

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 97-070

AMENDED
WATER RECYCLING REQUIREMENTS
FOR
WEST BASIN MUNICIPAL WATER DISTRICT
(WEST BASIN WATER RECLAMATION TREATMENT FACILITY)
(File No. 94-062)

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

1. West Basin Municipal Water District (hereinafter Producer) is a municipal water district and operates the West Basin Water Reclamation Treatment Facility (Facility) at 1935 East Hughes Way, El Segundo, California.
2. The Producer filed a report of material changes with this Regional Board to increase the tertiary treatment capacity from the existing 15 MGD (Phase I) to 30 MGD (Phase II) in line with the current plant expansion project.
3. The Producer currently provides 15 million gallons per day (MGD) of tertiary treatment to a portion of secondary treated wastewater from the City of Los Angeles Hyperion Treatment Plant under Water Recycling Requirements contained in Order No. 94-113, adopted by this Regional Board on October 31, 1994, for industrial and irrigational uses in the general local area. Figure 1 shows the location map for the reclamation facility and the Hyperion Treatment Plant and the general water reuse areas.

These Water Reclamation Requirements have been amended to reflect the undergoing expansion treatment processes and include additional findings.

4. The Producer wholesales and delivers recycled water to public and private purveyors. The purveyors then sell and deliver on retail the recycled water to the end-users. The purveyor is responsible to process the user's application, inspection of the point-of-use facility, and determine that the end-user has complied with all conditions of use. The actual delivery of recycled water to end-users is subject to approval of State Department of Health Services (hereinafter State DOHS) and/or its delegated local health agency.
5. The Producer's wastewater reclamation project is being developed and constructed in phases depending on the market volume for recycled water. The initial phase (Phase I) of the project involved production of up to 15 million gallons per day (mgd) of recycled water from the Title 22 Plant. The current treatment process consists of coagulation and flocculation, mono-media anthracite coal filtration, and chlorine disinfection.

April 2, 1997

6. The Producer also operates other water reclamation facility for the water barrier project under separate water reclamation requirements, adopted by this Board (File No. 93-009).
7. The Producer filed an Amended Engineering Report on August 2, 1996, and an addendum to the Report on March 5, 1997, for the Phase II Expansion Project (to 30 mgd). The expansion facility includes the following:
 - a) The addition of one new 15 mgd pump to the existing pumping station equipment outside the Hyperion Treatment Plant to bring the total pumping capacity to 40 mgd. In addition, the existing turbidity meter at the facility will be equipped with adjustable alarm points which will transmit data to the facility control room.
 - b) The addition of three new flocculation basins (15 MGD) to the existing three basins, to be operated in parallel to bring the capacity to 30 mgd. A bypass channel will be constructed so that all flocculation basins can be removed from service should the influent quality be proved to go directly to the filter influent channel.
 - c) Alum will be replaced with ferric chloride as the primary coagulant. The ferric chloride will be stored in the 6,400 gallon storage tank originally provided for alum.
 - d) The addition of four mono media gravity filters of anthracite coal to the current six filters. All the filters will be equipped with their own individual effluent turbidity meters with alarms for high turbidity for individual control.
 - e) The addition of three new chlorine contact basins to increase the capacity from 15 to 30 mgd. The new basins will be equipped with dual alarms to increase the reliability of the effluent chlorine residual monitoring system.
 - f) A new diversion pumping station on the effluent channel from the chlorine contact chambers to allow treated water that meets specifications to go directly to the distribution system without passing through the 5 million gallon reservoir, and to recycle any chlorination basin effluent which does not meet specifications so that it can be retreated.
 - g) During Phase I operations waste backwash water from the filters was passed through the Barrier Plant Lime Treatment Clarifier for treatment. To eliminate the impact of this flow on the stability of the lime clarifier process, a new Backwash Water Clarifier is installed to treat the backwash from both the old and new filters.
 - h) Modifications to the existing chemical storage and feed system will include the addition of one hypochlorite storage tank and two hypochlorite feed pumps.

