

California Integrated Waste Management Board

Board Meeting

March 13, 2007

AGENDA ITEM 8

ITEM

Discussion And Request For Rulemaking Direction To Notice For 45-day Comment Period
Proposed Regulations On Postclosure Maintenance And Financial Assurance Demonstrations
For Landfills

I. ISSUE/PROBLEM STATEMENT

The purpose of this item is to present background information and provide for California Integrated Waste Management Board (Board) discussion and direction to staff on two issues: 1) how the Board can improve its existing cost estimating regulations, based in part on experiences with the BKK Class III landfill in southern California; and 2) of whether and how the Board should require financial assurance (FA) demonstrations for postclosure maintenance (PCM) beyond the first 30 years of PCM and additionally for corrective actions at landfills. This item is based on prior Board direction on these issues, subsequent legislation (AB 2296), and stakeholder comments at informal workshops held by staff.

II. ITEM HISTORY

In November 2003, December 2004, August 2005, October 2005 and January 2006 Board staff held workshops and working group meetings discussing the various issues of PCM as it is currently implemented; the ongoing necessity to maintain closed landfills beyond 30 years; potential corrective actions necessary at landfills; current FA demonstrations provided to the State; and, the potential for new FA demonstrations and financing mechanisms. Background papers and agendas are available for each of these workshops and working group meetings on the Board's website.

In July 2006, the Board directed staff to: 1) initiate a rulemaking to clarify that FA requirements for PCM are for more than 30 years, address cost estimate issues, and require corrective action plans; and 2) begin the process to study potential long-term threats and FA mechanisms for long-term PCM and corrective action at solid waste landfills.

Staff held a workshop on November 27, 2006 to solicit comments on an informal draft for the rulemaking. A summary of the comments received at the workshop through the time this item was prepared is included in section IX of this item. As described below, AB 2296 provides further direction on some of these issues.

On November 15, 2006, the Board approved the concept for a Request for Proposal titled "Study To Identify Potential Long-Term Threats and Financial Assurance Mechanisms For Long-Term Postclosure Maintenance and Corrective Action At Solid Waste Landfills." This Request for Proposal was finalized and released on February 5, 2007. The Proposals are due on Monday, March 19, 2007.

III. OPTIONS FOR THE BOARD

Staff is seeking Board direction to begin the formal process of conducting a rulemaking. The Board's options are:

Option 1 – Direct staff to begin the formal process of a rulemaking that encompasses a suite of cost estimate issues, clarifies that FA requirements for PCM extend beyond 30 years, and requires development of corrective action plans, but defers establishment of FA demonstrations for corrective action until after the study mandated by AB 2296. Specifically:

- a) Clarify that closure, PCM, and corrective action cost estimates be based on costs the State may incur if the State assumes responsibility for the specific activity due to a failure of an owner/operator, and address other issues such as the need for contingencies on all cost estimates (as discussed in the "Analysis" below).
- b) Clarify the requirement that FA demonstrations for PCM must assure that the assured funds are fully available upon request of the Board, regardless of side-agreements between the owner/operator and the provider of the assurance or payment plan arrangements of the owner/operator to provide the assurance to the State.
- c) Clarify that FA requirements are for a minimum of 30 years, and that the evidence of financial ability for PCM must be maintained until the waste no longer poses a threat to public health and safety or the environment.
- d) Explore how existing FA mechanisms could be used to assure greater than 30 years of PCM.
- e) Expand regulations to require preparation and submittal of known or reasonably foreseeable corrective action plans for all landfills under Board authority, and specify elements necessary to the corrective action plan for the facility, such as the repair or replacement of major environmental control systems.

Option 2 – Based on the direction provided by AB 2296, defer all longer-term FA demonstration amendments and corrective action issues until after the study is completed, and direct staff to begin the formal rulemaking on cost estimate issues. This would address only items a) and b) in Option 1. This would mean deleting the grey highlighted areas in the attached proposed regulations prior to beginning the formal rulemaking.

Option 3 – Take no action at this time and direct staff to return with more information.

IV. STAFF RECOMMENDATION

Staff is seeking direction on the options listed above. The Board could pursue Option 1, which would clarify that FA demonstrations for PCM are required for more than 30 years, require corrective action plans, and address various cost estimate issues. This option would still defer the issue of FA demonstrations for corrective action issues to a subsequent rulemaking. However, staff also understands that the history and final form of AB 2296 would defer all longer-term issues until after the mandated study is completed. Therefore, staff suggests that Option 2 is appropriate to pursue.

