

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

912



FROM: Community Health Agency

SUBMITTAL DATE:

August 23, 2004

SUBJECT: Adoption of Ordinance No. 830, an Ordinance of the County of Riverside, State of California, Regulating the Land Application of Class A Sewage Sludge for Agricultural Activities.

RECOMMENDED MOTION:

Adoption of Ordinance No. 830, an Ordinance of the County of Riverside Regulating the Land Application of Class A Sewage Sludge for Agricultural Activities.

BACKGROUND:

On June 3, 2003, the Board accepted the "Report and Recommendations from Class A Biosolids Land Application Committee" (Agenda Item 3.39). Included in the report was a recommended draft ordinance to regulate this activity in the County. The recommended motion directed staff to complete the internal review and processing of the draft Ordinance and submit for introduction and public hearing.

Departmental Concurrence


(continued)

FORM APPROVED
COUNTY COUNSEL

AUG 24 2004

BY 
ASSISTANT COUNTY COUNSEL

GF:dm



Gary Feldman, M.D., Director

FINANCIAL DATA	Current F.Y. Total Cost:	\$	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	\$	Budget Adjustment:	N/A
	Annual Net County Cost:	\$	For Fiscal Year:	

SOURCE OF FUNDS:	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION: APPROVE

County Executive Office Signature 

- Dep't Recomm.: Consent Policy
- Per Exec. Ofc.: Consent Policy

Prev. Agn. Ref.: 16.9, 3/16/2004, **District:** ALL **Agenda Number:**

16.1

EXISTING REGULATIONS

Under existing Federal Standards, sewage sludge is categorized by the level of processing to eliminate harmful pathogens:

Class B Biosolids – (Roughly the Equivalent of PSRP¹ sludge as previously addressed in Riverside County Ordinance No. 696). This is a sludge product that is processed to reduce pathogenic loads to a specified level far below that of untreated sewage. Specified processing to reduce attractiveness to vectors is also required.

Class A Biosolids – This is a sludge product that has received additional processing, usually through composting, heat or chemical treatment, to eliminate 99.9% of the pathogenic bacteria remaining in Class B. There are seven general categories of processes identified in the Federal Standards for achieving Class A pathogen reduction, and numerous specific systems or methodologies being used or developed within the categories.

Riverside County Ordinance No. 696, codified as Section 8.128 et. seq. of the Riverside County Code, was enacted in 1991 to regulate the land application of sewage sludge equivalent to Class B Sludge. Due to public testimony regarding health and odor impacts as well as a recommendation by the Health Officer, the Board adopted Ordinance No. 812, which prohibited further applications of Class B Sludge effective November 25, 2001.

The adoption of Ordinance No. 812 in 2001 banning Class B applications did not impact or address the land application of Class A Sludge, and currently there are no local standards for the regulation of this activity. Since that time, many sewerage agencies, which had previously shipped Class B Sludge to the County, have initiated activities to evaluate or implement conversions of their facilities to further process the sludge to Class A standards. There is some expectation that this material could be intended for land application, as was Class B. Therefore, there is a potential for land application of Class A Sludge in the future in agricultural areas of the County.

COMMITTEE

The main Committee first met on October 8, 2002, and held seven additional meetings through this process. The members were provided an overview of the current state of biosolids use in the County and advised of the goal of the Committee and Subcommittees.

Committee Findings

- The USEPA adopted standards for various processes and uses of sewage sludge which reduces levels of pathogens depending on the pathogen reduction process as part of 40 CFR Part 503 in 1993. Within those standards, sewage

¹ Process to Significantly Reduce Pathogens

sludge that may be land applied is identified as either Class A or Class B by virtue of specified pathogen and vector attraction reduction standards or processes.

- Riverside County Ordinance 696, codified as Section 8.128 et. seq. of the Riverside County Code, was enacted to regulate the land application of sewage sludge equivalent Class B Sludge in Riverside County.
- The adoption of Riverside County Ordinance No. 812, codified as section 8.129 et. seq. of the Riverside County Code, prohibited further applications of Class B Sludge effective November 25, 2001.
- Agricultural activities using nitrogen sources for fertilization are implicated in excessive and unsafe nitrate levels in groundwater in many areas, including sites within Riverside County.
- Benefits of Organic Amendments: Organic Amendments (including Class A Sewage Sludge) applied to horticultural and agricultural lands provide benefits to the soil and the economy.
- While there is no verifiable evidence of clinical illness or disease related to the use of Class A Sewage Sludge, various forms of the material have, by their noxious nature (odor, dust generating capacity and vector attraction), the potential to impact comfort and well being in the vicinity of their use and warrant some level of regulation.

REGULATORY STRUCTURE OF ORDINANCE

Unlike the earlier Ordinance regulating Class B Sludge, this Ordinance does not address the same issues as the Federal Regulatory (USEPA) Standards. It is designed to supplement them by addressing "quality of life" issues that do not appear to have been considered in that document.

The Ordinance establishes regulations governing the land application of bulk quantities of Class A Sewage Sludge on commercial farm land that will:

- Identify the role and responsibilities of each entity involved in the land application process:
 - Producer (Sewage plant and other processor)
 - Transporter/ Applicator
 - Receiver (Farmer/land-owner)
- Acknowledge the variability of nuisance potential for the products of different Class A processes, and establish a process to categorize each into a regulatory tier. Material placed in Tier 1 would be virtually innocuous, with material in Tiers 2-4 representing increasing impact potential.
- Establish ranges of criteria and regulatory oversight based on the regulatory Tiers (Attachment 1) with Tier 1 having the least amount of regulatory oversight. (The farming representatives on the Committee have indicated that they will only

use Tier 1 material due to the additional regulatory burden of the other Tiers and the desire to minimize the impacts to their neighbors.)

