

SUMMARY OF NECESSITY AND RESPONSE TO COMMENTS FOR AMENDMENT OF THE REGULATORY PROVISIONS OF STATE WATER BOARD RESOLUTION NO. 93-62, POLICY FOR REGULATION OF DISCHARGES OF MUNICIPAL SOLID WASTE

CHANGES TO SUMMARY OF REGULATORY PROVISIONS

[Note: The existing description of the Policy, as required by Government Code §11353, is at 23 CCR §2908 and addresses the Policy as adopted in 1993. The proposed revised Policy description section, which reflects the current action, is shown in its entirety at Item I.b.3 of the Administrative Record. The changes consist of the addition of the following paragraph together with minor conforming changes to the existing text.]

Paragraph added to describe the current action:

“On \$\$\$\$\$\$ \$ [INSERT DATE], 2005, the State Water Board adopted an amended version of Resolution No. 93-62 which added new federal section 40 CFR §258.4 to the list of federal sections, under 40 CFR Part 258, that the Regional Water Quality Control Boards (Regional Water Boards) implement under that resolution. Pursuant to 40 CFR §258.4, the Regional Water Boards can grant a landfill owner, whose landfill meets certain design, operation, monitoring, and reporting requirements, an exemption to the federal restrictions on liquid acceptance and/or run-on control for a period of up to three years, with up to three three-year extensions thereafter, for the purpose of conducting a research, development, or demonstration (RD&D) experiment.”

AUTHORITY AND REFERENCE

The municipal solid waste provisions of the federal Resources Conservation and Recovery Act (RCRA) are contained in Subtitle D of that act, commencing with Section 4001 (42 USC §6901, *et seq.*, Subchapter IV @ §6941, *et seq.*). Section 4005 of Subtitle D requires each state to have a regulatory program for landfills at which municipal solid waste is discharged (MSW landfills) in order to ensure that

these landfills will comply with the minimum standards for landfills contained in the federal regulations implementing Subtitle D.

The Porter-Cologne Water Quality Control Act (Division 7, commencing with Section 13000, of the California Water Code, "C.W.C.") provides a part of the authority that the state is relying upon to satisfy the requirements of RCRA §4005.

C.W.C. §13172 directs the State Water Resources Control Board (State Water Board) to develop statewide standards for waste and disposal site classification to ensure appropriate waste disposal. C.W.C. §13260 requires any person who discharges waste that could affect the quality of waters of the state to submit a report of waste discharge to the appropriate Regional Water Board, and C.W.C. §13263 directs the Regional Water Boards to issue waste discharge requirements for such discharges. C.W.C. §13267 provides investigative authority for the Regional Water Boards to gather information about discharges through technical and monitoring reports.

Article 3, commencing with Section 13140, of Chapter 3 of the Porter-Cologne Act provides for the adoption of State Policy for Water Quality Control. C.W.C. §13147 directs all state agencies, including the Regional Water Boards and the Integrated Waste Management Board, to comply with State Policy for Water Quality Control in any action affecting water quality.

HISTORY AND CONTEXT

The federal MSW landfill standards contained in Parts 257 and 258 of Title 40 of the Code of Federal Regulations are applicable to landfills at which municipal solid wastes have been discharged after 9 October 1991. They prescribe relatively stringent design and construction standards for MSW landfills, and are directly applicable to persons who own or operate MSW landfills, including a case where the landfill is already regulated by state agencies. For larger MSW landfills, these regulations took effect on 9 October 1993; for the remaining medium and small landfills, they took effect at specified intervals through 9 October 1997.

Only a state that has an "approved program" for regulating MSW landfills in a manner that will ensure implementation of the federal MSW standards may approve specified alternatives to the design and construction standards contained in the regulations; in unapproved states, owners and operators of MSW landfills must comply with the prescribed standards, without recourse to such alternative approaches. In order to preserve the authority of the state to approve alternative

design and construction standards, in accordance with the performance standards in the federal regulations, the state must demonstrate that it can require MSW landfills to be built and operated in compliance with the federal prescriptive standards.

