

Report Topic

Report to the Legislature:  
AB 2296 (Montañez)



California Department of Resources Recycling and Recovery

July 2009

STATE OF CALIFORNIA

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NOTE: Subsequent to the completion of this study and the preparation of this report, legislation (SB 63, Strickland) signed into law by Gov. Arnold Schwarzenegger eliminated the California Integrated Waste Management Board and its six-member governing board effective Dec. 31, 2009.

CIWMB programs and oversight responsibilities were retained and reorganized, effective Jan. 1, 2010, and merged with the beverage container recycling program previously managed by the California Department of Conservation.

The new entity is known as the Department of Resources Recycling and Recovery (CalRecycle) and is part of the California Natural Resources Agency. It is no longer part of the California Environmental Protection Agency (Cal/EPA), which is referenced throughout this report.

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## **Background**

California's 282 active and closed solid waste landfills pose a potential environmental threat indefinitely without ongoing maintenance of closed facilities or corrective actions to respond to possible releases of contaminants from these facilities. Without continued maintenance, the integrity of today's "dry tomb" landfills may be compromised by the introduction of water. This allows disposed organic waste to biologically decompose, releasing methane and leachate which create a threat to public health and the environment. Proper maintenance at these landfills must be continued until it can be demonstrated that the waste no longer poses a threat. Federal and State statutes require landfill owners to provide financial assurances to ensure that funds are available for ongoing maintenance and/or corrective action.

This report provides:

- A description of the California Integrated Waste Management Board's (Board) long running efforts to address the appropriate level of long-term financial assurances for postclosure maintenance and corrective action at the 282 landfills subject to closure and postclosure maintenance requirements;
- An overview of the role that financial assurances play in the Board's regulatory oversight of solid waste landfills; and,
- A summary of the Board's responses to the recent legislation in this area.

California has long been the national leader in requiring financial assurances for solid waste landfills. California's initial requirements were established in 1990, in response to Assembly Bill (AB) 2448 (Eastin, Chapter 1319, Statutes of 1987), and pre-date federal requirements. California law provides that landfill owners and operators are responsible for maintaining closed landfills in a manner that does not present a threat to public health, safety, and the environment. Further, owner/operators must provide financial assurances to the State for these maintenance costs in the event that they are unable to maintain the landfills.

The Board recognized that closed landfills need to be maintained beyond the first 30 years of their closure and began examining this issue in a series of workshops held in 2003-2006. Responding to AB 2296 (Montañez, Chapter 504, Statutes of 2006), the Board further studied the conditions that potentially affect solid waste landfills and assessed the efficacy of various financial mechanisms that may be used to provide these assurances. During this effort, the Board developed an estimate of the present day value of the total postclosure maintenance costs projected for the next 100 years for the 282 existing landfills that are subject to the current financial assurance requirements. The projected amount of \$5.6 billion in postclosure maintenance costs will need to be paid by landfill operators or by the State if operators are unable, in order to maintain these landfills in a safe, protective condition. The analysis also identified that, without additional regulatory or statutory enhancements, only slightly more than one third of these costs are currently assured to the State.

The Board has taken action in response to this analysis. The Board's regulatory actions (including those promulgated and those in the process of promulgation) significantly increase the amount of financial assurance that is required for these projected postclosure maintenance costs. These regulatory actions also significantly reduce the risk of landfill operator defaults. In sum, these Board actions reduce the state's potential financial exposure for postclosure maintenance costs over the next 100 years to a present day value of \$100-200 million.

Further Board analysis projects a present worth estimate of \$1.8-2.5 billion in reasonably foreseeable corrective action costs (costs to address potentially threatening conditions at a landfill). These costs are projected for all landfills over the next 100 years. Without additional regulatory or statutory enhancements, financial assurances in regard to corrective action costs currently include only water quality related corrective actions for a portion of the state's landfills. The present worth estimate for these assurances is \$134 million. The Board's proposed regulations would dramatically increase the assured amount of these costs and significantly reduce the projected default amount to \$100-200 million over 100 years.

Combined, all but an estimated \$300-400 million (present value in a 100 year evaluation) in default costs for postclosure maintenance and reasonably foreseeable corrective action have been or are planned to be addressed by the Board's regulatory actions. For reasons further explained in documents attached to this summary, the remaining fiscal exposure that might be anticipated as a result of default cannot be addressed through the Board's current regulatory authority.

