



WASTE MANAGEMENT AUTHORITY &
SOURCE REDUCTION AND RECYCLING BOARD

December 20, 1996

Christopher Peck
Regulatory Affairs Manager/Ombudsman
California Integrated Waste Management Board
8800 Cal Center Drive
Sacramento, CA 95826

Dear Mr. Peck:

As a follow up to the Integrated Waste Management Board workshop on development of alternative daily cover (ADC) regulations as required by AB 1647 (Bustamante), I am forwarding a letter from the Alameda County Local Enforcement Agency. The letter, which was referenced at the workshop held at this office in San Leandro on December 2nd, lays out a proposal to consider 35% of total landfill tonnage as an upper limit on ADC.

The 35% proposal was not adopted by this agency. It is our desire that the regulations to be adopted by the Integrated Waste Management Board during 1997 not be built upon general "guesstimates", but rather upon material specific, practical limits which are clearly understood and which are consistent with the intent of the California Integrated Waste Management Act, originally contained in AB 939 (Sher).

If you need additional information, please give me a call at the number listed below.

Sincerely,

Bruce Goddard
Public Affairs Director

enclosure

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LAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

January 29, 1996

Karen Smith
Executive Director
Alameda County Waste Management Authority
777 Davis Street, Suite 200
San Leandro, CA 94577

Dear Ms. Smith:

This letter is in response to your request for our determination of the maximum amount of alternate daily cover (ADC) material which is appropriate to be considered as daily cover at County landfills. Our concerns in this matter involve: (1) assurance of adequate cover (reducing odor, litter and vector problems), (2) consistency with California Integrated Waste Management Board policy, and (3) creating an equitable, reasonable system which is easily implemented and enforced. After reviewing this matter with our staff, I am suggesting that 35% of the total landfill tonnage (waste plus ADC) is a realistic upper limit on ADC percentage.

In order to facilitate monitoring, and minimize regulatory time and expense, we recommend a semi-annual monitoring basis. We also recommend periodic re-evaluation of the cap to ensure that it accurately represents an appropriate maximum daily cover. Please call me at 567-6790 if you have any comments or questions.

Very truly yours,

Bill Reynolds
Program Manager, LEA
Solid Waste Management

maxcover.963

November 22, 1996
David Armstrong
6544 Whispering Pines Dr.
San Jose, CA 95120

Patty Zwarts, Assistant Director
Office of Legislative and Regulatory Affairs
CIWMB
8800 Cal Center Drive
Sacramento, CA 95826

Dear Ms. Zwarts:

Subject: Alternative Daily Cover Regulations

This letter is in response to your request for public comments on the subject regulations. My interest in the subject is as an environmental engineer for over 25 years and as a neighbor of a municipal waste landfill.

I have four recommendations in connection with the AB 1647 criterion that requires "...protection of public health and safety...", and your general statement that "...Alternative materials of an alternative thickness may be approved by the CIWMB as alternative daily cover if the owner demonstrates that the alternative material and thickness control vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment."

1. I have tried (unsuccessfully) for years to pursue a very simple point, i.e., that the public should not have to endure the smell of rotting garbage at their homes, and that such smells are a threat to public health. At the last public hearing I attended on this subject, a dump operator brought a medical doctor to testify that dump odors do not adversely affect health. This doctor could have made the same claim for sewer gases, which contain odorous mercaptans. There is no "proof" that these mercaptans affect public health. However, in most U.S. cities, sewer gases are generally regarded as being adverse to public health, and local agencies require the odors to be abated when they impact residences. Public health professionals have generally taken the position for decades that, in a modern, civilized society, the public should be separated from the off-gases of human wastes, whether from sewage or garbage. The precise health effects may never be clear, but I think it is clear that the public should not have to put up with these smells in their homes. I recommend that a "public health" criterion to be used in evaluating ADCs is "no odor nuisance."

There is a long history of odor nuisance in my neighborhood, caused in part by action of CIWMB in approving a dump expansion in close proximity to homes. The LEA receives revenue from the dump, and is not inclined to control the operation. From this history, I conclude that CIWMB and the LEA do not agree

with the criterion stated above. Thankfully, the odor nuisance problem has been partially mitigated by the excellent, professional work of the local air district (BAAQMD). BAAQMD regulations contain a methodology to address odor nuisance complaints, which they have used for many years.

