

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER No. 2000-08

NPDES No. CA0059927

WASTE DISCHARGE REQUIREMENTS
FOR
WHEELABRATOR NORWALK ENERGY COMPANY INC.
(Metropolitan State Hospital Cogeneration Plant)

The California Regional Water Quality Control Board, Los Angeles Region, (hereinafter Regional Board) finds:

1. Wheelabrator Norwalk Energy Company Inc. (Wheelabrator), discharges wastes under waste discharge requirements contained in order No. 93-037 adopted by this Board on June 14, 1993. This Order serves as a permit under the National Pollutant Discharge Elimination System (NPDES Permit No. CA0059927).
2. The Regional Board is implementing a Watershed Management Approach to address water quality protection in the Los Angeles Region. Pursuant to this Regional Board's watershed initiative framework, the San Gabriel River Watershed is the targeted watershed for the fiscal year 1999-2000. Accordingly, the Regional Board has been reviewing the Waste Discharge Requirements and NPDES permits for the facilities that discharge wastes to the San Gabriel River (including Wheelabrator). As a result of the review, this new Order is prepared to replace Order No. 93-037 adopted on June 14, 1993.
3. Wheelabrator operates the Metropolitan State Hospital Cogeneration Plant, a natural gas-fired cogeneration facility at 11500 Balsam Street, Norwalk, California. The plant can generate 696 megawatts per day of electricity for sale to Southern California Edison Company and also produces steam and chill water for sale to the Metropolitan State Hospital. This facility discharges up to 117,700 gallons per day of demineralizer waste, cooling tower blowdown and stormwater runoff into a storm drain (Discharge Serial No. 001) adjacent to the facility at Latitude 33° 15' 29" and Longitude 118° 04' 13", thence to the Coyote Creek, a tributary to the San Gabriel River, a water of the United States, above the estuary. See Figure 1 for location map.
4. Wheelabrator will use city-supplied water as the influent to the cooling system and proposes to alternate the use of city-supplied water with reclaimed water from the Central Basin Municipal Water District (CBMWD). The water from the San Jose Creek Water Reclamation Plant is the supply for the Rio Hondo Pumping Station, which in turn will serve the Wheelabrator facility. See Figure 2.
5. The cooling tower blowdown will be discharged directly from the closed-loop recirculation system to the storm drain without treatment. This waste stream may contain residual additives from water treatment chemicals added for pH control, disinfection, and corrosion and scaling control.

December 23, 1999

The demineralizer will purify municipal water, and wastes will be produced from regeneration of ion-exchange resin beds with acid and caustic solutions. The wastes will be collected, mixed, and neutralized in a neutralization tank equipped with devices for monitoring pH and automatic addition of acid or caustic.

The treated demineralizer wastes and cooling tower blowdown will combine at an interceptor before discharge into the storm drain.

Discharges of stormwater runoff (approximately 11,600 gallons per day) are from the water treatment area including sulfuric acid and sodium hydroxide storage tanks, the demineralizer unit, and the neutralization tank for the demineralizer wastes. The water treatment area is contained and allows stormwater to accumulate until the volume increases to a point that requires discharge. Before discharge, the stormwater will be sampled, tested for pH, and if necessary will be neutralized.

6. All other industrial and sanitary waste waters are discharged into the community sewer system.
7. The Environmental Protection Agency (EPA) promulgated Effluent Guidelines and Standards for the "Steam Electric Power Generating Point Source Category" on November 19, 1982. These regulations became effective on January 3, 1983, and prescribe effluent limitation guidelines for various inplant waste streams.
8. On June 13, 1994, this Regional Board adopted a revised Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan contains beneficial uses and water quality objectives for the Coyote Creek and San Gabriel River.
9. The beneficial uses of the receiving waters are:

Groundwater recharge, water contact and non-contact recreation, warm freshwater and wildlife habitats; and (within the estuary) industrial service supply, ocean commercial and sport fishing, preservation of rare and endangered species, marine habitat and saline water habitat.

The requirements in this Order are intended to protect designated beneficial uses and enhance the water quality of the watershed.
10. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

The Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe the waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall take effect at the end of ten days from the date of its adoption, provided that the Regional Administrator of the U.S. Environmental Protection Agency has no objections.

IT IS HEREBY ORDERED that Wheelabrator Norwalk Energy Company Inc., in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. EFFLUENT LIMITATIONS

1. Wastes discharged shall be limited to cooling tower blowdown, demineralizer wastes, and storm water runoff only, as proposed.
2. The discharge of an effluent from Discharge Serial No. 001 (combined cooling tower blowdown using city supplied-water, demineralizer waste, and storm water runoff) with constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>Monthly Average</u>	<u>Daily Maximum</u>
Total suspended solids	mg/L	30	100
	lbs/day ^[1]	29.5	98
Settleable solids ^[2]	ml/L	0.1	0.3
BOD ₅ 20°C	mg/L	20	30
	lbs/day ^[1]	19.6	29.5
Oil and grease	mg/L	10	15
	lbs/day ^[1]	9.8	14.7
Turbidity ^[2]	NTU	50	150
Sulfides	mg/L	----	1.0
Surfactants (as MBAS) ^[2]	mg/L	----	0.5
Residual chlorine ^[2]	mg/L	----	0.1

^[1] Based on the maximum discharge flow rate of 117,700 gallons per day.

^[2] Not applicable to discharge containing rainfall during or immediately after periods of rainfall.

