

1 Ordinance No. 830 Regulating CLASS A SLUDGE  
2 Sections:

3 Section 1 Purpose and Intent ..... 1  
4 Section 2 Definitions ..... 2  
5 Section 3 Prohibitions ..... 4  
6 Section 4 Prohibition Areas..... 4  
7 Section 5 Exemptions..... 5  
8 Section 6 Generators, Processors and Transporters ..... 5  
9 Section 7 Tier 1 Standards ..... 7  
10 Section 8 Tier 2 Standards ..... 9  
11 Section 9 Tier 3 Standards ..... 11  
12 Section 10 Tier 4 Standards ..... 13  
13 Section 11 Action on Registrations..... 15  
14 Section 12 Fees..... 16  
15 Section 13 Right of Entry ..... 17  
16 Section 14 Enforcement..... 17  
17 Section 15 Responsibility..... 17  
18 Section 16 Violations – Penalties ..... 18  
19 Section 17 Violations – Public Nuisance ..... 18  
20 Section 18 Severability..... 18  
21 Section 19 Effective Date..... 18

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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 Material 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 Material"** shall mean Class A Material that is not sold or given away in a bag  
31 for application to commercial farmland.

32 **C) "Class A Sewage Sludge" or "Class A Material"** 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 the

1 ceiling concentration limits in 40 CFR Section 503.13 Table 1. Class A Material  
2 from each generator, or process and location if multiple processes or locations are  
3 used, shall be placed in a tier level based on its nuisance value as determined by a  
4 Product Review Panel established by the Health Officer for Riverside County.

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

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

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

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

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

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

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

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

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

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

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

- 1 **K) "Independent Hearing Panel"** shall mean the panel established pursuant to  
2 California Public Resources Code Section 44308 for solid waste facility issues and  
3 consisting of a minimum of three persons.
- 4 **L) "Land Application"** shall mean the placement of Class A Material within three (3)  
5 feet of the surface of agricultural land to facilitate the growth of crops.
- 6 **M) "Land Owner"** shall mean any person, firm, business, city, county, district, special  
7 district including a water district, sole proprietorship, partnership, joint venture, trust,  
8 association or corporation whether for profit or non profit that owns real property  
9 within the unincorporated areas of Riverside County.
- 10 **N) "Site"** shall mean a discrete parcel of land, greater than 2 acres, upon which Class A  
11 Material is to be applied for the purpose of growing crops.
- 12 **O) "Product Review Panel"** shall mean a panel appointed or reappointed by the  
13 County Health Officer on or before February 1 of each calendar year, composed of  
14 six individuals representing the following groups: 1) Citizen; 2) County Staff; 3)  
15 Product Generator; 4) Transporter or Farmer; 5) Academic, County Extension or  
16 Agricultural Commissioner representative, 6) Processor.
- 17 **P) "Processor"** shall mean any person, firm or business responsible for transforming  
18 biosolids received from a Generator into Class A Material.
- 19 **Q) "Transporter"** shall mean any person, company, organization, or other legal entity  
20 engaged, or about to become engaged with the transportation of Class A Material  
21 received from a Generator or Processor for the purpose of land application.

22 **Section 4. Prohibitions.**

- 23 **A)** No Generator, Processor, Transporter, Grower or Landowner shall engage in any land  
24 application activities that are inconsistent with the standards of this Ordinance,  
25 exceed agronomic rates or are otherwise prohibited by or in violation of any other  
26 Federal, State or Local standard.
- 27 **B)** No Generator, Processor, Transporter, Grower or Landowner shall engage in any land  
28 application activities without the prior, unexpired and unrevoked registration with the  
29 Department.
- 30 **C)** No person shall deliver bulk Class A Material to any site for the purposes of land  
31 application unless that site is in compliance with all notifications and has a current  
32 and unrevoked registration with the Department as required by this Ordinance.

33 **Section 5. Prohibition Areas.**

34 Upon petition by a public agency with public health and water quality responsibility  
35 and jurisdiction, the Board of Supervisors may establish, by resolution, areas with

1 additional restrictions to the land application of bulk Class A Sewage Sludge, up to  
2 and including complete prohibition.

3 **Section 6. Exemptions.**

4 The following sites shall be exempted from the prohibitions:

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

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

8 **Section 7. Generators, Processors and Transporters.**

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

13 1. Name and address of the Generator, Processor or Transporter.

