

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of)
the CITY OF CORONA for Review of)
Order No. 80-56 of the California)
Regional Water Quality Control Board,)
Santa Ana Region. Our File No. A-273.)
NPDES PERMIT NO. CA 0106623.)

Order No. WQ 81-2

BY THE BOARD:

On May 9, 1980, the California Regional Water Quality Control Board, Santa Ana Region (Regional Board), adopted Order No. 80-56 (NPDES Permit No. CA 0106623) prescribing waste discharge requirements for the City of Corona, Dewatering Operation, Riverside County. On June 6, 1980, the City of Corona (petitioner) filed a petition for review of Order No. 80-56 with the State Water Resources Control Board (State Board). Interested persons were notified of the petition, the Regional Board record was filed with the State Board, and the Regional Board filed its response to the petition on September 11, 1980.

I. BACKGROUND

The petitioner proposes to discharge up to 2 mgd of extracted groundwater to Temescal Creek, a tributary of the Santa Ana River, Reach 3, Riverside County. This proposed pumping is from the vicinity of the petitioner's sewage treatment plant and treated sewage effluent disposal ponds. Petitioner has stated that such dewatering is necessary in order to lower groundwater levels in the area of the disposal ponds and thereby increase

the percolation capacity of the ponds. Regulation of the treatment plant disposal pond discharge is covered by other Regional Board orders and is not an issue before the State Board at this time. Evidence in the record clearly indicates that recent high groundwater levels in the vicinity of the petitioner's disposal ponds have substantially contributed to water quality problems in the area.

II. CONTENTIONS AND FINDINGS

1. Contention: The petitioner contends that the Regional Board is without jurisdiction to impose waste discharge requirements as the proposed discharge does not contain pollutants or waste.

Finding: Water Code Section 13376 provides that any person proposing to discharge "pollutants" to navigable waters of the United States shall file a report of waste discharge with the Regional Board. It further provides that such discharges are unlawful except as authorized pursuant to waste discharge requirements. The Clean Water Act defines "pollutant" to include sewage and municipal waste discharged to navigable waters. Water Code Section 13260 requires that any person proposing to discharge wastes that may affect the waters of the State is subject to the issuance of waste discharge requirements. "Waste" is defined similarly to "pollutants" and includes sewage and any and all waste substances associated with human habitation (Water Code Section 13050(d)). "Discharge of a pollutant" is defined to mean any addition of any pollutant to navigable waters from any point source (33 U.S.C. Section 1362(12)).

Is the proposed discharge a discharge of pollutants or waste? In answering this question, two alternative tests have been employed. First, the discharge should be considered a discharge of pollutants or waste if it contains materials which, but for the discharger's or other person's activity, either would not be present or would not be present in the amounts now found. Second, a Regional Board is empowered to adopt waste discharge requirements based upon the changed characteristics of the receiving waters brought about by the activities of the discharger. These tests are derived from a series of Attorney General Opinions interpreting the term "waste" (26 Ops.Cal.Atty.Gen. 88; 27 Ops.Cal.Atty.Gen. 182; 37 Ops.Cal.Atty.Gen. 139; 43 Ops.Cal.Atty.Gen. 302; 63 Ops.Cal. Atty.Gen. 51). By use of the former test, it has been concluded that waste discharge requirements are appropriate to regulate the drainage into surface streams or lakes of water that has flowed through abandoned mining operations and therefore contains materials which, but for the mining operations, would not be present at all or in the amounts now found. The latter test was used to conclude that water discharged from a hydroelectric power plant constitutes a discharge of waste.

The petitioner asserts that the proposed discharge would be of natural groundwater and that it would be of better quality than that of the receiving water. We disagree with the former entirely and the latter in part. The assertion that the proposed discharge is natural groundwater is refuted by petitioner's own admission that 15 percent or so of the water in the extraction well originates from petitioner's disposal ponds. In

this regard, the record indicates that the proposed dewatering well is located approximately 200 feet from the disposal ponds. The shallow soil zone from the ground surface to a depth of 55-70 feet in this area consists of coarse sand and gravel with high permeabilities in the range of 5,000 to 11,000 gallons per day per square foot. This indicates a relatively small amount of silt and clay that is available to filter the effluent. The groundwater gradient in the area shows a direct hydrologic continuity through the highly permeable soils from the percolation ponds to the dewatering well location.

