

ATTACHMENT H - BIOSOLIDS AND SLUDGE MANAGEMENT

(Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 CFR §503.9. Sewage sludge that is hazardous, as defined in 40 CFR part 261, must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).)

1. General Requirements

- 1.1. All biosolids generated by the Permittee shall be reused or disposed of in compliance with the applicable portions of:
 - a. 40 CFR part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR part 503 Subpart B (land application) applies to biosolids placed on the land for the purpose of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR part 503 Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal.
 - b. 40 CFR part 258: for biosolids disposed of in Municipal Solid Waste landfills.
 - c. 40 CFR part 257: for all biosolids disposal practices not covered under 40 CFR part 258 or 503.
- 1.2. The Permittee is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR part 503, whether the Permittee reuses or disposes of the biosolids itself or transfers them to another party for further treatment, reuse, or disposal. The Permittee is responsible for informing subsequent preparers, appliers, or disposers of the requirements they must meet under 40 CFR part 503.
- 1.3. Duty to mitigate: The Permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.
- 1.4. No biosolids shall be allowed to enter wetland or other waters of the United States.
- 1.5. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.
- 1.6. Biosolids treatment, storage, and use or disposal shall not create a nuisance such as objectionable odors or flies.
- 1.7. The Permittee shall assure that haulers who transport biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.
- 1.8. If biosolids are stored for over two years from the time they are generated, the Permittee must ensure compliance with all the requirements for surface disposal under 40 CFR part 503 Subpart C, or must submit a written request to USEPA with the information in section 503.20 (b), requesting permission for longer temporary storage.

- 1.9. Sewage sludge containing more than 50 mg/kg PCB's shall be disposed of in accordance with 40 CFR part 761.
- 1.10. Any off-site biosolids treatment, storage, use or disposal site operated by the Permittee within Region 4 (Los Angeles Regional Water Quality Control Board) that is not subject to its own Waste Discharge Requirements shall have facilities adequate to divert surface runoff from the adjacent area, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from a storm or flood having a 1-percent chance of occurring in a 24-hour period in any given year and from the highest tidal stage that may occur.
- 1.11. There shall be adequate screening at the plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects with a diameter greater than 3/8 inches are removed.

2. Inspection and Entry

The Los Angeles Water Board, USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Permittee, directly or through contractual arrangements with their biosolids management contractors, to:

- 2.1. Enter upon all premises where biosolids are produced by the Permittee and all premises where Permittee biosolids are further treated, stored, used, or disposed, either by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal.
- 2.2. Have access to and copy any records that must be kept under the conditions of this permit or of 40 CFR part 503, by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal.
- 2.3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the production of biosolids and further treatment, storage, use, or disposal by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal.

3. Monitoring

- 3.1. Biosolids shall be monitored for the metals required in section 503.16 (for land application) or section 503.26 (for surface disposal), using the methods in "Test Methods for Evaluating Solids Waste, Physical/Chemical Methods" (SW-846), as required in 503.8(b)(4), at the following minimum frequencies:

Amount of Sewage Sludge (Metric Tons per 365 days)	Frequency
Greater than 0 but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once per quarter

Amount of Sewage Sludge (Metric Tons per 365 days)	Frequency
Equal to or greater than 1,500 but less than 15,000	Once per month
Equal to or greater than 15,000	Once per month

For accumulated, previously tested biosolids, the Discharge shall develop a representative sampling plan, which addresses the number and location of sampling points, and collect representative samples.

Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis. Biosolids to be land applied shall be tested for Organic-N, ammonium-N, and nitrate-N at the frequencies required above.

- 3.2. Biosolids shall be monitored for the following constituents at the frequency stipulated in 40 CFR § 503.16: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia nitrogen, and total solids. If biosolids are removed for use or disposal on a routine basis, sampling shall be scheduled for regular intervals throughout the year. If biosolids are stored for an extended period prior to use or disposal, sampling may occur at regular intervals, or samples of the accumulated stockpile may be collected prior to use or disposal, corresponding to the tons accumulated in the stockpile for that period.
- 3.3. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with >5 mgd influent flow shall sample biosolids for pollutants listed under section 307(a) of the Act (as required in the pretreatment section of the permit for POTWs with pretreatment programs.) Class 1 facilities and Federal Facilities with >5 mgd influent flow shall test dioxins/dibenzofurans using a detection limit of <1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.
- 3.4. The biosolids shall be tested annually or more frequently if necessary to determine hazardousness in accordance with Title 22 of the California Code of Regulation, Article 1, Chapter 11, Division 4.5 (section 66261.3).
- 3.5. Biosolids placed in a municipal landfill shall be tested semi-annually by the Paint Filter Test (SW-846, Method 9095) to demonstrate that there are no free liquids.

4. Pathogen and Vector Control

- 4.1. Prior to land application, the Permittee shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR section 503.32. Prior to disposal in a surface disposal site, the Permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.
- 4.2. If pathogen reduction is demonstrated using a "Process to Further Reduce Pathogens," the Permittee shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliform and/or pathogens, samples must be collected at the frequency specified in Table 1 of 40 CFR § 503.16. If Class B is

demonstrated using fecal coliform, at least seven grab samples must be collected during each monitoring period and a geometric mean calculated from these samples. The following holding times between sample collection and analysis shall not be exceeded: fecal coliform – 6 hours when cooled to <10 degrees Celsius (extended to one month when cooled to <4 degrees Celsius).

