

OCT 04 1991

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of)
ENVIRONMENTAL HEALTH COALITION)
For Review of Waste Discharge)
Requirements Order No. 90-31 for)
Ground Water Dewatering Waste)
Discharges to San Diego Bay or)
Tributaries Thereto Issued by the)
California Regional Water Quality)
Control Board, San Diego Region.)
NPDES Permit No. CA0108707. Our)
File No. A-686)

ORDER NO. WQ 91-10

BY THE BOARD:

On May 23, 1990, the State Water Resources Control Board (State Board or Board) received a petition from the Environmental Health Coalition (EHC). The petition sought review of Waste Discharge Requirements Order No. 90-31 (the General Permit) which was issued by the Regional Water Quality Control Board, San Diego Region (Regional Board) on April 23, 1990.

The time limit for reviewing this petition expired on August 4, 1991 (23 C.C.R., Section 2052). Therefore, the Board is reviewing the contentions raised in the petition on its own motion (Water Code Section 13320).

I. BACKGROUND

Order No. 90-31 is a General NPDES Permit¹ which regulates ground water dewatering discharges to San Diego Bay and its tributaries.² There are three types of dewatering operations covered by the permit. The first, cleanup dewatering, is done to treat polluted ground water. The second, construction dewatering, is done during construction in order to keep the construction site dry. The third, permanent dewatering, is done to prevent ground water intrusion into the portions of a building which are located below the water table.

At the time the General Permit was adopted, it was expected that most of the permitted discharges would be approximately 10,000 to 15,000 gallons per day, and that some of the discharges would be up to 500,000 gallons per day.

¹ The State Board and the Regional Boards are authorized to issue General Permits by EPA under 40 C.F.R., Section 122.28 (54 Fed. Reg. 40664). Pursuant to 40 C.F.R., Section 122.28, a General Permit may be issued to cover a category of point source discharges located in a specific geographic area if the sources all:

- (a) involve the same or substantially similar types of operations;
- (b) discharge the same types of wastes;
- (c) require the same effluent limitations or operating conditions;
- (d) require the same or similar monitoring; and
- (e) are more appropriately controlled under a general permit than under individual permits.

² Dewatering is a process by which ground water is actively pumped out and removed from an area at a rate greater than the rate of recharge.

In recent years, numerous areas of ground water pollution in San Diego have been discovered, particularly in the downtown area which neighbors San Diego Bay. Most of this pollution has been caused by petroleum and related compounds discharged from leaky underground tanks. The great scope of the ground water pollution problem has led to increased cleanup dewatering operations, and has increased the likelihood that these pollutants will be intercepted by construction and permanent dewatering operations.

Regional Board staff proposed adoption of a General Permit to cover all dewatering discharges to San Diego Bay and held a workshop in November, 1989 to receive comments and suggestions regarding regulation of such discharges. Then, in April, 1990 the Regional Board adopted Order No. 90-31.

Order No. 90-31 permits construction dewatering, cleanup dewatering, and existing permanent dewatering discharges. It prohibits new permanent dewatering discharges.³

Due to high levels of four pollutants, copper, mercury, tributyltin (TBT), and polychlorinated biphenyls (PCBs), San Diego Bay is listed in this Board's 1990 Water Quality Assessment (WQA) as having impaired water quality and has been placed on several Clean Water Act-mandated lists of impaired water bodies.

³ The General Permit defines "permanent dewatering" as dewatering operations for structures which (1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of ground water, and (2) require removal of ground water to prevent water infiltration to the structure(s). A project is a "new" permanent dewatering project if it had not submitted a complete report of waste discharge or applied for a building permit before the Order was adopted.

These lists are the 131.11 list (segments which may be affected by toxic pollutants); 303(d) list (water quality limited segments where objectives or goals may not be attainable with BAT/BCT); the 304(1) list (the "Long List", narrative or numeric objectives are violated or beneficial uses are impaired); and the 319 list of surface waters with nonpoint source problems. The beneficial uses in San Diego Bay that are considered impaired are ocean commercial and sport fishing, shellfish harvesting, and marine habitat.

