develop “in-vessel digestion” regulations is to utilize applicable transfer/processing and compostable material handling design and operational requirements. Staff offers the following three options for developing in-vessel digestion regulations:

Option 1 (as provided in “Proposed language” below): A stand-alone, fully-contained set of regulations containing imported transfer/processing and compostable materials handling standards applicable to in-vessel digestion.

Other options considered but not developed include –

Option 2: A stand-alone set of regulations containing cross-references to transfer/processing and compostable materials handling standards applicable to in-vessel digestion. (If Option 2 is selected, staff will edit the proposed language below to replace repeated regulatory requirements with cross-references.)

Option 3: Option 2 plus provide, upon completion of the rulemaking, a fully-contained, non-regulatory guidance document that includes the full text of any cross-referenced standard.

Option 1 - Proposed language:

Chapter 3.2 In-Vessel Digestion Operations and Facilities Regulatory Requirements

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Article 1. In-Vessel Digestion Operations and Facilities Regulatory Requirements

§ 17896.1. Authority and Scope.

(a) This Chapter sets forth permitting requirements and minimum operating standards for in-vessel digestion operations and facilities that receive and process by means of in-vessel digestion solid wastes that are subject to the requirements of this Chapter. The regulatory tier requirements of sections 17896.3 through 17896.8 are not applicable to operations and facilities that are subject to regulations elsewhere in this Chapter. Activities placed within the excluded tier in other chapters of this Division, may still be subject to the regulatory requirements specified in this Chapter.

(b) This Chapter is adopted pursuant to and for the purpose of implementing the California Integrated Waste Management Act of 1989 (Act) commencing with section 40000 of the Public Resources Code, as amended. These regulations should be read together with the Act.

(c) Digestion of organic material can be a naturally occurring or an artificially controlled process. This Chapter establishes standards and regulatory requirements for the intentional processing of organic material by means of in-vessel aerobic and anaerobic digestion.

(d) This Chapter implements and interprets those provisions of the Act relating to receipt, storage, handling, recovery, transfer, or processing of solid waste at in-vessel digestion operations and facilities. Nothing in this Chapter limits or restricts the power of any federal, state, or local agency to enforce any provision of law that it is authorized or required to enforce or administer, nor limits or restricts cities and counties from promulgating and enforcing laws which are as strict or stricter than the regulations contained in this Chapter. However, no city or county may promulgate or enforce laws which otherwise conflict with the provisions of this Chapter.

(e) No provision in this Chapter shall be construed as relieving any owner, operator, or designee from obtaining all required permits, licenses, or other clearances and complying with all orders, laws, regulations, or reports, or other requirements of other regulatory or enforcement agencies, including but not limited to, local health agencies, regional water quality control boards, Department of Toxic Substances Control, California Department of Industrial Relations, Division of Occupational Safety and Health, air quality management districts or air pollution control districts, local land use authorities, and fire authorities.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.2. Definitions.

(a) For the purposes of this Chapter:

() "Anaerobic Digestion" is the biological decomposition of organic material in the absence of oxygen or in an oxygen-starved environment. Anaerobic digestion produces biogas and a residual digestate.

() "Aerobic Digestion" is the biological decomposition of organic material in the presence of oxygen.

() "Agricultural material" means material of plant or animal origin, which result from the production and processing of farm, ranch, agricultural, horticultural, aquacultural, silvicultural, floricultural, vermicultural, or viticultural products, including manures, orchard and vineyard prunings, and crop residues

() "Agricultural site" means activities located on land that is zoned for agricultural uses.

() "Biogas" is a gas resulting from the decomposition of organic material under anaerobic conditions that is composed primarily of methane and carbon dioxide.

() "Compost" means the product resulting from the controlled biological decomposition of organic solid wastes that are source separated from the municipal solid waste stream, or which are separated

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at a centralized facility.

() "Contact Water" means water that has come in contact with waste and may include leachate.

() "DTSC" means the California Department of Toxic Substances Control.

() "Digestate" means the solid and/or liquid residual material remaining after organic material has been processed by means of in-vessel digestion.

() "Digestion" means pursuant to PRC 40116.1 the controlled biological decomposition, of organic solid waste that are separated from the municipal waste stream or which are separated at a centralized facility, and that proceeds through one or more of the stages of hydrolysis, acidogenesis, acetogenesis, methanogenesis, and glycolysis. Digestion includes:

(A) anaerobic digestion

(B) fermentation

(C) aerobic digestion

() "EA" means enforcement agency as defined in PRC section 40130.

() "Fermentation" means the biological conversion of carbohydrates into acids or alcohol in the absence of oxygen.

() "Hazardous Wastes" means any waste which meets the definitions set forth in Title 22, section 66261.3, et seq.

() "In-vessel digester" is one or more fully enclosed structures in which the entire digestion process occurs, such as in tanks or other sealed containers.

() "Large Volume In-Vessel Digestion Facility" means an in-vessel digestion activity that receives 100 tons or more of solid waste per operating day.

() "Limited Volume In-Vessel Digestion Operation" means an in-vessel digestion activity that receives no more than 60 cubic yards and no more than 15 tons of solid waste per operating day.

() "Litter" means all solid waste which has been improperly discarded or which has migrated by wind or equipment away from the operations area. Litter includes, but is not limited to, convenience food, beverage, and other product packages or containers constructed of steel, aluminum, glass, paper, plastic, and other natural and synthetic materials, thrown or deposited on the lands and waters of the state.

() "Medium Volume In-Vessel Digestion Facility" means an in-vessel digestion activity that receives more than 15 tons and less than 100 tons of solid waste per operating day.

() "Nuisance" includes anything which:

(A) is injurious to human health or is indecent or offensive to the senses and interferes with the comfortable enjoyment of life or property, and

(B) affects at the same time an entire community, neighborhood or any considerable number of persons. The extent of annoyance or damage inflicted upon an individual may be unequal.

() "On-site" means located within the boundary of the operation or facility.

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() "Operating day" means the daily hours of operation for a facility or operation as set forth in the application, Enforcement Agency Notification or solid waste facilities permit.