14 2. Type of organization such as sole proprietorship, partnership, agency,  
15 municipality, special district, joint venture, lease, corporation, business trust of  
16 company including names and home addresses.

17 3. Name of person submitting application, and relationship to generator,  
18 processor or transporter.

19 4. Identification (name and phone number of the local contact person).

20 5. Additional application requirements for Generators and Processors:

21 a) List of Facilities from which Class A Material is generated.

22 b) Method or methods used to achieve Class A level.

23 c) Any and all documents related to the identification of incomplete or  
24 inadequate processes to achieve the designation class of Class A  
25 Material.

26 d) Remediation protocols to be used in the event that material not meeting  
27 Class A standards is delivered to a site.

28 e) Additional application requirements for Transporter:

29 f) A written spill prevention and response program.

30 B) Tier Placement. Class A Material from each Generator and Processors, or process and  
31 location if multiple processes or locations are used, shall be placed in a tier level

1 based on its nuisance value as determined by a Product Review Panel using protocols  
2 established by the Health Officer for Riverside County.

3 C) Standards of Operation

4 1. A Generator and/or Processor:

- 5 a) Shall advise the Department within 1 business day of any event that may  
6 impact the quality of the Class A Material being provided for land  
7 application.
- 8 b) Shall advise the Department within 1 business day of any notice from the  
9 governing regional water quality control board or USEPA of any  
10 violation that may impact the quality of the Class A Material being  
11 provided for land application.
- 12 c) Shall individually certify each load as meeting the Class A standards.
- 13 d) Shall implement the above identified remediation protocol upon  
14 determination or notification that material not meeting Class A Material  
15 standards is delivered to a site.
- 16 e) Shall, at a minimum, perform monthly site visits and audit the land  
17 application practices in use for their Tier 2, 3 and 4 Class A Material.  
18 The results of the above audit shall be reported to the Department  
19 biannually using forms provided by the Department and shall include  
20 any actions taken by the Generator.
- 21 f) Shall demonstrate pathogen destruction through process controls  
22 including but not limited to alarming, shutdown procedures or testing to  
23 preclude land application of substandard material. Records  
24 demonstrating compliance shall be maintained for a period of one year  
25 from the time of application.
- 26 g) Shall maintain processes to meet Class A Standards. Failure to do so  
27 shall result in the denial or rescission of the registration.

28  
29 2. A Transporter:

- 30 a) Shall identify each vehicle with the identity and telephone number of the  
31 Transporter, subcontractor or other responsible operator clearly visible,  
32 on the rear and on each side, with letters of not less than three (3) inches  
33 in height.
- 34 b) Shall design and maintain Vehicles in such a manner as to prevent  
35 leakage of liquids or spilling, blowing or loss of material during  
36 transportation.

- 1 c) Shall provide a shovel, broom, fire extinguisher, and first aid kit to be  
2 maintained on vehicles at all times.
- 3 d) Shall ensure that the Class A Material quality certification is available  
4 for review on the vehicle, and copies from each load are retained on site  
5 until all deliveries are complete.
- 6 e) Shall create and maintain an accurate record for each load of Class A  
7 Material delivered and applied in Riverside County including, but not  
8 limited to, the information listed below:
- 9 (i) Generator (by specific facility),  
10 (ii) Date and time picked up,  
11 (iii) Date and time delivered to site.  
12 (iv) Site identification:  
13 (v) Load size; and,  
14 (vi) Vehicle(s) and driver(s).
- 15 Such records shall be submitted to the Department within fifteen (15)  
16 days from the end of any reporting month in which activity occurs, and  
17 an annual report within 30 days of the end of the calendar year.
- 18 f) Shall maintain vehicle exteriors to be free of sludge before entering  
19 public roads and in sound mechanical condition. All loads shall be fully  
20 and securely covered. Transporter shall immediately and completely  
21 clean any and all spillage.

22 **Section 8.** Tier 1 Standards.

23 **A) Site Notification**

- 24 1. The Transporter and Grower shall be jointly responsible for notification of  
25 the Department for Sites receiving Tier 1 Material. Such notification shall be  
26 made no later than the last business day prior to delivery of the material, using  
27 forms provided by the Department to include:
- 28 a) Name, address and phone number of the grower or land owner with  
29 evidence of grower or land owner agreeing to the application of Class A  
30 Tier 1 Material use, right of entry and any other conditions.
- 31 b) Riverside County Assessors Parcel Number (APN).
- 32 c) A map of the application site.
- 33 d) The Generator(s) or Processor(s) from which the Transporter receives  
34 the material.