The Ordinance will not regulate any sewage sludge applications for horticultural, industrial, commercial, residential property development, golf courses, orchards or vineyards, or agricultural activities associated with public schools with a recognized agricultural training program or curriculum.

BOARD DIRECTIVES ON REPORT

Pursuant to the comments received at the June 3, 2003, session of the Board the following revisions to the Draft Class A Sludge Ordinance were made:

- **Notifications.** Staff reintroduced language requiring the advisory posting of the fields to address the concerns expressed related to notification of people within the community.
- **Monitoring.** Staff developed a random monitoring program (Attachment 2) to confirm conformance to the ordinance, quality of material delivered to sites (including Tier 1) and the effectiveness of the buffers adopted.
- **Clarification.** Staff revised the definitions to clarify that Tiers 1-3 are limited to Exceptional Quality (EQ) sludge, which includes more restrictive limits to heavy metal contaminants.

Other revisions:

- The references to "land reclamation" sites were deleted to be consistent with the "Purpose and Intent" identified for the Ordinance.
- **Prohibition Areas.** A new section was added that will allow the Board to adopt further restrictions in specific areas upon petition by a public agency with public health and water quality responsibility and jurisdiction.
- **Fees.** The fee schedule was adjusted to reflect the costs of monitoring (inspections and sampling).

PUBLIC HEARING OF MARCH 16, 2004

During the public hearing on this Ordinance on March 16, 2004, the Board received comments of concern that the Committee had not met and discussed the changes made subsequent to the June 3, 2003 Board presentation as noted above. The public hearing was therefore continued to June 8, 2004, (later extended to September 14) to enable the Committee to review and evaluate the changes.

The Committee met on May 6 and again on June 10 2004 and made the following determinations on the changes.

- Notifications. ***After discussion during meetings on May 6, 2004, the Committee reiterated the position that posting requirements would not be effective in alleviating community concerns and would impose a burden on farmers utilizing Class A biosolids and so should be omitted from the Ordinance.***
- Monitoring. ***After discussion on May 6, 2004, the Committee recommended revisions to the monitoring plan, which were discussed and accepted at the June 10, 2004, meeting.***
- Clarification. ***After discussion the Committee accepted this change.***
- The references to "land reclamation" sites have been deleted to be consistent with the "Purpose and Intent" identified for the Ordinance. (Deleted from Standards from Tiers 1-4, items A.1: "*Sites shall be limited to land reclamation or bonafide agricultural sites*". ***After discussion the Committee accepted this change.***
- Prohibition Areas. ***After discussion the Committee recommends deletion of this section, as the Board already has this authority.***
- Fees. ***Due to changes to the monitoring plan per the May 6 and June 10, 2004, meetings, the fee schedule has been modified (Fees reduced).***

Draft Ordinance No. 830 as attached includes the changes as determined by the by the Committee per above. The Planning Department has prepared a Notice of Exemption from CEQA (attached) for this Ordinance. This notice is to be filed with the Clerk of the Board and the California State Office of Planning and research for posting for a period of 30 days.

FINANCIAL

The cost to enforce the provisions of this proposed Ordinance will be recovered through fees established in the Ordinance.

Selected Criteria and Regulatory Oversight for Tiers

	Tier 1	Tier 2	Tier 3	Tier 4
Producer pre-registration	Yes	Yes	Yes	Yes
Transporter pre-registration	Yes	Yes	Yes	Yes
Site pre-registration	No	Yes	Yes	Yes
Notification prior to delivery to site	Yes	Yes	Yes	Yes
Public Notification via posted signs	No	No	No	No
Distance (buffer) to:				
Potable water well	100 ft	100 ft	100 ft	100 ft
Residence, school business, place of worship or entertainment area	0 ft	500 ft	1000ft	½ mile
Public roads and property lines	50 ft	50 ft	50 ft	50 ft
Incorporation to soil				
Within 1/4 mile of school; before school is back in session	Yes	Yes	Yes	NA
At sites less than 20 acres:	Within 48 Hours	Within 24 hours		
For sites of 20 acres or more,	7days*			
Application amounts limited to Agronomic Rate	Yes	Yes	Yes	Yes
Road spillage clean up by transporter	Yes	Yes	Yes	Yes
Site remediation for substandard loads by generator	Yes	Yes	Yes	Yes

*For sites of 20 acres or more, incorporation shall commence no less than seven (7) days after the first delivery and shall be completed within seven (7) days of the final delivery to the site.

Class A Sludge Monitoring Class A Biosolids Monitoring Plan

Pursuant to the comments received at the June 3, 2003 session of the Board, the Department of Environmental Health (DEH) has developed the following monitoring program for implementation of the proposed Ordinance regulating the land application of Class A Biosolids. This monitoring program uses inspections and laboratory testing to evaluate compliance with the conditions of the Ordinance, validate the data supplied by the generators and users of the material, and to confirm the effectiveness of the buffers established for the various tiers.

Inspections

Tier 1 Application Sites

At least one site inspection is to be conducted during the delivery/spreading process to visually verify the quantities being applied and to evaluate the level of off site odors. Per the Ordinance, Tier 1 material is "Bulk Class A EQ Material for which the generator has demonstrated minimal nuisance (fly attraction and odor) generating characteristics as determined by the Product Review Panel."

When biosolids or soil testing is required, per the testing regimen that follows, samples shall be taken as part of these inspections.

