# STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of MAIN SAN GABRIEL BASIN WATERMASTER

For Review of Order No. 88-133, Waste Discharge Requirmenets of the California Regional Water Quality Control Board, Los Angeles Region. Our File No. A-597. ORDER NO. WQ 91-09

BY THE BOARD:

On November 28, 1988, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), issued waste discharge requirements (requirements) to Azusa Land Reclamation Company, Inc. (ALR) in Order No. 88-133. The Order establishes revised waste discharge requirements for the continued operation and expanded use of an existing landfill. The landfill has been used for the disposal of nonhazardous and inert wastes. On December 28, 1988, the State Water Resources Control Board (State Board) received a timely petition from the Main San Gabriel Basin Watermaster (Watermaster or Petitioner), requesting review of the requiremnts. The petitioner requested that the State Board deny issuance of waste discharge requirements for the continued use of the landfill, except for the disposal of inert wastes.

On October 3, 1989, the State Board adopted Order No. WQ 89-17. That Order authorized the continued use of the

landfill and amended the waste discharge requirements to add specified conditions. The petitioners and other interested persons sought judicial relief. The Los Angeles County Superior Court upheld Order No. WQ 89-17 in a decision entered on May 14, 1990. On January 14, 1991, the Second District Court of Appeals reversed the Superior Court. The Appellate Court directed the Superior Court to issue a Writ of Mandate requiring the State Board to vacate Order No. WQ 89-17 and to permit no further expanded dumping, except for inert wastes, at the Azusa landfill until the requirements of the California Environmental Quality Act (CEQA) are satisfied. On February 13, 1991, the Superior Court issued the Writ of Mandate. On February 26, 1991, the State Board vacated its Order. (State Board Order No. WQ 91-01.) On June 6, 1991, the State Board held a workshop which focused on the issue of whether the State Board should act now to deny waste discharge requirements for the landfill or whether the CEQA process should be initiated. While the 270-day requirement for review of the petition has passed,  $^{1}$  we will proceed to review this matter on our own motion. (Water Code Section 13320.)

#### I. BACKGROUND

The Azusa landfill is located in the central part of the San Gabriel Valley. It is located within an active sand and gravel quarry which comprises 302 acres. The landfill lies within the Main San Gabriel Hydrologic Subarea, ground waters of

<sup>1</sup> Title 23, California Code of Regulations, Section 2052(d).

which are beneficially used for municipal, industrial, and agricultural water supply. It is located one mile to the east of the San Gabriel River and the Santa Fe Spreading Grounds, which are important recharge areas for the Main San Gabriel Ground Water Basin (Basin). Additionally, the landfill is located on rock debris deposited by the San Gabriel River and is underlain by Holocene alluvium derived from the San Gabriel mountains to the north. Very course sand, gravel, cobbles and boulders are characteristic of the alluvium. Only minor amounts of silt and clay are present. The material is highly permeable and will transmit water readily. The ground water beneath the site is part of the Basin which is used as a drinking supply for more than one million people. The Basin is currently polluted by solvents, 2 and is the subject of an Environmental Protection Agency (EPA) Superfund project.

Since the 1960's, the landfill has been operating under waste discharge requirements issued by the Regional Board (Orders Nos. 60-22 and 86-59). For nearly thirty years, waste has been deposited in an 80-acre unlined portion of the 302-acre site. In 1987, ALR submitted to the Regional Board a report of waste discharge, wherein it requested approval for use of the landfill beyond the current areas of waste disposal. On May 23 and June 10, 1988, the Regional Board took actions denying waste discharge

<sup>2</sup> There is much discussion in the petition and ALR's response thereto, concerning whether the existing landfill has contributed to contamination of the ground water. Resolution of that issue is not necessary to review of the petition and will not be decided here.

requirements for the proposed expanded use.<sup>3</sup> ALR then filed a revised report of waste discharge on June 10, 1988, in which ALR proposed a revised liner system for the expansion area.

On November 28, 1988, the Regional Board adopted waste discharge requirements, basing its decision on the addition of a synthetic liner to the previously-proposed clay liner. In adopting these requirements, which allow the proposed expanded use, the Regional Board rescinded Orders Nos. 60-22 and 86-59. On December 28, 1988, this Board received a petition from the Main San Gabriel Basin Watermaster requesting review of the waste discharge requirements issued to ALR.

Following a site visit, a workshop and a hearing, the State Board adopted Order No. WQ 89-17 on October 3, 1989. That Order amended the waste discharge requirements for the landfill. These amendments specified additional protective features, including a ground water barrier system and a requirement for additional separation between the bottom of the landfill and underlying ground water. 4

The waste discharge requirements in dispute were adopted pursuant to our "Chapter 15" regulations. (Title 23, California Code of Regulations, Section 2510 and following.)