V. ANALYSIS

A. Key Issues and Findings

Postclosure maintenance activities at solid waste landfills are required to be performed for a minimum of 30 years after the closure of a landfill and until there is no longer a threat to public health and safety or the environment. Currently, however, FA demonstrations for these maintenance activities are required only for the first 30 years after closure. However, PCM activities are likely to be required at most landfills for a longer period than 30 years. In addition, current PCM cost estimates and the associated FA demonstrations do not cover all potential events that may occur at a landfill over a longer-term period, particularly replacement/repair of items expected to have a useful service life of close to or beyond 30 years, and also corrective actions for events such as repair or replacement of major portions of the environmental control systems (e.g. the final cover). If FA demonstrations are required beyond the 30-year PCM period and extended to include corrective actions, at least until it is determined that the waste no longer poses a threat, the question becomes how owners/operators could demonstrate FA to the State of California. The answer to this question has long-term implications for taxpayers that might have to pay for cleanup or corrective action should there be no such assurances, and for landfill owners/operators who might be made responsible for providing longer-term FA demonstrations.

The Board has also been working to finalize the closure of the BKK Class III landfill in West Covina and to maintain and confirm the adequacy of closure cost estimates and the current FA demonstrations for that landfill. This and other experiences have raised questions about some aspects of implementing the Board's existing regulations regarding closure/PCM cost estimates and FA demonstrations.

As noted in Section II, over the last three years the Board has been exploring the issue of whether and how FA demonstrations should be required for more than 30 years along with related cost estimate issues. The following is a very brief listing of the items of consensus of those involved in the workshops and working group meetings throughout the State:

- 1) Operators acknowledge their responsibility for the closed landfill does continue until a determination is made that the closed facility no longer poses a threat to public health and safety or the environment;
- 2) Operators providing FA demonstrations with an immediate monetary value (i.e., trust funds, enterprise funds, insurance policies) fully expect (and some may financially need) to access the funds available to pay for the PCM expenses of the closed landfill, although this is not the primary intent of the funds;
- 3) Recent construction cost inflation and increased competition for contractors has been extremely difficult to plan for and has resulted in significant increases in costs faced by the operator, resulting in difficulties in providing accurate cost estimates and resulting in FA demonstrations that are not capable of matching the actual costs to perform the work, once bids are received, and;
- 4) Corrective Action costs for water quality related issues and PCM Costs are sometimes interchanged based on case-by-case situations. The FA demonstration requirements are then difficult to implement in a consistent manner.

In July, the Board directed staff to initiate two rulemakings and conduct a study. The first rulemaking was to clarify that FA requirements are for more than 30 years, to require development and submittal of corrective action plans, and to address cost estimate issues, but defer FA demonstrations for these corrective action plans until after the study was completed.

Subsequently, and partly as a result of these public workshops and public working group meetings, Assembly Member Montanez authored Assembly Bill No. 2296 which was chaptered and filed with the Secretary of State, September 27, 2006. This bill requires the Board to:

- adopt regulations that provide for an increase in the initial closure and postclosure maintenance cost estimates to account for cost overruns due to unforeseeable circumstances, and to provide a reasonable contingency comparable to that which is built into cost estimates for other, similar public works projects;
- adopt regulations on or before January 1, 2008, that would require closure and postclosure maintenance cost estimates to be based on reasonably foreseeable costs the state may incur if the state would have to assume responsibility for those activities due to the failure of the owner or operator. Specifically, cost estimates are required to include, but not be limited to, estimates in compliance with Sections 1770, 1773, and 1773.1 of the Labor Code, and the replacement and repair costs for longer lived items, including, but not limited to, repair of the environmental control systems.
- conduct a study, by January 1, 2008, to define the conditions that potentially affect solid waste landfills, in order to identify potential long-term threats. The study is also required to include the study of various financial assurance mechanisms that would protect the state from long-term postclosure maintenance or corrective action costs if a landfill owner or operator fails to meet its legal obligation to fund postclosure maintenance or corrective action during the postclosure period, and;
- adopt regulations and develop recommendations for needed legislation to implement the findings of the study on or before July 1, 2009;

AB 2296 thus differed from the Board's July direction by not including the issues of FA requirements beyond 30 years and of corrective action plans in the first rulemaking, but instead deferring them to the second rulemaking. Staff conducted the November 2006 workshop and presented draft regulations based on the Board's July direction. Per AB 2296, the Board is required to adopt regulations on cost estimates and related issues by January 1 2008. The question before the Board is what cost estimate issues this should include and whether the rulemaking should include addressing the FA requirements for more than 30 years and the corrective action plan issues.

Staff suggests that the first rulemaking include the following issues [see a) and b) directly below] at a minimum. Some stem from AB 2296, while some stem from the experience with the BKK landfill. All are intended to improve the existing requirements for closure plans, PCM plans and FA demonstrations, not with issues of what happens after 30 years of PCM at a closed landfill or the need for corrective action plans.

a) Cost Estimate Issues

Under current regulations (27 CCR 21840), the operator shall provide a written estimate, in current dollars, of the estimated annual cost of hiring a third party to maintain, monitor, and inspect the closed landfill. Cost estimates shall be based on the activities described in the PCM plan and account for PCM of the entire landfill. Since the PCM

cost estimate is an annual estimate, the cost of those maintenance items that occur less frequently than annually are prorated to an annual cost.