Tier 2, 3, and 4 Application Sites

At least three site inspections will be made. Site inspections shall be conducted:

- Prior to approval of the site for application, or additional applications if previously used, to confirm information supplied as part of the approval process,
- During application and incorporation process to confirm quantities applied, incorporation and effectiveness of buffers established for the respective tiers, and
- After application, to confirm the completion of all requirements and again evaluate the effectiveness of the buffers.

When Biosolids is required per the testing regimen below samples shall be taken as part of these inspections. The Department may, where appropriate, combine the application and post application inspections.

Testing Regimen

The Department of Environmental Health will conduct a spot sampling program of Biosolids material to ascertain that applications meet the

requirements as specified in the US EPA monitoring plans (United States Code of Regulations [CFR] 40 CFR Part 503).

Pathogens

Samples will be collected at the application site. The samples will be tested for Salmonella and/or fecal coliform. The sampling results will be compared to the results certified by the Generator or Processor of the Class A Biosolids. Each wastewater treatment plant will be assessed individually and the sampling frequency will be adjusted to gain The Department of Environmental Health's confidence in their self-reported results.

Procedure

One site per year will be randomly selected and sampled for each generator/processor. Staff will collect a Biosolids sample from five different trucks delivering the material to the field. A form will be completed with the following information: date, time, name of the generator or processor, and truck number. The samples shall be collected from the upper half of the material pile after it has been deposited onto the ground. The samples shall be composited and thoroughly mixed before a sub-sample is collected for pathogen analysis, with split samples available for the farmer or generator/processor.

Analyses

Salmonella and/or Fecal Coliform

Analytical results for Salmonella and/or Fecal Coliform will be evaluated per EPA 503 standards.

Heavy Metals and Nitrates

Samples will be collected at the application site. The samples will be collected to confirm contaminant levels (Heavy Metals) consistent with EPA 503 Standards and data generated by the producer.

Procedure

One site per year will be randomly selected and sampled for each generator/processor. Staff will collect a Biosolids sample from five different trucks delivering the material to the field. A form will be completed with the following information: date, time, name of wastewater treatment plant or generator/processor producing the material, and truck number. The samples shall be collected from the upper half of the pile of the material after it has been deposited onto the ground, before spreading and incorporation. The samples will be composited and thoroughly mixed before sub-samples are collected for metal and nitrogen analysis, with split samples available for the farmer or generator/processor.

Analyses: Heavy Metals (EPA 503, Table 3)

Analytical results will be evaluated with regard to the maximum levels as specified in EPA 503, Table 3. The data collected will be tracked for each site sampled.

Analyses: Nitrogen

Both the total and inorganic nitrogen content of the Biosolids will be determined to insure that the amounts applied conform to the agronomic rates recommended for the crop grown.

1 ORDINANCE NO. 830
2 AN ORDINANCE OF THE COUNTY OF RIVERSIDE REGULATING THE LAND
3 APPLICATION OF CLASS A SEWAGE SLUDGE FOR AGRICULTURAL
4 ACTIVITIES

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1
2 **ORDINANCE NO. 830**
3 **AN ORDINANCE OF THE COUNTY OF RIVERSIDE REGULATING THE**
4 **LAND APPLICATION OF CLASS A SEWAGE SLUDGE FOR**
5 **AGRICULTURAL ACTIVITIES**

6 The Board of Supervisors of the County of Riverside Ordains as follows:

7 **Section 1. Authority.**

8 This chapter is adopted pursuant to the police power granted to Riverside County by
9 Article XI, Section 7 of the California Constitution. In addition, 40 CFR 503.5, 33
10 USCA 1345(e) and California Water Code Section 13274(i) grant authority to local
11 government to impose more stringent requirements on the use, disposal and land
12 application of sewage sludge in order to protect public health and the environment
13 from the adverse effect of such sludge.

14 **Section 2. Purpose and Intent.**

15 A) It is the purpose and intent of this Chapter to regulate the land application of bulk
16 Class A Sewage Sludge in a manner that is consistent with agronomic rates and
17 protects public health, ground and surface water, soils, and agricultural markets.

18 B) This Chapter shall not regulate the distribution of Class A EQ products for uses such
19 as horticultural, industrial, commercial or residential property development or golf
20 courses. This Ordinance is only intended to apply to commercial farming
21 applications.

22 **Section 3. Definitions.**

23 Whenever in this Chapter the following terms are used, they shall have the meanings
24 respectively ascribed to them in this Section.

25 A) "**Agronomic Rate**" shall mean Class A Biosolids applications that, in conjunction
26 with existing plant available nitrogen (PAN) levels, will not exceed nitrogen fertilizer
27 rates for the crop to be grown as determined by the Riverside County Agricultural
28 Commissioner and will not result in phytotoxicity (accumulation of heavy metals
29 and/or nutrients adverse to normal vegetative growth).

30 B) "**Bulk Biosolids**" shall mean Class A Biosolids that are not sold or given away in a
31 bag for application to commercial farmland.

32 C) "**Class A Sewage Sludge**" or "**Biosolids**" shall mean the accumulated matter
33 produced in the treatment of wastewater that has been processed for pathogen
34 reduction in accordance with Federal 40 CFR Part 503, Section 503.32 (a), one of the
35 vector attraction reduction standards set forth in 40 CFR Section 503.33, and meets
36 the ceiling concentration limits in 40 CFR Section 503.13 Table 1. Class A Biosolids
37 from each generator, or process and location if multiple processes or locations are

1 used, shall be placed in a tier level based on its nuisance value as determined by a
2 Product Review Panel established by the Health Officer for Riverside County.

3 1. **“Tier 1”** shall mean any Bulk Class A EQ Biosolids for which the generator
4 has demonstrated minimal nuisance (fly attraction and odor) generating
5 characteristics as determined by the Product Review Panel.