The predominant sources of TBT and copper in San Diego Bay are outside the control of the dischargers to be covered under the General Permit. These sources include urban runoff and antifouling paints from marine vessels. A major source of copper pollution comes from copper ore deposits in the vicinity of Paco Terminal. The 1990 WQA states that urban runoff and industrial activities are the sources of PCBs and mercury.

At the time the Regional Board issued the General Permit, the State Board had not yet adopted the California Enclosed Bays and Estuaries Plan (EBE Plan) (adopted April 1991). The Enclosed Bays and Estuaries Policy (EBE Policy), which was adopted in 1974, does not contain any numerical water quality standards. The Regional Board took guidance from the California Ocean Plan (Ocean Plan) (revised September 1988) and the U.S. Environmental Protection Agency's (EPA) 1986 Water Quality Criteria (the Gold Book). Effluent limitations in the General Permit are based on the Ocean Plan or on the Water Quality Control Plan for the San Diego Region (Basin Plan). If ground

water is polluted with petroleum related wastes, the General Permit requires treatment based on best available technology economically achievable for removal of contaminants listed in the General Permit. Ground water which complies with effluent limitations without treatment need not be treated.

II. Preliminary Issue

There is an issue which should be addressed before petitioner's contentions are considered. It is a restriction of the area in which discharges are permitted under the General Permit.

The title of the General Permit and numerous provisions of the General Permit indicate that it is regulating discharges to San Diego Bay or "tributaries thereto" (General Permit Sections A.7., A.8., A.9., and B.1.). Major tributaries to San Diego Bay are the Sweetwater and Otay Rivers.

On the other hand, none of the findings in the General Permit deal with water bodies which are tributary to San Diego Bay. For example, there is no finding regarding the beneficial uses of these rivers. The record submitted to the State Board by the Regional Board contains no evidence which pertains to these rivers. The record focuses exclusively on discharges to San Diego Bay. Moreover, the Fact Sheet presented to the Regional Board when the General Permit was adopted indicates that discharges are to be permitted to "San Diego Bay and storm drains or other conveyances tributary to San Diego Bay."

It appears, therefore, that the Regional Board intended to limit discharges under the permit to San Diego Bay and not its tributaries. Even if this was not the Regional Board's intent, there is not an adequate record to support permitting discharges to tributaries to San Diego Bay. The title of the General Permit and pertinent provisions of the General Permit should be amended to confine discharges to San Diego Bay and storm drains or other conveyance systems tributary thereto.

II. CONTENTIONS AND FINDINGS

Contention: Petitioner asserts that additional discharges into San Diego Bay should be prohibited based on the antidegradation policy in 40 C.F.R., Section 131.12.⁴

Finding: The relevant portions of 40 C.F.R., Section 131.12 (Antidegradation Policy) state:

"The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

"(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

"(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower

⁴ The petition contained numerous allegations which were not supported in petitioner's points and authorities. On June 12, 1990, State Board staff notified petitioner that the petition was incomplete because it lacked a statement of points and authorities. On June 29, 1990 petitioner submitted a statement of points and authorities. This Order addresses only those contentions covered in the statement of points and authorities. Any other allegations in the petition are deemed incomplete and are therefore dismissed.

water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control."⁵

Petitioners allege that because the Bay is water quality impaired, all discharges to the Bay should be prohibited (40 C.F.R., Sections 131.12(a)(1) and 122.4(i)). Petitioners are not correct. Water quality impairment in San Diego Bay is caused by only four waste constituents: copper, mercury, TBT, and PCBs. Discharges of those four pollutants to San Diego Bay should be prohibited only if such discharges contribute to violations of water quality objectives.

Discharges of copper, mercury, TBT, and PCBs will not contribute to violations of water quality objectives if they are discharged at levels which do not exceed those objectives. Effluent meeting water quality objectives can only improve water quality in San Diego Bay where waste levels exceed water quality objectives due to sources other than these discharges. In other words, if these discharges comply with water quality objectives, they will be cleaner than the receiving water.⁶

⁵ The final portions of this regulation are not included because San Diego Bay has not been declared an outstanding national resource and thermal discharges are not at issue here.