8. Since the reclamation facility will be operating on a side stream (portion of secondary treated effluent) from the Hyperion Treatment Plant, redundancy in process units nor standby or emergency power during outages are not provided. The reclamation plant layout allows off-specification recycled water to be pumped back and retreated in the Title 22 Plant until the effluent meets the specifications. If retreatment of the recycled water would be impractical, the off-specification water would be discharged to the Hyperion five-mile outfall.
9. During Phase II, the Producer proposes to deliver recycled water for irrigation purposes in the following cities: El Segundo, Inglewood, Hawthorne, Lawndale, Lennox, Manhattan Beach, Hermosa Beach, Redondo Beach, Torrance and West Central portions of Los Angeles. These areas of recycled water applications are within the West Coast Basin hydrologic area.
10. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations from the State Department of Health Services (DOHS), and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare, prescribe Water Reclamation Requirements for water which is used, or proposed to be used, as reclaimed water. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide reclamation criteria.
11. The use of recycled water for irrigation in parks, golf courses, freeway landscapes, school yards, cemeteries, and other landscaped or agricultural areas; and as cooling water in industrial cooling towers could affect public health, safety, or welfare; therefore requirements are necessary.
12. The Regional Board has consulted with the State DOHS regarding the proposed production, distribution, and use of recycled water; and has incorporated the department's recommendations in this Order.
13. The requirements contained in this Order, as they are met, will be in conformance with the goals and objectives of the Basin Plan and requirements of the Water Code.
14. The Producer has prepared an engineering report on its proposed production, distribution, and use of recycled water in irrigation and industrial cooling tower applications. The State DOHS approved the amended engineering report on April 3, 1997.
15. The Producer had prepared and certified in May 1991 an Environmental Impact Report (EIR) on the water reclamation project. The EIR has identified no significant adverse impact on the ground water quality as a result of the use of recycled water for irrigation.

The Regional Board has notified the Producer and interested agencies and persons of its intent to amend Water Recycling Requirements for the use of recycled water and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the use of recycled water and the tentative water recycling requirements.

IT IS HEREBY ORDERED that Order No. 94-113 adopted by this Regional Board on October 31, 1994, is amended as follows:

A. RECYCLED WATER LIMITATIONS

1. The recycled water shall be limited to up to 30 MGD of disinfected tertiary treated municipal wastewater from the operation of **Phase I and Phase II** of the water reclamation project, as proposed.

B. ADD TO "E. PROVISIONS"

20. The Producer shall prepare a filter surveillance program to monitor filter performance, loss of media, and evaluate the mono-media filtration performance without and with the use of the flocculation bypass channel. This program should be updated annually and the results of the filter surveillance program should be submitted along with the annual monitoring report to this Regional Board and to the State DOHS.
21. In an enforcement action, it shall not be a defense for the Producer that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure the treatment facility, the Producer shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost.

All other Requirements, Limitations, and Provisions of Order No. 94-113 shall remain in full force and effect.

I, Lawrence P. Kolb, Acting Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Amended Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on May 12, 1997.


LAWRENCE P. KOLB
Acting Executive Officer



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DR 16



Pete Wilson
Governor

May 16, 1997

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AMENDED WATER RECYCLING REQUIREMENTS FOR WEST BASIN MUNICIPAL WATER DISTRICT (WEST BASIN WATER RECLAMATION TREATMENT FACILITY) (File No. 94-062)

Reference is made to our letter dated April 11, 1997, which transmitted a draft of a tentative Order amending Order No. 94-113, previously adopted by this Board on October 31, 1994.

In accordance with established administrative procedures, this Regional Board at a public meeting held on May 12, 1997, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. 97-070 (copy attached) relative to this waste discharge. This Order amends the above Order.

Please note that as indicated in our April 11, 1997, letter, Treatment Optimization/Evaluation Report is due within 90 days after one year of operation of the new facilities, and the Filter Surveillance Program is due 30 days prior to operation of the new facilities, thence yearly to both the Regional Board and State Department of Health Services.

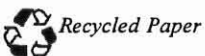
Your current Monitoring and Reporting Program remains in effect. Please reference all technical and monitoring reports to our Compliance File No. CI-7453, and should be sent to the Regional Board, Attn: Technical Support Unit.

If you have any questions, please contact Mr. Magdy Baiady at (213) 266-7586.


HUBERT H. KANG
Senior Water Resource
Control Engineer

Enclosures

cc: See attached mailing list



cc: Mailing List
Shannon Fitzgerald, Source Water Protection, U. S.
Environmental Protection Agency (W- 6-3)
Bill Thurston, Drinking Water and Groundwater, U. S.
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Tim Ulrich, U. S. Bureau of Reclamation, Southern California
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Honorable Ben Traina, City of Lomita
Honorable Frank E. Hill, City of Rolling Hills

Richard Burttt, City of Torrance
Honorable Peter Weber, City of Rolling Hills Estates
Honorable Gwen Duffy, City of Gardena
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Honorable Michael Mitoma, City of Carson
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John Bauman, Palos Verdes Begonia Farm
Philip Birgel, Roman Catholic Archbishop of Los Angeles
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Robert R. Marshall, Coastline Church of Christ
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Mark Friedman, Hillside Memorial Park
Daniel L. Villa, Inglewood Park Cemetery
Don Brann, Wiseburn School District
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