6 2. **“Tier 2”** shall mean any Bulk Class A EQ Biosolids for which the nuisance
7 (fly attraction and odor) generating characteristics of the Biosolids, as
8 determined by the Product Review Panel, warrant minimal buffer zones.

9 3. **“Tier 3”** shall mean any Bulk Class A EQ Biosolids for which the nuisance
10 (fly attraction and odor) generating characteristics of the Biosolids, as
11 determined by the Product Review Panel, warrant moderate buffer zones.

12 4. **“Tier 4”** shall mean any Bulk Class A Biosolids for which the nuisance (fly
13 attraction and odor) generating characteristics of the Biosolids, as determined by
14 the Product Review Panel, warrant maximal buffer zones. All Class A Biosolids
15 shall be considered to be Tier 4 Biosolids until such time as the Product Review
16 Panel may evaluate and slot such Biosolids into another tier.

17 D) **“Class A EQ ”** shall mean Class A Biosolids meeting the ceiling concentrations set
18 forth in 40 CFR Section 503.13(b)(1), the pollutant concentration standards set forth
19 in 40 CFR Section 503.13(b)(3), and one of vector attraction reduction options set
20 forth in 40 CFR Section 503.33(b)(1)-(8).

21 E) **“Commissioner”** shall mean the Agricultural Commissioner for the County of
22 Riverside and his or her designee.

23 F) **“County”** shall mean the County of Riverside, State of California.

24 G) **“Department”** shall mean the Department of Environmental Health for the County of
25 Riverside.

26 H) **“Director”** shall mean the Director of Environmental Health for the County of
27 Riverside and his or her designee.

28 I) **“Generator”** shall mean Municipal Wastewater Treatment Facility or Sewage
29 Sludge Treatment Facility.

30 J) **“Grower”** shall mean the person or entity primarily responsible for planting,
31 maintaining, and harvesting or allowing the use of crops and/or rangeland for
32 domestic animal or human use.

33 K) **“Independent Hearing Panel”** shall mean the panel established pursuant to
34 California Public Resources Code Section 44308 for solid waste facility issues and
35 consisting of a minimum of three persons.

1 L) **"Land Application"** shall mean the placement of Class A Biosolids within the first
2 three (3) feet of the surface of agricultural land to facilitate the growth of crops.

3 M) **"Land Owner"** shall mean any person, firm, business, city, county, district, special
4 district including a water district, sole proprietorship, partnership, joint venture, trust,
5 association or corporation whether for profit or non profit that owns real property
6 within the unincorporated areas of Riverside County.

7 N) **"Site"** shall mean a discrete parcel of land, greater than 2 acres, upon which Class A
8 Biosolids is to be applied for the purpose of growing crops.

9 O) **"Product Review Panel"** shall mean a panel appointed or reappointed by the
10 County Health Officer on or before February 1 of each calendar year, composed of
11 six individuals representing the following groups: 1) Citizen; 2) County Staff; 3)
12 Product Generator; 4) Transporter or Farmer; 5) Academic, County Extension or
13 Agricultural Commissioner representative, 6) Processor.

14 P) **"Processor"** shall mean any person, firm or business responsible for transforming
15 biosolids received from a Generator into Class A Biosolids.

16 Q) **"Transporter"** shall mean any person, company, organization, or other legal entity
17 engaged, or about to become engaged with the transportation of Class A Biosolids
18 received from a Generator or Processor for the purpose of land application.

19 **Section 4. Prohibitions.**

20 A) No Generator, Processor, Transporter, Grower or Landowner shall engage in any land
21 application activities that are: inconsistent with the standards of this Ordinance,
22 exceed agronomic rates, or are otherwise prohibited by or in violation of any other
23 Federal, State or Local standard.

24 B) No Generator, Processor, Transporter, Grower or Landowner shall engage in any land
25 application activities without the prior, unexpired and unrevoked registration with the
26 Department.

27 C) No person shall deliver bulk Class A Biosolids to any site for the purposes of land
28 application unless that site is in compliance with all notifications and has a current
29 and unrevoked registration with the Department as required by this Ordinance.

30 **Section 5. Exemptions.**

31 The following sites shall be exempted from the prohibitions:

32 A) Agricultural sites operated in conjunction with a public school with a recognized
33 agricultural training program or curriculum.

34 B) A tree or vine farming operation considered active by the Commissioner.

1 **Section 6. Generators, Processors and Transporters.**

2 **A) Registration:** Each Generator, Processor and Transporter shall be registered with the
3 Department prior to conducting activities regulated under this Ordinance, with said
4 registration valid for up to 5 years, with payment of annual registration fees, using
5 forms provided by the Department to include:

- 6 1. Name and address of the Generator, Processor or Transporter.
- 7 2. Type of organization such as sole proprietorship, partnership, agency,
8 municipality, special district, joint venture, lease, corporation, business trust of
9 company including names and home addresses.
- 10 3. Name of person submitting application, and relationship to generator,
11 processor or transporter.
- 12 4. Identification (name and phone number of the local contact person).
- 13 5. Additional application requirements for Generators and Processors:
 - 14 a) List of Facilities from which Class A Biosolids is generated.
 - 15 b) Method or methods used to achieve Class A level.
 - 16 c) Any and all documents related to the identification of incomplete or
17 inadequate processes to achieve a Class A Biosolids designation..
 - 18 d) Remediation protocols to be used in the event that Biosolids not meeting
19 Class A standards are delivered to a site.
 - 20 e) Additional application requirements for Transporter:
 - 21 f) A written spill prevention and response program.