⁶ Likewise, if effluent limitations for mercury, copper, TBT, and PCBs are set at water quality objectives, there is no need to establish a waste load allocation before these discharges are permitted.

At the time that the Regional Board adopted the General Permit, there were no numerical water quality objectives for mercury, copper, TBT, and PCBs established for enclosed bays. Since that time, the State Board has promulgated, in the EBE Plan, numerical water quality objectives for the protection of aquatic life and human health which apply to San Diego Bay. (Plan pp. 2-7, A1-1). The EBE Plan includes methods for calculating effluent limitations in order to implement the water quality objectives (Plan pp. 11-12). If the effluent limitations in the General Permit for mercury, copper, TBT, and PCBs are amended to implement these numerical water quality objectives, discharges of those constituents would be permissible. Therefore, this Order amends the effluent limitations in the General Permit for these four constituents.

The EBE Plan provides that when the ambient background concentration of a substance in a receiving water body equals or exceeds the water quality objective, the effluent limitations must be set at the water quality objective (EBE Plan p. 11).⁷

⁷ The EBE Plan contains the following formula for calculating effluent limitations which applies to the facts in this case as follows:

$C_e = C_o + D(C_o - C_b)$, when $C_o > C_b$, and

$C_e = C_o$, when $C_o < \text{or} = C_b$,

Where C_e = the effluent concentration limit for the substance,

C_o = the water quality objective for the substance to be met in the receiving water body,

C_b = the ambient background concentration of the substance in the receiving water body, and

D = the allocated dilution ratio, expressed as parts receiving water per part wastewater, based on mixing zone provisions.

Ambient background concentration (C_b) means the median concentration of a substance, in the vicinity of a discharge which is not influenced by the discharge. Ambient concentration shall be determined using analytical methods at least as sensitive as those used to determine compliance with effluent limitations.

The ambient background concentrations in San Diego Bay for mercury, copper, TBT, and PCBs exceed water quality objectives in the Plan (1990 WQA). The effluent limitations in the General Permit for mercury, PCB, and copper should be amended to conform with the water quality objective in the EBE Plan.⁸ The effluent limitation for mercury should be amended to add a 30-day average of .025 ug/l⁹ and a 1-hour average of 2.1 ug/l. The effluent limitation for copper should be amended to add a 1-hour average of 2.9 ug/l. The effluent limitation for PCBs should be amended to add a 30-day average of .00007 ug/l.

There is no effluent limitation for TBT included in the General Permit. An effluent limitation for TBT should be added to the General Permit at the level of the water quality objective established by the EBE Plan. The effluent limitation for TBT should be a 30-day average of .005 ug/l.

⁸ The Regional Board has argued in its response to the petition that high levels of copper do not exist throughout the Bay but that they are found in isolated "hot spots". It is possible that "ambient background concentrations" of copper or other pollutants within the vicinity of a particular discharge may be less than water quality objectives. However, lacking evidence of which locations in the Bay may have ambient background concentrations which are less than water quality objectives and because the General Permit authorizes discharge throughout the Bay, the Regional Board determination that the entire Bay is water quality limited should be followed. However, individual NPDES permits or a General Permit which limits discharge locations may rely on site specific data, including but not limited to, ambient background concentrations of pollutants, and may contain effluent limitations calculated pursuant to alternatives authorized in the EBE Plan.

⁹ ug/l = micrograms per liter.

Other waste constituents covered by the General Permit exist in San Diego Bay at levels which do not violate receiving water objectives. Because the Bay waters are of high quality as to those other waste constituents, discharges containing those constituents should be analyzed pursuant to the second paragraph of the Antidegradation Policy (40 C.F.R., Section 130.12(a)(2)) and State Board Resolution No. 68-16, "Statement of Policy With Respect to Maintaining High Quality of Waters in California" (Resolution No. 68-16).