1 e) The amount of Tier 1 material to be applied, including an analysis of  
2 agronomic rate to including the accounting of existing soil nitrogen  
3 levels using the concentration of soil nitrate (in ppm) to a depth of 1 foot.

4 f) Fees per Section 13 below.

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

7 1. Delivery to land application sites adjacent to residential developments shall  
8 be limited to the hours between 6:00 AM and 8:00 PM unless the staging area is  
9 greater then 500 ft from the nearest dwelling.

10 2. Material not meeting Class A Tier 1 Standards shall not be delivered to the  
11 site. The Generator or Processor shall implement the above identified  
12 remediation protocol upon notification or receipt of information that material  
13 delivered to the site does not meet all standards as identified herein.

14 3. The transporter shall ensure that the Class A Material quality certification is  
15 available for review on the vehicle.

16 4. No application of Tier 1 Material shall exceed the agronomic rate for the  
17 crop as determined by the Commissioner.

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

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

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

25 a) Data for determination of agronomic rate,

26 b) Generator(s) or Processor(s),

27 c) Dates and amount delivered to use site,

28 d) Crops planted and yield.

29 8. Upon application, Tier 1 Material shall be promptly incorporated into the  
30 soil by discing or other suitable tillage within the timelines set out below.  
31 Incorporation shall be continuous until completed. Incorporation shall be  
32 thorough to a depth of no less than 6 inches unless otherwise approved by the  
33 Commissioner, including residues in staging areas. Tier 1 Material shall be  
34 incorporated when applied:

35 a) Within 1/4 mile of school: before school is back in session.

- 1           b)     At all other sites of less than 20 acres: within 48 hours of delivery.
- 2           c)     For sites of 20 acres or more, incorporation shall commence no more  
3                 than seven (7) days after the first delivery and shall be completed within  
4                 seven (7) days of the final delivery to the site unless otherwise  
5                 authorized by the Commissioner.

6           **9. Site Identification.** The areas to receive any Class A Tier 1 Material shall  
7                 be clearly marked using informational signs, no less than 8 1/2 inches by 11  
8                 inches, spaced no more than 200 feet apart in clearly visible location(s) and  
9                 easily read from areas accessible to the public. All unfenced sites shall be  
10                clearly identified and delineated with the signs posted adjacent to roads and  
11                adjacent properties. The signs are to remain in place and legible until delivery  
12                and incorporation is completed. Lettering shall be in a color that contrasts with  
13                the background and shall include the statement "Class A sewage Sludge is being  
14                applied to this field. Please contact the Riverside County Department of  
15                Environmental Health at (Phone #) if you have any questions related to this  
16                material".

17   **Section 9. Tier 2 Standards.**

18   **A) Site Registration:** The Landowner, Grower and Transporter shall be jointly  
19                 responsible for registration of Sites receiving Tier 2 Material. Sites shall be registered  
20                 with the Department prior to conducting activities regulated under this Ordinance,  
21                 with said registration renewed on an annual basis, using forms provided by the  
22                 Department to include:

- 23                 1. Name, address and phone number of both the grower and land owner with  
24                 evidence of both grower and land owner agreeing to the application of the Class  
25                 A Tier 2 material, right of entry and any other conditions.
- 26                 2. Site identification to include Riverside County Assessors Parcel Number  
27                 (APN).
- 28                 3. A map of the application site.
- 29                 4. A tabulation of site information to include:
- 30                         a)     Net acreage (to nearest 0.1 acre),
- 31                         b)     Annual application rate for the planned crop.
- 32                         c)     Proximity to occupied dwellings, property lines, roads and wells.
- 33                         d)     Analysis of agronomic rate to including the accounting of existing soil  
34                         nitrogen levels using the concentration of soil nitrate (in ppm) to a depth  
35                         of 1 foot.