() "Operating Record" means an easily accessible collection of records of an operation's or facility's activities and compliance with required state minimum standards under Title 14. The Record may include the Facility Plan or Transfer/Processing Report for facilities, and shall contain but is not limited to containing: agency approvals, tonnage and load checking records, facility contacts and training history. The record may be reviewed by state and local authorities and shall be available during normal business hours. If records are too voluminous to place in the main operating record or if the integrity of the records could be compromised by on-site storage, such as exposure to weather, they may be maintained at an alternative site, as long as that site is easily accessible to the EA.

() "Operations Area" means:

(A) the following areas within the boundary of an operation or facility as described in the permit application or Enforcement Agency Notification:

(i) equipment management area, including cleaning, maintenance, and storage areas; and

(ii) material and/or solid waste management area, including unloading, handling, transfer, processing, and storage areas.

(B) the boundary of the operations area is the same as the permitted boundary of the operation or facility but may or may not be the same as the property boundary on which the operation or facility is located.

() "Operator" means the owner, or other person who through a lease, franchise agreement or other arrangement with the owner, that is listed in the permit application or Enforcement Agency Notification and is legally responsible for all of the following:

(A) complying with regulatory requirements set forth in these Articles;

(B) complying with all applicable federal, state and local requirements;

(C) the design, construction, and physical operation of the operations area;

(D) controlling the activities at an operation or facility as listed on the permit application or Enforcement Agency Notification.

() "Owner" means the person or persons who own, in whole or in part, an operation or facility and the land on which it is located. If the ownership of the operation or facility is not the same as the ownership of the land on which it is located, the owner of the land shall be identified as the "Land Owner" and the owner of the operation or facility shall be identified as the "Facility Owner."

() "Post digestion solids" means the solid residual material remaining after organic material has been processed by means of in-vessel digestion.

() "RWQCB" means the Regional Water Quality Control Board. "SWRCB" means the State Water Resources Control Board.

() "Salvaging" means the controlled separation of solid waste material which do not require further processing, for reuse or recycling prior to transfer activities.

() "Scavenging" means the uncontrolled and/or unauthorized removal of solid waste materials.

() "Special Waste" includes but is not limited to:

(A) waste requiring special collection, treatment, handling, storage, or transfer techniques as defined in Title 22, section 66260.10.

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(B) waste tires and appliances requiring the removal of mercury switches or chlorofluorocarbons.

() "Spotter" means an employee who conducts activities that include, but are not limited to, traffic control, hazardous waste recognition and removal for proper handling, storage and transport or disposal, and protection of the public from health and/or safety hazards.

() "Store" means to stockpile or accumulate for later use.

() "Storage tank" is an impervious concrete, metal or other tank designed to temporarily store feedstock and wastewater

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.3. Regulatory Tiers Requirements for In-Vessel Anaerobic Digestion Operations and Facilities.

Sections XXXX.X through XXXX.X set forth the regulatory tier requirements (Title 14, Division 7, Chapter 3.2, Article X.X, commencing with section XXXXX of the California Code of Regulations (commencing with section 21570) that apply to specified types of In-Vessel Digestion Operations and Facilities. These requirements are summarized in Table 1

Table 1 In-Vessel Anaerobic Digestion Operations and Facilities Placement into the Regulatory Tiers

<u>Excluded Tier</u>	<u>Enforcement Agency Notification Tier</u>	<u>Registration Permit Tier</u>	<u>Full Solid Waste Facility Permit</u>
<u>Anaerobically digestible materials at POTW's</u>	<u>Limited Volume In-Vessel Digestion Operation Section XXXXX.X</u>	<u>Medium Volume In-Vessel Digestion Facility Section XXXXX.X</u>	<u>Large Volume In-Vessel Digestion Facility Section XXXXX.X</u>
<u>Ag material derived from ag site & returned to same site</u>	<u>Research digestion operations</u>		
<u>In-vessel digestion activities with less than 50 cubic yard capacity</u>			

Note: There are no in-vessel digestion operations or facilities placed within the Standardized tier.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.4. Excluded Activities.

(a)The activities listed in this section are not subject to the in-vessel digestion requirements set forth in this Chapter. Nothing in this section precludes the EA or the CalRecycle from inspecting an excluded activity to verify that the activity is being conducted in a manner that qualifies as an excluded activity or from taking any appropriate enforcement action.

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PLACEHOLDER...(see Issue 5 for complete initial discussion draft regulatory text) (1) A Publicly Owned Treatment Works Treatment Plant that receives vehicle-transported solid waste that is an anaerobically digestible material for the purpose of anaerobic co-digestion with POTW wastewater, under the following conditions

(2) An activity is excluded if it handles agricultural material, derived from an agricultural site, and returns a similar amount of post-digested solids or compost to that same agricultural site, or an agricultural site owned or leased by the owner, parent, or subsidiary of the agricultural site that on which the in-vessel digestion activity is located. No more than an incidental amount of up to 1,000 cubic yards of compost product may be given away or sold annually. No post-digested solids that are not compost may be given away or sold.

(3) In-vessel digestion activities with less than a total of 50 cubic yards of solid waste, feedstock, and digestate on site are excluded

§ 17896.5. Research Digestion Operations

(A) An operator conducting research digestion operation shall not have more than xxxxx cubic yards of feedstock, additives, amendments, chipped and ground material, and compost on-site at any one time, and shall comply with the EA Notification requirements set forth in Title 14, California Code of Regulations, Division 7, Chapter 5.0, Article 3.0 (commencing with section 18100), except as otherwise provided by this Chapter.

(B) An operator conducting research composting operations utilizing may exceed xxxx cubic-yards of feedstock, additives, amendments, chipped and ground material and compost, if the EA determines that such increased volume will not pose additional risk to the public health, safety and the environment.

(C) In addition to the EA Notification requirements set forth in Title 14, California Code of Regulations, Division 7, Chapter 5.0, Article 3.0, section 18103.1(a)(3), the operator shall provide a description of the research to be performed, research objectives, methodology/protocol to be employed, data to be gathered, analysis to be performed, how the requirements of this subchapter will be met, and the projected timeframe for completion of the research operation.