There is not sufficient evidence in the record to determine whether or not discharge of these waste constituents will degrade the water quality of San Diego Bay if they are discharged at levels provided in the General Permit. Nonetheless, even if degradation will occur, the General Permit contains a finding which concludes that the permit complies with the Antidegradation Policy and Resolution No. 68-16. (General Permit, Finding 20). There is ample evidence in the record to support this finding.¹⁰

As required by the Antidegradation Policy and Resolution No. 68-16, the effluent limitations in the General Permit are sufficiently stringent that discharges will not

¹⁰ The State Board provides guidelines for an antidegradation analysis in the State Board's Administrative Procedures Update 90-004. These are recommendations and not regulations.

unreasonably affect present or anticipated beneficial use of the Bay or cause a condition of pollution or nuisance.¹¹

The express reason for issuing the General Permit was the discovery of high levels of hydrocarbon pollution in the City of San Diego, particularly in the downtown area which neighbors San Diego Bay. The General Permit is intended to facilitate ground water cleanup and to assure that construction dewatering operations do not inadvertently discharge pollutants. Temporary construction dewatering operations cannot be avoided in a high ground water area like San Diego. The need for temporary cleanup dewatering is obvious. Polluted ground water must be pumped in order to treat it and the treated water must be disposed of. The General Permit further limits the impact of ground water dewatering discharges by prohibiting new permanent discharges.

The Regional Board considered all feasible alternatives to discharging to San Diego Bay. Reuse of ground water was rejected because of its high salt content. ReInjection is not feasible in the densely urbanized City because it could destabilize existing buildings. The City of San Diego has

¹¹ The effluent limitations in the Permit are sufficiently stringent to protect existing beneficial uses of the Bay, considering the temporary and variable nature of the discharges. With the exception of the effluent limitations for silver, the limitations in the General Permit will provide water quality protection which is as stringent or more stringent than the numerical water quality objectives for those constituents in the EBE Plan. This Order does not set an effluent limitation for silver because the record does not contain information regarding the Bay's assimilative capacity for silver. The adoption of the EBE Plan after the time that the General Permit was issued does not invalidate the General Permit. The Regional Board does have the power to review the General Permit and determine what changes, if any, should be made to bring it into conformity with the EBE Plan. (Water Code Section 13263(e)). The Regional Board should do so.

refused to accept dewatering discharges into its sewer because these waters displace limited capacity for wastewater which requires treatment. Discharge into the City's sewer may not be desirable because it increases the burden on the City's collection and treatment system which is already in violation of Federal and State requirements (United States and State of California v. City of San Diego, (United States District Court, Southern District of California) Civ. No. 88-1101-B). In any event, we lack authority to compel the City to accept these wastes. There was a lengthy discussion of alternatives at the November 1989 workshop and Regional Board staff invited all workshop participants, including petitioner, to suggest alternatives. No feasible alternatives were suggested at the workshop or in later communications with the Regional Board.¹²

In the absence of alternative discharge points, prohibition of discharge to San Diego Bay would be tantamount to prohibition of all ground water cleanup activity and new construction in downtown San Diego. It has already been noted that ground water pollution is pervasive in downtown San Diego. Cleanup of this ground water is required by State law (Water Code Section 13304). Much of downtown San Diego has been designated as a redevelopment area, which means the local government has determined that the area is blighted and that encouragement of new development in the area is an important public interest

¹² Petitioner contends that the Regional Board did not adequately evaluate alternatives. As noted here, there was substantial exploration of alternatives. This contention will not be discussed separately.

(Health and Safety Code Section 33000 et seq.). It is common knowledge that the presence of polluted ground water beneath a property makes sale or development financing of that property difficult if not impossible. It has already been noted that some temporary ground water dewatering cannot be avoided for building construction in downtown San Diego.

Discharges in accordance with the General Permit are necessary to accommodate important economic and social development in the area in which San Diego Bay is located, and will be consistent with maximum benefit to the people of the State. If these discharges were prohibited, there would be unquestionable substantial adverse social and economic impacts due to inability to clean up severe ground water pollution and inability to redevelop downtown San Diego. The stringent effluent limitations in the General Permit, many at a level more stringent than the numerical water quality objectives in the EBE Plan, will adequately protect aquatic life and human health in San Diego Bay and assure that water quality degradation, if any, will be minimal.

