

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petitions of)
)
SAN ELIJO RANCH, INC., AND)
CITY OF SAN MARCOS)
)
to Review Addendum No. 2 Modifying)
Waste Discharge Requirements Order)
No. 92-02 and Failure of the)
California Regional Water Quality)
Control Board, San Diego Region, to)
Take Certain Enforcement Actions.)
Our File Nos. A-976, A-976(a),)
and A-979.)
_____)

ORDER NO. WQ 96-11

BY THE BOARD:

I. INTRODUCTION

On May 16, 1995, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Addendum No. 2 to Waste Discharge Requirements Order No. 92-02 (Order No. 92-02). Order No. 92-02 prescribes waste discharge requirements (WDRs) for the discharge of municipal solid waste to a vertical expansion of the San Marcos Sanitary Landfill, an existing unlined Class III waste management unit in San Diego County, operated by the County of San Diego (County). On June 15, 1995, San Elijo Ranch, Inc., and the City of San Marcos (petitioners) each filed a timely petition with the State Water Resources Control Board (SWRCB or Board) asking that the SDRWQCB's action be rescinded. The petitioners also submitted requests for a stay of the effect of Addendum No. 2 until the merits of the petitions are reviewed by this Board. This Board denied the stay request after holding a public hearing. See

SWRCB Order No. WQ 95-3. San Elijo Ranch, Inc., also filed a separate petition requesting review of the SDRWQCB's alleged failure to take appropriate enforcement actions for alleged violations at the landfill. The three petitions have been consolidated for purposes of this Order.

II. BACKGROUND

On January 22, 1992, the SDRWQCB adopted Order No. 92-02 prescribing WDRs for the vertical expansion of the San Marcos Sanitary Landfill. Petitions were filed with this Board challenging Order No. 92-02 and opposing expansion of the landfill. Subsequently, on June 17, 1993, this Board adopted SWRCB Order No. WQ 93-8, which concluded that vertical expansion of the landfill may proceed so long as substantial design and other improvements were incorporated into the construction.¹ This Board also remanded the matter to the SDRWQCB to amend Order No. 92-02. Among other changes, Discharge Specification B.16 was added to Order No. 92-02. That provision reads:

"Upon commencement of operation of the landfill's recycling center, at least 75 percent of all waste disposed at the site shall be no greater than 4 inches in size."

¹ For further information about the landfill and the surrounding site, see SWRCB Order No. WQ 93-8. This Board, in Order No. WQ 93-8, expressed its concern about the adequacy of the containment system and therefore required additional features to be included in the containment system to protect water quality. Consistent with this concern, we also stated that "if future monitoring or measurement indicates that the integrity of the containment system is in jeopardy, the Regional Water Board is directed to immediately address the matter, including the issue of stopping waste disposal at the site." Order No. WQ 93-8 at page 30.

This provision, which has come to be known as the "shredding" requirement, was added to Order No. 92-02 based on the following finding contained in SWRCB Order No. WQ 93-8:

"A proposed waste size reduction system, to be installed as part of the recycling center at the landfill should be fully developed. This system, by increasing the moisture holding capacity of the waste, will assist in minimizing the creation of leachate. It will also address the concern about differential settlement by assuring a uniform type of waste product."

SWRCB Order No. WQ 93-8 at p. 29. The shredding requirement was included in the order following a prehearing conference at which the County indicated its ability to shred a portion of the waste. In this sense, the shredding requirement was based on the County's preexisting commitment to operate a recycling center and on a general understanding that the shredding may have water quality benefits. Following construction of the recycling center, the County shredded at least 75 percent of the waste in order to meet the size reduction requirement. Both shredded and unprocessed waste were disposed in the vertical expansion during the time the County shredded some of the waste.

On May 16, 1995, the SDRWQCB adopted Addendum No. 2 to Order No. 92-02, which deleted Discharge Specification B.16--the shredding requirement. The deletion of the shredding requirement was requested by the County because it desired, for economic reasons, to close the recycling center where the waste is

shredded.² The petitioners have asked this Board to reverse the SDRWQCB's action and reinstate the shredding requirement. The petitioner, San Elijo Ranch, Inc., has also asked this Board to review the SDRWQCB's responses to violations of landfill requirements by the County, contending that the SDRWQCB has not adequately responded to violations.