(D) The EA Notification for a research digestion operation shall be reviewed after each two year period of operation. Review criteria shall include the results and conclusions drawn from the research.

(E) Research digestion operations that will be using unprocessed mammalian tissue as a feedstock for the purpose of obtaining data on pathogen reduction or other public health, animal health, safety, or environmental protection concern, shall satisfy the following additional requirements:

1. Unprocessed mammalian tissue used as feedstock shall be generated from on-site agricultural operations, and all products derived from unprocessed mammalian tissue shall be beneficially used on-site.

2. The operator shall prepare, implement and maintain a site-specific, research digestion operation site security plan. The research digestion site security plan shall include a description of the methods and facilities to be employed for the purpose of limiting site access and preventing the movement of unauthorized material on to or off of the site.

3. The EA Notification for the research digestion operation using unprocessed mammalian tissue as feedstock and documentation of additional requirements of this section shall be reviewed after each six month period of operation.

(f) The operator shall submit all additional documentation required by subsections (C) and (E)2. to the EA with the Notification and prior to the digestion of any feedstock. The EA shall determine that the EA

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Notification for research digestion operations is complete and correct only if the additional documentation requirements of this section have been met.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

§ 17896.6. Limited Volume In-Vessel Digestion Operations.

All limited volume in-vessel digestion operations shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations (commencing with section 18100). These operations shall be inspected by the EA at least once every three (3) months unless the EA approves, with CalRecycle concurrence, an operator request for reduced inspection frequency. The EA shall approve a lesser inspection frequency if it will not pose an additional risk to public health and safety and the environment but in no case shall the frequency be less than annual. The EA shall submit, for concurrence, a copy of the operator request and EA-proposed approval to CalRecycle.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.7. Medium Volume In-Vessel Digestion Facilities

All medium volume in-vessel digestion facilities shall comply with the Registration Permit requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations (commencing with section 18104). These facilities shall be inspected monthly by the EA in accordance with PRC section 43218.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.8. Large Volume In-Vessel Digestion Facility

All large volume in-vessel digestion facilities shall obtain a Full Solid Waste Facilities Permit, in accordance with the procedures set forth in Title 27, Division 2, Subdivision 1, Chapter 4, Subchapter 3, Articles 2, 3, and 3.1 of the California Code of Regulations (commencing with section 21570). The In-Vessel Digestion Report required by section 17869.11 shall constitute the Report of Facility Information required by section 21570(f)(2) of Title 27. These facilities shall be inspected monthly by the EA in accordance with PRC section 43218.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.9. In-Vessel Digestion Facility Plan.

Each operator of a Medium Volume In-Vessel Digestion Facility, as defined in section 17896.2 (x) shall file with the EA an "In-Vessel Digestion Facility Plan" (as specified in section 18221.5.1). The information contained in the Plan shall be reviewed by the EA to determine whether it is complete and correct as defined in Title 14, Division 7, Chapter 5.0, Article 3.0, section 18101.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.10 In-Vessel Digestion Report.

(a) Each operator of a Large Volume In-Vessel Digestion Facility, as defined in section 17896.2(x) shall file with the EA an "In-Vessel Digestion Report" (as specified in section 18221.6.1). An operator of an existing facility who submits an application package to the EA, pursuant to Title 27, section 21570, which proposes to change the facility's operations, or to change the solid waste facility permit shall do one of the following:

(1) submit the updated information as an amendment to the existing In-Vessel Digestion Report; or

(2) submit a complete In-Vessel Digestion Report as described in section 18221.6.1.

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Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.11. Applicability of State Minimum Standards

(a) Articles 1, 2, 3, 4, and 6. of this Chapter set forth the minimum standards that apply to all in-vessel digestion operations and facilities, except as noted in Section 17896.1.(a).

(b) Article 5 of this Chapter sets forth additional minimum standards that will apply only to In-Vessel Digestion facilities.

(c) Approvals, determinations and other requirements that the EA is authorized to make under Articles 1, 3, 4, 5, and 6 of this Chapter shall be provided in writing by the EA to the operator. The operator shall place a copy of each approval, determination and other requirement in the operating record together with those records identified in sections 17414 and 17414.1.

(d) Some of the standards contained in this Chapter authorize the EA to approve an alternative method of compliance with the standard. These provisions are not intended to allow the EA to change the particular standard, but are intended to allow the EA flexibility to approve, in advance, an alternative method of meeting the existing standard which provides equivalent protection of the public health and safety and the environment as the existing standard. For facilities that require a full solid waste facility permit, the EA may choose to include the approved alternative method of compliance as a term and condition of the solid waste facility permit, rather than in the manner authorized by subdivision (c) of this section. If the method is included in the solid waste facility permit, a change to the method may require a revision to the solid waste facility permit in accordance with the procedures set forth in Title 27, Division 2, Subdivision 1, Chapter 4, Subchapter 3, Articles 2, 3, and 3.1 (commencing with section 21570).

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

Article 2. Siting and Design

§ 17896.12. Siting On Landfills.

(a) In-vessel digestion operations and facilities or portions thereof, located atop fully or partially closed solid waste landfills shall meet postclosure land use requirements pursuant to Title 27, California Code of Regulations, section 21190.

(b) In-vessel digestion operations and facilities or portions thereof, located on intermediate cover on a solid waste landfill shall locate operations areas on foundation substrate that is stabilized, either by natural or mechanical compaction, to minimize differential settlement, ponding, soil liquefaction, or failure of pads or structural foundations.

(c) In-vessel digestion operations and facilities or portions thereof, located on intermediate cover on a solid waste landfill shall be operated in a manner not to interfere with the operations of the landfill or with the closure or postclosure maintenance of the landfill.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.13. General Design Requirements.

(a) The design of a new in-vessel digestion operation or facility shall utilize expert advice, as appropriate, from persons competent in engineering, architecture, landscape design, traffic engineering, air quality control, water quality protection and design of structures.

(b) The design shall be based on appropriate data regarding the expected service area, anticipated nature and quantity of wastes to be received, climatological factors, physical settings, adjacent land use (existing and planned), types and number of vehicles anticipated to enter the operation or facility, adequate off-street parking facilities for transfer vehicles, drainage control, the hours of operation and

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other pertinent information. If the operation or facility is to be used by the general public, the design shall take account of safety features that may be needed to accommodate such public use.