- 1 e) The Generator(s) or Processor(s) from which the Transporter receives  
2 the material.
- 3 5. 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. Material not meeting Class A Tier 2 Standards shall not be delivered to the  
9 site. The Generator or Processor shall implement the above identified  
10 remediation protocol upon notification or receipt of information that material  
11 delivered to the site does not meet all standards as identified herein.
- 12 3. The Transporter shall ensure that the Class A Material quality certification is  
13 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 2 Material shall exceed the agronomic rate for the  
16 crop as determined by the Commissioner.
- 17 5. Tier 2 Material shall not be applied within 100 feet of a well.
- 18 6. Tier 2 Material shall not be applied within:
- 19 a) 500 feet 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 2 Material shall be promptly incorporated into the  
25 soil by discing or other suitable tillage within the timelines set out below.  
26 Incorporation shall be continuous until completed. Incorporation shall be  
27 thorough to a depth of no less than 6 inches unless otherwise approved by the  
28 Commissioner, including residues in staging areas. Tier 2 Material shall be  
29 incorporated when applied:
- 30 a) Within 1/4 mile of school: before school is back in session.
- 31 b) At all other sites within: 24 hours of delivery.
- 32 8. No Class A Tier 2 Material shall be delivered to a site when climatic  
33 conditions such as wind greater than 25 mph, or rain that will preclude the  
34 incorporation identified above.

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

- 4 a) Data for determination of agronomic rate,
- 5 b) Generator(s) or Processor(s),
- 6 c) Dates and amount delivered to use site,
- 7 d) Crops planted and yield.

8 **10. Site Identification.** The areas to receive any Class A Tier 2 Material shall  
9 be clearly marked using informational signs, no less than 8 1/2 inches by 11  
10 inches, spaced no more than 200 feet apart in clearly visible location(s) and  
11 easily read from areas accessible to the public. All unfenced sites shall be  
12 clearly identified and delineated with the signs posted adjacent to roads and  
13 adjacent properties. The signs are to remain in place and legible until delivery  
14 and incorporation is completed. Lettering shall be in a color that contrasts with  
15 the background and shall include the statement "Class A Sewage Sludge is  
16 being applied to this field. Please contact the Riverside County Department of  
17 Environmental Health at (Phone #) if you have any questions related to this  
18 material".

19 **Section 10. Tier 3 Standards.**

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

- 25 1. Name, address and phone number of both the grower and land owner with  
26 evidence of both grower and land owner agreeing to the application of the Class  
27 A Tier 3 material, right of entry and any other conditions,
- 28 2. Site identification to include Riverside County Assessors Parcel Number  
29 (APN),
- 30 3. A map of the application site,
- 31 4. A tabulation of site information to include:
  - 32 a) Net acreage (to nearest 0.1 acre),
  - 33 b) Annual application rate for the planned crop.
  - 34 c) Proximity to occupied dwellings, property lines, roads and wells.

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

4 6. The generator(s) or processor(s) from which the transporter receives the  
5 material.

6 7. Fees per section 13 below.

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

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

11 2. Material not meeting Class A Tier 3 Standards shall not be delivered to the  
12 site. The Generator or Processor shall implement the above identified  
13 remediation protocol upon notification or receipt of information that material  
14 delivered to the site does not meet all standards as identified herein.

15 3. The Transporter shall ensure that the Class A Material quality certification is  
16 available for review on the vehicle, and copies from each load are retained on  
17 site until all applications are complete.

18 4. No application of Class A Tier 3 Material shall exceed the agronomic rate  
19 for the crop as determined by the Commissioner.

20 5. Tier 3 Material shall not be applied within 100 feet of a well.

21 6. Tier 3 Material shall not be applied within:

22 a) 1000 feet from any residence, school, business, place of worship,  
23 entertainment area,

24 b) 50 feet from public roads,

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

27 7. Upon application, Tier 3 Material shall be promptly incorporated into the  
28 soil by discing or other suitable tillage within the timelines set out below.  
29 Incorporation shall be continuous until completed. Incorporation shall be  
30 thorough to a depth of no less than 6 inches unless otherwise approved by the  
31 Commissioner, including residues in staging areas. Tier 3 Material shall be  
32 incorporated when applied:

33 a) Within 1/4 mile of school: before school is back in session,

34 b) At all other sites within: 24 hours of delivery.

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

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

- 7 a) Data for determination of agronomic rate,
- 8 b) Generator(s) or Processors,
- 9 c) Dates and amount delivered to use site,
- 10 d) Crops planted and yield.