The record also indicates that the proposed discharge contains materials which, but for the petitioner's disposal operations, either would not be present at all or would not be present in the amounts indicated. The record contains test data that can be used to compare the quality of the receiving water above the point of the proposed discharge with the quality of the discharge itself. This data can be summarized as follows:

TABLE 1.

TEST PROGRAM CONDUCTED FOR PETITIONER
ON JUNE 25, 1979

		<u>Constituents</u>			<u>ORTHO</u>
		<u>CI</u>	<u>MBAS</u>	<u>NH₃</u>	<u>PO₄</u>
Temescal	Upstream	151.8	0.060	1.2	0.40
	Downstream	159.5	0.072	1.2	0.52
	<u>Pumping</u>				
	<u>Period</u>				
Well at	1hr	172.6	0.102	4.8	2.20
Dewatering	2hr	170.5	0.112	4.8	2.02
Site	4hr	171.7	0.096	4.0	1.96
	8hr	192.9	0.092	<0.6	2.20
	16hr	193.7	0.084	<0.6	2.08

TABLE 2. RESULTS OF SAMPLES BY ARMY CORPS OF ENGINEERS, FEBRUARY 12, 1980

SAMPLE	Constituent														
	pH	SPEC COND	COLOR	TURBIDITY	SODIUM	POTASSIUM	BICARB ALKA	TOTAL HARDNESS	CALCIUM	MAGNESIUM	CHLORIDE	SULFATE	NITRATE (NO ₃)	MBAS	TDS
Dewatering Well 2A	7.3	1269	17	0.6	148	16	252	306	88	21	154	172	4.9	0.16	735
ACOE #6 Temescal Creek Before Elsinore Release	7.5	1660	15	1.5	146	13	397	545	122	58	213	246	12	0.3	1090

TABLE 3. TEST PROGRAM CONDUCTED FOR PETITIONER ON APRIL 9, 1980

SAMPLE	Constituent																		
	pH	BOD	SPEC COND	COLOR	TURBIDITY	SODIUM	POTASSIUM	BICARB ALKA	TOTAL HARDNESS	CALCIUM	MAGNESIUM	CHLORIDE	SULFATE	NITRATE (NO ₃)	MBAS	SILICA	FLUORIDE	BORON	TDS
Dewatering Well 2A	7.3	<3	1269	17	0.6	148	16	252	306	88	21	154	172	4.9	0.16	1.3	0.70	0.53	735
Temescal Creek at Golf Course	7.6	11	1105	25	20	136	8	183	241	71	16	372	152	4.9	0.10	0.85	0.73	0.17	774
Temescal Basin Objectives						120			440			180	160	45.0					840

During each test, the levels of some or all of various constituents of the extracted water were higher than the receiving water. For example, the data from June 1979 shows the dewatering wells to have higher chloride, methylene-blue-active-substances, ammonia, orthophosphate, and coliform concentrations than the receiving waters.

Consequently, we find that the well discharge contains pollutants or waste. Since discharge of pollutants or waste is proposed to navigable waters, regulation is required. The City has not provided convincing data to show that biologic pollutants are adequately removed before effluent reaches the well. At the workshop session, petitioner argued that at some point sewage ceases being sewage. While that may be possible, the record before us clearly shows that the proposed discharge contains materials which would not have been there absent petitioner's disposal operations. Thus, petitioner's argument must fail.

In its argument that this discharge should not be regulated, the petitioner cited the fact that there are unregulated discharges of waters high in total dissolved solids from trenches constructed in the nearby airport area. This fact is not a reason for allowing petitioner to discharge without regulation. The record discloses that perhaps these discharges should also be regulated. We request the Regional Board to closely examine these discharges to determine whether they contain pollutants that should be regulated.