2. There are others who believe that dumps adversely affect health by *Aspergillus* micro-organisms, volatile organic compounds, and other agents. There is considerable evidence from the Calderon studies, etc. that landfill gas contains volatile organic compounds that are listed by EPA and CalEPA as known carcinogens. I recommend that CIWMB work with the State OEHHA to conduct risk assessments, using the Calderon data, to establish general risk based criteria for separation of dumps from homes. This risk information is needed in order to evaluate alternative ADCs.

3. The language included in the "general statement" does not mention moisture control as a criterion. Moisture, or water balance, is the most important physical variable that a dump operator can control. Moisture is one of the most important variables affecting off-site odor nuisance. I recommend that any proposed ADC be evaluated for its impact on the landfill water balance. Some ADCs will encourage rainfall penetration and some will eliminate most penetration (e.g. synthetic membranes.). For this reason, the appropriateness of some ADCs may be a function of local climate.

4. As I have pointed out in prior letters, CIWMB has adopted solid waste regulations with weak, unenforceable language (e.g. odors should be "minimized," dust should be "minimized") Any future enforcement of the regulations, by means of court action, would be a waste of time, since there are no clear requirements on the dump operators with regard to odor/dust nuisance. Without well written regulations, there are no meaningful standards by which to evaluate the ADCs. Therefore, if the regulations are not to be re-written, I recommend that CIWMB select a committee of the larger private and government landfill operators, and grant them full authority to decide the ADC criteria on their own. By giving them the full authority and responsibility, without the shelter of a CIWMB validation, I expect they will arrive at reasonably responsible decisions.

Thank you for the opportunity to comment.


David Armstrong



BROWNING-FERRIS INDUSTRIES

GOVERNMENT AFFAIRS

Ms. Patty Zwarts, Assistant Director
Office of Legislative and Regulatory Affairs
California Integrated Waste Management Board
8800 Cal Center Drive
Sacramento, California 95826

January 10, 1997

RE: The Promulgation of Regulations Pursuant to AB 1647

Dear Ms. Zwarts:

Thank you for the opportunity to provide our perspective on the California Integrated Waste Management Board's promulgation of regulations concerning the use of alternative daily cover (ADC) pursuant to AB 1647. We greatly appreciate that the Board staff hosted two full-day workshops to discuss and consider all thoughts and ideas about this issue.

In an effort to consolidate our thinking and hopefully, reduce the time you take to review multiple comment letters, representatives from the California Chapters of the Solid Waste Association of North America, Los Angeles County Sanitary Districts, Los Angeles County Board of Supervisors, and Browning-Ferris Industries met and developed the enclosed policy paper for your consideration. Further, although you may receive separate correspondence from Norcal Waste Systems, California League of Cities, and the California State Association of Counties, I believe that this paper is consistent with their perspective on ADC regulation as mandated by AB 1647.

In sum, we support the Board's promulgation of rules that are consistent with the Board's policy of January 25, 1995 concerning ADC and that define performance standards for the use of alternatives to dirt for daily cover that are technically and functionally sound and environmentally protective. We also support the continued development and viability of the composting industry but do not believe that AB 1647 alters that viability on a statewide basis nor do we believe that these regulations should be developed in an attempt to alter that viability.

Again, thank you for your consideration of our comments on this issue and we look forward to our continuing discussion of this effort.

Sincerely,

Mark Leary
Manager, Government Affairs

cc: CIWMB Members

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The Promulgation of Regulations Concerning the Use of Alternative Daily Cover pursuant to AB 1647

Background

On January 25, 1995, the California Integrated Waste Management Board adopted a policy that allowed the use of waste derived material as alternative daily cover to constitute diversion under prescribed conditions. The Board subsequently adopted implementing regulations that were approved by the Office of Administrative Law. The Board's authority to adopt these regulations was challenged in court by the Natural Resources Defense Council and the Council's challenge was upheld by the Sacramento Superior Court.