III. CONTENTIONS AND FINDINGS³

1. Contention: The petitioners contend that insufficient evidence exists to conclude that deletion of the shredding requirement will not impair the beneficial uses of waters of the State. They point out that there is significant evidence that a release of leachate from the landfill has occurred and is continuing, and that the vertical expansion may contribute to this leachate problem. Specifically, they contend that (1) entirely nonshredded waste contains significantly more moisture than shredded waste and therefore will result in significantly more leachate generation; (2) the disposal of nonshredded waste will exacerbate the existing problem of differential settlement; (3) the disposal of nonshredded waste will affect the County's program for excluding hazardous waste;

² The County has stated in its response to the petitions that the cost of operating the recycling center where the waste was shredded was more than \$1 million per month and that the cost threatens the financial stability of the County's solid waste system.

³ This section of this Order addresses many of the contentions raised by petitioners. Other contentions raised by petitioners are denied for failure to raise substantial issues. 23 CCR Section 2052(a)(1); People v. Barry, 194 Cal.App.3d 158, 239 Cal.Rptr. 349 (1987).

and (4) the disposal of nonshredded waste will result in the increased production of landfill gas.⁴

Finding: We find that the deletion of the shredding requirement at this landfill is not expected to increase the potential impact to water quality from the vertical expansion.

The petitioners, relying on scientific literature regarding the effects of shredding on the intrinsic properties of landfill waste, assert that shredding waste will result in significant reductions in leachate and gas generation due to decreased initial moisture content and increased moisture retention capacity of shredded waste. They also rely on the literature to assert that shredded waste will reduce total and partial waste settlement due to denser and more uniformly distributed particle size of the shredded waste. Accordingly, the petitioners concluded that shredding of waste would have advantages for water quality protection at a landfill because the shredding of waste would reduce the quantity of leachate and gas, and decrease waste settlement.

With respect to leachate production, the petitioners contend that the initial moisture content in the landfill will decrease significantly as a result of shredding, that compacted shredded waste significantly reduces infiltration, and that

⁴ Petitioner, San Elijo Ranch, Inc., requested that the SWRCB consider additional evidence that was not presented to the SDRWQCB and, therefore, was not included in the administrative record. This Board has considered additional evidence requested by petitioner and other evidence as authorized by California Water Code Section 13320(b). In addition to petitioner's evidence, this Board considered the following material which contains information regarding shredding: Ham and Bookter (1982), Bookter and Ham (1982), Lord and Beck, Jr. (1982), and Reinhardt, et al. (1974).

shredding increases field capacity and moisture retention capacity of the waste. As a result, leachate generation would decrease.

There is no specific data from the San Marcos Landfill in the record that would demonstrate whether the disposal of shredded waste with unprocessed waste has resulted in the production of less leachate than the disposal of unprocessed waste alone. This Board, therefore, has evaluated the scientific literature, including studies cited by the petitioners, to determine whether the elimination of the shredding requirement will result in the increased production of leachate.⁵ Studies on experimental landfills indicate that the volume of leachate produced in a landfill is primarily dependent upon seasonal variations affecting the water infiltration into a landfill, particularly from rainfall. The volume of leachate produced in a landfill is secondarily dependent upon a water budget consisting of runoff, evapotranspiration, and infiltration into the landfill. Water budget is affected most significantly by cover of the landfill, not by shredding. In fact, data from experimental landfills shows that landfill cells with shredded waste produce more leachate than the cells with unprocessed waste

⁵ Certain technical issues raised in the petition are summarized and evaluated in the "Technical Review of the San Marcos Sanitary Landfill Petitions" (SWRCB Technical Report) from Harry M. Schueller, Chief, Division of Clean Water Programs, State Water Resources Control Board, to Craig M. Wilson, Assistant Chief Counsel, State Water Resources Control Board (April 8, 1996) and in the "Addendum to the Technical Review of the San Marcos Landfill Petitions" (SWRCB Technical Report Addendum) from Harry M. Schuller, Chief, Division of Clean Water Programs, State Water Resources Control Board, to Craig M. Wilson, Assistant Chief Counsel, State Water Resources Control Board (May 22, 1996).

with other factors being the same. Shredding may decrease initial moisture content of waste by exposing more surface area of waste to evapotranspiration if the weather conditions are dry; but in wet conditions, shredding would not be expected to decrease initial moisture content because more surface of waste would be exposed to rainwater. We conclude, therefore, that the available information does not support the contention that shredding necessarily reduces leachate volume.