22 **B) Tier Placement.** Class A Biosolids from each Generator and Processors, or process
23 and location if multiple processes or locations are used, shall be placed in a tier level
24 based on their nuisance value as determined by a Product Review Panel using
25 protocols established by the Health Officer for Riverside County.

26 **C) Standards of Operation**

- 27 1. A Generator and/or Processor:
 - 28 a) Shall advise the Department within 1 business day of any event that may
29 impact the quality of the Class A Biosolids being provided for land
30 application.
 - 31 b) Shall advise the Department within 1 business day of any notice from the
32 governing regional water quality control board or USEPA of any
33 violation that may impact the quality of the Class A Biosolids being
34 provided for land application.

- 1 c) Shall individually certify each load as meeting the Class A standards.
- 2 d) Shall implement the above identified remediation protocol upon
3 determination or notification that Biosolids not meeting Class A
4 Biosolids standards are delivered to a site.
- 5 e) Shall, at a minimum, perform monthly site visits and audit the land
6 application practices in use for their Tier 2, 3 and 4 Class A Biosolids.
7 The results of the above audit shall be reported to the Department
8 biannually using forms provided by the Department and shall include
9 any actions taken by the Generator.
- 10 f) Shall demonstrate pathogen destruction through process controls
11 including but not limited to alarming, shutdown procedures or testing to
12 preclude land application of substandard Biosolids. Records
13 demonstrating compliance shall be maintained for a period of one year
14 from the time of application.
- 15 g) Shall maintain processes to meet Class A Standards. Failure to do so
16 shall result in the denial or rescission of the registration.
17
- 18 2. A Transporter:
- 19 a) Shall mark each vehicle with the identity and telephone number of the
20 Transporter, subcontractor or other responsible operator clearly visible,
21 on the rear and on each side, with letters of not less than three (3) inches
22 in height.
- 23 b) Shall design and maintain vehicles in such a manner as to prevent
24 leakage of liquids or spilling, blowing or loss of Biosolids during
25 transportation.
- 26 c) Shall provide a shovel, broom, fire extinguisher, and first aid kit to be
27 maintained on vehicles at all times.
- 28 d) Shall ensure that the Class A Biosolids quality certification is available
29 for review on the vehicle, and copies from each load are retained on site
30 until all deliveries are complete.
- 31 e) Shall create and maintain an accurate record for each load of Class A
32 Biosolids delivered and applied in Riverside County including, but not
33 limited to, the information listed below:
- 34 (i) Generator (by specific facility),
- 35 (ii) Date and time picked up,
- 36 (iii) Date and time delivered to site.
- 37 (iv) Site identification:

- 1 (v) Load size; and,
- 2 (vi) Vehicle(s) and driver(s).

3 Such records shall be submitted to the Department within fifteen (15)
4 days from the end of any reporting month in which activity occurs, and
5 an annual report within 30 days of the end of the calendar year.

- 6 f) Shall maintain vehicle exteriors to be free of sludge before entering
7 public roads and in sound mechanical condition. All loads shall be fully
8 and securely covered. Transporter shall immediately and completely
9 clean any and all spillage.

10 **Section 7. Tier 1 Standards.**

11 **A) Site Notification**

12 1. The Transporter and Grower shall be jointly responsible for notification of
13 the Department for Sites receiving Tier 1 Biosolids. Such notification shall be
14 made no later than the last business day prior to delivery of the Biosolids, using
15 forms provided by the Department to include:

- 16 a) Name, address and phone number of the grower or land owner with
17 evidence of grower or land owner agreeing to the application of Class A
18 Tier 1 Biosolids use, right of entry and any other conditions.
- 19 b) Riverside County Assessors Parcel Number (APN).
- 20 c) A map of the application site.
- 21 d) The Generator(s) or Processor(s) from which the Transporter receives
22 the Biosolids.
- 23 e) The amount of Tier 1 Biosolids to be applied, including an analysis of
24 agronomic rate to include the accounting of existing soil nitrogen levels
25 using the concentration of soil nitrate (in ppm) to a depth of 1 foot.
- 26 f) Fees per Section 13 below.

27 **B) Standards of Operation:** Grower and Transporter shall be jointly responsible for
28 ensuring conformity to the following site conditions:

- 29 1. Delivery to land application sites adjacent to residential developments shall
30 be limited to the hours between 6:00 AM and 8:00 PM unless the staging area is
31 greater than 500 ft from the nearest dwelling.
- 32 2. Biosolids not meeting Class A Tier 1 Standards shall not be delivered to the
33 site. The Generator or Processor shall implement the above identified
34 remediation protocol upon notification or receipt of information that Biosolids
35 delivered to the site do not meet all standards as identified herein.

1 3. The Transporter shall ensure that the Class A Biosolids quality certification
2 is available for review on the vehicle.

3 4. No application of Tier 1 Biosolids shall exceed the agronomic rate for the
4 crop as determined by the Commissioner.

5 5. Tier 1 Biosolids shall not be applied within 100 feet of a potable water well.

6 6. No Tier 1 Biosolids shall be delivered to a site when climatic conditions
7 such as wind greater than 25 mph, or rain that will preclude the incorporation
8 identified above.

9 7. Both the Grower and the Transporter shall maintain an accurate record for
10 each load of Tier 1 Biosolids delivered and applied to each site under their
11 control including, but not limited to, the information listed below:

- 12 a) Data for determination of agronomic rate,
- 13 b) Generator(s) or Processor(s),
- 14 c) Dates and amount delivered to site,
- 15 d) Crops planted and yield.

