

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

81 Higuera Street, Suite 200
San Luis Obispo, California 93401-5427

ORDER NO. 95-01

**WASTE DISCHARGE REQUIREMENTS
FOR
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
FRANKLIN D. & CORA L. HILTON
HILTON PROPERTY BIOSOLIDS APPLICATION SITE
SAN LUIS OBISPO COUNTY**

The California Regional Water Quality Control Board, Central Coast Region, (hereafter Board), finds:

1. Chuck Ellison, Wastewater Treatment Plant Manager, filed a Report of Waste Discharge on June 23, 1994, on behalf of the South San Luis Obispo County Sanitation District, 1600 Aloha Place, Oceano, CA 93445 (hereafter District). Supplemental information was submitted by John Wallace and Associates (4115 Broad St., Suite B-5, San Luis Obispo, CA) on August 8, 1994. The District proposes landspreading of biosolids collected from the District's Wastewater Treatment Plant (hereafter Plant) on property owned by Franklin D. & Cora L. Hilton, 280 Phelan Ranch Way, Arroyo Grande, CA 93420 (hereafter Property). The South San Luis Obispo County Sanitation District and Franklin & Cora Hilton are collectively referred to as "Discharger".
2. The Site is located southeast of the City of Arroyo Grande, east of Oceano and approximately 1-1/2 miles west of Highway 101; as shown in Attachment A which is included as part of this Order. The property totals 43.17 acres with approximately 22.6 acres designated as the Hilton Biosolids Application Site, as shown in Attachment B which is included as part of this Order.
3. The District has biosolids storage capacity at the Plant, so biosolids storage at the Hilton Property is unnecessary and prohibited by this Order. The District accumulates about 2,000 cubic yards of biosolids per year following treatment by anaerobic digesters, belt presses, and drying beds.
4. The east field slopes 2 to 3% and the west field slopes 3 to 4%. Both fields slope toward the center of the Property to a natural sump area. The site consists of Class VI non-irrigated soils (Department of Agriculture, July 14, 1994 letter). Well logs in the vicinity suggest that dune sand deposits, including sand and clay, are beneath the Property. The dune sand overlays clays, sands, and gravels of the Paso Robles Formation. A soil sample collected April 27, 1994 indicated the pH to be 6.9 and cation exchange capacity to be normal (9.2 milliequivalents per 100 grams on June 4, 1993). Most metals were not detected or were present at levels well below hazardous levels. Molybdenum, selenium and zinc were found at levels of 0.030, 0.026, and 0.084 mg/L respectively.
5. A ground water sample was collected on April 27, 1994 from the on-site domestic well to establish background water quality. The combined total of nitrate and nitrite as nitrogen was found to be 12 mg/l. Kjeldahl nitrogen was not detected.
6. The Property is located within the Los Berros Creek watershed approximately 1/4 mile west of the Los Berros Creek. The site is outside the 100-year flood zone. Runoff from the Site is primarily contained on-site in a natural sump; surface water exists at times of precipitation. One well exists on the Site between the Fields. Land to the east of the site is used as vegetable farmland.

Item No. 15 Attachment No. 1
October 22, 2004 Meeting
South San Luis Obispo Co.
Sanitation District