(c) The in-vessel digestion operation or facility shall be designed in such a manner as to restrict the unloading area to as small an area as practicable, provide adequate control of windblown material, minimize the propagation or attraction of flies, rodents or other vectors and the creation of nuisances by reason of solid wastes being handled at the operation. Other factors which shall be taken into consideration are: dust control, noise control, public safety, and other pertinent matters related to the protection of public health at the operation or facility.

(d) In reviewing the design of a proposed in-vessel anaerobic digestion operation or facility, the EA may require the applicant to describe how he or she has complied with applicable local and state requirements regarding odor control measures, personnel health and safety, and sanitary facilities.

(e) Solid waste storage containers shall be durable, easily cleanable, designed for safe handling, and constructed to prevent loss of wastes from the container during storage. If such a container is used to store garbage, other wet or liquid producing wastes, or wastes composed of fine particles, such container shall in all cases be nonabsorbent and leak-resistant. Unloading areas shall be easily cleanable, designed for safe handling and constructed to prevent loss of wastes.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

Article 3. Operating Standards for In-Vessel Digestion Operations and Facilities.

§ 17896.14. Cleaning.

(a) In-vessel digestion operations, facilities, and their equipment, boxes, bins, pits and other types of containers shall be cleaned using the following schedule, or at a lesser frequency, approved by the EA, in order to prevent the propagation or attraction of flies, rodents, or other vectors:

(1) all operations and facilities shall be cleaned each operating day of all loose materials and litter;

(2) all operations or facilities that operate 24 hours per day must clean the operations or facilities at least once every 24 hours.

(b) The entrance and exit shall be cleaned at a frequency which prevents the tracking or off-site migration of waste materials.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.15. Drainage Control.

(a) Drainage at all in-vessel digestion operations and facilities shall be controlled to:

(1) minimize the creation of contact water outside of the tanks;

(2) prevent to the greatest extent possible given existing weather conditions, the uncontrolled off-site migration of contact water;

(3) protect the integrity of roads and structures;

(4) protect the public health; and

(5) prevent safety hazards and interference with operations.

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Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.16. Dust Control.

(a) The operator shall take adequate measures to minimize the creation, emission, or accumulation of excessive dust and particulates, and prevent other safety hazards to the public caused by obscured visibility. The operator shall minimize the unnecessary handling of wastes during processing to prevent the creation of excessive dust. Measures to control dust include, but are not limited to: reduced processing, periodic sweeping and cleaning, misting systems or ventilation control. One or more of the following may be an indication that dust is excessive:

(1) safety hazards due to obscured visibility; or

(2) irritation of the eyes; or

(3) hampered breathing;

(4) migration of dust off-site.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.17. Hazardous, Liquid, and Special Wastes.

(a) An in-vessel digestion operation or facility shall not intentionally accept or store hazardous wastes, including batteries, oil, paint, and special wastes, unless it has been approved to handle the particular waste by the appropriate regulatory agencies. Such approvals shall be placed in the operating record.

(b) At in-vessel digestion operations and facilities where unauthorized hazardous wastes are discovered, control measures as are necessary to protect public health, safety and the environment, such as elimination or control of dusts, fumes, mists, vapors or gases shall be taken prior to isolation or removal from the operation or facility.

(c) In-vessel digestion operations and facilities shall be properly equipped to handle liquid wastes and sludges wastes in a manner to protect public health, safety, and the environment.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.18. Litter Control

Litter at in-vessel digestion operations and facilities shall be controlled, and routinely collected to prevent safety hazards, nuisances or similar problems and off-site migration to the greatest extent possible given existing weather conditions.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.19. Load checking.

(a) The operator of an attended in-vessel digestion operation or facility shall implement a load checking program to prevent the acceptance of waste which is prohibited by this Article. This program must include at a minimum:

(1) the number of random load checks to be performed;

(2) a location for the storage of prohibited wastes removed during the load checking process that is separately secured or isolated;

(3) records of load checks and the training of personnel in the recognition, proper handling, and disposition of prohibited waste. A copy of the load checking program and copies of the load checking

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records for the last year shall be maintained in the operating record and be available for review by the appropriate regulatory agencies.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.20. Maintenance Program.

All aspects of the in-vessel digestion operation or facility shall be maintained in a state of good repair. The operator shall implement a preventative maintenance program to monitor and promptly repair or correct deteriorated or defective conditions.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.21. Medical Wastes.

Medical waste, unless treated and deemed to be solid waste, which is regulated pursuant to the Medical Waste Management Act (commencing with Section 117600 of the Health and Safety Code), shall not be accepted at an in-vessel digestion operation or facility, unless approved by the appropriate regulatory agencies.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.22. Noise Control.

Noise shall be controlled to prevent health hazards and to prevent nuisance. Measures to control noise include but are not limited to: posting of warning signs that recommend or require hearing protection; separation by barriers that limit access to authorized personnel only; or, enclosures to reduce noise transmission. Compliance with specific provisions regarding noise control in a local land use approval, such as a conditional use permit or CEQA mitigation measures, shall be considered compliance with this standard.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.23. Non-Salvageable Items.

Drugs, cosmetics, foods, beverages, hazardous wastes, poisons, medical wastes, syringes, needles, pesticides and other materials capable of causing public health or safety problems shall not be salvaged at in-vessel digestion operations or facilities unless approved by all applicable agencies and the EA.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.24. Nuisance Control.

Each in-vessel digestion operation and facility shall be conducted and maintained to prevent the creation of a nuisance..

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.25. Odor Minimization Plan

(a) All in-vessel digestion operations and facilities shall prepare, implement and maintain a site-specific odor impact minimization plan. A complete plan shall be submitted to the EA with the EA Notification or permit application.

(b) Odor impact minimization plans shall provide guidance to on-site operation personnel by describing, at a minimum, the following items. If the operator will not be implementing any of these procedures, the plan shall explain why it is not necessary.