The purpose of AB 1647 was to amend the applicable provisions of the California Waste Management Act of 1989 to remove any uncertainty as to the authority of the Board to adopt the policy of January 25, 1995 and the implementing regulations and to "overturn" the Superior Court Decision.

AB 1647 (Chapter 987, Statutes of 1996) defines "diversion" for the purposes of the California Integrated Waste Management Act of 1989 and declares that the beneficial reuse of solid waste in the construction and operation of solid waste landfill, including the use of alternative daily cover (ADC), constitutes diversion through recycling and shall not be considered disposal.

AB 1647 requires the California Integrated Waste Management Board to establish, by regulation, conditions for the use of ADC. In adopting the regulations, the Board is directed to consider the following criteria: (1) Those conditions established in past policies adopted by the Board affecting the use of alternative daily cover; (2) Those conditions necessary to provide for the continued economic development, economic viability, and employment opportunities provided by the composting industry in the state; and, (3) Those performance standards and limitations on maximum functional thickness necessary to ensure protection of public health and safety consistent with state minimum standards.

Policy Position

We support the California Integrated Waste Management Board's (Board) promulgation of regulations concerning the uses of Alternative Daily Cover (ADC) pursuant to the mandates of AB 1647.

Further, we believe that it is appropriate that the Board promulgate regulations to ensure that waste-derived material used in excess of that which would be required to be functionally equivalent to dirt is not considered diversion.

In response to the criteria defined within AB 1647 which the Board is required to consider, with no mandate to respond to, we offer the following :

- ◆ We support the Board's policy of January 25, 1995 concerning ADC. In addition to being consistent with AB 1647 in allowing ADC to constitute diversion, it sets a reasonable maximum thickness for green material applied as daily cover.
- ◆ We support the continued economic development and viability of the composting industry but do not believe that AB 1647 alters that viability on a statewide basis nor do we believe that these regulations should be developed in an attempt to alter that viability. Data currently available indicates that the amount of waste derived green material being used as ADC is minuscule in relation to the quantity available statewide for composting.
- ◆ We believe that the regulations should reflect the Board's January 25, 1995 policy that ensures that materials other than dirt that are used to cover waste at landfills are as protective as dirt in fulfilling the federal requirements and state minimum standards for daily cover. Accordingly, we support the Board's development and consideration of technical performance standards for the types of materials that may be suitable for ADC and the parameters as to how they may be used.

In summary, we believe the Board's focus in this promulgation effort should be on the development of performance standards that are technically and functionally sound and environmentally protective.



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Sacramento
California
95814

916.327.7500

916.441.5507

California State Association of Counties

November 26, 1996

Dan Pennington, Chairman
California Integrated Waste Management Board
8800 Cal Center Drive
Sacramento, CA 95826-3268

RE: Alternative Daily Cover Regulations

Dear Chairman Pennington:

The purpose of this letter is to share with you and the members of the Waste Board the position of the California State Association of Counties and the League of California Cities regarding the adoption of regulations to implement AB 1647 and use of alternative daily cover. Because of the press of legislative business, it is not possible for us to attend the two public workshops scheduled to take testimony. Therefore, we are providing this written commentary.

As you know, in 1995 the Board adopted a policy governing the use of alternative daily cover, as it relates to receiving AB 939 credit. The policy, which the League and CSAC supported, was adopted after the Office of Administrative Law disapproved the so-called "seven percent solution" previously adopted by the Board. The January 1995 policy included a performance based standard, required a demonstration project and provided that alternative daily cover could not exceed twelve inches of green material. Thus, the policy limits the amount of credit any jurisdiction can receive due to ADC. The League and CSAC support this limitation as appropriate, since it prevents jurisdictions from "piling on" excess green material in order to receive more credit. Should a landfill exceed the performance standard (i.e., the twelve inches), that material is to be considered disposal and is not eligible for AB 939 credit.

