

**Encina Wastewater Authority
Annual Pretreatment Program Report**

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Program Summary

The Encina Wastewater Authority (EWA) operates an approved pretreatment program in North San Diego County. EWA is a joint powers authority consisting of six member agencies: the Cities of Vista, Carlsbad and Encinitas, as well as the Vallecitos Water District, the Buena Sanitation District and the Leucadia Wastewater District. The Encina System is comprised of the collection, treatment and disposal facilities of its member agencies including: the Encina Water Pollution Control Facility, the Shadowridge Water Reclamation Facility (currently non-operational), the Gafner Water Reclamation Facility, the Meadowlark Water Reclamation Facility, the Carlsbad Water Recycling Facility (not yet operational) and the Encina Ocean Outfall.

The Encina service area encompasses a population in excess of 300,000 and covers a 125 square mile area. This area is predominantly characterized by residential development. At the end of 2004, the industrial flow to Encina (0.189 MGD) represented only 0.73% of the average daily influent (25.88 MGD). It is anticipated that the percentage of industrial flows will continue to decrease due to continued residential growth in the service area.

During 2004, Encina had no violations of its NPDES permit. All monitoring of EWA's effluent and receiving water demonstrated compliance with regulatory standards.

At the end of 2004, Encina had 68 permitted Industrial Users (IUs): 30 Categorical Industrial Users (CIUs), 5 Non-categorical Significant Industrial Users (SIUs), 28 Class III Industrial Users and 5 Special Use Discharge Permits (SUPs). EWA staff conducted 49 inspections and collected 181 samples in the CIU/SIU categories. Additional inspections and sampling of Class III IUs were also conducted. Laboratory data confirm that the Best Management Practices (BMP) Program implemented during 1999 and 2000 has been effective overall in reducing the level of pollutants discharged to the Encina System.

Encina maintains a proactive enforcement stance and assessed more than \$15,000.00 in fines and enforcement costs during 2004. Although 10 of the 38 CIU/SIUs in the Encina service area during the year were in Significant Non-Compliance (SNC), this is not necessarily indicative of on-going problems. Seven of the ten are attributable to isolated incidences of non-compliance: two industries were in SNC for violations that occurred in 2003, two for not submitting reports, one for discharging without a permit, and two based on results from a single sampling event.

No significant changes were made in the operation of EWA's Pretreatment Program during 2004. Funding increased by about 4% while staffing levels remained constant.

Summary Of Analytical Results

The data required in this section was previously reported in both tabular and graphical form in the *Encina Water Pollution Control Facility and Ocean Outfall, 2004 Annual Self-Monitoring Report, for Order No. 2000-36, NPDES Permit No. CA0107395*. This report was submitted to Mr. John Robertus of the San Diego Regional Water Quality Control Board, Surface Water Unit, on January 27, 2005. All data is incorporated herein and can be referenced using the following table. A full priority pollutant scan is attached in Appendix A.

Influent

Flow Report	Page 5
BOD	Pages 8 and 11
TSS	Pages 20 and 23
Oil & Grease	Pages 32 and 35
pH	Page 38
Metals	Page 131

Effluent

Flow Report	Page 5
BOD	Page 41
TSS	Page 47
Oil & Grease	Page 51
pH	Page 59
Metals	Pages 119, 122, 125 and 128

Biosolids

Metals	Pages 134
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Upset, Interference or Pass-through Incidents

During 2004, there were no incidents of upset, interference, or pass-through at Encina, attributed to industrial users. All regularly scheduled effluent monitoring for 2004 demonstrated that EWA's effluent quality remains consistent and meets or exceeds regulatory standards. Receiving water monitoring during 2004 also met compliance standards.

Industrial Users

In January of 2004, EWA's Pretreatment Program regulated 72 IUs in the Encina service area: 32 CIUs, 5 SIUs, 29 Class IIIs and 6 SUPs. At the end of the year, the permitted IUs numbered 68: 30 CIUs, 5 SIUs, 28 Class IIIs and 5 SUPs. As shown below, the contribution of industrial flows (CIU/SIU) as a percentage of Encina's average daily influent has declined during the last decade. This trend is expected to continue due to residential growth in the service area.