With respect to the production of gas in a landfill, the petitioners point out that the production of gas in a landfill is highly dependent on available moisture. Since, in their view, unprocessed waste contains more moisture, unprocessed waste would produce more landfill gas. They relied on a study of an existing landfill to conclude that methane production and migration was reduced where the waste was shredded.⁶

This Board disagrees with petitioners' interpretation of the scientific literature. Several studies of experimental landfills have shown that shredding of waste causes rapid decomposition which results in faster and higher rate of gas production.⁷ Based on the information available about the

⁶ The petitioners pointed out that one study concluded that shredded waste may produce more methane (McBean, et al. (1995)), but relied on another study (Vydra and Grimm (1975)), that petitioners' assert reported reduced methane where the waste was shredded. Vydra and Grimm (1975), however, do not specifically relate the production of methane to shredding by presenting quantitative data. See SWRCB Technical Report at pp. 6-11 for further discussion.

⁷ The studies include Ham and Bookter (1982), Bookter and Ham (1982), McBean, et al. (1995), Kemper, et al. (1984), and Lord and Beck, Jr. (1982). See SWRCB Technical Report at pp. 6-11 for further discussion.

San Marcos Sanitary Landfill, it cannot be concluded that shredding waste has decreased or would decrease the production of landfill gas.

With respect to settlement, the petitioners point out that shredding results in significant reductions in waste particle size, in a more uniform particle size distribution, and that waste shredding increases waste density. They point out that, at the San Marcos Sanitary Landfill, waste density increased approximately seven percent as a result of shredding.⁸ They conclude that due to those factors, waste shredding will reduce total and partial settlement in a landfill as a result of more uniformly distributed particle size and denser waste in comparison to unprocessed waste.

We agree with petitioners' statements that shredding results in significant reductions in waste particle size, in a more uniform particle size distribution, and it increases in waste density. We also agree that shredding of waste contributes to reduction of settlement in some landfills if waste is placed appropriately. Shredding, however, is not the primary factor that controls settlement. Other factors include morphology of the landfill, geological and climatological conditions, and methods of waste placement. At the San Marcos Sanitary Landfill, shredded waste was placed in the vertical expansion overlying the old refuse, which contains only unprocessed waste. The shredded

⁸ The density of shredded waste is 1500 pounds/cubic yard and unshredded waste is 1400 pounds/cubic yard. See Addendum No. 2 to Order No. 92-02 at par. 5.a.

waste has been placed with unprocessed waste in the vertical expansion, not as uniform layers but rather in phases, in waste loads that varied over time and location. The reduction in the size of the waste particles and the increase in the density of waste in the vertical expansion cannot be expected to result in a decrease in either total settlement because shredded waste is placed on old waste that is unprocessed, or partial settlement because the shredded waste is not placed as uniform lifts over the old refuse. Settlement plate monitoring data from the vertical expansion indicate that settlement now taking place at the landfill is directly related to waste load.⁹ Partial settlement in the landfill, including areas with shredded waste, is occurring. The site conditions and monitoring data from the San Marcos Sanitary Landfill indicate that shredding of waste has not prevented settlement. We conclude, therefore, that although shredding may, in some circumstances, be useful for reducing settlement, it is not effective for reducing total or partial settlement at the San Marcos Sanitary Landfill vertical expansion.

With respect to hazardous waste exclusion, the petitioners contend that the shredding requirement results in the reduction in disposal of hazardous waste due to easier interception during shredding. We agree that the shredding

⁹ In Addendum No. 2 to Order No. 92-02, the SDRWQCB, in addition to deleting the shredding requirement, required the County to install four additional settlement plates along the centerline of the landfill and to submit settlement plate monitoring data quarterly. The plates allow the County to measure actual settlement.

process may enable the dischargers to intercept household hazardous waste more frequently than unprocessed waste disposal. That advantage, however, does not justify the inclusion of the shredding requirement alone given the high cost of shredding, and the explosive hazards of hazardous waste containers. The County is required by applicable regulations to implement a hazardous waste exclusion program, but is not specifically required to shred the waste as part of a hazardous waste exclusion program.