16 8. Upon application, Tier 1 Biosolids shall be promptly incorporated into the
17 soil by discing or other suitable tillage within the timelines set out below.
18 Incorporation shall be continuous until completed. Incorporation shall be
19 thorough to a depth of no less than 6 inches unless otherwise approved by the
20 Department, including residues in staging areas. Tier 1 Biosolids shall be
21 incorporated when applied:

- 22 a) Within 1/4 mile of school: before school is back in session.
- 23 b) At all other sites of less than 20 acres: within 48 hours of delivery.
- 24 c) For sites of 20 acres or more, incorporation shall commence no more
25 than seven (7) days after the first delivery and shall be completed within
26 seven (7) days of the final delivery unless otherwise authorized by the
27 Department.

28 **Section 8. Tier 2 Standards.**

29 **A) Site Registration:** The Landowner, Grower and Transporter shall be jointly
30 responsible for registration of Sites receiving Tier 2 Biosolids. Sites shall be
31 registered with the Department prior to conducting activities regulated under this
32 Ordinance, with said registration renewed on an annual basis, using forms provided
33 by the Department to include:

- 1 1. Name, address and phone number of both the grower and land owner with
2 evidence of both grower and land owner agreeing to the application of the Class
3 A Tier 2 Biosolids, right of entry and any other conditions.
- 4 2. Site identification to include Riverside County Assessors Parcel Number
5 (APN).
- 6 3. A map of the application site.
- 7 4. A tabulation of site information to include:
 - 8 a) Net acreage (to nearest 0.1 acre),
 - 9 b) Annual application rate for the planned crop.
 - 10 c) Proximity to occupied dwellings, property lines, roads and wells.
 - 11 d) Analysis of agronomic rate to include the accounting of existing soil
12 nitrogen levels using the concentration of soil nitrate (in ppm) to a depth
13 of 1 foot.
 - 14 e) The Generator(s) or Processor(s) from which the Transporter receives
15 the Biosolids.
- 16 5. Fees Per Section 13 below.

17 **B) Standards of Operation: Transporter and Grower shall be jointly responsible for**
18 **ensuring conformity to the following site conditions:**

- 19 1. Delivery to land application sites shall be limited to the hours between 6:00
20 AM and 8:00 PM.
- 21 2. Biosolids not meeting Class A Tier 2 Standards shall not be delivered to the
22 site. The Generator or Processor shall implement the above identified
23 remediation protocol upon notification or receipt of information that Biosolids
24 delivered to the site do not meet all standards as identified herein.
- 25 3. The Transporter shall ensure that the Class A Biosolids quality certification
26 is available for review on the vehicle, and copies from each load are retained on
27 site until all applications are complete.
- 28 4. No application of Tier 2 Biosolids shall exceed the agronomic rate for the
29 crop as determined by the Commissioner.
- 30 5. Tier 2 Biosolids shall not be applied within 100 feet of a well.
- 31 6. Tier 2 Biosolids shall not be applied within:
 - 32 a) 500 feet from any residence, school, business, place of worship,
33 entertainment area,

- 1 b) 50 feet from public roads,
- 2 c) 50 feet from property lines unless written permission is obtained from
- 3 the adjacent landowner.

4 7. Upon application, Tier 2 Biosolids shall be promptly incorporated into the
5 soil by discing or other suitable tillage within the timelines set out below.
6 Incorporation shall be continuous until completed. Incorporation shall be
7 thorough to a depth of no less than 6 inches unless otherwise approved by the
8 Department, including residues in staging areas. Tier 2 Biosolids shall be
9 incorporated when applied:

- 10 a) Within 1/4 mile of school: before school is back in session.
- 11 b) At all other sites within: 24 hours of delivery.

12 8. No Class A Tier 2 Biosolids shall be delivered to a site when climatic
13 conditions such as wind greater than 25 mph, or rain that will preclude the
14 incorporation identified above.

15 9. Both the Grower and the Transporter shall maintain an accurate record for
16 each load of Tier 2 Biosolids delivered and applied to each site under their
17 control including, but not limited to, the information listed below.

- 18 a) Data for determination of agronomic rate,
- 19 b) Generator(s) or Processor(s),
- 20 c) Dates and amount delivered to use site,
- 21 d) Crops planted and yield.

22 **Section 9. Tier 3 Standards.**

23 A) Site Registration: The Transporter and Grower shall be jointly responsible for
24 registration of sites receiving Tier 3 Biosolids. Sites shall be registered with the
25 Department prior to conducting activities regulated under this Ordinance, with said
26 registration renewed every five years with an annual permit fee, using forms provided
27 by the Department to include:

- 28 1. Name, address and phone number of both the grower and land owner with
29 evidence of both grower and land owner agreeing to the application of the Class
30 A Tier 3 Biosolids, right of entry and any other conditions,
- 31 2. Site identification to include Riverside County Assessor's Parcel Number
32 (APN),
- 33 3. A map of the application site,
- 34 4. A tabulation of site information to include:

- 1 a) Net acreage (to nearest 0.1 acre),
- 2 b) Annual application rate for the planned crop.
- 3 c) Proximity to occupied dwellings, property lines, roads and wells.
- 4 5. Analysis of agronomic rate to including the accounting of existing soil
- 5 nitrogen levels using the concentration of soil nitrate (in ppm) to a depth of 1
- 6 foot,
- 7 6. The Generator(s) or Processor(s) from which the transporter receives the
- 8 Biosolids.
- 9 7. Fees per Section 13 below.
- 10 **B) Standards of Operation: Transporter and Grower shall be jointly responsible for**
- 11 **ensuring conformity to the following site conditions:**
- 12 1. Delivery to land application sites shall be limited to the hours between 6:00
- 13 AM and 8:00 PM.
- 14 2. Biosolids not meeting Class A Tier 3 Standards shall not be delivered to the
- 15 site. The Generator or Processor shall implement the above identified
- 16 remediation protocol upon notification or receipt of information that Biosolids
- 17 delivered to the site do not meet all standards as identified herein.
- 18 3. The Transporter shall ensure that the Class A Biosolids quality certification
- 19 is available for review on the vehicle, and copies from each load are retained on
- 20 site until all applications are complete.
- 21 4. No application of Class A Tier 3 Biosolids shall exceed the agronomic rate
- 22 for the crop as determined by the Commissioner.
- 23 5. Tier 3 Biosolids shall not be applied within 100 feet of a well.
- 24 6. Tier 3 Biosolids shall not be applied within:
- 25 a) 1000 feet from any residence, school, business, place of worship,
- 26 entertainment area,
- 27 b) 50 feet from public roads,
- 28 c) 50 feet from property lines unless written permission is obtained from
- 29 the adjacent landowner.
- 30 7. Upon application, Tier 3 Biosolids shall be promptly incorporated into the
- 31 soil by discing or other suitable tillage within the timelines set out below.
- 32 Incorporation shall be continuous until completed. Incorporation shall be
- 33 thorough to a depth of no less than 6 inches unless otherwise approved by the

1 Department, including residues in staging areas. Tier 3 Biosolids shall be
2 incorporated when applied:

- 3 a) Within 1/4 mile of school: before school is back in session,
- 4 b) At all other sites within: 24 hours of delivery.

5 8. No Tier 3 Biosolids shall be delivered to a site when climatic conditions
6 such as wind greater than 25 mph, or rain that will preclude the incorporation
7 identified above.

8 9. Both the Transporter and the Grower shall maintain an accurate record for
9 each load of Tier 3 Biosolids delivered and applied to each site under their
10 control including, but not limited to, the information listed below.

- 11 a) Data for determination of agronomic rate,
- 12 b) Generator(s) or Processors,
- 13 c) Dates and amount delivered to use site,
- 14 d) Crops planted and yield.

15 **Section 10. Tier 4 Standards.**

16 A) Site Registration: The Transporter and Grower shall be jointly responsible for
17 registration of sites receiving Tier 4 Biosolids. Sites shall be registered with the
18 Department prior to conducting activities regulated under this Ordinance, with said
19 registration renewed on an annual basis, using forms provided by the Department to
20 include:

21 1. Name, address and phone number of both the grower and land owner with
22 evidence of grower and land owner agreeing to the application of the Class A
23 Tier 4 Biosolids, right of entry and any other conditions.

24 2. Site identification to include Riverside County Assessor's Parcel Number
25 (APN),

26 3. A map of the application site,

27 4. A tabulation of site information to include:

- 28 a) Net acreage (to nearest 0.1 acre),
- 29 b) Annual application rate for the planned crop,
- 30 c) Proximity to occupied dwellings, property lines, roads and wells.

31 5. Analysis of agronomic rate to including the accounting of existing soil
32 nitrogen levels using the concentration of soil nitrate (in ppm) to a depth of 1
33 foot.

1 6. The Generator(s) or Processor(s) from which the transporter receives the
2 Biosolids.

3 7. Fees per Section 13 below.

4 **B) Standards of Operation:** Transporter and Grower shall be jointly responsible for
5 ensuring conformity to the following site conditions.

6 1. Delivery to land application sites shall be limited to the hours between 6:00
7 AM and 8:00 PM.

8 2. Biosolids not meeting Class A Tier 4 Biosolids Standards shall not be
9 delivered to the site. The Generator or Processor shall implement the above
10 identified remediation protocol upon notification or receipt of information that
11 Biosolids delivered to the site do not meet all standards as identified herein.

12 3. The transporter shall ensure that the Class A Biosolids quality certification
13 is available for review on the vehicle, and copies from each load are retained on
14 site until all applications are complete.

15 4. No application of Tier 4 Biosolids shall exceed the agronomic rate for the
16 crop as determined by the Commissioner.

17 5. Tier 4 Biosolids shall not be applied within 100 feet of a well.

18 6. Tier 4 Biosolids shall not be applied within:

19 a) ½ mile from any residence, school, business, place of worship,
20 entertainment area,

21 b) 50 feet from public roads,

22 c) 50 feet from property lines unless written permission is obtained from
23 the adjacent landowner.

24 7. Upon application, Tier 4 Biosolids shall be incorporated into the soil by
25 discing or other suitable tillage within 24 hours of delivery. Incorporation shall
26 be continuous until completed. Incorporation shall be thorough to a depth of no
27 less than 6 inches unless otherwise approved by the Department, including
28 residues in staging areas.

29 8. No Tier 4 Biosolids shall be delivered to a site when climatic conditions
30 such as wind greater than 25 mph, or rain that will preclude the incorporation
31 identified above.

32 9. Both the Grower and the Landowner shall maintain an accurate record for
33 each load of Tier 4 Biosolids delivered and applied to each site under their
34 control including, but not limited to, the information listed below:

- 1 a) Data for determination of agronomic rate,
- 2 b) Generator(s) or Processors,
- 3 c) Dates and amount delivered to use site,
- 4 d) Crops planted and yield.

5 **Section 11.** Action on Registrations of Generators, Processors, Transporters and Sites
6 receiving Tiers 2, 3 or 4 Biosolids.

