

Waste Management Comments to ICF Revised Work Plan and Scope of Work (Draft)

***“Study to Identify Potential Long-Term Threats and Financial
Assurance Mechanisms for Long-Term Post-Closure Maintenance
and Corrective Action at Solid Waste Landfills”***

July 10, 2007

General approach: CIWMB has made an efficient choice in contracting by selecting ICF, which had extensive experience evaluating the federal financial assurance requirements. Those analyses are generally viewed as authoritative and objective and should be incorporated into the data-base for this study (i.e., added to Task 1). In addition, ICF should incorporate constructive comments on California’s evaluation of financial assurance and post-closure care submitted by broad-based business associations with extensive experience with RCRA programs. These comments are attached.

The timing of CIWMB’s evaluation is unfortunate, however. US EPA currently is undertaking an extensive analysis of the use and adequacy of the federal criteria for financial assurance. As noted in the attached Memorandum from Susan Bodine, Assistant Administrator for the Office of Solid Waste and Emergency Response, EPA has committed to evaluate in FY 2007 a number of subject areas directly pertinent to the CIWMB review at hand.

Specific Tasks:

Introduction Bullet 1 (conduct a study to define the conditions that potentially affect solid waste landfills): The list of conditions is missing two critical features: operational practices and potential for exposure (including consideration of land use and institutional controls). These should be added to technologies and engineering controls.

Task 2: As noted above, EPA has committed to evaluate in FY 2007 a number of subject areas directly pertinent to CIWMB Task 2:

- The adequacy of the financial test
- The use of insurance, including captive insurance
- The accuracy of CostPro
- The policy issues raised by further defining corrective action estimates
- The issue of financial assurance for post-closure care beyond 30 years

It would make more sense for CIWMB to review EPA’s pending results, and then to conduct further state-specific review.

To the extent that CIWMB continues on its expedited track, it should at the least take advantage of published work already completed by EPA and its advisory committees. EPA’s independent federal advisory committee on environmental financing, the Environmental Financing Advisory Board (EFAB), already has conducted several years

of extensive analysis of use of the financial test and captive insurance nation-wide. EFAB's recommendations, and EPA's responses acknowledging the breadth and soundness of EFAB's analysis and recommendations, are attached to these comments and are directly on point with regard to CIWMB Task 2.

Task 3: The concept of a pooled fund has been under discussion among states, EPA and business under the auspices of the RCRA Corrective Action Project (RCAP). RCAP is planning a second summit in November 2007 to discuss reliable, cost-effective mechanisms to assure long-term stewardship and care. The CIWMB and ICF would be welcome participants. A "hold the date" description of the summit is attached.

With regard to cost estimation for corrective action, accuracy in estimation will be important. Estimates that fail to credit operational excellence and desirable site design features will miss-estimate the potential for corrective action.

Tasks 3 & 4: The emphasis on equitable procedures governing a pooled fund are critical to the functionality and impact of a pooled approach. If the fund is to send the right message and incentive, it must focus on potential impacts on health and the environment by the physical characteristics of the landfill in question. If lesser standards are envisioned based on who owns the landfill (public vs. private sector, large vs. small business), the proposed fund will incentivize lesser rather than more environmental protection. The contractor should also consider the impacts on long-term solvency (and sending the appropriate "price signal" with regard to the beneficiary of the fund) when funds paid by landfill owners or waste generators are diverted from landfill response to other purposes (e.g., debt reduction, recycling infrastructure, etc.). ICF already has information to this effect (cited in discussing Task 3 Step 5).

Task 4: In discussing new potential insurance products, it will be as important to talk to insurance purchasers as insurance sellers.

Task 6: Item 3 should include both the possibility of systems failures and the ability to repair them. Recent experience with the surprising lack of disseminated contamination after Hurricane Katrina indicates that the impacts of systems failures should not be overestimated. As part of the analysis of risk and potential cost, the contractor also should consider the impacts of over-estimation of cost waste handling pricing and the state economy.

The technical portion of the work plan is focused in Task 6 – Risk Screening Methodology. ICF states that "the goal of Task 6 is to develop a method that CIWMB can apply to any individual landfill to determine whether its risk factors for PCM and CA are high, medium, or low." Therefore, ICF does not have a methodology to follow but is proposing to develop one that can be applied to an individual landfill. Clearly, this task is significant in scope and cannot realistically be achieved by ICF given the existing budget and schedule.