7. Ground water exists approximately 150 feet below the ground surface of the Property. According to the October 28, 1994 "Hilton Site Hydrogeologic Assessment Report" prepared by Tim Cleath and Associates, a ground water depression exists under the Property. Ground water flows generally to the southeast.
8. The District's staff will truck the biosolids to the Property. The Hiltons will be responsible for tilling of biosolids. The District accepts primary responsibility for the biosolids spreading project.
9. The Water Quality Control Plan, Central Coastal Basin (Basin Plan) was adopted by the Board on November 17, 1989, and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
10. Present and anticipated beneficial uses of ground water in the vicinity of the discharge (i.e., the Paso Robles Basin) include:
 - a. Domestic and Municipal Supply;
 - b. Agricultural Supply; and
 - c. Industrial Supply.
11. Present and anticipated beneficial uses of the Los Berros River that could be affected by the discharge include:
 - a. Domestic and Municipal Supply;
 - b. Agricultural Supply;
 - c. Ground Water Recharge;
 - d. Contact Water Recreation;
 - e. Non-contact Water Recreation;
 - f. Cold Freshwater Habitat;
 - g. Wildlife Habitat; and
 - h. Rare, Threatened or Endangered Species.
12. Biosolids application is exempt from the California Code of Regulation, Title 23, Division 3, Chapter 15, Section 2511 (f) criteria, providing nonhazardous decomposable waste is used as a soil amendment. Laboratory analysis indicates the Discharger's biosolids are non-hazardous.
13. The District has adopted a Negative Declaration for the project in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and with Title 14, California Code of Regulations, Chapter 3, Section 15304. The District has determined there are no significant adverse environmental effects or that all potentially significant adverse effects can be avoided through implementation of mitigation measures. Mitigation measures to prevent nuisance and assure protection of beneficial uses of surface and ground waters will be implemented through this Order.
14. Discharge of waste is a privilege, not a right. Authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure this and mitigate any potential adverse changes in water quality due to the discharge.
15. The United States Environmental Protection Agency implements the 40 Code of Federal Regulations 503 regulations (i.e., 503 regulations) which were promulgated on November 25, 1992. The 503 regulations address land application, incineration and disposal of domestic biosolids (sludge). Although some of the requirements contained in the 503 regulations have been incorporated into this Order, compliance with this Order does not assure compliance with the 503 regulations. The State of California currently is not implementing the 503 regulations.
16. State Department of Health Services (DHS) prepared a "Manual of Good Practices for Landspreading of Sewage Biosolids" dated April 1983. The Manual contains specifications and best management practices recommended for safe application of sewage biosolids.
17. On November 21, 1994, the Board notified the Dischargers and interested agencies and persons of the Board's intent to adopt waste discharge requirements for the biosolids application. A copy of the proposed order and an opportunity to submit written views and comments have been provided.

18. After considering all comments pertaining to this discharge during a public hearing on March 10, 1995, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, the South San Luis Obispo County Sanitation District, Franklin D. and Cora L. Hilton, their agents, successors, and assigns, may discharge waste at the Hilton Property, providing compliance is maintained with the following:

(Note: Other prohibitions and conditions, definitions, and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984. Applicable paragraphs are referenced in paragraph D.2 of this Order.)

A. PROHIBITIONS

1. Application of biosolids to areas other than the Hilton Biosolids Application Site indicated in Attachment B, is prohibited.
2. Discharge of any waste to adjacent drainageways or adjacent properties is prohibited.
3. Discharge of wastes other than nonhazardous biosolids is prohibited (prohibited wastes include "hazardous waste" as defined in Title 23, Division 3, Chapter 15, Article 2 of the California Code of Regulations. "Biosolids" refers to municipal sludge which has been treated by a process which significantly reduces pathogens).
4. Application of biosolids is prohibited unless a formal written agreement between the District and Mr. & Ms. Hilton, which describes each party's responsibilities, is submitted to the Executive Officer prior to biosolids application.
5. Application of biosolids is prohibited between November 1 and May 1 of each year, unless approved in writing by the Executive Officer.

6. Application of biosolids from any source, other than the South County Sanitation District, is prohibited.
7. Application of biosolids after November 1, 1997 is prohibited.
8. Storage of biosolids on the Hilton Property is prohibited, except as allowed by Application Specification B.9.

B. APPLICATION SPECIFICATIONS

1. The discharge shall not contain constituent concentrations in excess of the following limits (dry weight):

<u>Pollutant</u>	<u>milligrams per kilograms</u>
Arsenic	75
Cadmium	25
Chromium	3000
Copper	4300
Lead	500
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500
Polychlorinated Biphenyls (PCBs)	5

2. Biosolids discharged to the Site shall not have a pH less than 6.5 or greater than 8.5. The pH of the Site's soils shall be maintained between 6.0 and 9.0
3. Maximum cumulative application of heavy metals to the Fields shall not exceed the following cumulative pollutant loading rates:

<u>Pollutant</u>	<u>kilograms per hectare</u>
Arsenic	41
Cadmium	20
Chromium	3000
Copper	500
Lead	300
Mercury	17
Molybdenum	18
Nickel	200
Selenium	100
Zinc	1000