Since the adoption of this Policy, in 1993, all new landfills — and lateral expansions of existing landfills subject to the federal liner requirements — have used a single-, double-, or triple-composite liner. The Policy establishes a single-composite liner as the minimum allowable, on a landfill's bottom, and decreases the theoretical net leachate release rate to just several percent of the release rate one would expect with even a several-foot-thick clay-only liner. There are some situations where a double- or triple-composite liner is appropriate, but the basic minimum single-composite system provides a high degree of leak prevention capability, so long as it is designed and constructed by competent professionals and verified through an independent construction quality assurance program — a standard practice for landfill construction projects. Regional Water Boards have the discretion to require more than the basic single-composite liner, when needed. The Policy allows the use of an alternative composite liner or extra-thick flexible membrane liner on the landfill's steep sideslope portions, given that these tend to drain freely.

In early 1993, the USEPA reviewed California's draft application for program approval, jointly submitted by the State Water Board and the Integrated Waste Management Board, and noted several deficiencies in the state's ability to implement the federal MSW standards based upon the then-existing state regulations (i.e., “Chapter 15”: Chapter 15, Division 3 of Title 23 of the California Code of Regulations, now in Title 27 of that Code). The Porter-Cologne Water Quality Control Act provides sufficient authority for the State Water Board to promulgate regulations implementing the federal MSW standards, but there was not sufficient time to do so prior to the October 9, 1993, deadline for the implementation of the federal MSW standards. Therefore, the State Water Board used its authority to promulgate State Policy for Water Quality Control to address deficiencies noted by the USEPA and to ensure full implementation of all aspects of the federal MSW standards that could affect water quality within the available time.

Use of State Policy for Water Quality Control to ensure implementation of the federal MSW landfill standards by state regulatory agencies offers several advantages over a rulemaking proceeding: the policy does away with the need for

state regulations that repeat standards already set forth in the federal regulations; the State Water Board can ensure that implementation of the federal standards will be accomplished in a manner that is complementary to existing state standards; and preparation and promulgation of the policy can be accomplished more quickly and easily than a rulemaking.

Therefore, in 1993, the State Water Board adopted Resolution 93-62 as State Policy for Water Quality Control. The resolution was approved by the OAL and was included as part of California's application for "approved state" status, which the USEPA granted in early October 1993.

On March 22, 2004, the USEPA promulgated a new section of these regulations [40CFR§258.4], which empowers an "approved state" to allow landfill owners and operators to experiment with certain advanced operational methods, via the adoption of a "Research, Development, and Demonstration Permit" (e.g., in the form of revised waste discharge requirements). In order for the Regional Water Boards to be able to implement this new federal section, it must make a regulatory change and has chosen, in the interest of timeliness for implementation, to revise Resolution No. 93-62 by making conforming changes to update it. The principal change consists of incorporating this new federal section by reference into the list of federal standards the Regional Water Boards are to apply, when and where appropriate. The State Water Board is also taking this opportunity to make minor editorial changes and to eliminate language that is no longer applicable.

SUMMARY OF NECESSITY FOR CHANGES TO THE POLICY'S REGULATORY PROVISIONS

The new federal section allows an exemption to the federal run-on control system requirements of 40 CFR §258.26(a)(1) in addition to the liquids acceptance restrictions of 40 CFR §258.28(a). Of these two, the first is not relevant, given that the State Water Boards regulations impose a run-on requirement that is fully equivalent to that of 40 CFR §258.26(a)(1). Therefore, the State Water Board's revision of this policy focuses upon the liquids restriction exemption that the new federal section allows. The State Water Board's regulations already allow non-MSW landfills to accept liquid waste, so long as the addition does not exceed the water-holding capacity of the receiving waste. Implementation of this new federal section, in essence, allows the same practice at MSW landfills as the State Water Board's regulations currently allow at non-MSW landfills. This new allowance, as

applied by the revised Policy, would be available only to modern MSW landfills having at least a single-composite liner.