Since there is no defined timeline for PCM, and by extension for the cost estimate, the estimate by inference should include any maintenance/replacement throughout the entire PCM period, however long it may be. However, generally, only replacement and major maintenance costs that would occur within the first 30 years are included in the cost estimate. Maintenance/replacement of longer-life items such as drainage systems and environmental control systems are rarely included in cost estimates. Staff included draft language in Section 21840 (Attachment 1) that would address this.

Likewise, the requirement that PCM costs are to be third-party costs implies that the costs that the state would incur should the operator not perform PCM and the state must contract for those duties would include prevailing wages. However, most PCM plans do not currently specify prevailing wages when preparing cost estimates. Public Resources Code section 43501(a)(1)(A)(ii), as amended by AB 2296, requires the Board to specify in regulation that cost estimates must include, but not be limited to, estimates in compliance with Sections 1770, 1773, and 1773.1 of the Labor Code, and the replacement and repair costs for longer lived items, including, but not limited to, repair of the environmental control systems. Staff included draft language to address these issues in Sections 21815, 21820 and 21840 (Attachment 1).

b) Issues That Stem From the BKK Situation

Although the recent crises of the BKK Corporation and the BKK Class III Landfill situation in West Covina have largely subsided, there are state-wide policy implications warranting consideration to prevent such situations from occurring in the future. It is important to note that the complexity of the site and situation does not lend itself to obvious solutions that could have prevented the various problems from occurring and that efforts under current programs and requirements have for the most part been successful. Because of the need for expenditure of Board funds and the redesign of the closure project, though, several issues have arisen that if addressed now could potentially limit the probability of a similar BKK-type occurrence in the future. These issues include, but are not limited to:

- Strengthening Board oversight over Class III closure and PCM plans.
- Applying more Board focus and resources to the review and approval of complicated final closure projects tied to land use change and redevelopments.
- Considering allowing the Solid Waste Disposal and Co-disposal Site (AB 2136) Program to be used for landfill closure activities (this would require regulatory change).
- Clarifying insurance requirements and strengthening procedures for payment of premiums and payments from the policy, including the potential for reimbursement for expenses incurred by delays in payment.
- Clarifying and strengthening requirements for updating cost estimates on a periodic basis, including: better defining third-party cost estimates to include prevailing wages and other aspects which would have to be covered if the State was required to implement closure and PCM. Current cost estimate inflation requirements, while used nationally, do not adequately address the current construction cost increases experienced throughout California.

In addition, staff identified issues with other existing FA demonstrations that require regulatory amendments to resolve. Many of these issues were commented on after the November 2006 workshop. Generally, the comments were that since these issues were not specified in AB 2296, the Board should not be proceeding with any rulemaking attempting to address the issues. The commentators also contend that many of these issues should be included in the study required by AB 2296. However, staff disagrees with these comments for several reasons. First, these would entail revisions to existing regulations, and staff would have sought Board direction on these changes even if the Board had never explored the post-30 year postclosure maintenance and corrective action issues specifically identified within AB 2296. Additionally, these items are not within the intent of the study required by AB 2296:

- Trust fund form and language of other financial mechanisms require clean-up and clarification of the language, requirements, and use.
- Local government means test and guarantee forms need to be included in the regulatory appendix.
- The Financial means test should be reviewed and possibly updated to reflect economic effects of inflation over the last 15-plus years.
- The PCM cost estimate calculation should be reviewed and amendments considered to identify the complete costs of PCM associated with the actual operating facility.
- Releases from FA demonstrations during PCM should be based on true expenditures at the closed landfill, not the current 1/30th of the averaged estimate.
- Closure and PCM cost estimates should be clarified and strengthened for updating on a periodic basis.
- “As built” costs should be obtained from operators to assist in evaluation of adequacy of submitted estimates.

The final two issues listed below also are specifically identified within AB 2296 (despite the comments received after the November workshop), and staff recommends their inclusion in the draft proposed regulations:

- PCM cost estimates should include a reasonable contingency.
- Cost estimate requirements for closure and PCM should be considered for inclusion of prevailing wage based estimates.

Staff has included draft language to address these issues in Section 21815 (Attachment 1).

Longer-Term FA and Corrective Action Issues

Staff also believes the Board could address some or all of the post-30 year issues as directed in July 2006, although based on the history of AB 2296 these also could be deferred until after the required study. AB 2296 originally included FA demonstration requirements beyond 30 years and corrective action plans as part of the first rulemaking. However, in final form AB 2296 required a study first before addressing these issues in a subsequent second rulemaking.

c) Extending FA for PCM Beyond 30 Years

Under current law, operators are responsible for PCM for a period as long as the solid waste poses a threat of adverse impacts, but not less than 30 years after the closure of a landfill (PRC 43509; 27 CCR 21900). State law further requires the operator to maintain evidence of financial ability sufficient to pay all PCM costs (i.e., throughout this period) (PRC 43604). This is consistent with the minimal federal standards applicable to the

State (RCRA Subtitle D), which include a requirement of adequate FA for the full costs of PCM (40 CFR 258.72(b)). However, the current FA demonstrations for these PCM activities are only required for the first 30 years after closure.