We find that although a waste size reduction program may have significant advantages in certain circumstances, the SDRWQCB's decision to delete the shredding requirement is not inappropriate based on conditions existing in the vertical expansion at the San Marcos Sanitary Landfill.

2. Contention: The petitioners contend that the SDRWQCB exceeded its jurisdiction when it deleted the shredding requirement since that requirement was expressly ordered by the SWRCB. They also contend that the shredding requirement is not a prescriptive standard under Title 23, California Code of Regulations, Division 3, Chapter 15 (hereafter Chapter 15) from which the County can seek a waiver under Title 23, California Code of Regulations, Section 2510(b).

Finding: This Board, in SWRCB Order No. WQ 93-8, required the SDRWQCB to impose the shredding requirement pursuant to California Water Code Section 13320(c). As indicated earlier, the shredding requirement was added based on the County's plans to operate the recycling center and upon general information

regarding the water quality benefits of shredding. In response to this Board's Order, the SDRWQCB amended the WDRs to include the shredding requirement. The County implemented that requirement.

Subsequent to adoption of SWRCB Order No. WQ 93-8, implementation of the WDRs reverted to the SDRWQCB. In 1995 the County requested the SDRWQCB to delete the shredding requirement. Water Code Section 13263(e) authorizes the SDRWQCB to review and revise requirements upon application by any affected person, or on its own motion. Under Water Code Section 13263(e), the SDRWQCB has the authority to review the request of the County and make changes to the WDRs consistent with Water Code Section 13263 and applicable policies and regulations of this Board and the SDRWQCB. In this case, it was appropriate to review the shredding requirement based on site conditions. The SDRWQCB conducted a focused review of the actual water quality benefits of shredding and concluded that it was appropriate to delete the shredding requirement. It is appropriate for RWQCBs to update and revise WDRs based on subsequent information. The SDRWQCB did not exceed its jurisdiction in deleting the shredding requirement expressly ordered by this Board. Further, any new action of an RWQCB is subject to review by this Board.

The shredding requirement is not a prescriptive requirement of Chapter 15. The shredding requirement was imposed by this Board initially to add protective measures to the vertical expansion since the vertical expansion did not meet the

Chapter 15 prescriptive siting requirements, but rather was an engineered alternative to the prescriptive requirements. Title 23, California Code of Regulations, Section 2510(a) authorizes the RWQCBs, or the SWRCB, to impose more stringent requirements to accommodate site-specific conditions. In this case, the shredding requirement was added by this Board to accommodate site-specific conditions. The shredding requirement itself is not a prescriptive standard. As discussed above, however, the SDRWQCB has authority to review WDRs. In this case, we agree that the evidence supports deleting the shredding requirement.

3. Contention: The petitioners contend that the SDRWQCB violated the California Environmental Quality Act (CEQA) by deleting the shredding requirement without conducting additional environmental review under CEQA.

Finding: The SWRCB finds that the SDRWQCB complied with CEQA in adopting Addendum No. 2. The County is the lead agency for purposes of CEQA and as the lead agency certified an environmental impact report (EIR) and supplemental EIR in 1990 and 1992, respectively, for the vertical expansion. Shredding was not considered in those documents. Thus, the project for purposes of CEQA is the vertical expansion without shredded waste. The SDRWQCB is a responsible agency under CEQA. For purposes of use by a responsible agency, a final EIR prepared by a lead agency shall be conclusively presumed to comply with CEQA, unless the EIR is finally adjudged in a legal proceeding not to comply with CEQA or a subsequent EIR is necessary. See Title 14,

California Code of Regulations, Section 15231. The EIR has not been found in a legal proceeding to violate CEQA and a subsequent EIR is not necessary. The Board concluded, as discussed in Contention and Finding No. 1 above, that deletion of the shredding requirement is not expected to increase the potential impact to water quality from the vertical expansion. The SDRWQCB, therefore, was required to presume that the EIR complied with CEQA.