11 **10. Site Identification.** The areas to receive any Class A Tier 3 Material shall  
12 be clearly marked using informational signs, no less than 8 1/2 inches by 11  
13 inches, spaced no more than 200 feet apart in clearly visible location(s) and  
14 easily read from areas accessible to the public. All unfenced sites shall be  
15 clearly identified and delineated with the signs posted adjacent to roads and  
16 adjacent properties. The signs are to remain in place and legible until delivery  
17 and incorporation is completed. Lettering shall be in a color that contrasts with  
18 the background and shall include the statement "Class A Sewage Sludge is  
19 being applied to this field. Please contact the Riverside County Department of  
20 Environmental Health at (Phone #) if you have any questions related to this  
21 material".

22  
23 **Section 11. Tier 4 Standards.**

24 **A) Site Registration:** The Transporter and Grower shall be jointly responsible for  
25 registration of sites receiving Tier 4 Material. Sites shall be registered with the  
26 Department prior to conducting activities regulated under this Ordinance, with said  
27 registration renewed on an annual basis, using forms provided by the Department to  
28 include:

- 29 1. Name, address and phone number of both the grower and land owner with  
30 evidence of grower and land owner agreeing to the application of the Class A  
31 Tier 4 material, right of entry and any other conditions.
- 32 2. Site identification to include Riverside County Assessors Parcel Number  
33 (APN),
- 34 3. A map of the application site,
- 35 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 material.
- 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. Material not meeting Class A Tier 4 Material Standards shall not be
- 15 delivered to the site. The Generator or Processor shall implement the above
- 16 identified remediation protocol upon notification or receipt of information that
- 17 material delivered to the site does not meet all standards as identified herein.
- 18 3. The transporter shall ensure that the Class A Material quality certification is
- 19 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 Tier 4 Material shall exceed the agronomic rate for the
- 22 crop as determined by the Commissioner.
- 23 5. Tier 4 Material shall not be applied within 100 feet of a well.
- 24 6. Tier 4 Material shall not be applied within:
- 25 a) ½ mile 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 4 Material shall be incorporated into the soil by
- 31 discing or other suitable tillage within 24 hours of delivery. Incorporation shall
- 32 be continuous until completed. Incorporation shall be thorough to a depth of no
- 33 less than 6 inches unless otherwise approved by the Commissioner, including
- 34 residues in staging areas.

1 8. No Tier 4 Material shall be delivered to a site when climatic conditions such  
2 as wind greater than 25 mph, or rain that will preclude the incorporation  
3 identified above.

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

- 7 a) Data for determination of agronomic rate,
- 8 b) Generator(s) or Processors,
- 9 c) Dates and amount delivered to use site,
- 10 d) Crops planted and yield.

11 **10. Site Identification.** The areas to receive any Class A Tier 4 Material shall  
12 be clearly marked using informational signs, no less than 8 1/2 inches by 11  
13 inches, spaced no more than 200 feet apart in clearly visible location(s) and  
14 easily read from areas accessible to the public. All unfenced sites shall be  
15 clearly identified and delineated with the signs posted adjacent to roads and  
16 adjacent properties. The signs are to remain in place and legible until delivery  
17 and incorporation is completed. Lettering shall be in a color that contrasts with  
18 the background and shall include the statement "Class A sewage Sludge is being  
19 applied to this field. Please contact the Riverside County Department of  
20 Environmental Health at (Phone #) if you have any questions related to this  
21 material".

22 **Section 12.** Action on Registrations of Generators, Processors, Transporters and Sites  
23 receiving Tiers 2, 3 or 4 material.

24 **A)** Applicants shall be notified of incomplete or inaccurate registrations within ten (10)  
25 business days after the date of the filing of the Registration. The applicant may make  
26 the proper corrections and resubmit the corrected Registration. The applicant may  
27 make the necessary corrections and/or additions and resubmit the Registration within  
28 30 days of notification.

29 **B)** All complete and accurate Registrations shall be approved or denied, in whole or in  
30 part, within fifteen (15) business days after the date of filing or shall be deemed  
31 approved. If a Registration is denied, in whole or in part, the applicant may amend  
32 the Registration and resubmit the amended Registration or the Registration will be  
33 considered invalid.

34 **C)** Denial of Registration may be for one or more of the following causes, or for other  
35 reasons as specified by the Director:

- 36 1. Lack of responsibility as shown by past work.