There are 282 solid waste landfill facilities within the State of California that are subject to the FA requirements of Title 27 of the California Code of Regulations (T27 CCR). These facilities do not include facilities that ceased operation prior to January 1, 1988 (as defined in T27 CCR). Of these 282 facilities within the Board's scope of FA requirements, 41 facilities closed prior to the October 9, 1993 effective date of the federal Subtitle D requirements; however, all but three (3) of these closed facilities provide a FA demonstration for the 30-year PCM period. As and when the Board considers the possibility of extending the FA demonstration requirements of the PCM costs, this means that treating all closed facilities equally under any potential changes will have very little impact on the size of the regulated community.

Staff completed a basic analysis of all the current solid waste facilities subject to FA demonstration requirements. The longer-term PCM costs of California's solid waste landfills were analyzed to determine their aggregate potential liability for "normal" PCM. One hundred sixteen (116) landfills have already stopped receiving waste and are, or soon will be, in their PCM period. By 2009 half of California's landfills will be in postclosure. In the year 2021 the first California landfill will exhaust its required PCM fund; by 2040 all 116 FA demonstrations will have been exhausted. Staff conducted an initial analysis to provide some context about the order of magnitude of unfunded liabilities. This complete analysis is explained in greater detail in Appendix 4 of the background discussion paper from the December 2004 workshop meetings. Briefly, staff estimates that the net present value of unfunded PCM liability for these 116 sites by 2040 is \$150 million, almost 85% associated with publicly operated sites. PCM funding for the currently active sites peaks in 2033 and then declines gradually until the end of the century when recently permitted mega-landfills enter their PCM period. By 2054 the net present value of unfunded PCM costs for all sites in postclosure is more than \$600 million, 77% associated with publicly operated sites. Given the assumptions of the analysis, an annual investment of \$18 million beginning in 2005 would be necessary to offset the future value of unfunded PCM costs accruing in the next 50 years. By 2104 the net present value of unfunded PCM costs grows to more than \$3.2 billion, 74% associated with publicly operated sites. An annual investment of \$46 million beginning in 2005 would be necessary to offset the future value of unfunded post-closure costs accruing in the next 100 years.

These unfunded costs also only represent the regular and expected annual PCM costs at the closed landfills in California. The unexpected costs associated with naturally occurring events such as earthquakes, floods or flooding rains are not represented in these estimates. Also not represented are the longer-term (post 30-year) repair and replacement costs of the landfill environmental control systems in place. All equipment and structures will wear and either need repaired or replaced at some point during PCM of the landfill, and the costs of such repair and replacement can reasonably be foreseen and calculated. These costs are expected to far outpace the currently calculated maintenance items for the closed landfill.

If the Board wishes to move in the direction of requiring FA demonstrations for PCM beyond the initial 30 years of PCM, it would need to further clarify in regulations the provisions

stemming from PRC 43600 and 43602 regarding FA requirements and explicitly state that FA is for a minimum of 30 years and until the waste no longer poses a threat.

If FA demonstrations are required beyond the 30 year period, at least until it is determined that the waste no longer poses a threat, then the question becomes one of how operators could demonstrate FA demonstrations to the State of California? Board staff believes there are viable options to address this, without imposing substantial new and unanticipated costs on owners/operators. These options were explored as part of the informal draft regulations presented at the November 2006 workshop and include:

- The funds currently assured could be simply required to be maintained in perpetuity without allowing access to the funds, or the Board could develop a framework that provides some flexibility by the simple requirement that the FA demonstration always equal the estimated costs of the “next” 30 years of PCM.
- The Board could require the 30-year FA demonstration be re-established at some periodic interval. This is currently being attempted by the California Department of Toxic Substances (DTSC), which requires the operator to re-establish the 30-year FA demonstration at each permit renewal (closed DTSC facilities maintain permit status).

These options could resolve the demonstration requirements to the Board for financially viable facilities. However, these options do not recognize that the FA demonstration may actually need to be utilized by the State at some time to maintain the closed facility. Should an owner/operator of a closed facility cease to be financially viable and unable to maintain the closed facility, there could reasonably be considered no available assets, other than the FA demonstration, for the CIMWB to secure in order to maintain the facility. At that time, the Board may not have enough funds available to maintain the site until it no longer poses a threat to public health and safety or the environment beyond the 30-year financial resource without contributing taxpayer money to the maintenance expenses.

Essentially, these options provide for a longer period of assurances, but only delay the potential problem of lack of resources for PCM until some point in the future, with the anticipation that the facility will no longer pose a threat prior to the owner/operator ceasing to be a viable entity.

d) Using Existing FA Mechanisms For Greater Than 30 Years of PCM

Staff believes that each of the current FA demonstrations may be utilized to provide the necessary financial assurances to the State for PCM beyond the initial 30-year period. As an example of how this might work, here staff provides details on how the Trust Fund, the most commonly used FA mechanism, could work.