The work plan outlines a vague, two-pronged approach described as a "bottom-up" and a "top-down" methodology. While not clearly defined, it appears that the "bottom-up" approach will focus on site-specific design, construction, and compliance records at a minimum. The "top-down" approach appears to relate more to facility location relative to population centers, physiographic features (such as fault lines), and annual

precipitation. However, neither approach is described with any specificity so it is not clear how results will be used (i.e., as a “high altitude” screening tool only, or applied at a site level to determine long-term PCM obligations).

If the intent is to use at a site-specific level to determine long-term PCM obligations, the work plan does not consider key technical factors required to make such a determination. For example risk-screening criteria not mentioned in the work plan include performance based operational practices that reduce long-term threat, stage of waste decomposition as measured by leachate quality and quantity, landfill gas generation rates and trends, groundwater quality trends, etc. These performance-based criteria are all critical elements in any site-specific threat evaluation and should be evaluated at the point of exposure (EPA, 1998, Section 6.6.3). Complying with performance based criteria is now required in Wisconsin (e.g., Wisconsin NR 500 organic stability rules) and other states are using a performance based approach to develop guidance or rule that will provide a methodology for evaluating threat. Methodologies for determination of long-term threat to HH&E using site-specific data include ITRC (2006) and EREF (2006), as the contractor notes. It is also important to note that over 300 federal, state and local regulatory officials have participated in the ITRC web training on a performance based approach to evaluate threat, which has been offered since 2006. Overall feedback on the web training has been very positive and ITRC is planning on classroom training (i.e., 2 ½ day) in the future

The CIWMB points out that some of the key factors they identified are likely to change over time, particularly given the long time-frames under consideration. Specifically, proximity to human populations (i.e., growth concerns), future land use patterns, and changes in waste quantum and composition entering landfills in California due to the state’s goal of zero waste are identified. These issues are certainly important but do not substantially alter the methodology that determines the threat potential of a landfill to potential receptors. Most importantly, ICF acknowledges that their proposed approach is “largely qualitative” and that they are open to changes in the proposed approach. Waste Management is extremely concerned about this aspect of the work plan with the regard to the ability of this study to determine the period of PCM or CA. The plan has no budget and does not contemplate sufficient time to evaluate a technically-based methodology for assessing “risk” to an individual landfill.

Moreover, absent this kind of work, the work plan does not provide the CIWMB with technical justification to extend PCC terms on a site-specific basis since there will be no peer reviewed risk criteria address the potential threat of an individual landfill to HH&E. CIWMB and SWRCB regulations require an evaluation of threat on a site-specific basis rather than a global risk screening. For example:

27 CCR §21900:

“The operator of a solid waste landfill may be released from post-closure after a minimum period of 30 years upon demonstration to and approval by the CIWMB, the EA, and the RWQCB that the solid waste landfill no longer poses a threat to public health and safety and the environment”

This point was specifically addressed in the ITRC (2006) document on long-term care where it states, “...wastes contained within the landfill structure may represent a potential

risk; however, exposure to the waste can be managed and evaluated on a site-by-site basis to determine whether such a condition represents a threat to HH&E...” This foundational statement makes a distinction between evaluation of risk as a statewide estimate and potential threat at an individual landfill.

Waste Management will be providing additional technical references on long-term trends in leachate quality and landfill gas production as well as the use of a performance based approach when evaluating potential threat of a landfill to HH&E. This information can be used by ICF for their review and consideration during implementation of the Work plan. Waste Management will provide references electronically (pdf format) and a summary of their content via email in the near future.

Attachments:

- American Chemistry Council’s Comments to the California DTSC on financial assurance 11.14.05
- EFAB Initial Findings Concerning Use of the Financial Test and Corporate Guarantees 1.11.06
- EFAB Report of the Use of Captive Insurance as Financial Assurance Test -- Cover Letter 3.20.07
- EFAB Report on the Use of Captive Insurance as Financial Assurance Test, March 2007
- EPA Response to EFAB Captive Insurance Report, 4.25.07
- EPA Response to 2005 OIG Report, 10.20.06
- Attach I – EPA Plan for Addressing Financial Assurance, 10.20.06
- Attach II – EPA Upgrading Financial Assurance Program, 10.20.06
- EPA Response to EFAB Endorsing Financial Test, 2.21.06
- Industry Comments (Morgan-Lewis) Supporting Financial Test and Captive Insurance, 11.23.05
- Industry Letter (Morgan-Lewis) on Remedial Financial Assurance, 10.14.05
- Save the Date 11.5-6.07 RCRA CA