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(1) an odor monitoring protocol which describes the proximity of possible odor receptors and a method for assessing odor impacts at the locations of the possible odor receptors; and,

(2) a description of meteorological conditions effecting migration of odors and/or transport of odor-causing material off-site. Seasonal variations that effect wind velocity and direction shall also be described; and,

(3) a complaint response protocol; and,

(4) a description of design considerations and/or projected ranges of optimal operation to be employed in minimizing odor, including method and degree of aeration, moisture content of materials, feedstock characteristics, airborne emission production, process water distribution, pad and site drainage and permeability, equipment reliability, personnel training, weather event impacts, utility service interruptions, and site specific concerns as applicable; and,

(5) a description of operating procedures for minimizing odor, including aeration, moisture management, feedstock quality, drainage controls, pad maintenance, wastewater pond controls, storage practices (e.g., storage time and pile geometry), contingency plans (i.e., equipment, water, power, and personnel), bio filtration, and tarping as applicable.

(c) The odor impact minimization plan shall be revised to reflect any changes, and a copy shall be provided to the EA, within 30 days of those changes.

(d) The odor impact minimization plans shall be reviewed annually by the operator to determine if any revisions are necessary.

(e) The odor impact minimization plan shall be used by the EA to determine whether or not the operation or facility is following the procedures established by the operator. If the EA determines that the odor impact minimization plan is not being followed, the EA may issue a Notice and Order (pursuant to section 18304) to require the operator to either comply with the odor impact minimization plan or to revise it.

(f) If the odor impact minimization plan is being followed, but odor impacts are still occurring, the EA may issue a Notice and Order (pursuant to section 18304) requiring the operator to take additional reasonable and feasible measures to minimize odors.

Note: Authority cited: Sections 40502, 43020, 43021 and 43209.1, Public Resources Code. Reference: Sections 43020, 43021 and 43209.1,

§ 17896.26. Parking.

Adequate off-street parking area(s) shall be provided, if necessary, for transfer vehicles. Compliance with specific provisions regarding adequacy of off-street parking in a local land use approval, such as a conditional use permit or CEQA mitigation measures, shall be considered compliance with this standard.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.27. Personnel Health and Safety.

The Injury, Illness, and Prevention Program (IIPP) required by Title 8, California Code of Regulations, section 320 ...shall be available for review by local and state inspectors during normal business hours. Nothing in this section is intended to make the EA responsible for enforcing the IIPP.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.28. Prohibitions.

(a) The in-vessel digestion of unprocessed mammalian tissue, including but not limited to, flesh, organs, hide, blood, bone and marrow is prohibited, except when received from the food service

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industry, grocery stores, or residential food scrap collection, or as part of a research activity for the purpose of obtaining data on pathogen reduction or other public health, animal health, safety, or environmental concerns in accordance with section 17862.

(b) The in-vessel digestion of medical waste is prohibited.

(c) The in-vessel digestion of hazardous waste is prohibited.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

§ 17896.29. Protection of Users.

An in-vessel digestion operation or facility shall be designed, constructed, operated, and maintained so that contact between the public and solid wastes is minimized. This may be accomplished through the use of railings, curbs, grates, fences, and/or spotters.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.30. Roads.

All on-site roads and driveways shall be designed and maintained to minimize the generation of dust and tracking of soil onto adjacent public roads. Such roads shall be kept in safe condition and maintained to allow vehicles utilizing the in-vessel digestion operation or facility to have reasonable all-weather access to the site.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.31. Sanitary Facilities.

The operator shall maintain all sanitary and hand-washing facilities which may be required, by applicable state or local requirements, in a reasonably clean and adequately supplied condition.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.32. Scavenging and Salvaging.

Each in-vessel digestion operation or facility shall meet the following requirements:

(a) scavenging shall be prohibited;

(b) salvaging of materials, such as metal, paper, glass and cardboard is permitted as an integral part of the operation, subject to conditions established by the EA, the local land use authority, or other approving agencies.

(c) salvaging activities shall be conducted in a planned and controlled manner and not interfere with other aspects of site operation. Activities shall be conducted so as not to interfere with expeditious entry and exit of vehicles delivering waste to the transfer or processing operation or facility. Salvaging activities conducted at a transfer/processing operation or facility shall be confined to specified, clearly identified areas of the in-vessel digestion operation or facility, and controlled to prevent health, safety or nuisance problems;

(d) storage of materials salvaged from solid wastes shall be ancillary to the activities of the operation or facility unless such storage is planned as an integral part of the operation. Materials salvaged on-site shall be stored away from other activity areas in specified, clearly identifiable areas as noted in the In-Vessel Digestion Facility Plan or In-Vessel Digestion Report. They shall be arranged to minimize risk of fire, health and safety hazard, vector harborage, or other hazard or nuisance, and limited to a specified volume and/or duration as described in the Enforcement Agency Notification, In-Vessel Digestion Facility Plan, or In-Vessel Digestion Facility Report.

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Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.33. Signs.

(a) For in-vessel digestion operations or facilities not open to the public, each point of access from a public road shall be posted with an easily visible sign indicating the in-vessel digestion operation or facility name and location of nearest public operation or facility.

(b) If the operation or facility is open to the public, there shall be an easily visible sign at all public entrances indicating the name of the operator, the operator's telephone number, schedule of charges, hours of operation, and a listing of the general types of materials which either (1) WILL be accepted, or (2) WILL NOT be accepted.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.34. Site Restoration

All in-vessel digestion operations and facilities shall meet the following requirements:

(a) The operator shall provide the EA written notice of intent to perform site restoration, at least 30 days prior to beginning site restoration.

(b) The operator(s) and owner(s) shall provide site restoration necessary to protect public health, safety, and the environment.

(c) The operator shall ensure that the following site restoration procedures are performed upon completion of operations and termination of service:

(1) The operation and facility grounds, ponds, and drainage areas shall be cleaned of all residues including, but not limited to, compost materials, construction scraps, and other materials related to the operations, and these residues legally recycled, reused, or disposed.

(2) All machinery shall be cleaned and removed or stored securely.