In approving Addendum to Order No. 92-02 deleting the "shredding" requirement, the SDRWQCB relied on a categorical exemption for existing facilities in Title 14, California Code of Regulations, Section 15301. The existing facilities exemption applies to the "operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing," In this case, the project as described in the EIR is the vertical expansion without shredding. The SDRWQCB's approval of Addendum to Order No. 92-02 does not involve expansion of use beyond the project as approved in the EIR. The SDRWQCB's action to approve Addendum to Order No. 92-02 was exempt from CEQA. See *Community for Progressive Gilroy v. State Water Resources Control Board*, 192 Cal.App.3d 847, 237 Cal.Rptr. 723 (Cal.App. 3 Dist. 1987).

As a responsible agency, the SDRWQCB is required by Title 14, California Code of Regulations, Section 15096, to

consider the EIR prepared by the lead agency and to reach "its own conclusions on whether and how to approve the project." It also is responsible for "mitigating . . . environmental effects of those parts of the project which it decides to . . . approve." In adopting the Addendum to Order No. 92-02 deleting the shredding requirement, the SDRWQCB was required to include "feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment." Title 14, California Code of Regulations, Section 15096(g)(2). In this case, the SDRWQCB evaluated the impact of the elimination of shredded waste on differential settlement and slope stability, moisture holding capacity, the leachate collection and recovery system, the drainage control system, and the landfill gas system; and it considered the cost of shredding. It determined that the shredding requirement was not a necessary condition to protect water quality. We find that the SDRWQCB complied with CEQA by including feasible mitigation measures. We find, as discussed in Contention No. 1, above, that the shredding requirement is not a mitigation measure necessary to substantially lessen or avoid any significant effect on water quality at the San Marcos Sanitary Landfill. Other mitigation measures for protection of water quality are contained in Order No. 92-02 and SWRCB Order No. 93-8.

4. Contention: The petitioners contend that there is an ongoing leachate problem at the landfill and that the

elimination of the shredding requirement will worsen the leachate problem. They also assert that the County and the SDRWQCB predicted that no leachate would be produced in the vertical expansion of the landfill but that, in fact, a significant amount of leachate has been collected in the leachate collection and recovery system in the vertical expansion that is not due only to heavy rainfall events during 1994 and 1995. The petitioners also contend that more than 450,000 gallons of leachate may have penetrated through the liner of the landfill since 1994 in the area of the sump.

Finding: This Board agrees with the petitioners that the vertical expansion has generated leachate and that there was a problem with drainage and erosion control during heavy rainfall events of 1994 and 1995. This Board does not agree, however, that the elimination of the shredding requirement will worsen the leachate problem. The relationship of shredding and leachate production is addressed in Contention and Finding No. 1 above.

The petitioners' contentions regarding the leakage of leachate through the clay layer is based on the application of a model rather than actual measurements. The petitioners concluded, based on the Darcy's Law, that approximately 450,000 gallons of leachate and surface water runoff collected in the sump have penetrated through the clay liner and have migrated to the ground water underlying the site. The County disagrees with the petitioners' application of the model. The County concluded that leakage is not significant by assuming different

variables in applying the same model. Both the petitioners and the County rely on hypothetical calculations, modeling, and assumptions of parameter values in using the model to support their assertions. Based on the record before this Board, it is not possible to fully evaluate either the petitioners' or the County's assertions. This Board agrees that the petitioners have raised a valid concern about the possibility that leachate has leaked through the landfill. The determinations regarding leachate generation and migration, however, should be based on physical evidence obtained through monitoring data in order to determine whether there is leakage and the effects on ground water, rather than on modeling or hypothetical calculations. If leachate has leaked through the liner, the leakage should be addressed through appropriate detection and evaluation monitoring and corrective action programs, as necessary.