These regulations were substantially revised in 1984 to establish

<sup>3</sup> ALR filed petitions with the State Board asking for review of the Regional Board's failure to adopt waste discharge requirements. Upon the Regional Board's adoption of waste discharge requirements in the Order under review, ALR withdrew its petition.

<sup>4</sup> The issuance of waste discharge requirements does not create any vested right to continue such discharge, for waste discharges are privileges, not rights. Water Code Section 13263(g).

waste and siting classification systems and minimum waste management standards for waste treatment, storage, and disposal in landfills, surface impoundments, waste piles, and land treatment facilities. The intent of the regulations is to insure that water quality is protected when wastes are discharged to land. The Chapter 15 regulations establish minimum requirements which Regional Boards must follow in permitting waste discharges to land. Engineered alternatives to Chapter 15 requirements may be approved. Regional Boards may also impose more stringent requirements in specific cases, as may the State Board in reviewing Regional Board actions. Additionally, the discharge of waste may be prohibited. (Water Code Section 13243; Title 23, California Code of Regulations, Section 3742.)

The landfill is classified as a Class III landfill pursuant to the classification criteria of Chapter 15, and, thus, was authorized by the waste discharge requirements to accept nonhazardous solid waste and inert waste. The landfill presently consists of three areas. The first area is the original 80-acre unlined portion. There is virtually no capacity remaining in this area. The second area is a 22-acre zone that is lined and which met applicable requirements of the now vacated State Board Order No. WQ 89-17. Approximately 9 acres of this zone were used before the State Board prohibited discharges at the site. The third area is the remaining 200 acres, which is also subject to Order No. WQ 89-17. The landfill is virtually shutdown at the present time. Only inert wastes may be discharged.

### II. CONTENTIONS AND FINDINGS

1. <u>Contention</u>: Petitioner and other interested persons contend that further use of the landfill for other than the disposal of inert wastes should be denied. They contend that such use poses an unacceptable risk to ground water quality of an already polluted basin.<sup>5</sup>

<u>Finding</u>: For the reasons discussed below, we find that further discharges of nonhazardous waste at the landfill do pose an unacceptable risk to water quality. We, therefore, find that such discharges should be prohibited. We base these findings on the administrative record as supplemented during the trial court proceedings. 7

In analyzing whether the landfill is suitable for the discharge of nonhazardous waste, we will focus on two issues.

The first is whether the site itself is suitable for waste

<sup>5</sup> Based on the conclusion reached in this Order, specific sub issues raised by petitioner and others need not be discussed. Accordingly, this review on our own motion is limited to the general contention listed above.

<sup>6</sup> Since we are denying the waste discharge requirements, CEQA does not apply and no environmental document is required. Public Resources Code Section 21080(b)(5). Denial of waste discharge requirements without preparation of an environmental document is also consistent with the directives of the courts which did not hold that an environmental document was necessary for project disapproval. The Appellate Court merely indicated that the project could not be approved without such a document. (Slip Opinion, page 12.)

<sup>7</sup> It is appropriate for us to consider all materials that were before the courts in the writ proceeding, which as provided by statute, included any relevant evidence which, in the judgment of the court, should be considered to effectuate and implement the policies of the Porter-Cologne Water Quality Control Act. (Water Code Section 13330.) All such materials were provided to parties during the judicial proceedings and are available for public review. The State Board is also authorized to consider any relevant evidence which, in the judgment of the State Board, should be considered to effectuate and implement the policies of the Porter-Cologne Act. (Water Code Section 13320.)

disposal. The second issue is whether the landfill can be constructed so as to minimize the risks to water quality to an acceptable level notwithstanding the location of the landfill.

## A. Suitability of the Site

The record is replete with information regarding the unsuitability of this site for the disposal of waste. We begin our analysis of site characteristics with a discussion of the water that could be impacted by the discharge. The site overlies a part of a major drinking water aguifer. Over 90 percent of the water used by the more than one million residents of the San Gabriel Valley comes from this ground water. The aquifer produces approximately 200,000 acre-feet of water annually and has an estimated total capacity of over 10 million There are 46 individual water agencies, from acre-feet. municipal water departments to private water companies, that rely on the aquifer for a continuous source of drinking water. basin also has an unused storage capacity of at least 400,000 to 500,000 acre-feet. Substantial amounts, up to 142,000 acre-feet per year, of water imported from the State Water Project have already been stored in the Basin. Its potential for large-scale conjunctive use is being studied.

The fact that the San Gabriel Basin is currently polluted is not refuted. The EPA has placed the Basin on its National Priority List for cleanup under the Superfund program. This Board has recognized the magnitude of the pollution problem in adopting Resolution No. 88-114, which states that a

coordinated ground water management effort is needed for water quality improvement as well as water supply. The resolution urges the Watermaster to assume a lead role in coordinating the response to the Basin's water quality problems, and in taking all necessary actions to stop further pollution. Given the presence of pollutants in a water body which is currently the sole drinking water supply for a large populace, it is clear we must take all reasonable actions to prevent further pollution.

