

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2000-32
I.D. NO. 1A00016RSIS

WASTE DISCHARGE REQUIREMENTS

FOR

CITY OF YREKA
and
E.C. FIOCK AND SONS

BIOSOLIDS DISPOSAL FACILITY

Siskiyou County

The California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Water Board), finds that:

1. On December 13, 1999 the City of Yreka filed a complete Report of Waste Discharge concerning a program to land-apply biosolids from its wastewater treatment plant. The City's wastewater treatment plant includes aerobic digesters to thicken and treat sludge. Digested sludge is dewatered and stockpiled for later use. Sludge will be land-applied at agronomic rates to 179 acres of agricultural lands owned by E. C. Fiock and Sons. Best management practices, based on State and Federal requirements, will be employed by the City, the hauler and the farmer and /or landowner to prevent a condition of pollution or nuisance. The site is designated as Assessor's Parcel Number 13- 110-210 and is located adjacent to Oberlin Road within portions of Sections 25 and 36, T45N, R7W, MDB&M, as shown in "Attachment A" incorporated herein and made a part of this Order.

The City of Yreka, E.C. Fiock and Sons, a California General Partnership and Sietske Fiock, Bruce E. Fiock, Boyd A. Fiock, as General Partners are hereinafter referred to as the discharger.

2. Within this Order, terms that define "biosolids" and their use are described as follows:

Septage: Waste material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar wastewater handling device, that has not passed through a municipal wastewater treatment facility.

Sewage Sludge: The solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a municipal wastewater treatment facility. Sewage sludge includes solids removed or used during primary, secondary or advanced wastewater treatment processes. Sewage sludge does not include grit or

screening material generated during preliminary treatment of domestic sewage at a municipal wastewater treatment facility.

Biosolids: Sewage sludge that has been treated and tested and shown to be capable of being beneficially and legally used as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities as specified under 40 CFR Part 503.

For purposes of this Order, the term “biosolids” does not include septage.

3. The U. S. Environmental Protection Agency (U.S. EPA) has promulgated regulations at 40 CFR 503 for the use of biosolids as a soil amendment. These regulations establish ceiling concentrations for metals and reduction standards for pathogen and vector attraction; management criteria for the protection of water quality and public health; and annual and cumulative discharge limitations of persistent pollutants, such as heavy metals, to land for the protection of livestock, crops, and human health and water quality protection. The requirements of 40 CFR 503 are based on a risk-based evaluation using 14 different pathways.
4. The discharger shall submit an annual fee and an application fee equal to the annual fee, pursuant to Section 13260, California Water Code. The amount of the fee is currently determined by the type of order issued and the threat to water quality and complexity of the specific discharge, as detailed in Section 2200, Chapter 9, Division 3, Title 23, California Code of Regulations CCR).
5. This Order sets minimum standards for the use of biosolids as a soil amendment on an agricultural site and does not preempt or supersede the authority of local agencies to prohibit, restrict, or control the use of biosolids subject to their control, as allowed under current law. It is the responsibility of the discharger to make inquiry and obtain any local governmental agency permits or authorizations prior to the application of biosolids at the site.
6. The biosolids applied to land under this Order are non-hazardous decomposable wastes applied as a soil amendment pursuant to best management practices and, as such, are exempt from the requirements of Title 27, CCR , in accordance with Section 20090.
7. The City of Yreka’s wastewater treatment plant is currently regulated under Waste Discharge Requirements Order No. 96-69, adopted by the Regional Water Board on September 26, 1996, and Cease and Desist Order No. 98-103 adopted on September 24, 1998. The enforcement Order includes connection-restriction and time schedule provisions requiring the City obtain additional land disposal capacity for wastewater and sludge. Biosolids application to land is considered a sludge disposal alternative that meets the provisions for achieving compliance with the sludge-management aspect of task “a” of Cease and Desist Order No. 98-103.

8. A negative declaration for land application of biosolids was prepared and approved by the City of Yreka on November 4, 1999, to satisfy the provisions of the California Environmental Quality Action (Public Resources Code Section 21000 et seq.). The Regional Water Board has considered the negative declaration.
9. The Regional Water Board Water Quality Control Plan for the North Coast Region includes water quality objectives, a prohibition against discharge to the Klamath River and its tributaries, and receiving water limitations.
10. Beneficial uses of the Yreka Creek, the Shasta River and the Klamath River include:
 - a. municipal supply and domestic supply
 - b. agricultural supply
 - c. industrial service supply
 - d. groundwater recharge
 - e. freshwater replenishment
 - f. water contact recreation
 - g. non-contact water recreation
 - h. warm freshwater habitat
 - i. cold freshwater habitat
 - j. wildlife habitat
 - k. migration of aquatic organisms
 - l. spawning, reproduction, and/or early development
11. The existing and potential beneficial uses of areal groundwater include:
 - a. municipal water supply
 - b. agricultural water supply
 - c. industrial water supply
12. The permitted discharge is consistent with the antidegradation provision of State Water Resources Control Board Resolution No. 68-16. The impact on existing water quality will be insignificant if compliance with the provisions of this order is achieved.]
13. The Regional Water Board proposes to adopt an order recognizing new solids disposal practices and prescribe provisions for land-application of biosolids.
14. The Regional Water Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
15. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

THEREFORE, IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. Applications of biosolids shall be confined to the designated use areas stated and shown in Attachment "A" of this Order.
2. The discharge of any waste not specifically regulated by this Order is prohibited.
3. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code (CWC), is prohibited. [Health and Safety Code, Section 5411]
4. The discharge of waste to land that is not under the control of the discharger is prohibited, except as authorized under C.-1 SOLIDS DISPOSAL.
5. The discharge of waste from the City of Yreka Biosolids Disposal Facility to the Klamath River and its tributaries is prohibited.
6. The application of any material that results in a violation of the Safe Drinking Water and Toxic Enforcement Act (Health and Safety Code Section 25249.5) is prohibited.
7. Application of biosolids at rates in excess of the nitrogen requirements of the vegetation or at rates that would degrade ground water is prohibited.
8. The discharge of biosolids except as allowed for authorized storage, processing, and application sites is prohibited.
9. The application of "hazardous waste" as defined in Chapter 11, Division 4.5, Title 22 of the California Code of Regulations, is prohibited.
10. Discharge of biosolids with pollutant concentrations greater than those shown below is prohibited.