Contention: The discharge should be prohibited because it is municipal wastewater and industrial process waters.

Finding: The discharges under the General Permit are not municipal wastewater or industrial process waters as those terms are used in the EBE Policy.

The EBE Policy Prohibition 1 provides,

"New discharges of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, which are not

consistently treated and discharged in a manner that would enhance the quality of the receiving waters above that which would occur in the absence of the discharge, shall be prohibited."

The term "industrial process waters" is not defined in the EBE Policy, but this Board discussed the meaning of the term in Order No. 88-4 as follows:

"[It] makes sense to construe "industrial process water" as a discharge which is a by-product or integral part of an industrial process. Storm water and other flows which are incidental to the operation of a business such as a boatyard, should not be covered." (emphasis added)

This interpretation is consistent with the EPA definition of "process wastewater" in 40 C.F.R., Section 122.2,

"any water which during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product." (emphasis added)

Ground water is being discharged in this case. This ground water may contain waste products which became dissolved in the water due to spills or leaks from gas stations or industrial facilities. But, like stormwater, the ground water did not contact these wastes "during manufacturing or processing". This ground water is not an "integral part of an industrial process". Therefore, the discharges under the General Permit are not industrial process water discharges.

Petitioner argues that some of the discharges permitted under the General Permit are municipal wastewater because at one time similar discharges were disposed of into the municipal sewer system. The term "municipal wastewater" is not defined in the

EBE Policy. However, discussion regarding the discharge of municipal wastewater in the Appendix to the EBE Policy indicates that this term refers to discharges of treated sewage and industrial wastewater by public agencies and not to individual waste streams which are disposed of into municipal sewers. This interpretation is supported by Exhibit D of the Appendix which lists municipal wastewater discharges. The discharges on the list are all controlled by public agencies. This is also consistent with the EPA definition of "municipality" in 40 C.F.R., Section 122.2:

"a city, town, borough, county, parish, district, association or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of CWA."

Contention: The monitoring program in the General Permit is inadequate because it does not require monitoring of the effects of the discharge on the sediments, the benthic community, the indigenous biota, or aquatic resources used for human consumption.

Finding: The following receiving water limitations are in the General Permit:

"The discharge of ground water from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in San Diego Bay:

"1. Physical Characteristics

"d. The rate of deposition of solids and the characteristics of solids in San Diego Bay sediments shall not be changed such that benthic communities are degraded.

"2. Chemical Characteristics

"d. The concentration of substances set forth in discharge Specification B.1 in marine sediments shall not be increased to levels which would degrade indigenous biota.

"3. Biological Characteristics

"a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded." (General Permit pp. 10-11)

Petitioner asserts that the Regional Board cannot enforce these receiving water limitations unless each discharger monitors sediments and benthic life. However, direct monitoring of sediments and the benthic community is not the most appropriate method for determining compliance with these narrative receiving water limitations given the nature and character of the proposed discharges. Toxicity testing, including acute and chronic toxicity, should provide a reliable indicator of possible adverse impacts on aquatic life.

The need for benthic monitoring around discharge points is especially necessary when a dilution factor is assumed as a part of the permit. Benthic fauna monitoring is necessary to verify dilution factors and is dependent on the nature of the receiving waters, the discharge regime (e.g. intermittent, highly variable, or constant), the flow volume, the location of the discharge, and access. Without a reasonably constant discharge, it would be difficult to differentiate between adverse effects resulting from discharge constituents and those resulting from flow regimes. These difficulties can be compounded by the number of discharge locations. In this case, there is not a dilution

factor in the General Permit and discharges are not constant but are variable and temporary. For these reasons, selection of an appropriate monitoring program must be left to best professional judgement (BPJ) to attain results to determine whether a discharge will or has adversely affected the biological integrity of the receiving waters.