Changes to Recitals and §§I.-III. — The changes within the body of the resolution are either editorial in nature (e.g., to reflect that the Regional Water Board’s have already implemented most of the resolution’s requirements) or are necessary for clarifying that the resolution’s scope now includes the new federal section [40 CFR §258.4].

Changes to ATTACHMENT I — This attachment is incorporated by reference into §I.A. of the resolution and is necessary to provide a comprehensive listing of all federal MSW regulations sections that Regional Water Board’s must apply, as appropriate, in developing or revising WDRs for MSW landfills. By adding the new federal section to the top of the listing, that section, upon the resolution’s being approved by the OAL, becomes one of the federal sections that the Regional Water Boards are empowered to apply. This section-specific enforcement and implementation authority, in combination with that established by the CIWMB in a rulemaking it is undertaking, will be the basis for California to petition the USEPA for “approved state status” regarding this new federal section.

Scope of the New Federal Section Incorporated by Reference Under the new federal section, as implemented by the revised Policy, an MSW landfill owner or operator can request that a Regional Water Board revise waste discharge requirements (WDRs) to allow Research, Development, and Demonstration of new technology and approaches dealing with the acceptance of liquid waste (RD&D WDRs) in order to speed up considerably the biodegradation of the waste.

Currently (without RD&D WDRs), the Regional Water Boards can allow a landfill with a composite liner to accept its own leachate and clean water, with the limitation that the waste’s water-holding capacity shall not be exceeded. The use of clean water to moisten the waste (to encourage it to biodegrade) is wasteful if there is some other suitable liquid and it is appropriate to minimize or eliminate such use. Under the proposed new approach, the Regional Water Boards could allow a composite-lined landfill to accept its own leachate, clean water (if needed), and nonhazardous liquid waste from an approved source to achieve this “wetting up” of the waste, subject to the same restriction against exceeding the waste’s water holding capacity. The State Water Board’s slope stability, monitoring, and other

requirements would continue to apply to the RD&D landfill for the duration of the experimental work and thereafter too.

The new federal rule requires that any such RD&D operational change maintain the same federal maximum leachate depth of 30 cm (12") that applies at MSW landfills without such a permit. Therefore, the addition of waste liquid, perhaps in conjunction with an improved leachate collection system design, must be done in a manner that does not increase the leachate depth over the liner. In other words, the goal is to bring the waste to a very moist state without increasing the depth of leachate on the liner. Given this federal restriction, plus the consideration that even landfills that receive no additional liquid still produce leachate, it is the State Water Board's opinion that a bioreactor landfill, operated in this manner, poses no more threat to the environment than would a standard landfill. Furthermore, the rapid stabilization of the waste, using this approach, will result in a significant decrease in the volume of the in-place waste, thereby creating "airspace" for additional waste. It might even be possible to "mine" the waste afterwards, harvesting the soil-like residuals and segregating the inert portions (mostly glass and plastic) for recycling or discharge to an inert landfill. These options should reduce the need for new or expanded landfills.

Under the new federal rule, there are several additional restrictions intended to assure that only environmentally beneficial projects gain initial approval and continue in operation. RD&D operations, at a landfill, can go on for only three years, with a provision for up to three three-year extensions in the event that the experiment's early results indicate that it is worthwhile. The Regional Water Boards must pre-approve the types of nonhazardous liquid waste that the landfill can receive. The discharger must provide their Regional Water Board with an annual report describing the extent to which the project is meeting its previously declared goals, describing any related problems, and interpreting project-specific monitoring results. The Regional Water Boards can terminate a poorly performing RD&D project at any time. Lastly, small unlined rural landfills [under 40 CFR §258.1(f)] are excluded from being able to apply for RD&D WDRs. Therefore, given these effective administrative controls and restrictions, the State Water Board will incorporate this federal allowance because application of the new federal section is likely to result in additional water quality protection, over the long term, at landfills operating successfully under RD&D WDRs and to result in prompt termination of such allowances in the event that an RD&D project proves ill-conceived.

RESPONSE TO COMMENTS