The Trust Fund (27 CCR, section 22240) provides a source of interest-earning cash that is readily available to perform planned PCM activities. It is currently funded for a total estimated cost (based on multiplication of the average annual cost) associated with PCM over a 30-year period. Under current requirements, the interest earned on the trust fund is not required to be maintained within the trust fund account, and the operator is allowed to access the fund for annual expenditures for maintenance expenses. This annual amount will exhaust the fund at the end of the 30-year PCM period.

With minor modifications to the trust fund requirements, however, this same FA demonstration might successfully resolve the issue of ongoing annual funding for closed facilities. With the fund fully funded and earning interest at a reasonably prudent rate of

return, the trust fund could be capable of outperforming the rate of inflation. One possible amendment to the requirements could make the trust fund feasible for a period greater than 30 years and essentially provide a very long-term source of revenue for ongoing PCM activities, assuming no catastrophic expenses or financial failures of the trustee.

The draft informal regulations that were presented to interested parties and discussed at the November 2006 workshop attempted to provide a model of this by modifying the PCM funding requirements with a 50-year PCM cost estimate and an additional 20% contingency. Prior to the workshop, staff identified that if investments held by the State were earning an average of 4.59% return (i.e., the average rate of return since 1990 for the Surplus Money Investment Fund [SMIF], which is where the Board currently deposits its holdings), then a 41-year cost estimate for PCM as well as a 20% contingency would be necessary for a "perpetual fund." Both the draft language identifying 50-year cost estimates and the staff identification of 41-year cost estimates were the subject of concerns from stakeholders at and after the November workshop.

Since November, staff has examined the comments presented and the adopted AB 2296 requirements, and worked through numerous calculations with various compounded interest possibilities to see if a modification of the approach would be viable. As a result, staff have identified that if the regulations are amended to deny access to the principal invested (i.e., maintaining a 30-year fund) and require a 20% contingency (matching the contingency on the current closure cost estimates), the life of the PCM fund will be dramatically extended and the operator will be able to access the interest earnings for ongoing PCM expenses.

Based on this, staff believes that it is possible to utilize the current Trust Fund mechanism for a significantly longer PCM period. Similarly, the other existing FA demonstrations could also serve this longer PCM period, as the funds assured by each could be drawn by the Board to a SMIF account.

The Board could include a regulatory amendment to extend existing FA demonstrations beyond the initial 30-year period. If so, staff would include language in Section 22234 to limit the operator's access to interest earnings of the fund, thereby excluding access to the principal of a PCM fund (or the reduction in the value of other PCM FA demonstrations), and to add a 20% contingency to the PCM cost estimate to match the contingency currently required on the closure cost estimates as proposed in Section 21815(e) (Attachment 1). This would apply only to PCM costs. The more extreme and long-term expenses associated with catastrophic costs and corrective actions would not be covered by such a provision; they would require further research (per AB 2296) to identify viable FA demonstrations for long-term corrective action issues for all facilities in California.

e) Corrective Action Plans and Issues

Currently, Title 27 regulations implemented by the State Water Resources Control Board (SWRCB) include corrective action requirements related to water quality. Dischargers must 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 that would impact water quality.

There are no equivalent corrective action requirements in Title 27 for non-water quality related actions. Potential known or reasonably foreseeable non-water quality related remedial actions would include, but not be limited to: installation of a gas control system,

response to subsurface fire, cap replacement due to slide or breach, and drainage system failure. While some of these remedial actions may also be water quality related, they also could be non-water quality related. The more probable scenario would be the need for a gas control system at a site that does not have an existing system. While complete cover failure would be a rare event and would generally coincide with a seismic event, localized failures could be due to poor drainage or localized instability. One of the major activities most frequently mentioned in discussions over the last few years is replacement of the final cap should there be a catastrophic event. Staff believes this fits best with a corrective action plan rather than the PCM plan.

Staff has included highlighted language in Section 21787 of the proposed draft regulations that would require submittal of a corrective action plan. Each facility would have a site-specific plan prepared, submitted and reviewed and approved on a case-by-case basis. If the agreed upon reasonably foreseeable corrective action required a substantial cost estimate, such as the replacement of the final cap, this would be a specific and reasonable cost for the particular landfill. If the Board decides to defer this until after the mandated study is completed (i.e., Option 2), staff would delete the highlighted language prior to the formal 45-day comment period.

