

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 93-076

WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF PALM SPRINGS
WASTEWATER TREATMENT PLANT
Palm Springs - Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. The City of Palm Springs (hereinafter referred to as the discharger) 3200 E. Tahquitz Way, Palm Springs, CA 92263 submitted a Report of Waste Discharge on July 15, 1993, for the City's wastewater treatment facility. The entire plant is located in SE¼ of Section 19, T4S, R5E, SBB&M with a street address of 4375 Mesquite Avenue, Palm Springs, CA 92264.
2. The discharger currently discharges up to 16.5 million gallons-per-day (MGD) of treated wastewater from the treatment plant. The plant consists of the following processes:
 - (A) Preliminary Treatment: Preliminary treatment includes a bar screen and an aerated grit chamber. Large particles are removed by the bar screen. Sand and inorganic particles are removed by the aerated grit chamber. Removed material is collected and disposed at an approved solid waste management facility.
 - (B) Primary Treatment: At this stage, effluent from the aerated grit chamber is treated at the primary clarifiers for removal of floatable grease and settleable solids. Sludge and scum collected at the primary clarifier is pumped to a sludge thickener from where it is transferred to an anaerobic digester tank.
 - (C) Secondary Treatment: Secondary treatment includes a system of trickling filters and secondary clarifiers. Effluent from the primary clarifiers is treated at the trickling filters and the secondary clarifiers for aerobic processing and removal of additional solids, respectively. Solids collected at the secondary clarifiers are pumped to a sludge thickener from where it is transferred to the anaerobic digester tank. Methane produced at the digester tanks is used as an energy source for operating plant equipment. Effluent from the secondary clarifiers is disposed of to six (6) percolation ponds or directed to an offsite tertiary treatment plant for irrigation use. See Attachment "A" for a schematic drawing of facility.
3. Digested sludge from the anaerobic digester is dewatered on sludge drying beds. Digested sludge is periodically removed by a licensed sludge hauler.

4. Data submitted by the discharger indicates that the depth-to-ground water in the vicinity of the plant is about 200 ft. The nearest well (Well No. 29) is about 3/4 mile west of the site.
5. Ground water samples collected from Well No. 29 in Palm Springs indicates that the concentration of total dissolved solids is 182 mg/L, and nitrate is 1.4 mg/L.
6. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on May 15, 1991, and designates the beneficial uses of the ground and surface waters in this Region.
7. The beneficial uses of ground water in the Coachella Hydrologic Subunit are:
 - a. Municipal (MUN)
 - b. Industrial Supply (IND)
 - c. Agricultural Supply (AGR)
8. This discharge has been subject to Waste Discharge Requirements adopted by Board Order No. 89-017.
9. Federal regulations for storm water discharges were promulgated by the EPA on 16 November 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity (storm water) to obtain NPDES permits and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate industrial storm water pollution.
10. The State Water Resources Control Board adopted Order No. 91-13-DWQ (General Permit No. CAS00001), as amended by Water Quality Order No. 91-12-DWR, specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction to be covered under the Board Order.
11. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements of this discharge.
12. The Board in a public meeting heard and considered all comments pertaining to this discharge.
13. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).

IT IS HEREBY ORDERED, that Board Order No. 89-017 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

A. Effluent Limitations

1. Wastewater effluent discharged to the infiltration basins from the treatment facilities shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Monthly Average Value</u>	<u>Maximum Value</u>
20°C BOD ₅	mg/L	30.0	45.0
Suspended Solids	mg/L	30.0	45.0
Settleable Matter	ml/L	0.3	0.5

2. Wastewater discharged to holding and/or infiltration basins shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Annual Average Value</u>
Total Dissolved Solids	mg/L	400.0 ¹
Sulfate (SO ₄)	mg/L	90.0
Chloride (Cl)	mg/L	70.0
Fluoride	mg/L	1.2

3. The 30-day average removal of the pollutant parameters BOD₅ and Suspended Solids shall not be less than 65 percent.
4. The pH of the effluent shall be maintained within limits of 6.0 to 9.0.
5. Wastewater dry weather flow to the infiltration basin shall not exceed 16.5 MGD.

B. Discharge Prohibitions

1. The discharger shall not accept waste in excess of the design treatment capacity of the plant. In case of an emergency, the Regional Board shall be duly notified, and an approval is required from the Regional Board's Executive Officer.

¹ The total dissolved solids concentration should not exceed 400 mg/L above the average annual total dissolved solids concentration in the Palm Springs water supply.