## **CIWMB Analysis and Response to AB 2296**

With the passage of AB 2296, the CIWMB continued to focus its analysis of the potential long-term financial exposure to the State from the costs of long-term maintenance of closed landfills in California. The CIWMB's investigation of this issue includes a number of studies, numerous public workshops and stakeholder meetings, and Board hearings. Much of this work is captured in the reports and documents listed at the end of this report. The remainder of this report outlines the actions taken by the CIWMB to respond to the requirements of AB 2296.

The four legislative requirements contained in AB 2296 are:

1. Conduct a study to define conditions that potentially affect solid waste landfills (such as location, construction techniques, materials used and environmental control systems), and study various financial assurance mechanisms that would protect the State from long-term postclosure maintenance of corrective action costs;
2. Adopt regulations (referred to as Phase I) that require closure and postclosure maintenance cost estimates be based on reasonably foreseeable costs the State may incur if it assumes responsibility for those activities due to an owner/operator's failure to do so;
3. Adopt regulations (referred to as Phase II) to implement the findings of the study; and

4. Adopt recommendations to the Legislature for legislation needed to implement findings of the study.

### **AB 2296 Study**

In June 2007, the Board commissioned ICF Consulting Services of Fairfax, Virginia (contractor), to assist in conducting the “AB 2296 Study”. The AB 2296 Study comprises the contractor’s report and the staff analysis and report. This Study included an evaluation of current financial assurance mechanisms, analysis of a potential statewide mechanism, development of a simple risk screening method, creation of a financial exposure modeling tool, and a menu of policy options for further development. The Board accepted the Study in December 2007, and directed the continued examination of extending financial assurance requirements beyond the first 30-years of postclosure maintenance, and of the need for non-water quality corrective action financial assurances.

### **Phase I Regulations**

The Phase I regulations were adopted by the Board at the December 2007 meeting, were approved by the Office of Administrative Law in February 2009, and are now implemented within Title 27 of the California Code of Regulations. As required by AB 2296, these regulations require that closure and postclosure maintenance cost estimates prepared by landfill operators be based on reasonably foreseeable costs the State may incur if the State were required to carry out the maintenance activities. This action will greatly improve the accuracy of future postclosure maintenance cost estimates and should increase the assured amount of postclosure maintenance costs based on those estimates. In addition, another Phase I regulation change improves the financial assurance mechanisms used by landfill operators.

### **Phase II Regulatory Proposal**

CIWMB has directed staff to release for a 45-day comment period regulations that address the financial exposure to the State from both postclosure maintenance and corrective action. The proposed regulations (with adoption expected by December 2009) would require financial assurances at 30-times the annualized postclosure maintenance cost estimate for as long as the waste poses a threat to public health, safety and the environment. The proposed regulations provide operators an incentive to carry out effective maintenance and monitoring by allowing a five-times reduction to the required financial assurance in five-year increments to a base level of 15-times the annualized cost, and a similar increase for lack of continued performance. The proposed regulations broaden the use of existing corrective action financial assurances to include non-water quality related corrective action and establish a financial assurances funding level each landfill would be required to maintain. This funding level would be either the amount established by the Regional Water Quality Control Board for reasonably expected water quality related corrective actions or a CIWMB requirement for non-water quality corrective actions – whichever amount is greater.

The Board’s current regulatory proposal provides a balanced, financial assurances scheme that provides for operator postclosure maintenance for all but those

circumstances where an owner/operator defaults on their obligation. This financial exposure to the State – estimated to be between \$100 and \$200 million over the next 100 years – is what is left of an estimated \$5.6 billion total postclosure maintenance system cost born by operators for the 282 landfills over the same 100 year period. Similarly, the Board has directed that regulations be drafted that address non-water quality corrective action. These provisions leave a potential for owner operator corrective action default of \$100 to \$200 million over the next 100 years.

CIWMB has further directed staff to continue to work with stakeholders on how the proposed regulations will impact closed and closing landfills, and on the regulatory requirements that may be necessary to ensure financial assurance is maintained when a closing or closed landfill is changing ownership. CIWMB may consider further regulation development in these two areas during the Fall/Winter of 2009/2010.