Staff is not currently proposing that a corresponding FA demonstration requirement for corrective action plans be included in the proposed regulations. Depending upon the scenario (e.g., partial or complete repair or replacement of final cover and other facilities, and dependant on individual landfill scenarios), the estimated cost of corrective action at any given landfill could be several million dollars. After obtaining a reasonable estimate of costs as part of a corrective action plan, it would be consistent to require the owner/operator to provide an adequate FA demonstration for the cost. The Board's current requirements in Title 27 for FA demonstrations are only for closure of the facility and PCM. Staff believes that these FA mechanisms would not require substantial modifications in order for the Board to utilize them for corrective action issues, as they are already adopted for use when the SWRCB requires the submittal of a corrective action plan for known or reasonably foreseeable releases (for water quality issues). Board staff currently works with RWQCB staff and landfill owners/operators to obtain these FA demonstrations on behalf of the RWQCBs for these corrective action issues.

However, as directed by the Board and by AB 2296, the focus of the mandated study regarding FA demonstrations is on how these potential modifications might be finalized and whether and how a statewide pool, a statewide required insurance coverage, and/or some other new mechanism might be developed and required. Depending on the outcome of the mandated study and subsequent direction of the Board, this research on FA demonstrations would then provide the basis for potential further modification of the Title 27 regulations.

B. Environmental Issues

Staff is unaware of any CEQA or cross-media environmental issues relating to this item.

C. Program/Long Term Impacts

The rulemaking processes will require substantial staff resources over a multi-month process. The long term impact will be increased clarity within the regulations and improved cost estimates and financial demonstration from landfills throughout the State.

D. Stakeholder Impacts

Stakeholders will be impacted initially with the amendments to the PCM plan requirements and financial assurance demonstrations. These impacts will, however, only represent a truer cost actually faced by the operation of the facility and recognition of those truer costs.

E. Fiscal Impacts

Staff is not aware of specific significant fiscal impacts arising from this agenda item.

F. Legal Issues

Staff is not aware of specific significant legal impacts arising from this agenda item.

G. Environmental Justice

Staff is not aware of any Environmental Justice issues related to this agenda item.

H. 2001 Strategic Plan

This item relates to Goal 4 “Manage and mitigate the impacts of solid waste on public health and safety or the environment and promote integrated and consistent permitting, inspection, and enforcement efforts.” This item further relates to the recently adopted Strategic Directive 4 on Landfill Management.

VI. FUNDING INFORMATION

This item does not require any Board fiscal action.

VII. ATTACHMENTS

1. DRAFT proposed regulations

VIII. STAFF RESPONSIBLE FOR ITEM PREPARATION

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B. Legal Staff: Steven Levine

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C. Administration Staff: N/A

Phone: N/A

IX. WRITTEN SUPPORT AND/OR OPPOSITION

A. Support

At the November 2006 workshop, staff provided an early draft of the proposed regulations that addressed all of the issues discussed in the July 2006 item. The current draft (Attachment 1) retains many of these. Some provisions in the November draft (available here <http://www.ciwmb.ca.gov/Rulemaking/Postclosure/default.htm>) were deleted based on comments from stakeholders. These comments are presented here for the record.

Staff considered the following submitted supporting comments and recommendations in the development of the draft proposed regulations.

- G. Fred Lee, PhD, PE (TX), DEE and Anne Jones-Lee, PhD of G. Fred Lee & Associates, El Macero, California.
 - No specific recommended amendments to the draft proposed regulations were identified; however the authors strongly support the Board’s efforts to extend the postclosure maintenance financial assurance requirements until the waste no longer poses a threat.

- Cal-EPA should: 1) initiate a major effort to inform all landfill owners in California that the current tipping fees for municipal solid waste (MSW) management should be increased to cover the deficiencies in funds available to cover postclosure monitoring and maintenance for all landfills; 2) develop guidance on how a political jurisdiction that provides solid waste management in an area should develop the funding to address the legacy of inadequately funded postclosure monitoring and maintenance, and; 3) develop a funding mechanism for current land filling operations that includes sufficient assured funds for postclosure monitoring and maintenance for as long as the wastes are a threat.
- Rachel Oster, Planning Coordinator, Norcal Waste Systems, Inc., San Francisco, California.
 - The commenter supports the concept that all owners should be required to deposit money to a proposed State controlled account to cover any period beyond the initial postclosure period of 30 years.

B. Opposition

Staff considered the following submitted opposing comments and recommendations in the development of the draft proposed regulations.

- Rachel Oster, Planning Coordinator, Norcal Waste Systems, Inc., San Francisco, California.
 - Proposes that the cost estimate submittal requirements of section 21780 be amended to only require reevaluation at each five-year permit review. Additionally, the adjustments currently made based on inflation factors should actually be based on an indicator more directly related to the solid waste industry.
 - Proposes that since section 21787 identifies the submittal of a detailed schedule within the plan, that “detailed” should be clearly defined in the regulations.
 - Requests a definition of the phrase “until the solid waste no longer poses a threat to public health and safety and the environment” within the regulations.
 - Does not agree with the proposed use of the Surplus Money Investment Fund (SMIF) 15-year average annual rate of return as a basis for the submittal of a trust fund of sufficient value to ensure perpetual maintenance as identified in section 22210, as other available rates may be more beneficial to the industry.
 - Disagrees with the perceived assumption that the draft proposed regulations assume 100% failure of all landfills, and propose the Board to relay a better understanding of actual failure percentage, and monies utilized by the state in taking over these failed landfills.