4. The discharge shall not exceed of any of the following annual pollutant loading Rates:

<u>Pollutant</u>	<u>Kilograms per hectare per calendar year</u>
Arsenic	2
Cadmium	0.5
Chromium	150
Copper	75
Lead	15
Mercury	0.85
Molybdenum	0.90
Nickel	21
Selenium	5
Zinc	140

5. The nitrogen application rate (lbs N/acre/day, month, year or crop cycle) shall not exceed nitrogen removal rates (i.e., agronomic rates) of crops grown in the Fields.
6. Biosolids shall only be applied to land used for growing fodder, fiber, and seed crops not intended for human consumption.
7. Biosolids shall not be applied to any area within 500 feet of any domestic water supply well, private residence or spring, and no closer than 100 feet from any irrigation well, drainageway, or the "Sump Area" shown on Attachment B. Biosolids may be applied closer than 500 feet, but not less than 100 feet, after receiving the Executive Officer's concurrence in writing. The Discharger shall demonstrate to the Executive Officer's satisfaction that no significant nuisance, public health threat or impact to water quality will result, and submit written permission from all residences within 500 feet of the biosolids application area.
8. Biosolids shall not be applied to any area where ground water exists less than 10 feet from the ground surface.
9. Biosolids shall be spread within 24 hours of delivery to the Sites. Biosolids shall be tilled into the soil within 48 hours of its application, unless the Executive Officer approves, in writing, of extending the 48 hour limit up to five days.

10. Biosolids shall not be applied to water saturated ground or applied during periods of rainfall or applied when rainfall is predicted within 24 hours. Biosolids shall be tilled into the ground at least 24 hours prior to any predicted rainfall.

11. Upgradient runoff from storms of up to a 100-year, 24-hour intensity shall be diverted away from the Fields, unless the upgradient runoff water can be beneficially used to irrigate the Fields.

12. Once active biosolids application is completed, or after seasonal crop harvesting (if applicable), the Discharger shall comply with the following:

(a) Public access to the Fields shall be prevented for at least 12 months.

(b) Grazing by animals whose products are consumed by humans shall be precluded from the Fields for at least one month after biosolids application.

(c) If pasture is subsequently converted into a dairy pasture, grazing by milking animals shall be prevented for at least 12 months after biosolids application. There shall be no grazing by milking animals for at least three years if the milk is unpasteurized.

(d) Unprocessed food crops shall not be planted for at least three years after biosolids application.

13. Transportation, storage and application of biosolids shall be done in such a manner that nuisance conditions do not develop.

C. GROUND WATER LIMITATIONS

1. The discharge shall not cause nitrate concentrations in the ground water downgradient of the biosolids fields to exceed background concentrations.

March 10, 1995

2. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying ground waters, as determined by comparison of samples collected from wells located upgradient (i.e., background monitoring well) and downgradient of the fields.
3. The discharge shall not cause concentrations of chemicals and radionuclides in ground water to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations.
4. The discharge shall not cause concentrations of any organic or inorganic chemical to exceed the Department of Health Services Maximum Contaminant Levels for drinking water in ground or surface waters.
3. The Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or of subsequent use of the land for other purposes.
4. Discharger shall inform personnel involved in producing, transporting, or applying biosolids, of possible health hazards that may result from biosolids contact and use.
5. Discharger shall notify the Executive Officer, in writing, at least seven days prior to initiating any biosolids land spreading operation.
6. For any biosolids application within 500 feet of a residence as allowed by Application Specification No. B.7, Discharger shall notify affected tenants and owners at least 30 days prior to anticipated application. Thereafter, all affected tenants and owners shall be notified annually. Copies of such notification shall be submitted to the Executive Officer within seven calendar days.

D. PROVISIONS

1. Discharger shall comply with "Monitoring and Reporting Program No. 95-01," as specified by the Executive Officer.
2. Discharger shall comply with the following items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984, specifically Item Nos. A.2., A.3., A.7., A.9., A.10., A.14., A.16., A.18.-23., A.25.-26., B.1., B.3.-7., C.1.-7., C.10.-18., E.1.-4., and F.1.-19.
7. For new property owners and tenants within 500 feet of the biosolids application site, the Discharger shall notify such property owners and tenants within 30 days of beginning ownership or beginning residence, of the existence of the biosolids application site and of the existence of this Order. Copies of such notification shall be submitted to the Executive Officer within seven calendar days.

I, **ROGER W. BRIGGS**, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on March 10, 1995.