2. Discharge of treated wastewater at a location or in a manner different from that described in Findings No. 2 and 3, above, is prohibited.
3. Bypass or overflow of untreated or partially treated waste is prohibited, unless approved by the Regional Board's Executive Officer.
4. Discharge of both treated and untreated wastewater to any surface water body is prohibited.

C. Discharge Specifications

1. The treatment or disposal of waste at this facility shall not cause pollution or nuisance as defined in Section 13050(1) and 13050(m) of Division 7 of the California Water Code.
2. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
 - a. An erosion control program shall assure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
3. Public contact with undisinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
4. Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the nonirrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
5. A minimum depth of freeboard of two (2) feet shall be maintained at all times in all ponds.
6. The discharge shall not cause degradation of any water supply.
7. Treated or untreated sludge, or similar solid waste materials shall be disposed as described in Finding No. 3 of this Board Order, or at locations approved by the Regional Board's Executive Officer.

D. Provisions

1. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
2. The discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Chapter 4, Division 4, Title 23 of the California Code of Regulations.
3. The discharger shall maintain a copy of this Board Order at the site so as to be available at all times to site-operating personnel. The discharger shall

ensure that all site operating personnel are familiar with the content of this Board Order.

4. The discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.
5. The discharger shall construct a ground water monitoring system in the vicinity of the unlined infiltration basins which shall enable ground water samples to be collected and analyzed as specified by "Monitoring and Reporting Program No. 93-076". This system shall be constructed within six (6) months after the approval of the design plans for said system and shall include ground water monitoring wells upgradient and downgradient of the infiltration basins.
6. The design plans for the ground water monitoring system shall be submitted to the Regional Board's Executive Officer for approval by April 1, 1994.
7. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
8. Prior to any modifications in this facility which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board; and obtain revised requirements before any modifications are implemented.
9. The discharger shall provide a report to the Regional Board when it determines that the treatment plant is operating at 80 percent of the design capacity specified in Finding No. 2 of this Board Order. The report should indicate what steps, if any, the discharger intends to take to provide for increased wastewater treatment capacity necessary when the plant reaches its existing capacity.
10. The discharger shall implement acceptable operation and maintenance at the wastewater treatment plant so that needed repair and maintenance are performed in a timely manner.
11. The discharger shall, at all times, properly operate and maintain all systems and components of treatment and control which are installed or used by the discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance includes effective performance, adequate process control and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Board Order. All systems, both in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance, and made available to the Regional Board upon demand.
12. The discharger shall inform this office by telephone of all occurrences of bypasses within 1 business day of the occurrence. Within 5 days of the occurrence, the discharger shall send a report to this office which shall include the starting date and time of the occurrence, the actual or estimated ending date and time, an estimate of the total discharge and the corrective measures taken (or to be taken) by the discharger. The discharger shall

- maintain a log of this information. The said log shall be kept at the facility and shall be available during facility inspection. The discharger shall also report all failures which occur in the wastewater collection system in a similar procedure as the one stated above.
13. Compliance with the discharge limitations shall be determined at the end of the treatment process.
 14. The discharger shall comply with attached "Monitoring and Reporting Program No. 93-076", and future revisions thereto, as specified by the Regional Board's Executive Officer, in accordance with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board' Executive Officer at any time.
 - c. Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurements.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The results of such analyses.
 15. The following information shall be submitted to the Regional Board's Executive Officer within 90 days of the effective date of this Board Order and updated changes occur:
 - a. Annual sludge production in dry tons and percent of solids.
 - b. A schematic diagram showing sludge handling facilities (e.g. digester, lagoons, drying beds, incinerators) and a solids flow diagram.
 - c. A narrative description of sludge dewatering and other treatment processes, including process parameters. For example, if sludge is digested, report average temperature and retention time of the digester. If drying beds are used, report the depth of application and drying time and the duration.
 16. The discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a monthly summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination.
 17. All sludge generated at the wastewater treatment plant will be disposed, treated, or applied to land in accordance with Federal Regulation 40 CFR 503.


18. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23, of the California Code of Regulations and approved by the Regional Board's Executive Officer.
19. The discharger shall develop and implement a Storm Water Pollution Prevention Plan for this facility. The plan must be submitted to the Regional Board's Executive Officer for review and approval not later than 90 days after the adoption of this Board Order.
20. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.
21. The discharger shall allow the Regional Board's Executive Officer, or his/her authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, including reclaimed water treatment or discharge facilities, sludge use and disposal activities, or facilities where records must be kept under the conditions of this Board Order.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Board Order. Inspect and sample or monitor, at reasonable times, any facilities, equipment (including monitoring and control equipment) practices, or operations regulated or required under this Board Order, including reclaimed water treatment, discharge, sludge use or disposal sites.
22. The discharger shall allow the Regional Board's Executive Officer, or his/her authorized representative, to sample or monitor influent, effluent, and sludge for the purpose of determining compliance with this Board Order and other applicable requirements regarding sludge use and disposal.

E. Pretreatment

1. In the event that significant industrial wastewater is being discharged to the wastewater treatment facility, then:
 - a. The discharger shall develop, implement and maintain an industrial pretreatment program approved by the Regional Board's Executive Officer.
 - b. The discharger shall maintain an adequate revenue program and enforce prohibitions against any violation of applicable pretreatment standards approved by the Regional Board's Executive Officer.
2. The discharger shall provide the Regional Board with an annual report describing the pretreatment program activities over the previous 12-month period. The report shall be transmitted to the Regional Board office not later than January 31 of each year and include:
 - a. A summary of actions taken by the discharger which ensures industrial-user compliance;

- b. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and
 - c. The name and address of each user that received a revised discharge limit.
3. The Regional Board retains the right to take legal action against an industrial user and/or the discharger where a user fails to meet the approved applicable pretreatment standards.

I, Philip A. Gruenberg, 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, Colorado River Basin Region, on November 17, 1993.



Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 93-076
FOR
CITY OF PALM SPRINGS
WASTEWATER TREATMENT PLANT
Palm Springs - Riverside County

Location of Discharge: SE¼, Section 19, T4S, R5E, SBB&M

MONITORING

A. INFLUENT MONITORING

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD ₅	mg/L ¹	24-Hr. Composite	Monthly
Suspended Solids	mg/L	24-Hr. Composite	Monthly

B. EFFLUENT MONITORING

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD ₅	mg/L	24-Hr. Composite	Semi-Weekly
Suspended Solids	mg/L	24-Hr. Composite	Semi-Weekly
Settleable Solids (1 hour)	ml/L ²	Grab at Peak Flow	Daily
Flow (Total Plant Effluent)	MGD	Measurement	Daily ³
Hydrogen Ion (pH)	--	Grab	Daily
Total Dissolved Solids	mg/L	Grab	Monthly
Sulfate (SO ₄)	mg/L	Grab	Monthly
Chloride (Cl)	mg/L	Grab	Monthly
Fluoride (F)	mg/L	Grab	Monthly
Nitrate as Nitrogen (NO ₃ -N)	mg/L	Grab	Monthly
Nitrite	mg/L	Grab	Monthly

¹ mg/L = Milligrams per Liter

² ml/L = Milliliters per Liter

³ Reported for each day with average monthly flow calculated

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Nitrogen	mg/L	Grab	Monthly
Volatile Organic Compound (EPA methods 601 & 602)	µg/L ⁴	Grab	Quarterly

C. GROUND WATER MONITORING

Ground water shall be sampled from the monitoring wells and analyzed for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/L	Grab	Quarterly
Nitrates	mg/L	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Fluoride	mg/L	Grab	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly
Volatile Organic Compound	µg/L	Grab	Quarterly
Depth to Ground Water	Feet	Measurement	Quarterly
Flow Direction	--	Calculation	Quarterly

D. SLUDGE MONITORING

The discharger shall report quarterly on the quantity, location and methods of disposal of all sludge and similar solid materials being produced at the wastewater treatment plant facility.

The sludge that is generated at the treatment facility shall be sampled and analyzed for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Arsenic	mg/kg ⁵	Grab	Annually
Cadmium	mg/kg	Grab	Annually
Chromium	mg/kg	Grab	Annually
Copper	mg/kg	Grab	Annually
Lead	mg/kg	Grab	Annually
Mercury	mg/kg	Grab	Annually
Molybdenum	mg/kg	Grab	Annually
Nickel	mg/kg	Grab	Annually

⁴ µg/L = Microgram per Liter

⁵ mg/kg = Milligrams per kilogram on a dry weight basis

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Selenium	mg/kg	Grab	Annually
Zinc	mg/kg	Grab	Annually

E. OPERATION AND MAINTENANCE

<u>Activity</u>	<u>Reporting</u>
To inspect and document any operational and maintenance problems by reviewing each unit process.	Annually

The collection, preservation and holding times of all samples shall be in accordance with EPA-approved methods. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.