(3) All remaining structures shall be cleaned of compost materials, dust, particulates, or other residues related to the composting and site restoration operations.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

§ 17896.35. Pre-Digestion Solid Waste

(a) All solid wastes not placed in tanks for digestion shall be removed at the following frequencies or at an alternate frequency approved by the EA, in order to prevent the propagation or attraction of flies, rodents or other vectors:

(1) in-vessel digestion operations shall remove solid wastes not placed in tanks for digestion within 7 days from the date of receipt;

(2) solid wastes shall be injected into the digester tanks or other water and air tight enclosed storage vessel within 8 hours from the time of receipt.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.36. Supervision and Personnel.

The operator shall provide adequate supervision and a sufficient number of qualified personnel to ensure proper operation of the site in compliance with all applicable laws, regulations, permit conditions and other requirements. The operator shall notify the EA in writing of the name, address

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and telephone number of the operator or other person responsible for the operation. A copy of the written notification shall be placed in the operating record.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.37. Training.

Personnel assigned to the operation or facility shall be adequately trained in subjects pertinent to site solid waste operations and maintenance, hazardous materials recognition and screening, use of mechanized equipment, environmental controls, emergency procedures and the requirements of this Article. A record of such training history shall be maintained and made available for inspection.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.38. Vector, Bird and Animal Control.

The operator shall take adequate steps to control or prevent the propagation, harborage and attraction of flies, rodents, or other vectors, and animals, and to minimize bird attraction.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

Article 4. Record Keeping Requirements.

§ 17896.39. Record Keeping Requirements.

Each operator shall meet the following requirements:

(a) each operator shall maintain records of incoming weights or volumes and outgoing salvage or residual weights or volumes in a form and manner approved by the EA. Such records shall be: submitted to the EA or CalRecycle upon request; be adequate for overall planning and control purposes; and, be as current and accurate as practicable;

(b) all records required by this Article shall be kept by the operator in one location and accessible for three (3) years and shall be available for inspection by the EA and other duly authorized regulatory agencies during normal working hours.

(c) the operator shall submit copies of specified records to the EA upon request or at a frequency approved by the EA;

(d) the operator shall maintain a daily log book or file of special occurrences encountered during operations and methods used to resolve problems arising from these events, including details of all incidents that required implementing emergency procedures. Special occurrences shall include but are not limited to: fires, injury and property damage, accidents, explosions, receipt or rejection of prohibited wastes, lack of sufficient number of personnel pursuant to section 17410.2, flooding, earthquake damage and other unusual occurrences. In addition, the operator shall notify the EA by telephone within 24 hours of all incidents requiring the implementation of emergency procedures, unless the EA determines that a less immediate form of notification will be sufficient to protect public health and safety and the environment;

(e) the operator shall record any written public complaints received by the operator, including:

(1) the nature of the complaint,

(2) the date the complaint was received,

(3) if available, the name, address, and telephone number of the person or persons making the complaint, and

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(4) any actions taken to respond to the complaint;

(f) the operator shall maintain a copy of the written notification to the EA and local health agency of the name, address and telephone number of the operator or other person(s) responsible for the operations as required by section 17896.37.;

(g) The operator shall maintain records of employee training as required by section 17896.38;

(h) all in-vessel digestion operations and facilities shall maintain records as required by section 18809 et seq.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.40. Documentation of Enforcement Agency Approvals, Determinations, and Requirements.

Approvals, determinations, and other requirements the EA is authorized to make under this Chapter shall be provided in writing to the operator and placed in the operating record by the operator.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

Article 5. Additional Operating Requirements for In-Vessel Digestion Facilities Only.

§ 17896.41. Communications Equipment.

Each in-vessel digestion facility shall have adequate communication equipment available to site personnel to allow quick response to emergencies.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.42. Equipment.

Equipment shall be adequate in type, capacity and number, and sufficiently maintained to allow the in-vessel digestion facility to meet all requirements of this Chapter.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.43. Fire Fighting Equipment.

Each in-vessel digestion facility shall have fire suppression equipment continuously available, properly maintained and located as required by the local fire authority.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.44. Housekeeping.

The operator shall provide adequate housekeeping for the maintenance of in-vessel digestion facility equipment and shall minimize accumulations of fuel drums, inoperable equipment, parts, tires, scrap, and similar items.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.45. Lighting.

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The in-vessel digestion facility and/or equipment shall be equipped with adequate lighting, either through natural or artificial means, to ensure the ability to monitor incoming loads, effectiveness of operations, and public health, safety and the environment.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.46. Site Attendant.

An in-vessel digestion facility open to the public shall have an attendant present during public operating hours or the facility shall be inspected by the operator on a regularly scheduled basis as approved by the EA to ensure that it meets all of the requirements of this Chapter.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.47. Site Security.

The in-vessel digestion facility shall be designed to discourage unauthorized access by persons and vehicles through the use of either a perimeter barrier or topographic constraints.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.48. Traffic Control.

(a) Traffic flow through the in-vessel digestion facility shall be controlled to prevent the following:

(1) interference with or creation of a safety hazard on adjacent public streets or roads,

(2) on-site safety hazards, and

(3) interference with operations.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.49. Visual Screening.

The in-vessel digestion facility shall have appropriate treatment of areas open to public view to create and maintain an aesthetically acceptable appearance as approved by the local land use authority, or if none exist, in consultation with the EA. Compliance with specific provisions regarding visual screening in a local land use approval, such as a conditional use permit, or CEQA mitigation measures shall be considered compliance with this standard.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.50. Water Supply.

A safe and adequate water supply for conducting in-vessel digestion, drinking and emergency use (e.g., fire protection, first aid) shall be available.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

Article 6. Post Digestion Solids

§ 17896.52 Post Digestion Solids Handling

(a) Post digestion solids removed from the in-vessel digester or an air-tight and water-tight enclosed storage container shall be removed from the site within 8 hours and delivered as solid waste to

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another solid waste facility or operation for disposal unless the post-digested solids have been incorporated in an aerobic compost process on-site.