As a zero dilution factor is assumed for discharges under this Permit, whole effluent toxicity would probably be a more reasonable water quality characteristic to monitor for this type of discharge. This measurement would provide a concentration which can be used as an index to judge whether a potential adverse effect exists. The General Permit presently contains an acute toxicity limit of 0.05 T_{ua} as a six-month median and 0.59 T_{ua} as an instantaneous maximum, based on BPJ, with no limit for chronic toxicity. An acute toxicity limit, as specified in the General Permit, of 0.59 T_{ua} expressed as an instantaneous maximum translates into a test result of 90 percent survival of a test species in 100 percent effluent. The requirement of "no acute toxicity" is defined in the EBE Plan as a toxicity level where survival of the test organism in 100 percent effluent (undiluted) exceeds 90 percent for at least 50 percent of the time and survival is not less than 70 percent for less than 10 percent of the time in a 96-hour static or continuous-flow test.

The EBE Plan sets an acute toxicity requirement of no toxicity and a chronic toxicity limit of 1.0 T_{uc} as a daily average. Thus, the General Permit's acute toxicity limit is

stricter than that contained in the EBE Plan and should be retained. The monitoring and reporting program in the General Permit already provides for acute toxicity monitoring.

The General Permit contains no requirement for chronic toxicity. Because direct monitoring of benthic life is not required, the General Permit should include an effluent limitation of 1.0 Tuc toxicity so that a more accurate understanding of impacts on aquatic life can be obtained. Chronic toxicity monitoring can be performed at the same intervals for toxicity monitoring which are already provided in the General Permit.

Because these are intermittent and often relatively short term discharges, it would be difficult to determine their effect on the benthic community as compared to other factors affecting that community. The inclusion of a chronic toxicity effluent limitation and monitoring requirement in the Permit will provide a reasonable estimate of the long-term impacts of the discharges on marine communities and should be sufficient for these types of discharges.

Contention: The monitoring program in the General Permit is inadequate because effluent monitoring is too infrequent.

Findings: Petitioner asserts that testing for total petroleum hydrocarbons should be done more frequently. The General Permit provides for monthly monitoring for certain individual petroleum compounds: benzene, ethylbenzene, toluene

and xylene (BETX). Total petroleum hydrocarbons are monitored only quarterly.

This monitoring schedule is appropriate. BETX molecules are more soluble and more transportable than other, larger hydrocarbon compounds. Therefore, they are more likely to be detected in water samples and are a greater threat to water quality. The detection levels for these substances is sufficiently low to assure detection of effluent limitation violations.

The petitioner is also concerned that there could be months of violations before detection under the monitoring schedule in the General Permit.

Prohibition A.7. and Reporting Requirement E.14. of the General Permit provide that each discharger must demonstrate how ground water is to be treated in order to comply with effluent limitations. It also permits the discharger to provide a contingency plan instead of providing treatment in advance of discharge. It is implicit in this requirement that the discharger must prove that the proposed discharge will comply with effluent limitations before starting discharge. This provision should be clarified to assure that ground water will be tested before discharge and that the discharger assesses possible sources of contaminants which might be intercepted by the dewatering system. This demonstration should cover all waste constituents listed in the General Permit. It should also include all waste constituents in Tables 1 and 2 of the EBE Plan unless the Regional Board determines with reasonable certainty

that particular waste constituents are unlikely to be present in the discharge stream, or that a particular discharge is so low in volume that it will have no significant adverse impact on water quality. (EBE Plan, p. 10, memorandum from Edward Anton, Acting Chief, Division of Standards and Assessment, State Board to Robert S. Dodds, Assistant Executive Officer, Regional Water Quality Control Board, Lahontan Region, May 7, 1991). This would assure that the Regional Board had adequate information to determine the risk of contaminants in the discharge, determine which constituents are likely to be present, and determine the treatment system needed to comply with effluent limitations. Given this procedure in advance of discharge, the frequency of monitoring required in the permit is adequate.