- Chuck Helget, President, Sector Strategies for Allied Waste Services; Evan Edgar for California Refuse Removal Council; Marc Aprea, President Aprea and Company for Republic Services, Inc.; Grace R. Chan, P.E., Department Head, Solid Waste Management Department, Sanitation Districts of Los Angeles County, and; Charles A. White, P.E., Director of Regulatory Affairs, Waste Management.
 - The draft proposed regulation package must be limited to only specific items identified in AB 2296 statutory amendments. All other proposed regulatory amendments must be eliminated and included in the Board's planned study currently in the Request for Proposal process.
 - AB 2296 is intended to focus the Board's immediate attention on the development of improved cost-estimating procedures for closure and postclosure maintenance to include a requirement to use "prevailing wages", better annual inflation adjustments, and other standardizations when making such cost estimates.
 - Without clearly justified direction from the study, regulations of the Board should not require development and demonstrations of reasonably foreseeable corrective action plans beyond the existing State Water Resources Control Board (SWRCB) corrective action regulations.
 - The proposed section 21815 includes cost estimating criteria beyond the AB 2296 requirements which have not been justified.
 - Proposing to include a 20% contingency factor to all postclosure and corrective action costs is not expressly authorized for inclusion in the regulation by AB 2296 and should be deferred to the study.
- Nancy L. Ewert, P.E., Engineering Manager, Technical Resources Division, Kern County Waste Management Department.
 - Extending the minimum time period from 30 to 50 years for postclosure maintenance calculations should be explained and the methodology/rationale proposed for use in defining the point at which the waste no longer poses a threat to public health and safety and the environment should be presented.
 - Recommends that more fairly distributing the risk of future defaults by developing different standards for public agencies and the private sector would be appropriate.
 - Identifies that section 21780 (commenter intended section 21787) uses the term "pollution" without a clear definition of the term.
 - Identifies that section 21815(e) needs further justification regarding the proposed requirement to add a 20% contingency to the plans and to include the use of Caltrans standards.
 - Identifies that section 21815(f) needs further clarification concerning what is meant by the implementation of corrective action remedial action.
 - Identifies that section 21815(f)(2) requires a revised cost estimate that reflects the expected costs (based on submitted contractor bids or other appropriate documentation, and that the term "or other appropriate documentation" be clarified for use in this context.

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- Adopt Regulations by January 1, 2008 that:
 - provide for an increase in the closure and PCM cost estimates to provide a reasonable contingency; and,
 - require closure and PCM cost estimates to be based on reasonably foreseeable costs the state may incur if the state would have to assume responsibility for the closure and PCM.

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- Conduct a study by January 1, 2008:
 - To define conditions that potentially affect landfills, including technologies and engineering controls designed to mitigate potential risks, and,
 - study various financial assurance mechanisms that would protect the state from long-term postclosure and corrective action costs.

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- Adopt regulations and develop recommendations for needed legislation to implement the findings of the study by July 1, 2009.

PCM and FA at Landfills

- Operators responsible for PCM until no longer any threat
- Required to have FA demo for first 30 years of PCM
- 282 solid waste landfill facilities within State subject to FA requirements