3. The discharge of an effluent from Discharge Serial No. 001 (combined cooling tower blowdown using reclaimed water, demineralizer waste, and storm water runoff) with constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>Monthly Average</u>	<u>Daily Maximum</u>
Total suspended solids	mg/L	30	100
	lbs/day ^[1]	29.5	98
Settleable solids ^[2]	ml/L	0.1	0.3
BOD ₅ 20°C	mg/L	20	30
	lbs/day ^[1]	19.6	29.5
Oil and grease	mg/L	10	15
	lbs/day ^[1]	9.8	14.7
Turbidity ^[2]	NTU	50	150
Sulfides	mg/L	----	1.0
Chromium (VI)	µg/L	11.43 ^[3]	16.29 ^[3]
Zinc	µg/L	121.70 ^[3]	122.70 ^[3]
Surfactants (as MBAS) ^[2]	mg/L	----	0.5
Residual chlorine ^[2]	mg/L	----	0.1
Phenol	µg/L	----	1,000
Phenolic compounds	µg/L	----	1.0
Benzene	µg/L	----	1.0
Toluene	µg/L	----	150
Xylene	µg/L	----	1750
Ethylene dibromide	µg/L	----	0.05
Ethylbenzene	µg/L	----	700
Carbon tetrachloride	µg/L	----	0.5

^[1] Based on the maximum discharge flow rate of 117,700 gallons per day.

^[2] Not applicable to discharge containing rainfall during or immediately after periods of rainfall.

^[3] Expressed as total recoverable metals.

<u>Constituents</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>Monthly Average</u>	<u>Daily Maximum</u>
Tetrachloroethylene	µg/L	----	5.0
Trichloroethylene	µg/L	----	5.0
1,1-dichloroethylene	µg/L	----	6.0
1,4-dichlorobenzene	µg/L	----	5.0
1,1-dichloroethane	µg/L	----	5.0
1,2-dichloroethane	µg/L	----	0.5
Methyl Tertiary Butyl Ether (MTBE)	µg/L	----	13
Vinyl chloride	µg/L	----	0.5
Lindane	µg/L	0.08	0.2
Methylene chloride	µg/L	----	5
Chloroform	µg/L	----	100
Bromodichloromethane	µg/L	----	100
Arsenic	µg/L	----	50 ^[3]
Cadmium	µg/L	2.42 ^[3]	4.56 ^[3]
Copper	µg/L	9.38 ^[3]	13.54 ^[3]
Lead	µg/L	3.16 ^[3]	82.17 ^[3]
Mercury	µg/L	0.906 ^[3]	1.65 ^[3]
Selenium	µg/L	5.0 ^[3]	50 ^[3]
Silver	µg/L	----	4.0 ^[3]

^[3] Expressed as total recoverable metals.

4. The pH of wastes discharged shall at all times be within the range of 6.5 to 8.5.
5. The temperature of the wastes discharged shall not exceed 80°F.
6. The acute toxicity of the effluent shall be such that the average survival in undiluted effluent for any three (3) consecutive 96-hour static or continuous flow

bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

If the acute toxicity limitation is violated three consecutive months, the Discharger shall conduct a toxicity identification evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

B. EFFLUENT LIMITATIONS FOR IN-PLANT WASTE STREAMS

The discharge of demineralizer wastes and cooling tower blowdown with constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>Monthly Average</u>	<u>Daily Maximum</u>
Total suspended solids	mg/L	30	100
Oil and grease	mg/L	10	15
Total residual oxidant	mg/L	0.2	0.5
Total chromium	mg/L	0.05	0.05
Total zinc	mg/L	1.0	1.0

C. NARRATIVE WATER QUALITY LIMITATIONS

1. The wastes discharged shall not degrade surface water communities and populations, including vertebrate, invertebrate and plant species.
2. The wastes discharged shall not produce concentrations of toxic substances in the receiving waters that are toxic to or produce detrimental physiological responses in human, animal or aquatic life.
3. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges or other pests.
4. The wastes discharged shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
5. The wastes discharged shall not cause any increase in turbidity to the extent that such an increase causes nuisance or adversely affects beneficial uses.

D. REQUIREMENTS AND PROVISIONS

1. The discharger 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 water courses under their jurisdiction; including applicable requirements in municipal storm water management programs

developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

2. This order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR, Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Cause for taking such action includes, but is not limited to: failure to comply with any condition of this order and permit, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of order adoption and permit issuance.

The filing of a request by the discharger for an Order and permit modification, revocation and issuance, or termination; or a notification of planned changes or anticipated noncompliance does not stay any conditions of this Order and permit.

3. This Order may also be modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed protection management approach.
4. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements" ("Standard Provisions" Attachment N). If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions and General Monitoring and Reporting Requirements," those provisions stated hereinbefore prevail.
5. The discharger must develop and implement a Storm Water Pollution Prevention Plan in accordance with Attachment A: Page 11, Section A, Storm Water Pollution Prevention Plan and submit to the Board within 90 days from the effective date of this order.

E. EXPIRATION DATE

This order expires on December 10, 2005.

The discharger must file a Report of Waste Discharge in accordance with Title 23, California Codes of Regulations, not later than 180 days in advance of the expiration date as application for issuance of new waste discharge requirements.

F. RESCISSION

Except for enforcement purposes, Order No. 93-037, adopted by this Board on June 14, 1993 is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on January 26, 2000.

Dennis A. Dickerson
Executive Officer

/JMM