III. SUMMARY AND CONCLUSIONS

1. There is not sufficient evidence on the record to permit discharges to tributaries to San Diego Bay.
2. San Diego Bay is a water quality limited segment because of high levels of copper, mercury, PCBs, and TBT. In order to comply with the Federal Antidegradation Policy and Resolution No. 68-16, effluent limitations in the General Permit for copper, mercury, and PCBs should be amended to water quality objective levels in the EBE Plan, and effluent limitations for TBT should be added to the General Permit in accordance with water quality objectives in the EBE Plan.
3. The discharge of copper, mercury, PCBs, and TBT at levels required by the General Permit as amended will not degrade water quality in San Diego Bay.

4. The General Permit, as amended, does not violate the Federal Antidegradation Policy or State Water Resources Control Board Resolution No. 68-16.

5. The Regional Board adequately evaluated alternatives before adopting the General Permit.

6. A waste load allocation is not necessary before discharge to San Diego Bay of copper, mercury, PCBs, and TBT can be permitted at levels not exceeding water quality objectives.

7. The discharges permitted by the General Permit are not discharges of municipal wastewater or industrial process water.

8. Monitoring sediments and benthic life is not appropriate in this case; monitoring for acute and chronic toxicity should be required instead.

9. The monitoring schedule in the General Permit is adequate but the certification reporting requirement should be clarified and monitoring requirements for TBT and chronic toxicity should be added.

IV. ORDER

IT IS HEREBY ORDERED that

(1) The title of the General Permit is amended to read:

"General Waste Discharge Requirements for Ground Water Dewatering Discharges to San Diego Bay and Storm Drains or Other Conveyance Systems Tributary Thereto".

The location of discharges permitted under the General Permit is limited to San Diego Bay and storm drains or other conveyance systems tributary thereto.

(2) B. DISCHARGE SPECIFICATIONS, Table 1 on pages 9 and 10 of the General Permit are amended as follows:

- a. For copper, add a 1-hour average of 2.9 ug/l
- b. For mercury, add a 30-day average of .025 ug/l and a 1-hour average of 2.1 ug/l
- c. For PCBs, add a 30-day average of .00007 ug/l
- d. Add an effluent limitation for TBT of a 30-day average of .005 ug/l
- e. Add an effluent limitation for chronic toxicity of 1.0 Tuc and a provision in accordance with Chapter III, Part D of the EBE Plan (1991).

(3) E. REPORTING REQUIREMENTS, Paragraph 14 on page 22 of the General Permit is amended by adding the following to the end of the paragraph:

"The report shall demonstrate, to the satisfaction of the Executive Officer, that the proposed discharge will comply with effluent limitations. The report shall include data from testing of groundwater which will be the source of the discharge and shall include a risk assessment of possible sources of contaminants which might be intercepted by the dewatering system. Testing shall be performed for all waste constituents listed in this permit. Testing shall also include all waste constituents listed in Table 1 and 2 of the EBE Plan adopted by the State Water Resources Control Board unless the Executive Officer determines with reasonable certainty that particular waste constituents are unlikely to be present in the discharge stream or that a particular discharge is so low in volume that it will have no significant adverse impact on water quality."

(4) D. GROUNDWATER DISCHARGE MONITORING, on page 3 of the Monitoring and Reporting Program No. 90-31 is amended by adding requirements for monitoring tributyltin in units of ug/l, by grab sample with a quarterly minimum frequency of analysis and

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a quarterly reporting frequency and by adding requirements for monitoring chronic toxicity by grab sample according to standards specified in the EBE Plan (1991) with a semiannual minimum frequency of analysis and a semiannual reporting frequency.

IT IS FURTHER ORDERED that in all other respects, the petition is denied.

CERTIFICATION

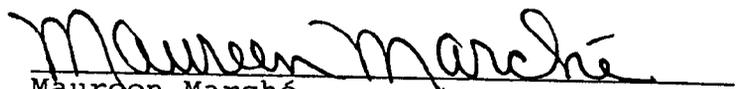
The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 26, 1991.

AYE: W. Don Maughan
 Edwin H. Finster
 Eliseo M. Samaniego
 John Caffrey

NO: None

ABSENT: None

ABSTAIN: None


Maureen Marché
Administrative Assistant to the Board