2. Contention: The petitioner contends that the Regional Board inappropriately applied TDS water quality objectives for the Santa Ana River, Reach 3, and refused to consider the assimilative capacities of the receiving waters.

Finding: The point of discharge proposed by the City is to Temescal Creek approximately one mile from the confluence of Temescal Creek and Reach 3 of the Santa Ana River. TDS water quality objectives for Temescal Creek are 800 mg/l and TDS water quality objectives for the Santa Ana River, Reach 3, are 700 mg/l. Order No. 80-56 includes an effluent limitation for filterable residue of 700 mg/l as a four-month average concentration limit. Thus, the Regional Board applied the TDS limit for the Santa Ana River, Reach 3.

In Order No. WQ 79-14 (Pacific Water Conditioning Association), we found that the Santa Ana River TDS water quality objectives were appropriately applied to the City of Corona's discharge to Temescal Creek. This conclusion is equally applicable in this case. The actual impacts of this discharge will affect water quality of the Santa Ana River. Water Quality objectives for Temescal Creek are based upon groundwater recharge to the Temescal basin, and as the discharge point is close to the confluence with the Santa Ana River, the water from this discharge will not recharge the Temescal basin but will affect the flows of the Santa Ana River.

The petitioner introduced evidence at the Regional Board hearing that indicated assimilative capacity in the Santa Ana

River in 1978-79 due to above normal flows to the River. The Regional Board concluded that any such additional assimilative capacity was only a seasonal variation. While petitioner now appears willing to limit the proposed discharge to high flow periods, petitioner's application for a discharge permit was not so limited when presented to the Regional Board. Having concluded that most of Reaches 2 and 3 of the River have no assimilative capacity available at present, the Regional Board established the effluent limitations for TDS at the level of the Basin Plan objective.

We note that the petitioner now states that the dewatering well is really needed during wet periods in the winter months when water levels are so high that its disposal ponds will not work at capacity. During such periods of high winter flow, there may be assimilative capacity in both Temescal Creek and the Santa Ana River. If assimilative capacity is available during high flows, the Regional Board could allow a reasonable use of assimilative capacity by petitioner. Establishment of a TDS limit by adding an increment to the water quality objective would be one method of allowing such use of assimilative capacity.

Based on the fact that a discharge of extracted water with a TDS limit higher than 700 mg/l may be appropriate during high flow periods, we therefore feel it appropriate to remand this matter to the Regional Board for consideration of the following issues:

1. Is there seasonal assimilative capacity in Temescal Creek and the Santa Ana River? If so, during what period?
2. If there is such assimilative capacity, should the discharge of extracted water by petitioner be limited to such periods?
3. If there is such assimilative capacity, would the proposed discharge make reasonable use of it? Would a TDS limit of higher than 700 mg/l be appropriate?
4. If such discharge is permissible, should it be regulated so that the dewatering operation would not result in an increase in petitioner's disposal pond capacity?
5. If such discharge is allowed, should it terminate upon the anticipated enlargement of the petitioner's treatment plant?

III. CONCLUSIONS

After review of the record and consideration of the contentions of the petitioner, and for the reasons discussed, we conclude as follows:

1. The Regional Board has jurisdiction to issue waste discharge requirements for this project.
2. The Regional Board should reconsider the waste discharge requirements in accord with the factors discussed in this Order.

IV. ORDER

IT IS HEREBY ORDERED that Regional Board reconsider the petitioner's waste discharge requirements in a manner consistent with this Order.

DATED: FEB 19 1981

/s/ Carla M. Bard
Carla M. Bard, Chairwoman

/s/ L. L. Mitchell
L. L. Mitchell, Member

/s/ Jill B. Dunlap
Jill B. Dunlap, Member

/s/ F. K. Aljibury
F. K. Aljibury, Member