Order No. 92-02 contains requirements to control and monitor leachate. Additional monitoring of leachate and surface runoff is necessary because of site-specific conditions, particularly runoff problems.¹⁰ The SDRWQCB should modify, as it has proposed, the monitoring and reporting program to ensure appropriate monitoring and control of leachate and surface water

¹⁰ In January 1994 surface runoff infiltrated into a sump and the leachate collection tank for the vertical expansion due to a construction error. Again, in January 1995, surface runoff from heavy rainfall infiltrated into a sump and the leachate collection tank. The leachate and runoff water caused by those events is being collected and was used for onsite dust control and is now being treated and disposed offsite under a permit for discharge to the sewer system. Both the County and SDRWQCB point out in their responses to the petitions that the problems that caused these incidence have been corrected. The SDRWQCB issued an administrative civil liability for \$105,000 to the County for the violations that resulted in those discharges.

runoff in the vertical expansion, including monitoring to determine leakage through the liner. The SDRWQCB should also include leachate monitoring requirements that specify that free water surface in the leachate collection and recovery system sump is to be maintained at the lowest elevation that is compatible with the efficient sump operation, according to the sump's design specifications.

5. Contention: The petitioners contend that the containment system at the vertical expansion does not function effectively because (1) partial settlement has resulted in potential fractures and ponded areas in the clay liner and has caused leachate to flow away from rather than towards the leachate collection and recovery system sump; (2) the installment of gas collection wells have caused perforations in the clay liner that have not been properly sealed; (3) moisture sensors installed within the vertical expansion are not working properly and, therefore, "leachate monitoring wells" should be installed above the clay liner to detect ponding; and (4) the permeability of the clay liner increased due to compaction and cracking problems during construction of the clay liner.

Finding: This Board agrees with petitioners that partial settlement is occurring at the vertical expansion because settlement plate monitoring data indicated differential settlement rates as waste is being placed non-uniformly (load by load within phases) over the older refuse. Therefore, the potential exists for this partial settlement to cause damage to

the containment system varying in magnitude and in time based on waste load. However, from the available information it is not possible to determine whether settlement has actually caused fractures, ponding, and reversal of hydrologic gradient in the clay liner. The County should evaluate settlement monitoring data on an ongoing basis to determine the effects of partial settlement and report the results to the SDRWQCB. The County should, in such report, propose the appropriate landfilling sequence that would minimize the opportunity for formation of enclosed depressions and reversal of gradient. The placement of waste loads can then be managed to avoid the formation of long term depressions and changes in hydrologic gradient.

The record does not provide adequate information to determine (1) whether the gas collection wells have caused perforations in the clay liner which have not been sealed properly, (2) whether the moisture sensors are operating properly and whether there is a need to install "leachate monitoring wells" above the clay liner; or (3) whether problems that occurred during construction were adequately corrected. The SDRWQCB should further evaluate these contentions and take immediate action to address such matters where appropriate.

6. Contention: The petitioners contend that the County has failed to comply with financial assurance requirements for corrective action and for closure and postclosure maintenance and that the SDRWQCB has failed to properly enforce those requirements.

Finding: Title 23, California Code of Regulations, Section 2550.0(b) directs the RWQCB to require the discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the waste management unit. The County has provided a letter (dated March 20, 1995) to the SDRWQCB that necessary funding for corrective action "will be withdrawn from the existing Solid Waste Enterprise Fund," which is funded from the collection of tipping fees. This letter does not provide sufficient information to determine if the County "Fund" is adequate or available to comply with the applicable regulations. The petitioners have asserted that a creditor holds a lien on the Solid Waste Enterprise Fund. The County has not refuted that allegation. The SDRWQCB should require the County to demonstrate that the "Fund" or other funding is adequate and available to initiate and complete corrective action as required by the regulations.

Title 23, California Code of Regulations, Section 2580(f), requires the County to establish an irrevocable closure fund or provide other means to ensure closure and postclosure maintenance of each unit in accordance with an approved plan.¹¹

¹¹ *Public Resources Code Sections 43600 and 43601 require the County to provide to the Integrated Waste Management Board evidence of financial ability to provide for closure and postclosure maintenance in an amount equal to the estimated costs in the approved closure and postclosure maintenance plans. The funds must be available to the RWQCB to implement closure and postclosure activities. Although both the Title 23 California Code of Regulations and the Public Resources Code require a fund, only one fund is required. The Integrated Waste Management Board evaluates the adequacy of the fund, including the funding mechanism. The RWQCB evaluates the adequacy of the closure and postclosure plans. Pub. Resources Code § 43101(c)(11)-(12).*

The petitioners contend that the closure fund does not contain sufficient funds to cover the estimated cost of closure. The County asserts that it intends to fully fund the closure and postclosure maintenance before March 1997. The Integrated Waste Management Board has determined that the fund is not adequate for closure and postclosure maintenance costs and will reevaluate the fund according to the County's final closure and postclosure plan, which has not yet been approved. The SDRWQCB should reevaluate the adequacy of the discharger's funds for closure and postclosure maintenance according to the County's final closure and postclosure plan, and should coordinate its review of the fund with the Integrated Waste Management Board.