(b) Post-digested solids that have not been analyzed for metal concentration pursuant to section 17896.54, pathogen concentration pursuant to section 17896.55(a), and physical contaminants pursuant to section 17896.56 or are known to contain any metal in amounts that exceed the maximum metal concentrations described in section 17896.54, pathogens that exceed the maximum acceptable pathogen concentrations described in section 17896.55(a), or physical contaminants that exceed the maximum physical contamination limits described in section 17896.56 shall be designated for disposal, additional processing through digestion or composting, or other use as approved by state or federal agencies having jurisdiction.

(c) All in-vessel digestion operations and facilities that compost on-site shall comply with the maximum metal concentrations requirements of section 17896.54, the maximum acceptable pathogen concentrations requirements of section 17896.55(a), and physical contamination limits of section 17896.56.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 17896.53. Sampling Requirements.

(a) The sampling of post-digested solids, to determine compliance with section 17896.52(a)(1), shall occur within twenty-four (24) hours of the solids being removed from the in-vessel digester.

(b) The sampling of compost produced from post-digested solids at an in-vessel digestion operation or facility shall occur at the point where the compost is removed from the site, bagged for sale, given away for beneficial use and removed from the site or otherwise beneficially used. Analytical results indicating compliance with sections 17896.54, 17896.55, and 17896.56 shall be received by the operator prior to the sampled compost leaving the site.

(c) This sampling shall be performed by taking and analyzing at least one composite sample, following the requirements of this section as follows:

(1) An operator who digests green material, food material, vegetative food material or mixed solid waste shall take and analyze one composite sample for every 5,000 cubic-yards of compost produced.

(2) An operator who digests biosolids shall meet the sampling schedule described in Table 1 below.

Table 1- Frequencies of Compost Sampling for Biosolids at In-Vessel Digestion Facilities

<u>Amount of Biosolids Feedstock</u> <u>(metric tons per 365 day period)</u>	<u>Frequency</u>
<u>Greater than zero but fewer than 290</u>	<u>annually</u>
<u>Equal to or greater than 290 but fewer than 1,500</u>	<u>quarterly</u>
<u>Equal to or greater than 1,500 but fewer than 15,000</u>	<u>bimonthly</u>
<u>Equal to or greater than 15,000</u>	<u>monthly</u>

(A) The amount of biosolids feedstock shall be calculated in dry weight metric tons.

(3) Composite sample analysis for maximum acceptable metal concentrations, specified in section 17896.54, shall be conducted at a laboratory certified by the California Department of Health Services, pursuant to the Health and Safety Code.

(d) A composite sample shall be representative and random, and may be obtained by taking twelve (12) mixed samples as described below.

(1) The twelve samples shall be of equal volume.

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(2) The twelve samples shall be extracted from within the post-digested solids or compost pile as follows:

(A) Four samples from one-half the width of the pile, each at a different cross-section;

(B) Four samples from one-fourth the width of the pile, each at a different cross-section; and,

(C) Four samples from one-eighth the width of the pile, each at a different cross-section.

(e) The EA may approve alternative methods of sampling for a green material in-vessel digestion operation or facility that ensures the maximum metal concentration requirements of section 17896.54 and the pathogen reduction requirements of section 17896.55, as applicable, are met.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

§ 17896.54. Maximum Metal Concentrations.

(a) Compost produced from post-digested solids at an in-vessel digestion operation or facility that contains any metal in amounts that exceed the maximum acceptable metal concentrations shown in Table 2 shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction. These maximum metal concentrations standards may also be applied to post-digested solids pursuant to section 17896.52(a)(1). Sample results must be received by the operator prior to removing product from the site.

Table 2 -Maximum Acceptable Metal Concentrations

<u>Constituent</u>	<u>Concentration</u> <u>(mg/kg)</u> <u>on dry weight basis</u>
<u>Arsenic (As)</u>	<u>41</u>
<u>Cadmium (Cd)</u>	<u>39</u>
<u>Copper (Cu)</u>	<u>1500</u>
<u>Lead (Pb)</u>	<u>300</u>
<u>Mercury (Hg)</u>	<u>17</u>
<u>Nickel (Ni)</u>	<u>420</u>
<u>Selenium (Se)</u>	<u>100</u>
<u>Zinc (Zn)</u>	<u>2800</u>

(b) Alternative methods of compliance to meet the requirements of Subdivision (a) of this section, including but not limited to sampling frequencies, may be approved by the EA for green and food materials in-vessel digestion operations and facilities if the EA determines that the alternative method will ensure that the maximum acceptable metal concentrations shown in Table 2 are not exceeded.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

§ 17896.55. Pathogen Reduction.

(a) The density of fecal coliform in compost produced from post-digested solids at an in-vessel digestion operation or facility shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), and the density of Salmonella sp. bacteria in this compost shall be less than three (3) Most Probable Number per four (4) grams of total solids (dry weight basis). These pathogen reductions standards may also be applied to post-digested solids pursuant to section 17896.52(a)(1). Sample results must be received by the operator prior to removing product from the site.

(1) Compost products derived from compostable materials, that contain pathogens in amounts that exceed the maximum acceptable pathogen concentrations described in Subdivision (a) of this section shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction.

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(b) Operators of in-vessel digestion operation and facilities that produce compost from post-digested solids shall ensure that:

(2) At enclosed or within-vessel composting process operations and facilities, active compost shall be maintained at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 3 days.

(A) Due to variations among enclosed and within-vessel composting system designs, including tunnels, the operator shall submit a system-specific temperature monitoring plan with the permit application to meet the requirements of Subdivision (b)(2) of this section.

(3) If the operation or facility uses a windrow composting process, active compost shall be maintained under aerobic conditions at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, there shall be a minimum of five (5) turnings of the windrow.

(4) If the operation or facility uses an aerated static pile composting process, all active compost shall be covered with 6 to 12 inches of insulating material, and the active compost shall be maintained at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 3 days.

(c) Alternative methods of compliance to meet the requirements of Subdivision (b) of this section may be approved by the EA if the EA determines that the alternative method will provide equivalent pathogen reduction.

(d) In-vessel digestion operations and facilities that compost post-digestion solids shall be monitored as follows to ensure that the standards in Subdivision (b) of this section are met:

(1) Each day during the pathogen reduction period, at least one temperature reading shall be taken per every 150 feet of windrow, or fraction thereof, or for every 200 cubic-yards of active compost, or fraction thereof.