REPORTING

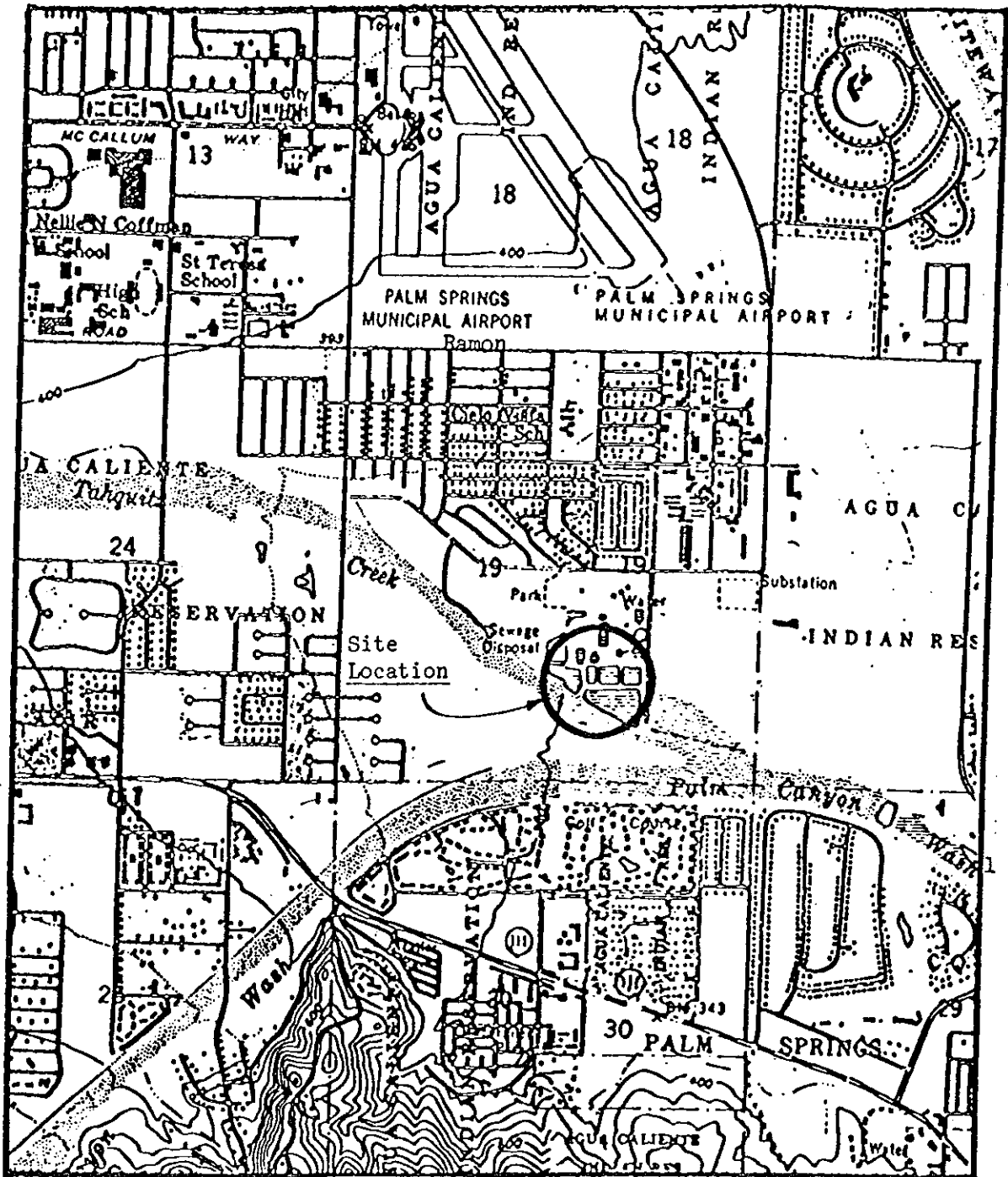
- Daily, semi-weekly and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted to the Regional Board by January 15 of each year.
- The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
- Each report shall contain the following statement:

"I declare under the penalty of law that this document and all the attachments are true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".
- Monitoring reports shall be signed by the City Manager of the City of Palm Springs, or other duly authorized employee.
- Submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