	<u>Ceiling Concentration</u>
<u>Constituent</u>	<u>mg/kg dry weight</u>
Arsenic	75
Cadmium	85
Copper	2,500
Lead	350
Mercury	57

Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

11. The application of biosolids to water-saturated or frozen ground or during periods of precipitation that induces run-off from the permitted site is prohibited.
12. The application of biosolids in areas where biosolids are subject to gully erosion or offsite washout is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The average annual loading of biosolids shall not exceed 200 tons over a period of 12 months.
2. The discharge of waste shall not cause a pollution of groundwater
3. The discharger is encouraged to comply with the State guidance manual issued by the Department of Health services titled “ Manual of Good Practice for Landspreading of Sewage Sludge”.
4. Use and disposal of sewage sludge shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards contained in 40 CFR 503.
5. Disposal of sludge at the land application site shown in “Attachment A” shall be accomplished within the following limits:
 - a. Biosolids will be applied at, or below, the agronomic needs of the crops.
 - b. The pH of the soil (top 12 inches) within the sludge application area shall be maintained at 6.5, or above, as measured at the time of application.
 - c. Metals loading rates to the application area shall not exceed:

Compound	Annual Loading Rate kg/ha	Lifetime Loading kg/ha
Arsenic	2	41
Cadmium	1.9	39
Copper	75	1500
Lead	15	300
Mercury	0.85	17
Molybdenum	0.90	18
Nickel	21	420
Selenium	5.0	100

Zinc	140	2800
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* Dry Weight Basis

- d. When the cumulative annual loading plus natural background levels in the upper six inches of the soil column reaches the lifetime loading limit for any metal listed in subsection 5c , use of the sludge application site shall be terminated.
 - e. Sludge application shall be limited to the dry season of the year which, for purposes of this Order, is defined as May 1 to October 15. Regardless of the time of year, sludge shall not be applied if rainfall is expected prior to completing the application and incorporation activities .
 - f. Sludge shall not be applied to land when the distance from the incorporation depth to groundwater is 5 feet or less.
 - g. The discharge of sludge to land having a slope greater than 15 percent is prohibited.
 - h. The following setbacks shall apply: from any drainage conveyance - 33 feet, from any well -100 feet, from any dwelling - 500 feet, from any roadway - 200 feet.
- 6. Sludge shall be handled and applied in accordance with the Sludge Management Plan submitted on December 13, 1999. Any proposed change in sludge use or management practices from a previously-approved practice shall be submitted to the Executive Office for approval at least 90 days in advance of the change.
 - 7. Biosolids' application rates shall not exceed the agronomic rate for nitrogen, as cited in professional publications for California, by the County Agricultural Commissioner or recommended by a Certified Agronomist or Certified Soil Scientist for the crop being planted.
 - 8. If biosolids are applied to a site where the soil will be tilled, biosolids shall be incorporated within 48 hours after application. Tillage practices shall be used which minimize the erosion of soils from the application site by wind, storm water, or irrigation water.
 - 9. All biosolids shall be transported in covered vehicles capable of containing the designated load.

10. All biosolids having a water content that is capable of leaching liquids shall be transported in leak proof vehicles.
11. Each biosolids' transport driver shall be trained as to the nature of their load and the proper response to accidents or spill events and shall carry a copy of an approved spill response plan.

C. SOLIDS DISPOSAL

1. Collected screenings, sludges and other solids removed from liquid wastes that are not applied to the land application site shown in Attachment "A" shall be disposed of at a legal point of disposal, and in accordance with applicable provisions of Title 27, Division 3, California Code of Regulations.

D. PROVISIONS

1. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel.

2. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

3. Operation and Maintenance

The discharger must maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

4. Change in Discharge

The discharger must promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

5. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger must notify the succeeding owner or operator of the following items by letter, a copy of which must be forwarded to the Regional Water Board:

- a. existence of this Order, and
- b. the status of the dischargers' annual fee account

6. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from his liability under federal, State, or local laws, nor create a vested right for the discharger to continue the waste discharge.

7. Monitoring

The discharger must comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2000-32 and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Order and incorporated herein. Chemical, bacteriological, and bioassay analyses must be conducted at a laboratory certified for such analyses by the State Department of Health Services.

8. Inspections

The discharger shall permit authorized staff of the Regional Water Board:

- a. entry upon premises in which an effluent source is located or in which any required records are kept;
- b. access to copy any records required to be kept under terms and conditions of this Order;
- c. inspection of monitoring equipment or records; and
- d. sampling of any discharge.

9. Noncompliance

In the event the discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment;
- b. accidents caused by human error or negligence; or
- c. other causes such as acts of nature;

the discharger must notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

10. Revision of Requirements

This Regional Water Board requires the discharger to file a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

Certification

I, Lee A. Michlin, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on April 27, 2000.

Lee A. Michlin
Executive Officer

(YRKBSWDR)