YEAR	% IW
2004	0.73
2003	0.87
2002	0.95
2001	0.90
2000	0.96
1999	1.64
1998	1.72
1997	1.85
1996	2.70
1995	2.23
1994	3.23

Appendix B contains a list of all SIUs along with: federal category, if applicable; type of pretreatment in place; the number of inspections conducted; the number of samples collected by EWA; the number of samples collected by the IU; the number of violations; the IU's compliance status by quarter; whether all Total Toxic Organics (TTO) certifications or monitoring data were submitted; and a summary of any enforcement actions taken. Below is a list of additions, name changes, changes of status and deletions that occurred during the year.

Additions

- Seltzer Chemicals – Carlsbad, California - A new Class I permit was issued to this facility, which is subject to 40 CFR Part 439.

Name Changes

- Holdrite Corporation – San Marcos, California – Company changed its name to Hubbard Enterprises.

Changes of Status

- Black Oxide Service – San Marcos, California – This business was reclassified from a Class I to a Class III after electing to go zero discharge.

Deletions

- L.E. Flex Circuits – Carlsbad, California – Shut down production and permit was rescinded in March.
- Sherline Pharmaceuticals – Vista, California – Moved out of service area and permit was rescinded in November.

Baseline Monitoring Report Requirements

Seltzer Chemicals was issued a Class I permit in December. They manufacture vitamins and thus are subject to 40 CFR Part 439. Baseline monitoring demonstrated compliance with Pharmaceutical Manufacturing Pretreatment Standards and EWA local limits.

Enforcement Activities

EWA maintains a proactive enforcement stance. During 2004, 54 Notices of Violation (NOVs) were issued and more than \$15,000.00 in fines and enforcement costs was assessed. Administrative Orders are not an approved element of EWA's Enforcement Response Plan.

Despite EWA's proactive enforcement stance, 10 of the 38 SIUs in the service area during the year were in SNC. However, this number is not necessarily indicative of ongoing problems. Black Oxide Service and K & K Laboratories were in SNC due to violations that occurred in the fourth quarter of 2003 and had no violations during 2004. Nature's World International and Palmer Natural Products did not submit their January 15, 2005 semiannual Compliance Status Reports. Seltzer Chemicals was found discharging without a permit. Seven Manufacturing and Vitashots were in SNC based on results from one sampling event. More long-term compliance issues are discussed below.

Cintas was in SNC during 2003 due to BOD and oil & grease violations. Pretreatment system repairs were made in November 2003 and subsequent sampling conducted in November and December demonstrated compliance with their permit. In February 2004 Cintas had another BOD violation, which was attributed to pump failure. An NOV was issued with a fine of \$1,100.00. In order to assess the effectiveness of the steps taken in response to the violations, Cintas was required to conduct monthly monitoring for BOD and oil & grease for six months. Since February, ten sampling events were conducted which resulted in only one oil & grease violation.

Hollandia Dairy installed a membrane filtration system, which went on-line in September 2003, due to ongoing problems with BOD and oil & grease. Monthly sampling conducted from September 2003 until February 2004 demonstrated compliance with Hollandia Dairy's permit; however, they subsequently had BOD violations on 3/30/04, 6/23/04 and 6/30/04. NOVs were issued in response to these violations with fines of

\$300.00. Hollandia Dairy replumbed the chemical feed lines on their pretreatment system and had no further BOD violations based on nine subsequent sampling events conducted during the second half of 2004.

Vista Industrial Products has EPA model treatment technology at Sample Point #1 (S.P. #1) and no treatment at Sample Point #2 (S.P. #2). Initially, S.P. #2 only received wastewater from tumbling, but later, a spray booth used to clean and put a phosphate coating on different types of parts, was plumbed through this sample point. Vista Industrial Products subsequently had zinc violations at S.P. #2 in February, March, and October 2004. NOVs were issued with fines of \$550.00. Vista Industrial Products has decided to divert all wastewater from the phosphating of plated parts through the pretreatment system, which discharges through S.P. #1.