1           2. Submission of inadequate, incomplete, or inaccurate Registration  
2 information.

3           3. The plan proposes an application that is not environmentally sound.

4 **D)** Written notice of the denial of a Registration shall be given by personal delivery or by  
5 mailing by certified mail to the applicant at the address on file with the Department.

6 a)       Approved Registrations shall be valid for a period of 5 years, subject to payment  
7 of annual inspection and sampling fees.

8 **E)** The Director may rescind a Registration whenever the registered individual has  
9 violated a provision of this Ordinance or State rules or regulations, discharge order of  
10 the Water Quality Control Board, or is in noncompliance with a resolution of the  
11 Board of Supervisors. In such instance, a written notice to this effect shall first be  
12 delivered in person or by certified mail to the business address of the person  
13 appearing on the Registration. The written notice shall state the grounds for the  
14 proposed rescission.

15 **F)** The Generator, Processor, Transporter, Grower or Landowner may appeal such  
16 proposed denial or rescission by the Director by filing a written request for a hearing  
17 before the Independent Hearing Panel not more than fifteen (15) calendar days after  
18 notice of the proposed denial or rescission has been mailed. Upon receipt of a written  
19 request for a hearing, the Panel shall set the matter for public hearing on a date not  
20 more than sixty (60) calendar days following receipt of such written request, and shall  
21 give the appellant and the Panel at least thirty (30) calendar days written notice of the  
22 time, date, and place of the hearing. The hearing panel shall issue its written decision  
23 and findings on the appeal within thirty (30) calendar days after the close of the  
24 hearing. Such decision will be final. Where the approval is rescinded, the Generator,  
25 Processor, Transporter, Grower or landowner shall terminate operations forthwith as  
26 determined by the Panel.

27 **Section 13. Fees.**

28 **A)** A deposit in the amount listed below shall be made to the Department for the review  
29 of each Registration of a Generator, Processor, Transporter, or Site. Fees collected in  
30 excess of the actual cost of providing the review shall be refunded. Registrations  
31 whose review requires a cost to the Department beyond the initial deposit shall  
32 require an additional deposit.

- |    |                            |           |
|----|----------------------------|-----------|
| 33 | 1. Generator or Processor: | \$ 500.00 |
| 34 | 2. Transporter:            | \$ 250.00 |
| 35 | 3. Tier 2, 3 or 4 Site:    | \$ 200.00 |

36

- 1 **B) Annual inspection and sampling fees**
- 2           1. For Generator or Processor:                                 \$ 2000.00
- 3           2. For Transporter:   \$ 100.00
- 4           3. For each Tier 1 application site:                                 \$ 560.00
- 5           4. For each Tier 2, Tier 3 or Tier 4 application site:     \$ 730.00

6 **C) These fees shall be incorporated into Riverside County Ordinance No. 640.**

7 **D) A fee pursuant to Board Resolution 2003-191 as amended, revised or superceded**  
8 **shall be paid to the Commissioner for the review and evaluation of the agronomic rate**  
9 **for each registration at each Tier 1, Tier 2, Tier 3 or Tier 4 site.**

10 **Section 14. Right of Entry.**

11 **A) The Grower or Land Owner shall agree, as a requirement of the approval, to authorize**  
12 **the Director at reasonable times and upon presentation of credentials to:**

- 13           1. Have access to and copy any records required to be kept under the terms and  
14           conditions of this approval,
- 15           2. Inspect any monitoring equipment or observe any monitoring method  
16           required in the approval,
- 17           3. Inspect any collection, transport vehicles, treatment, pollution management,  
18           or control facilities required under the approval,
- 19           4. Enter any site where Class A Material is proposed to be used or has been  
20           used or stored and sample any ground or surface waters, soils, vegetation, Class  
21           A Material or other materials on the site; and,
- 22           5. Obtain any photographic documentation or evidence.

23 **Section 15. Enforcement.**

24  
25 It shall be the duty of the Director to enforce the provisions of this Ordinance.  
26

27 **Section 16. Responsibility.**

28 The Generator, Processor, Transporter, Grower, Land Owner and any person or persons  
29 leasing the site shall be jointly and severally responsible for compliance with this  
30 Ordinance.