Executive Officer

4-4-95

Date

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**MONITORING AND REPORTING PROGRAM NO. 95-01
FOR
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
FRANKLIN & CORA HILTON
HILTON BIOSOLIDS APPLICATION SITE
SAN LUIS OBISPO COUNTY**

Biosolids Monitoring

Samples shall be collected from the last point in the biosolids handling process where representative samples of residual solids from the treatment process can be obtained. Samples collected shall be analyzed for the following parameters at the frequencies specified below:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Quantity Applied	Cubic yds. & kilograms	Measured	Daily
Quantity Applied	Cubic yds. & kilograms	Calculated	Monthly
Location of Application	--	--	Daily
Type of Crops Grown	--	--	Semi-Annual (April and October)
Moisture Content	%	Grab	"
pH	units	Grab	"
Total Kjeldahl Nitrogen	mg/kg*	Grab	"
Ammonia (as N)	mg/kg*	Grab	"
Nitrate (as N)	mg/kg*	Grab	"
Total Phosphorus	mg/kg*	Grab	"
Grease and Oil	mg/kg*	Grab	"
Arsenic	mg/kg*	Grab	"
Cadmium	mg/kg*	Grab	"
Chromium	mg/kg*	Grab	"
Copper	mg/kg*	Grab	"
Lead	mg/kg*	Grab	"
Mercury	mg/kg*	Grab	"
Molybdenum	mg/kg*	Grab	"
Nickel	mg/kg*	Grab	"
Selenium	mg/kg*	Grab	"
Zinc	mg/kg*	Grab	"
Polychlorinated Biphenyls (PCBs)	mg/kg*	Grab	"

* Total sample (including all solids and any liquid portion) to be analyzed and results reported as mg/kg based on the dry weight of the sample.

Site Metal Accumulation and Soil Analysis

The cumulative metal loading rates (kilograms/hectare or pounds/acre) (including arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc) discharged to the Site shall be calculated annually for each biosolids field. As part of this report, representative samples (three minimum from each Field) of soil from the biosolids application site shall be collected and analyzed annually (immediately following biosolids application) for cation exchange capacity (milliequivalents per 100 grams of soil), pH, cadmium, lead, and nitrogen compounds. Soil shall be sampled at the depth of cultivation or biosolids placement, whichever is greater.

Application Rates

The metals application rates (kg metal/ha or lbs metal/acre) and the nitrogen application rate (kg N/ha or lbs N/acre) shall be calculated by the Discharger and reported prior to each application of biosolids (usually the May 15 monitoring report). In reporting the nitrogen application rate, a comparison shall be made with the nitrogen removal rates of crops grown.

Ground Water Monitoring

By March 21, 1995, the Discharger shall submit a ground water monitoring plan consistent with the monitoring program required below. The monitoring plan shall include an evaluation of local hydrogeology and an evaluation of background water quality. A minimum of four independent sampling events prior to May 1, 1995 are required to establish background water quality.

After depth to ground water has been measured, the well shall be purged and samples shall be collected and analyzed for each of the following:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Sampling and Analysis</u>
Depth to Ground water	feet	Measured	Semi-Annual (April and October)
Nitrate Nitrogen (as N)	mg/l	Grab	"
Total Dissolved Solids	mg/l	Grab	"
pH	units	Grab	"
Arsenic	mg/l	Grab	"
Cadmium	mg/l	Grab	"
Copper	mg/l	Grab	"
Chromium (Total)	mg/l	Grab	"
Lead	mg/l	Grab	"
Nickel	mg/l	Grab	"
Mercury	mg/l	Grab	"
Molybdenum	mg/l	Grab	"
Nickel	mg/l	Grab	"
Selenium	mg/l	Grab	"
Zinc	mg/l	Grab	"

Reporting

As provided by Section 13267 of the California Water Code, the Discharger shall submit monitoring reports by the 15th day of May, and November. The monitoring reports shall include the following:

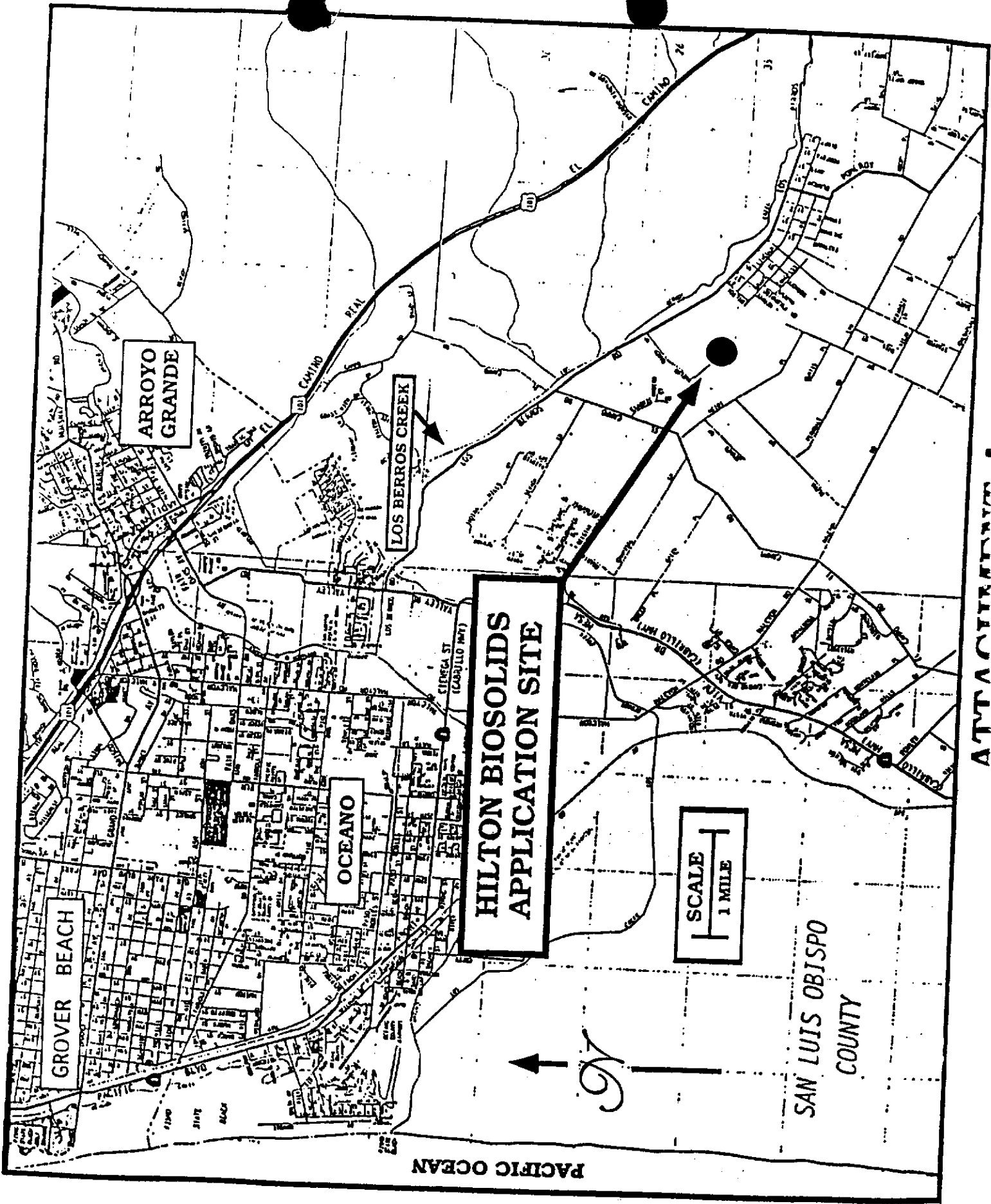
- 1) Tabulation and interpretation of all sampling data.
- 2) Water quality analysis data sheets from laboratory.
- 3) Determination of the velocity and direction of ground water flow beneath each Field that has received biosolids.
- 4) Documentation of any deviation from the approved sampling and analysis plan.
- 5) The report submitted May 15th shall include an operational summary for the previous year and a site operations plan for the current year.