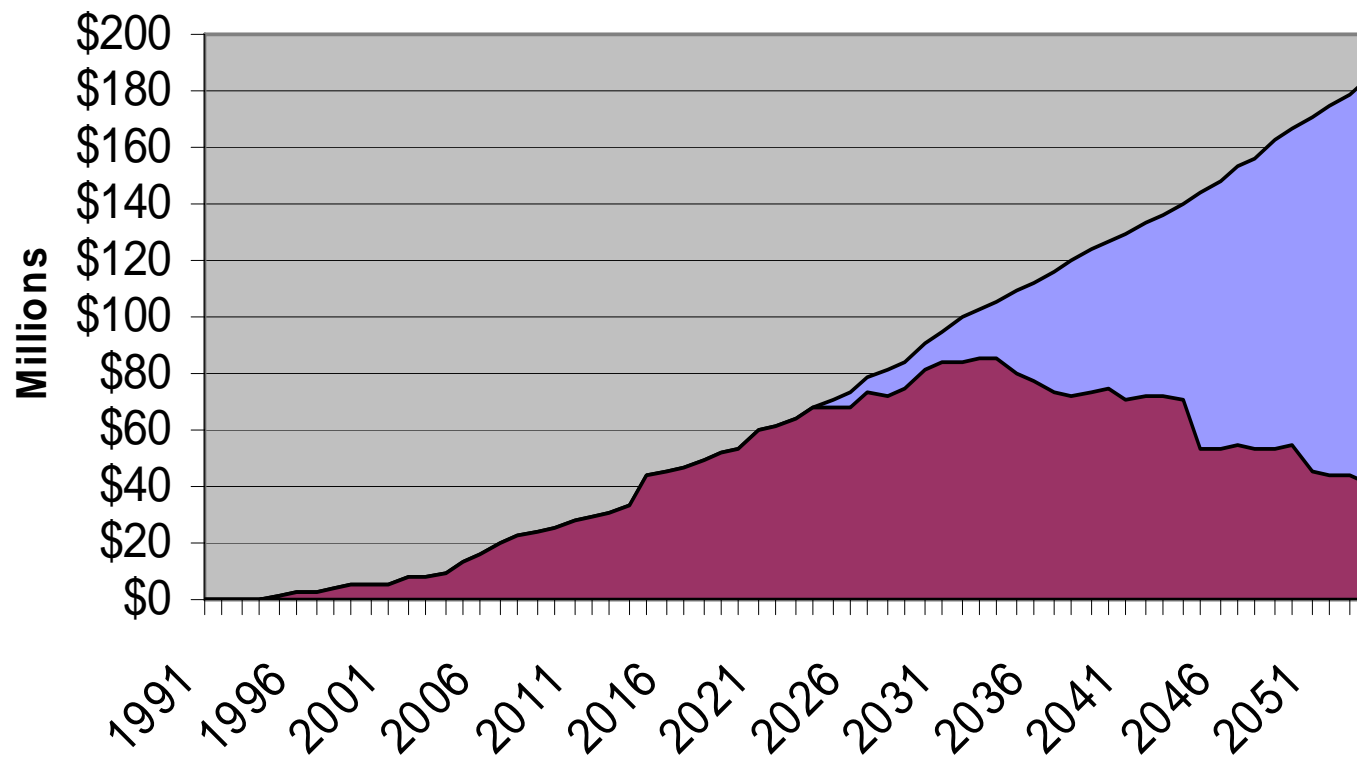
Longer-term Maintenance

- Began exploring longer-term issues (i.e., after first 30 years) in 2003
- Longer-term PCM costs were analyzed to determine aggregate potential liability for “normal” PCM
 - 116 landfills already in PCM
 - By 2021, first landfill will exhaust its required PCM FA demonstration
 - By 2040 all 116 FA demonstrations will have been exhausted

Longer-term Maintenance

- Net Present Value (NPV) of unfunded PCM liability for these 116 sites by 2040 is \$150 million ~ 85% publicly operated sites
- By 2054 the NPV of unfunded PCM costs for all sites in postclosure is more than \$600 million ~ 77% publicly operated sites

Assured (red) and Unassured (blue) Annual Post-Closure Liabilities (all sites)



Longer-term Maintenance

- Unfunded costs only represent regular and expected annual PCM costs
- Unexpected costs - earthquakes, floods or flooding rains not represented
- Also not represented are longer-term (post 30-year) repair and replacement costs of environmental control systems in place

Existing Cost Estimate Issues

- PCM cost estimates for items that occur less than annually should be prorated to an annual cost
- PCM cost estimates should include any maintenance/replacement for entire PCM period
- Costs for closure & PCM should be based on third party cost estimates should the State have to implement closure or PCM (e.g., prevailing wages)
- PCM cost estimates should include a contingency similar to the current closure plan cost estimates

BKK Issues

- Strengthen Board oversight of Class III closure & PCM plans
- Clarify insurance requirements for payment of premiums and disbursements from policy
- Closure & PCM cost estimates should be updated on a periodic basis

Workshops & Meetings

- November 2003, December 2004, August 2005, October 2005, January 2006 - staff held workshops and working group meetings:
 - PCM as currently implemented
 - ongoing necessity to maintain closed landfills beyond 30 years
 - potential corrective actions necessary at landfills
 - current FA demonstrations provided to State
 - potential for new FA demonstrations and financing mechanisms

Workshops & Meetings

- July 2006: Board directed staff to:
 - initiate rulemaking to clarify that FA requirements for PCM are for more than 30 years, address cost estimate issues, and require corrective action plans
 - begin process to study potential long-term threats and FA mechanisms for long-term PCM and corrective action at landfills.
- November 2006: workshop to solicit comments on informal draft for rulemaking

Key Issues

- Cost Estimates
- BKK Situation and Revelations
- Extending FA for PCM Beyond 30 Years
- Using Existing FA Mechanisms For Greater Than 30 Years of PCM
- Corrective Action Plans

Option 1

- Clarify closure, PCM, and corrective action cost estimates must be based on costs State may incur, and address need for contingencies on all cost estimates;
- Clarify FA demonstrations for PCM must assure funds are fully available upon request of Board;
- Clarify FA requirements for PCM extend beyond 30 years;
- Extend existing FA mechanisms to assure greater than 30 years of PCM; and,
- Require known or reasonably foreseeable corrective action plans for all landfills under Board authority.

Option 2

- Clarify closure and PCM cost estimates must be based on costs State may incur, and address need for contingencies on all cost estimates;
- Clarify FA demonstrations for PCM must assure funds are fully available upon request of Board