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

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



**FROM:** Community Health Agency

**SUBMITTAL DATE:**  
February 18, 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:**

1. That the Board Introduce and set for public hearing the adoption of County Ordinance No. 830, an Ordinance of the County of Riverside regulating the Agricultural Use of Class A Sewage Sludge;
2. That the Board authorize the Clerk to place an advertisement for the Public Hearing in the appropriate local publications;
3. That upon the close of the Public Hearing the Board adopt Riverside County Ordinance No. 830.

**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.  
(continued)

  
\_\_\_\_\_  
Gary Feldman, M.D., Director

GF:dm

<b>FINANCIAL DATA</b>	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:	

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

**C.E.O. RECOMMENDATION:**

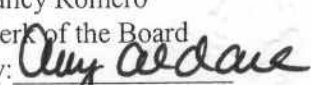
**APPROVE**

**County Executive Office Signature** 

**MINUTES OF THE BOARD OF SUPERVISORS**

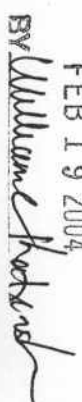
On motion of Supervisor Buster, seconded by Supervisor Venable and duly carried, IT WAS ORDERED that the above ordinance is approved as introduced with waiver of the reading, and is set for public hearing on Tuesday, March 16, 2004 at 1:30 p.m.

Ayes: Buster, Venable and Wilson  
Noes: None  
Absent: Tavaglione and Ashley  
Date: March 2, 2004  
xc: CHA, COB

Nancy Romero  
Clerk of the Board  
By:   
Deputy

**Prev. Agn. Ref.:** 3.39, 6/3/2003, | **District:** ALL | **Agenda Number:**

**ATTACHMENTS FILED  
WITH THE CLERK OF THE BOARD**

FORM APPROVED COUNTY COUNSEL  
 FEB 19 2004  
 BY:   
 Policy  Consent   
 Policy  Consent   
 Dept's Recomm.:  Per Exec. Ofc.:

The recommended motion directed staff to complete the internal review and processing of the draft and submit for introduction and public hearing.

The Report was the result of a directive from the Riverside County Board of Supervisors on August 13, 2002, establishing a Class A Biosolids Land Application Committee. The Committee brought identified stakeholders representing the Community, Wastewater Treatment Plant Operators, Processors, Farmers, Academics and Government together in a process to identify or develop reasonable, protective standards for the land application of Class A Sewage Sludge. The intent was to implement a structured review and evaluation process resulting in recommended standards, incorporating industry best practices and a good neighbor policy.

### **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 PSRP<sup>1</sup> 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.

In July 2002, the National Research Council of the National Academy of Science completed an 18-month study of EPA regulations (Part 503) and issued a report entitled "Biosolids Applied to Land: Advancing Standards and Practices." The overarching findings of the report concluded that:

"There is no documented scientific evidence that the Part 503 Rule has failed to protect public health. However, additional scientific work is needed to reduce persistent uncertainty about the potential for adverse human health effects from exposure to biosolids."

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<sup>1</sup> Process to Significantly Reduce Pathogens

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.

Staff distributed a "Draft Ordinance to Regulate the Land Application of Class A Sewage Sludge" to serve as a beginning framework for discussion and consideration. This document represented staff efforts, since the prohibition of Class B applications in 2001, to address the enforcement deficiencies recognized in the Class B standards.

Three subcommittees were set up: Producers, Science, and Receivers (farmers), with each expected to provide analysis and data pertinent to the completion of the overall goal. While some of the Committee members retained personal positions that either no regulation is needed for Class A Sludge, or all future sludge applications should be banned completely, we did achieve near consensus with regard to the scope and structure of a regulatory process in which the Standards reflect reasonably safe practices, can be enforced and will be adhered to.

Neither this Agency nor the Committee was able to perform any of the experimental studies of the practice as recommended by the National Academy of Sciences<sup>2</sup> report that stimulated our current process. We do believe, by our evaluation of the existing standards (Federal, other jurisdictional and/or organizationally recommended) and review of existing research by the Science Subcommittee, that the land application of sewage sludge meeting Class A requirements does not pose a significant health risk. The proposed Ordinance represents input by the Committee to the Ordinance "framework" initially distributed.

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<sup>2</sup> Evaluated by this Agency in August 13, 2002 submittal to the Board "Report on July 2002 NAS Study of 40CFR 503 Standards and Implications Related to Land Application of Sewage Sludge in Riverside County."