Pollution Prevention Plans

No industries have submitted or been required to submit a pollution prevention plan.

Best Management Practices Program

In addition to the regulation of SIUs, EWA has attempted to reduce the level of pollutants entering the system through the implementation of a BMP Program. The program began in 1999 with staff development of a wide variety of BMPs for non-significant industrial users. A preliminary file review was performed on each user to determine eligibility to participate in the program. This was followed by an inspection, sampling event and interview to identify applicable pollution prevention strategies. Users who demonstrated a willingness to participate in the program agreed to implement a variety of actions directed at reducing the level of pollutants in their discharge. Follow-up sampling and inspections are used to verify program effectiveness.

EWA influent data indicates that the BMP Program has been effective in reducing the level of pollutants discharged to the Encina System. Implementation of the program resulted in a reduction in the number of Class III Permits from 304 at the beginning of 1999 to 35 at the end of 2000. Few changes to user classifications have occurred in recent years; however, new non-significant industrial users are encouraged to participate in the program via EWA's website and inquiries made to our member agencies.

Significant Changes in Pretreatment Program Operation

No significant changes were made in the operation of EWA's Pretreatment Program during 2004.

Summary of Annual Pretreatment Budget

In FY 2005, Encina's Pretreatment Program budget totaled \$430,011; the amount budgeted may vary slightly from actual expenditures. This shows an increase in expenditures of approximately 3.6% over the FY 2004 budget. The number of staff members in the Program remained the same. A line item detail of the budget is attached for reference in Appendix C. The table below shows a historical summary of program expenditures.

FISCAL YEAR	BUDGETED EXPENDITURES (\$)
2005	430,011
2004	414,934
2003	456,155
2002	438,698
2001	408,919
2000	401,213
1999	322,727
1998	302,000
1997	322,823
1996	290,000
1995	284,900
1994	284,400
1993	209,200
1992	206,800
1991	185,500

Public Education

EWA conducts wastewater treatment plant tours on a regular basis throughout the year. During 2004, 25 tours were conducted for approximately 600 people. Typical tour groups include classes from elementary schools, high schools and colleges, as well as professional organizations. Special tours are also conducted for SIU contacts. Plant tours include a discussion of the pretreatment program, storm water pollution prevention, household hazardous waste disposal practices, product substitution, and EWA's Environmental Management System (EMS) for biosolids. Free instructional materials are provided to each participant to share with family and friends.

EWA also participates in other community outreach activities. In 2004, EWA staff: spoke to the Industrial Environmental Association about EWA's Pretreatment Program; hosted booths at Oceanside's Pepper Tree Day Fair and the City of Carlsbad's Public Works Fair; and made a presentation at a Metal Finishing Pollution Prevention Workshop sponsored by the County of San Diego. In addition, copies of the brochure developed in 2003 entitled "10 Simple Things You Can Do to Protect the Ocean" were distributed to EWA's member agencies and were made available to the public by being

displayed in their lobbies. Brochures were also provided to the San Dieguito Lagoon Foundation and the Stephen Birch Aquarium for distribution.

40CFR403.8(f)(2)(vii) requires at least annual public notification, in the largest daily newspaper in the POTW's service area, of industrial users, which at any time during the previous twelve months, were found in significant non-compliance. Attached in Appendix D is a copy of the SNC publication for the period of January 1 to December 31, 2004.

Sludge Disposal Methods

In 2004, Encina produced approximately 34,295 wet tons of biosolids. Metals levels in the biosolids remain well below EPA's Table 3 standards for land application. The ability to consistently meet these standards for disposal is largely due to EWA's small industrial base and effective Pretreatment Program.

Encina remains committed to land application of biosolids as its disposal method of choice. Due to Riverside County's ban on Class B biosolids, Encina entered into an agreement with Ag Tech of Yuma, Arizona for subsurface land application of biosolids.

In February 2004, Black & Veatch was awarded a contract for the design of a biosolids heat drying facility. The design is approximately 30% complete and Encina has begun pre-purchasing equipment needed to finish the design phase. Construction of this facility will allow for the production of Class A, pathogen-free biosolids and will maximize the ability to reuse this resource.