- 4.3. For biosolids that are land applied or placed in a surface disposal site, the Permittee shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR section 503.33(b).

5. LAND APPLICATION

The Permittee shall ensure that Class A thermophilically digested biosolids are applied at a rate not to exceed the agronomic rate for the crop that is grown.

6. SURFACE DISPOSAL

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

7. NOTIFICATION

The Permittee either directly or through contractual arrangements with their biosolids management contractors shall comply with the following 40 CFR part 503 notification requirements.

7.1. Notification of Non-compliance

The Permittee shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the noncompliance may seriously endanger health or the environment. For other instances of non-compliance, the Permittee shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of the non-compliance in writing within 10 working days of becoming aware of the non-compliance.

7.2. Interstate Notification

If bulk biosolids are shipped to another State or to Indian Lands, the Permittee must send written notice within 60 days of the shipment and prior to the initial application of bulk biosolids to the permitting authorities in the receiving State or Indian Land (the USEPA Regional Office for the area and the State/Indian authorities).

7.3. Land Application Notification

A reuse/disposal plan shall be submitted to USEPA Region 9 Coordinator and, in the absence of other state or regional reporting requirements, to the state permitting agency, prior to the use or disposal of any biosolids from this facility to a new or previously unreported site. The plan shall be submitted by the land applier of the biosolids and shall include a description and a topographic map of the proposed site(s) for reuse or disposal, names and addresses of the

applier(s) and site owner(s), and a list of any state or local permits which must be obtained. For land application sites, the plan shall include a description of the crops or vegetation to be grown, proposed nitrogen loadings to be used for the crops, a determination of agronomic rates, and a groundwater monitoring plan or a description of why groundwater monitoring is not required.

If the biosolids do not meet 40 CFR § 503.13 Table 3 metals concentration limits, the Permittee must require their land applier to contact the state permitting authority to determine whether bulk biosolids subject to the cumulative pollutant loading rates in 40 CFR § 503.12(b)(2) have been applied to the site since July 20, 1993, and, if so, the cumulative amount of pollutants applied to date, and background concentration, if known. The Permittee shall then notify USEPA Region 9 Coordinator of this information.

For biosolids that are land applied, the Permittee shall notify the applier in writing of the nitrogen content of the biosolids, and the applier's requirements under 40 CFR part 503, including the requirements that the applier certify that the requirement to obtain information in Subpart A, and that the management practices, site restrictions, and any applicable vector attraction reduction requirements Subpart D have been met. The Permittee shall require the applier to certify at the end of 38 months following application of Class B biosolids that those harvesting restrictions in effect for up to 38 months have been met.

7.4. Surface Disposal Notification

Prior to disposal at a new or previously unreported site, the Permittee shall notify USEPA and the State. The notice shall include a description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator and site owner, and any state or local permits. It shall also describe procedures for ensuring grazing and public access restrictions for three years following site closure. The notice shall include a groundwater monitoring plan or description of why groundwater monitoring is not required.

8. REPORTING

The Permittee shall submit an annual biosolids report to USEPA Region 9 Biosolids Coordinator and the Los Angeles Regional Water Quality Control Board by February 19 of each calendar year. The report shall include:

- 8.1. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.
- 8.2. Results of all pollutant monitoring required in the Monitoring Section above. Results must be reported on a 100% dry weight basis.
- 8.3. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 40 CFR § 503.17 and 503.27, and certifications.
- 8.4. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.

- 8.5. Names and addresses of land appliers and surface disposal site operators, and volumes applied (dry metric tons).
- 8.6. Names and addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, deep well injection, or other reuse/disposal methods not covered above, and volumes delivered to each.
- 8.7. The Permittee shall submit, or require all parties contracted to manage their biosolids to submit, an annual biosolids report to USEPA Region 9 Biosolids Coordinator by February 19 of each year for the period covering the previous calendar year. The report shall include:

Names and addresses of land appliers and surface disposal site operators, name, location (latitude/longitude), and size (hectares) of site(s), volumes applied/disposed (dry metric tons), results of any groundwater monitoring; for land application: biosolids loading rates (metric tons per hectare), nitrogen loading rates (kg/ha), calculated plant available nitrogen, dates of applications, crops grown, dates of seeding and harvesting and certifications that the requirement to obtain information in 40 CFR § 503.12(e)(2), management practices in §503.14, site restrictions in § 503.32(b)(5) have been met; for biosolids exceeding 40 CFR §503.13 Table 3 metals concentrations, the locations of sites where the biosolids were applied and cumulative metals loading at the sites to date; and for closed sites, the date of site closure and certifications of management practiced for three years following site closure.

- 8.8. The annual biosolids report shall be submitted to USEPA using USEPA's NPDES [Central Data Exchange \(CDX\)](https://cdx.epa.gov/) and can be accessed at <https://cdx.epa.gov/>.