### 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 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 have been made:

- Notifications. Staff has reintroduced language requiring the advisory posting of the fields to address the concerns expressed related to notification of people within the community. Posting was determined to be preferable to other options to ensure that all individuals having access to the sites are advised. Please be advised that this element was extensively discussed by the Committee and its inclusion was opposed by many Committee members, most especially the farming community.
- Monitoring. Staff has developed a random monitoring program (Attachment 1) to confirm conformance to the Ordinance, quality of material delivered to sites (including Tier 1) and the effectiveness of the buffers adopted.
- Clarification. Staff has 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 have been deleted to be consistent with the "Purpose and Intent" identified for the Ordinance.
- Prohibition Areas. A new section has been 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) as noted 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	Yes	Yes	Yes	Yes
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
Within 24 hours	No	Yes	Yes	Yes
At sites of less than 20 acres: within 48 hours of delivery	Yes	No	No	No
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	Yes	No	No	No
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

## **Class A Sludge Monitoring**

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

### ***Testing Regimen***

The Department of Environmental Health will conduct a spot sampling program of sewage sludge 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).

After the first year of application, a similar spot check program will be initiated to ascertain that the cumulative loading for heavy metals meets the requirements as specified in the US EPA monitoring plans, and that the nitrate levels are maintained within agronomic levels.

### **Pathogens**

Samples will be collected at the application site. The samples will be tested for total and fecal coliform. Some samples will be also analyzed for the enteric pathogens of *Escherichia coli* and *Klebsiella* spp. The results from these enterics will be compared with the results from the Total and Fecal Coliform analyses.

The sampling results will be compared to the results certified by the wastewater treatment plant. Each wastewater treatment plant will be assessed individually and the sampling frequency will be adjusted to gain the confidence of Environmental Health of their self-reported results.

### Procedure

One site per year will be randomly selected and sampled for each generator/processor. Staff will collect a sludge 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 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. Sample collection and preservation shall be as described in the Standard Methods for the Examination of Water and Wastewater.

### Analyses

- Total & Fecal Coliform
- *Escherichia coli*
- *Klebsiella* spp

Analytical results for Coliform will be evaluated per EPA 503 standards. Enterics will be analyzed to determine any relationship to coliform levels.

### **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 sludge 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 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.

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.

### **Cumulative Loading**

After the first year of application, a similar spot check program will be initiated to ascertain that the cumulative loading for heavy metals meets the requirements as specified in the US EPA monitoring plans, and that the nitrate levels are maintained within agronomic levels.

#### *Nitrate*

All fields are to be sampled for Nitrate as part of the post application inspection.

#### *Heavy Metals (EPA 503 Table 2)*

10% of the fields with previous sludge applications will be selected annually for Heavy Metals testing.

#### Procedure

Staff will collect a sludge sample from five different locations in the field. A form will be completed with the following information: date, time, field name and location of sample collection, name of wastewater treatment plant producing the material, and truck number. The samples shall be collected from the top 6 inches of the soil. Sample collection and preservation shall as described in the Standard Methods for the Examination of Water and Wastewater.

#### Analyses

The results from the Nitrate analysis will be compared to nitrogen requirements for the proposed crop and the proposed application rate.

Analytical results for Heavy Metals will be evaluated with regard to the maximum cumulative levels as specified in EPA 503 Table 2.

SUMMARY OF RIVERSIDE COUNTY ORDINANCE NO. 830,  
REGULATING THE LAND APPLICATION OF CLASS A SLUDGE  
FOR AGRICULTURAL PURPOSES

This ordinance is intended to regulate land application of bulk Class A sewage sludge in the County of Riverside. By way of definitions, prohibitions and exemptions this ordinance recognizes it applies only to commercial farming applications.

This ordinance establishes the registration requirements for Generators, Processors and Transporters of Class A sewage sludge, as well as providing Standards of Operation for those involved in such activities.

In order to monitor the delivery and spreading process, Ordinance No. 830 creates four (4) separate tier levels based on the nuisance value determined by a Product and Review Panel established by the Health Officer for Riverside County.

Ordinance No. 830 establishes fees for Generators, Processors and Transporters sewage sludge along with enforcement responsibilities and penalties for violations.

The full text of Ordinance No. 830 is available for review in the Office of the Clerk of the Board of Supervisors, 4080 Lemon Street, 1<sup>st</sup> Floor, Riverside, California.