ORDERED BY _____


Executive Officer

4-4-95

Date



ARROYO GRANDE

LOS BERROS CREEK

HILTON BIOSOLIDS APPLICATION SITE

OCEANO

GROVER BEACH

SCALE
1 MILE

SAN LUIS OBISPO
COUNTY

PACIFIC OCEAN

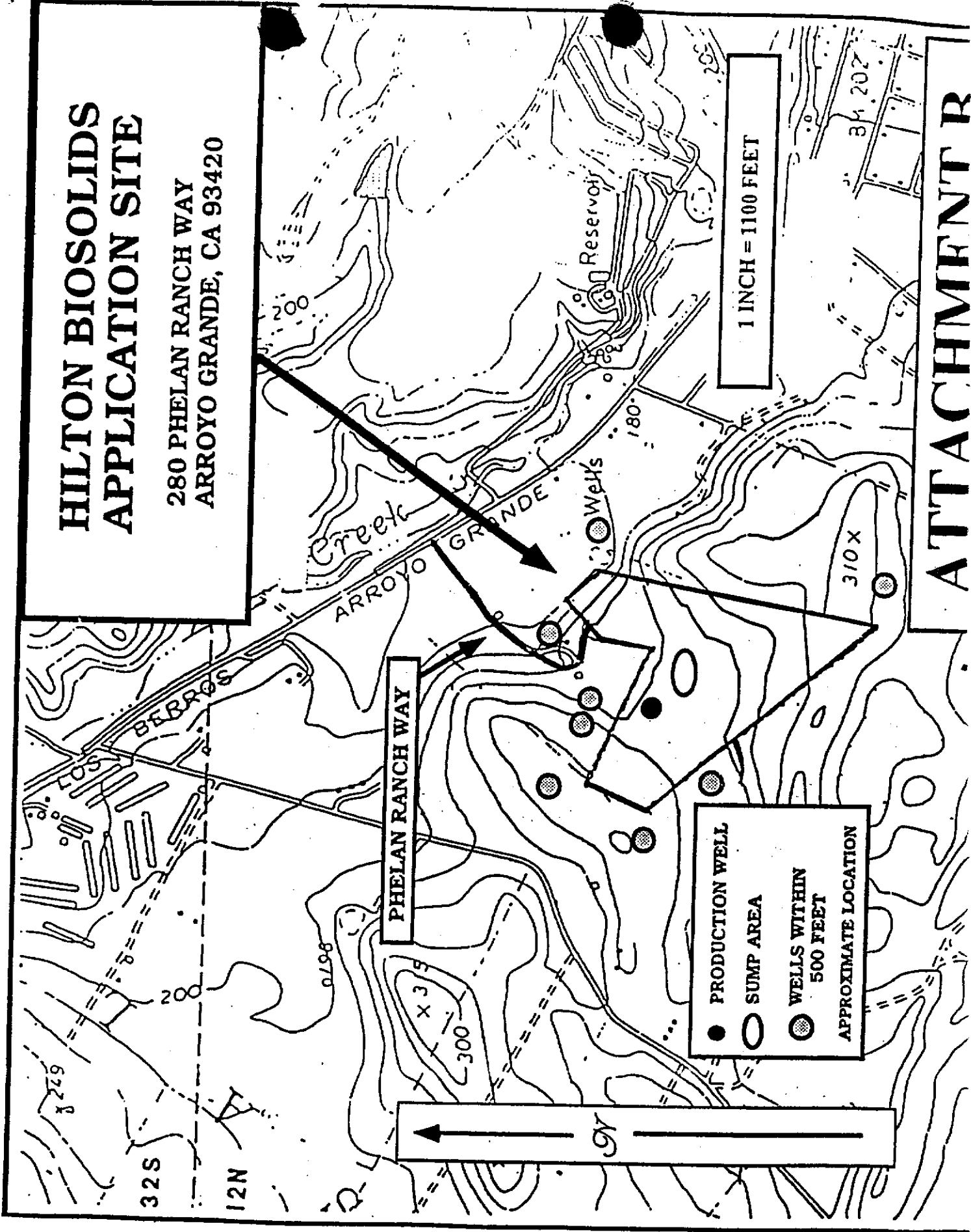
ATTACHMENT

HILTON BIOSOLIDS APPLICATION SITE

280 PHELAN RANCH WAY
ARROYO GRANDE, CA 93420

1 INCH = 1100 FEET

ATTACHMENT R



PHELAN RANCH WAY

- PRODUCTION WELL
- SUMP AREA
- WELLS WITHIN 500 FEET
- APPROXIMATE LOCATION

32S 12N

310X

310Z