(2) Temperature measurements for pathogen reduction shall be measured as follows:

(A) Windrow composting processes and agitated bays shall be monitored twelve (12) to twenty-four (24) inches below the pile surface;

(B) Aerated static pile composting processes shall be monitored twelve (12) to eighteen (18) inches from the point where the insulation cover meets the active compost.

(3) Alternative methods of compliance to meet the requirements of Subdivision (d) of this section may be approved by the EA if the EA determines that the alternative method will provide equivalent temperature measurements. (Gore parking lot issue)

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

§ 17896.56. Physical Contamination Limits

(a) Products derived from compostable materials shall not contain more than 0.1% physical contaminants greater than 4 millimeters by weight. Products that contain more than 0.1% physical contaminants greater than 4 millimeters by weight shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction. Sample results must be received by the operator prior to removing product from the site.

(b) Upon request of the EA, a compostable material handling operation shall take a representative sample of product derived from compostable material and send to a laboratory at which physical

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contaminants greater than 4 millimeters shall be collected and weighed, and the percentage of physical contaminants determined.

(c) All compostable material handling facilities shall take one representative sample for every 5,000 cubic-yards of product derived from compostable material and send to a laboratory at which physical contaminants greater than 4 millimeters shall be collected and weighed, and the percentage of physical contaminants determined.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 43020 and 43021, Public Resources Code.

Chapter 5. Enforcement of Solid Waste Standards and Administration of Solid Waste Facility Permits: Loan Guarantees.

Article 3.2 Reports of Facility Information

§ 18221.5.1 In-Vessel Digestion Facility Plan.

Each operator of a Medium Volume In-Vessel Digestion Facility, ~~or Direct Transfer Facility~~ that is required to obtain a Registration Permit, as set forth in sections 17403.4 and 17403.6 and Title 14, Division 7, Chapter 5.0, Article 3.0, (commencing with section 18100) shall, at the time of application, file an In-Vessel Digestion Facility Plan ("Plan") with the EA as required in section 17403.8 of this Title. In order to maintain the permit, the operator must file amendments as necessary to maintain the accuracy of the Plan. Such amendments, or lack thereof, may become the basis for changes in the permit or for revocation of the permit. The Plan shall contain the following:

(a) name(s) of the operator, owner, and the company they represent, if applicable;

(b) schematic drawing of the building and other structures showing layout and general dimensions of the operations area, including, but not limited to, unloading, storage, loading, and parking areas;

(c) descriptive statement of the manner in which activities are to be conducted at the facility;

(d) days and hours that the facility is to operate. If the hours of waste receipt differ from the hours of material processing, each set of hours may be stated. For facilities with continuous operations, indicate the start of the operating day for purpose of calculating amount of waste received per operating day. The operator may also indicate whether or not, and when, other activities, such as routine maintenance will take place, if those activities will occur at times other than those indicated above;

(e) total acreage contained within the operating area;

(f) facility design capacity including the assumptions, methods, and calculations performed to determine the total capacity;

(g) information showing the types and the daily quantities of solid waste to be received. If tonnage was figured from records of cubic yards, include the conversion factor used;

(h) description of the methods used by the facility to comply with each state minimum standard contained in sections 17406.1 through 17419.2;

(i) anticipated volume of quench or process water and the planned method of treatment, and disposal of any wastewater;

(j) description of provisions to handle unusual peak loading;

(k) description of transfer, recovery and processing equipment, including classification, capacity and the number of units;

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(l) planned method for final disposal of the solid waste;

(m) planned method for the storage and removal of salvaged material;

(n) resume of management organization which will operate the facility.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.

§ 18221.6.1 In-Vessel Digestion Report.

Each operator of a Large Volume In-Vessel Digestion Facility that is required to obtain a Full Solid Waste Facility Permit, as set forth in Title 27, Division 2, Subdivision 1, Chapter 4, Subchapter 3, Articles 2.0-3.2, (commencing with section 21570) shall, at the time of application, file an In-Vessel Digestion Report ("Report") with the EA as required in section 17403.9 of this Title. In order to maintain an existing permit, the operator must file amendments as required in section 17403.9 of this Title and re-title the document as a Transfer/Processing Report. Such amendments, or lack thereof, may become the basis for changes in the permit or for revocation of the permit. A Report shall contain the following:

(a) name(s) of the operator, owner, and the company they represent, if applicable;

(b) facility specifications or plans, to include: a site location map, a site map, and identification of adjacent land uses and distances to residences or structures that are nearby and are within 1000 feet of the facility property line;

(c) schematic drawing of the building and other structures showing layout and general dimensions of the operations area, including, but not limited to, unloading, storage, loading, and parking areas;

(d) descriptive statement of the manner in which activities are to be conducted at the facility;

(e) days and hours the facility is to operate. If the hours of waste receipt differ from the hours of material processing, each set of hours may be stated. For facilities with continuous operations, indicate the start of the operating day for purpose of calculating amount of waste received per operating day. The operator may also indicate whether or not, and when, other activities, such as routine maintenance will take place, if those activities will occur at times other than those indicated above;

(f) total acreage contained within the operating area;

(g) facility design capacity including the assumptions, methods, and calculations performed to determine the total capacity;

(h) information showing the types and the daily quantities of solid waste to be received. If tonnage was figured from records of cubic yards, include the conversion factor used;

(i) description of the methods used by the facility to comply with each state minimum standard contained in sections 17406.1 through 17419.2;

(j) anticipated volume of quench or process water, and the planned method of treatment, and disposal of any wastewater;

(k) description of provisions to handle unusual peak loading;

(l) description of transfer, recovery and processing equipment, including classification, capacity and the number of units;

(m) planned method for final disposal of the solid waste;

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(n) planned method for the storage and removal of salvaged material:

(o) resume of management organization which will operate the facility:

(p) list of permits already obtained, and the date obtained or last revised.

Note: Authority cited: Sections 40502, 43020 and 43021, Public Resources Code. Reference: Sections 40053, 43020 and 43021, Public Resources Code.