## **Recommendations for Statutory Changes**

Having considered all options, based on adopted Phase I regulations and proposed Phase II regulations, only one action remains. CIWMB recommends that the Legislature consider the possibility of establishing a state-wide pooled financial assurance mechanism or mechanisms (pooled fund(s)) to address the projected \$300 - \$400 million (present value in a 100 year evaluation) in residual financial exposure for postclosure maintenance and corrective action that cannot be addressed through regulation. The Legislature may also want to size the pooled fund(s) to account for extraordinary corrective actions, which are more appropriately addressed through a pooled fund(s). This action would increase the upper-bound of a pooled fund(s). These funds should be raised over the 100 year period and utilized for the postclosure maintenance and corrective action needs of solid waste landfills for which the owner/operators have defaulted. Use of CIWMB's modeling tool and the analysis conducted to date with stakeholders may be of benefit to the Legislature if it decides to move forward with this recommendation.

## **Key Public Meetings and Documents**

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Below are key meetings and documents regarding long-term postclosure maintenance, corrective action, and financial assurances. A complete listing of public workshops and meetings may be found at

<http://www.ciwmb.ca.gov/agendas/mtgdocs/2009/04/00024483.doc>

- 1) **Workshop, Monday, November 03, 2003,**  
<http://boardnet.ciwmb.ca.gov/BAWDS/Agenda.asp?RecID=868&Year=2003&Comm=WKS&Month=11> Post-Closure Maintenance Period And Financial Assurances For Post-Closure Maintenance [Public Notice](#) (WORD97, 144 KB), [Discussion Paper](#) (WORD97, 69 KB)

- 2) **Board Meeting, Tuesday, December 11, 2007, *Permitting and Compliance, Item 10. Consideration Of Adoption Of Proposed Regulations On Landfill Closure And Postclosure Cost Estimates*** -- (Committee Item K),  
<http://boardnet.ciwm.ca.gov/BAWDS/Agenda.asp?RecID=1277&Year=2007&Comm=BRD&Month=12> [Agenda Item](#) (WORD97, 66 KB), [Agenda Attachment 1](#) (PDF, 1623 KB), [Agenda Attachment 2](#) (WORD97, 310 KB), [Agenda Attachment 3](#) (WORD97, 251 KB), [Resolution 2007-242 Final](#) (WORD97, 30 KB), [Meeting Transmittal](#) (WORD97, 36 KB)
  
- 3) **Final (AB 2296) Study to Identify Potential Long-Term Threats and Financial Assurance Mechanisms for Long-Term Postclosure Maintenance and Corrective Action at Solid Waste Landfills** – December 2007  
<http://www.ciwm.ca.gov/LEACentral/Financial/2007Study/Deliverables/FinalReport.pdf>
  
- 4) **Board Meeting, Tuesday, May 19, 2009,**  
<http://boardnet.ciwm.ca.gov/BAWDS/Agenda.asp?RecID=1567&Year=2009&Comm=BRD&Month=5> - Request For Rulemaking Direction On Noticing Revisions To The Proposed (Phase II) Regulations On Long-Term Postclosure Maintenance, Corrective Action And Financial Assurances For An Additional Comment Period - (Committee Item G) [Agenda Item \(Revision 2\)](#) (WORD97, 73 KB), [Agenda Attachment 1](#) (WORD97, 1942 KB), [Agenda Attachment 2](#) (WORD97, 516 KB), [Agenda Attachment 3](#) (WORD97, 227 KB), [Agenda Attachment 4](#) (WORD97, 241 KB), [Agenda Attachment 5](#) (WORD97, 226 KB), [Agenda Attachment 6](#) (WORD97, 431 KB), [Agenda Attachment 7](#) (WORD97, 515 KB), [Agenda Attachment 8](#) (WORD97, 363 KB), [Agenda Attachment 9](#) (WORD97, 71 KB), [Agenda Attachment 10](#) (WORD97, 47 KB), [Presentation](#) (PPT97, 273 KB)
  
- 5) **Assembly Bill 2296 Legislative Report, Long-Term Postclosure and Corrective Action Financial Assurances, Initial Draft - May 11, 2009**  
<http://www.ciwm.ca.gov/agendas/mtgdocs/2009/05/00024578.doc>