7. Contention: The petitioners contend that the County's preliminary closure plan specifies that the geomembrane liner will be applied only on the top deck of the landfill not the slopes, which would violate SWRCB Order No. WQ 93-8.

Finding: SWRCB Order No. WQ 93-8 amended Order No. 92-02 to require:

". . . a final cover which is designed and constructed to function with minimum maintenance and consists of, at a minimum, 2-foot thick foundation layer which may contain waste materials, overlain by a 2-foot thick clay liner having a permeability of 1×10^{-6} cm/sec or less, by a geomembrane liner consisting of 60 mil high-density polyethylene (HDPE) material or equivalent, and finally by a 1-foot thick vegetation soil layer, or an engineered equivalent final cover approved by the Regional Board pursuant to 23 CCR Subsections 2510(b) and (c)."

This provision of SWRCB Order No. WQ 93-8 did not exclude the slopes from the specified final cover design. If the County proposes a final cover that differs from the specific requirements in SWRCB Order No. WQ 93-8, it must propose the design as an engineered equivalent final cover that must be evaluated and approved by the SDRWQCB.

IV. SUMMARY AND CONCLUSIONS

1. The SDRWQCB's deletion of Discharge Specification B.16--the "shredding" requirement--from WDRs Order No. 92-02 was appropriate because such deletion is not expected to increase the potential impact to water quality from the vertical expansion.

2. The SDRWQCB did not exceed its jurisdiction in deleting the shredding requirement, which was expressly ordered by this Board, since the SDRWQCB is authorized under Water Code Section 13263(e) to review WDRs. The shredding requirement is not a prescriptive standard under Chapter 15.

3. The SDRWQCB's action to delete the shredding requirement was exempt from CEQA because the action came within the "existing facilities" exemption.

4. The SDRWQCB should modify the monitoring and reporting program to ensure appropriate monitoring and control of leachate and surface water runoff.

5. Partial settlement is occurring at the vertical expansion and, therefore, settlement monitoring data should be evaluated by the County on an ongoing basis to determine and correct impacts of partial settlement and control the placement

of waste to minimize the impact. The results should be reported to the SDRWQCB to include a proposal for the appropriate landfilling sequence. The SDRWQCB should evaluate factors that could impact the integrity of the clay liner.

6. The SDRWQCB should require the County to demonstrate that it has financial resources adequate to initiate and complete corrective action and to fund closure and postclosure maintenance as required by Chapter 15.

7. SWRCB Order No. WQ 93-8 did not exclude the slopes from the requirements for the final cover. Any proposal by the discharger for a final cover must be evaluated and approved by the SDRWQCB.

V. ORDER

IT IS HEREBY ORDERED that:

1. The SDRWQCB shall modify the monitoring and reporting program to ensure appropriate monitoring and control of leachate and surface water runoff consistent with this Order, including a requirement that free water surface in the leachate collection and recovery system be maintained at the lowest elevation that is compatible with the efficient sump operation, according to the sump's design.

2. The SDRWQCB should require the discharger to evaluate settlement monitoring data, propose the appropriate landfilling sequence, and report the results to the SDRWQCB. The SDRWQCB should evaluate factors that could impact the integrity of the clay liner, consistent with this Order.

3. The SDRWQCB shall require the County to demonstrate that it has financial resources adequate to initiate and complete corrective action and to fund closure and postclosure maintenance as required by Chapter 15.

4. Any proposal by the County for a final cover must be evaluated and approved by the SDRWQCB to assure compliance with Chapter 15.

IT IS FURTHER ORDERED that in all other respects, the petitions are 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 June 20, 1996.

AYE: John Caffrey
John W. Brown
Marc Del Piero
James M. Stubchaer

NO: None

ABSENT: None

ABSTAIN: Mary Jane Forster



Maureen Marche
Administrative Assistant to the Board