Having discussed the underlying ground water, we turn our attention to the geology of the site. In adopting Order No. 88-133, the Regional Board found that the site is underlain by an alluvium which is characterized by very coarse sand, gravel, cobbles and boulders. The Regional Board concluded that the material is highly permeable and will transmit water readily. The site is located in a geologic setting that is ideally suited to receive, store, and transmit large volumes of potable water. Logically, an environment suited for rapid ground water recharge is the least suited for waste disposal. The alluvial fan underlying the site has an infiltration rate that would allow material leaking from a landfill to reach ground water in a short period of time. Thus, rather than providing a protective line of defense against discharges reaching ground water, the underlying geology ensures that leaks will result in ground water discharges.

## B. Construction Features

Having concluded that the site is not generally suitable for a landfill, we must next determine whether the

landfill can be constructed so as to overcome these shortcomings. While ALR has proposed extensive containment features, we find that such features cannot overcome the fact that the site itself is simply the wrong place for a landfill. Accordingly, we will exercise our authority under Water Code Section 13243 to prohibit the discharge of nonhazardous waste at the landfill.

ALR submits that the design features it has proposed for the expanded areas of dumping reduce the risk to the underlying ground water to a reasonable level. ALR has provided considerable technical information to support its conclusion. However, experts of the Watermaster and other interested persons reviewing ALR's design proposals conclude that the risk is still present. These experts assert that all liner systems will leak and that, given the site geology and the fact that a vitally important ground water basin underlies the site, the question is not if the ground water will be polluted but merely when.

Faced with the conflicting evidence in the record, we note that the burden is on ALR to establish that reasonable protection is assured. The discharger must demonstrate that alternatives to the siting standards in Chapter 15 afford equivalent protection. (Title 23, California Code of Regulations, Section 2510.) This burden is especially heavy when

<sup>8</sup> Much of this evidence was made available for the first time to the courts during the writ proceedings. The evidence was in the form of expert declarations which reviewed the design system. This evidence indicated that the proposed landfill design will not prevent ground water pollution; that the proposed containment system will be incapable of preventing landfill leachate from leaking into the ground water; that ground water contamination is likely no matter what efforts are made to line the site; and that the containment system is subject to significant risk of leakage and consequent release of contaminates to the ground water.

the site is located in a risky area such as is the case here. In this regard, it should be noted that the Legislature has recognized the risk of siting landfills in areas where sand and gravel operations are occurring. (Public Resources Code Section 40060.).9

Finally, when weighing such conflicting evidence, we are mindful of the legislative history of the Porter-Cologne Water Quality Control Act. That history indicates that conservatism in the direction of high quality should guide our decisionmaking. A margin of safety must be maintained to assure the protection of all beneficial uses. 10

In summary, we find that further discharges of nonhazardous wastes at the Azusa landfill should be prohibited based on the following:

- (1) The site overlies a major drinking water aquifer.
- (2) This aquifer is already suffering from pollution problems.
- (3) The geology of the site is ill-suited for the disposal of wastes.
- (4) The Legislature has recognized the risks of siting landfills in gravel pits.

<sup>9</sup> Watermaster and others argue that Public Resources Code Section 40060 requires an immediate denial of waste discharge requirements to ALR. We need not reach this issue based on our conclusion that discharges should be prohibited under our general Porter-Cologne Act authority. (Water Code Section 13243.) See also Title 23, California Code of Regulations, Section 2520, Table 2.1, which indicates that landfills not be located in high risk areas.

<sup>10</sup> Final Report of the Study Panel to the California State Water Resources Control Board, March 1969, page 15. 1969 Calif. Stats., Chapter 482, Section 36 (adopting report as legislative history).

- (5) The record contains conflicting evidence on whether the landfill can be designed to minimize the risks to an acceptable level.
- (6) The discharger has the burden of demonstrating that alternatives to natural geologic protection features afford equivalent protection. While the discharger has made a significant effort, this burden has not been met.

# III. CONCLUSIONS

- 1. The Azusa landfill is underlain by highly permeable and transmissable soils.
- 2. The Azusa landfill overlies a major drinking water aquifer.
- 3. Containment features proposed at the landfill do not reduce the risk of water quality impairment to an acceptable level.
- 4. The further discharge of nonhazardous waste at the Azusa landfill should not be permitted.

#### IV. ORDER

IT IS HEREBY ORDERED that Waste Discharge Requirement Order No. 88-133 of the Los Angeles Regional Water Quality - Control Board is rescinded except as it authorizes the disposal of inert wastes.

IT IS FURTHER ORDERED that the Regional Board consider what additional measures are appropriate to regulate the existing landfill.

## 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 July 24, 1991.

AYE:

W. Don Maughan Edwin H. Finster John Caffrey

NO:

Eliseo M. Samaniego

ABSENT:

None

ABSTAIN:

None

Maureen Marché

Administrative Assistant to the Board