- 7 **A)** Applicants shall be notified of incomplete or inaccurate registrations within ten (10)
8 business days after the date of the filing of the Registration. The applicant may make
9 the proper corrections and resubmit the corrected Registration. The applicant may
10 make the necessary corrections and/or additions and resubmit the Registration within
11 30 days of notification.
- 12 **B)** All complete and accurate Registrations shall be approved or denied, in whole or in
13 part, within fifteen (15) business days after the date of filing or shall be deemed
14 approved. If a Registration is denied, in whole or in part, the applicant may amend
15 the Registration and resubmit the amended Registration or the Registration will be
16 considered invalid.
- 17 **C)** Approved Registrations shall be valid for a period of 5 years, subject to payment of
18 annual inspection and sampling fees.
- 19 **D)** Denial of Registration may be for one or more of the following causes, or for other
20 reasons as specified by the Director:
 - 21 1. Lack of responsibility as shown by past work.
 - 22 2. Submission of inadequate, incomplete, or inaccurate Registration
23 information.
 - 24 3. The plan proposes an application that is not environmentally sound.
- 25 **E)** Written notice of the denial of a Registration shall be given by personal delivery or by
26 mailing by certified mail to the applicant at the address on file with the Department.
- 27 **F)** The Director may rescind a Registration whenever the registered individual has
28 violated a provision of this Ordinance or State rules or regulations, discharge order of
29 the Water Quality Control Board, or is in noncompliance with a resolution of the
30 Board of Supervisors. In such instance, a written notice to this effect shall first be
31 delivered in person or by certified mail to the business address of the person
32 appearing on the Registration. The written notice shall state the grounds for the
33 proposed rescission.
- 34 **G)** The Generator, Processor, Transporter, Grower or Landowner may appeal such
35 proposed denial or rescission by the Director by filing a written request for a hearing

1 before the Independent Hearing Panel not more than fifteen (15) calendar days after
2 notice of the proposed denial or rescission has been mailed. Upon receipt of a written
3 request for a hearing, the Panel shall set the matter for public hearing on a date not
4 more than sixty (60) calendar days following receipt of such written request, and shall
5 give the appellant and the Panel at least thirty (30) calendar days written notice of the
6 time, date, and place of the hearing. The hearing panel shall issue its written decision
7 and findings on the appeal within thirty (30) calendar days after the close of the
8 hearing. Such decision will be final. Where the approval is rescinded, the Generator,
9 Processor, Transporter, Grower or landowner shall terminate operations forthwith as
10 determined by the Panel.

11 **Section 12. Department Monitoring Plan**

- 12 A) The Department shall implement a monitoring program to ensure conformance with
13 the conditions and restrictions established by this Ordinance.
- 14 1. Inspections will be conducted to
- 15 a. Verify physical conditions of sites as described in site notifications and
16 registrations,
- 17 b. Verify conformance with standards of operation, buffers and clearances
18 established for the Tier of Biosolids being applied,
- 19 c. Verify that the material delivered is consistent with material reviewed by
20 the Product Review Panel in placing it in its respective Tier,
- 21 d. Provide feedback to the Department and the Product Review Panel on the
22 effectiveness of the buffers and clearances established for the respective
23 Tiers,
- 24 e. Conduct sampling activities.
- 25 2. Sampling will be conducted to provide independent confirmation for the various
26 analysis required by the generator of the Biosolids to be applied, to include:
- 27 a. Pathogen analysis,
- 28 b. Contaminants, including heavy metals, for both Biosolids and soil.
- 29 c. Nitrogen, to validate analysis provided for Agronomic Rates.
- 30 B) Inspections and sampling frequencies, material to be sampled for, sampling standards
31 and other details shall be established through a monitoring plan approved by the
32 Health Officer.

33 **Section 13. Fees.**

34 A) A deposit in the amount listed below shall be made to the Department for the review
35 of each Registration of a Generator, Processor, Transporter, or Site. Fees collected in
36 excess of the actual cost of providing the review shall be refunded. Registrations
37 whose review requires a cost to the Department beyond the initial deposit shall
38 require an additional deposit.

- 39 1. Generator or Processor: \$ 500.00
- 40 2. Transporter: \$ 250.00

1 **Section 17.** Violations – Penalties.

2 Violations by any person, firm, partnership, association, agency, municipality, special
3 district or corporation, whether having obtained approval or not, of any of the provisions
4 of this ordinance, constitute an infraction or misdemeanor as hereinafter specified. Upon
5 conviction thereof, the person or entity shall be subject to a fine of \$100.00 for the first
6 offense; \$200.00 for the second violation within a one (1) year period; and \$300.00 for
7 each additional violation within the same one (1) year period. Fourth and additional
8 violations within a one-year period shall each constitute a misdemeanor and shall be
9 punishable by a fine not to exceed one thousand dollars (\$1,000.00), or six (6) months in
10 jail, or both. Notwithstanding the above, a first or subsequent offense may be charged and
11 prosecuted as a misdemeanor. Payment of any penalty provided herein shall not relieve a
12 person, as defined, of the responsibility of correcting the conditions considered as a
13 separate and distinctive offense.

14 **Section 18.** Violations – Public Nuisance.

15 In addition, any violation of this Ordinance is hereby deemed to be a public nuisance, and
16 may be abated, and/or enjoined by the Director, irrespective of any other remedy
17 hereinabove provided.

18 **Section 19.** Severability.

19 If any clause, provision, sentence, or paragraph of this Ordinance, or the application
20 thereof, is deemed to be invalid as to any person, entity, establishment, or circumstance,
21 such invalidity shall not effect the other provisions of this Ordinance that shall still
22 remain in effect, and to this end, it is hereby declared that the provisions of this
23 Ordinance are severable.

24 **Section 20.** Effective Date.

25 This Ordinance shall take effect sixty (60) days after the date of adoption.

26