ORDERED BY: Philip A. Greenberg
Executive Officer
NOV 17 1993

Date



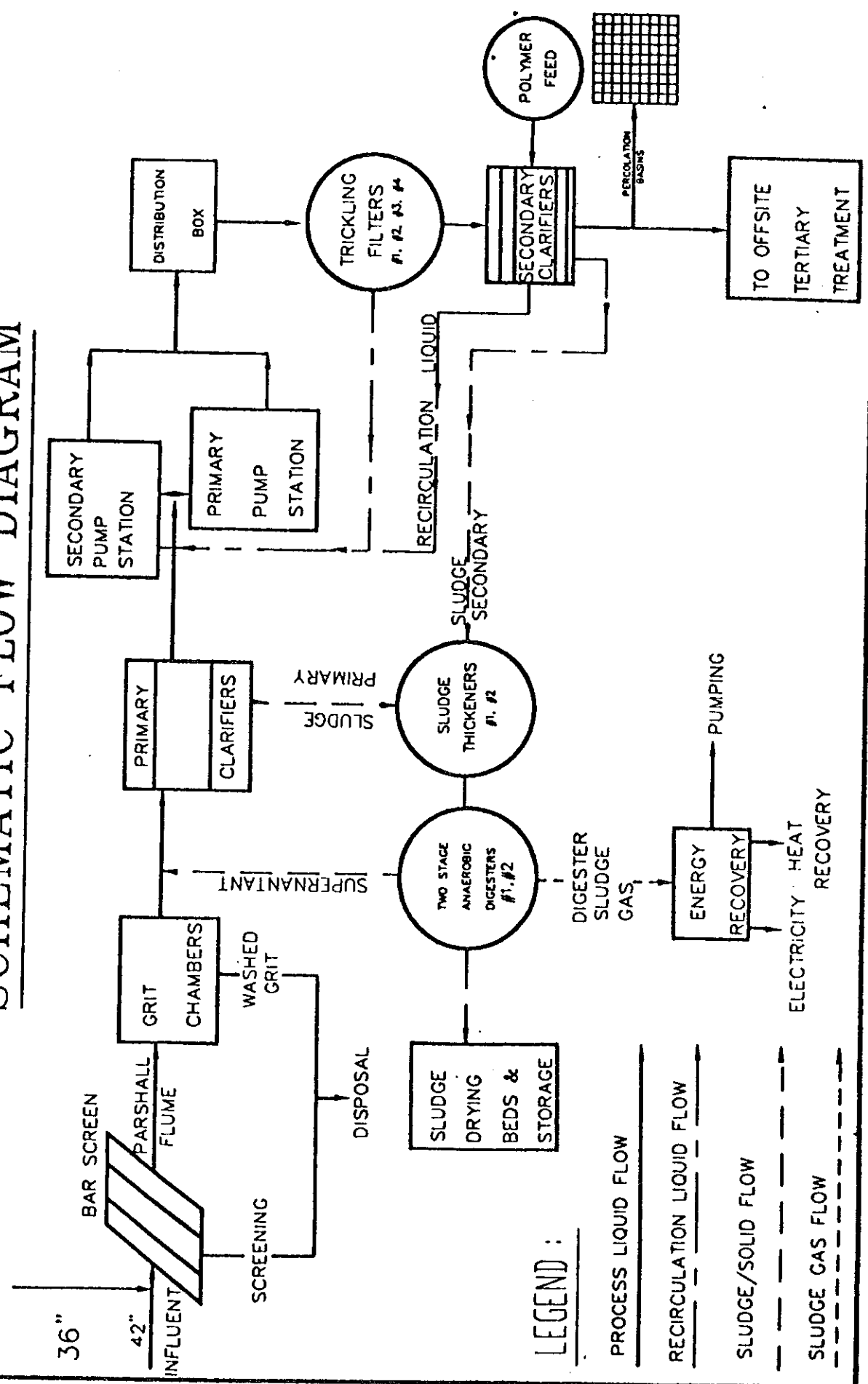
SITE MAP
CITY OF PALM SPRINGS
WASTEWATER TREATMENT PLANT
Palm Springs - Riverside County
Discharge Location: SE $\frac{1}{4}$ of Section 19, T4S, R5E, SBB&M
USGS Palm Springs and Cathedral City 7.5 Min. Topographic Map

DATE:

CITY OF PALM SPRINGS

WASTEWATER TREATMENT & RECLAMATION PLANT

SCHEMATIC FLOW DIAGRAM



LEGEND :

- PROCESS LIQUID FLOW
- RECIRCULATION LIQUID FLOW
- SLUDGE/SOLID FLOW
- SLUDGE GAS FLOW