Unfortunately, the Superior Court of Sacramento County ruled that the Board's regulations addressing disposal based counting were not consistent with the statutes. This halted the Board's draft regulations that specified the performance based standards that were being circulated for public comment. Thus, AB 1647 was introduced to make clarifying changes to the statutes and to ensure that green material used as alternative daily cover would be eligible for AB 939 credit, consistent with the Board's policy adopted in 1995.

The League and CSAC respectfully request that the Board adopt regulations that re-instate the disposal based counting procedure and continue the adoption process for the performance based

regulations that reflect the Board's 1995 policy. We believe that AB 1647 provides for such actions and that they are consistent with the intent of the law.

We also wish to respond to those individuals who suggest that the Board reconsider its 1995 policy and adopt implementing regulations for AB 1647 that are not consistent with the 1995 policy and regulations that were in process when the Court acted. While we recognize that AB 1647 requires the Board to consider several factors in adopting implementing regulations, we are not aware of any information regarding these factors that were not considered in adopting the 1995 policy.

Subsequent to the Superior Court's decision, the Board voted unanimously to appeal the decision. It is our understanding that the main reason for this response was "to keep the faith with local governments" who had relied upon the Board's policy in developing plans and programs to implement AB 939. We believe that the same reasons for appealing the court decision apply to regulations that are adopted to implement AB 1647. To do otherwise *would* break the faith with local governments who have relied on the Board's existing policy as direction for achieving the AB 939 goals.

On behalf of CSAC and the League, we respectfully request that the Board act to adopt regulations that will implement the spirit and letter of the 1995 policy. We ask for no more or no less. We will, of course, be happy to discuss our position with you or any members of the Board at your convenience.

Sincerely,



Karen Keene
Legislative Representative
California State Assoc. of Counties



Yvonne Hunter
Legislative Representative
League of California Cities

cc: Members, California Integrated Waste Management Board
Patty Zwarts, Legislative Office
— Ralph Chandler, Executive Officer
Assembly Member Cruz Bustamante

G. Fred Lee & Associates

27298 E. El Macero Dr.
El Macero, California 95618-1005
Tel. (916) 753-9630 • Fax (916) 753-9956
e-mail gfredlee@aol.com

January 13, 1997

Patty Zwartz, Asst Director
Off of Legislative and Regulatory
Affairs
CIWMB
8800 Cal Center Drive
Sacramento, CA 95826

Dear Ms. Zwartz:

I wish to provide some comments on issues pertinent to alternative daily cover requirements. I have repeatedly found in my work on landfill impact issues that landfill operators do not control the airborne emissions from landfills released through the daily deposition of wastes so that they are not adverse to those who own or use properties adjacent to the landfill. This is one of the primary reasons for justifiable NIMBY. As long as the Integrated Waste Management Board's LEAs allow landfill operators to fail to properly apply daily cover to the deposited wastes, there will be justified NIMBY.

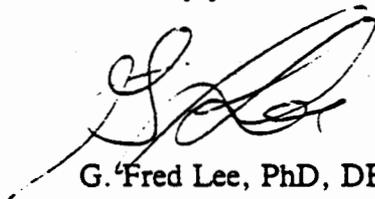
While it is often said that landfill odors are only adverse from an aesthetic perspective, it is now well-known that landfill odors are health threats as well. This issue is discussed in the enclosed report that I developed for the Cal EPA Comparative Risk Project.

With respect to alternative daily cover approaches, whatever is done with respect to daily cover must be effective in controlling off-site emissions at the landfill owner-adjacent property owner property line in accord with current regulatory requirements. If landfills owners are properly fined for allowing off-site odors, then significantly different approaches would be followed in managing daily cover as well as alternative daily cover.

One of the issues that needs to be considered in specifying daily cover for landfills is the fact that some regulatory agencies and landfill owners try to make the daily cover of low permeability. In fact, just the opposite should be done. The "dry tomb" landfilling approach is obviously technically flawed and will eventually lead to groundwater pollution. The best way to minimize the amount of this pollution is to encourage moisture entry into the landfill during the time when the liner system can likely be effective in collecting leachate. Therefore, daily cover for a landfill should be highly porous and encourage any precipitation that enters the landfill to move through the wastes and be collected as leachate. This helps to ferment and leach the wastes. Eventually, fermentation and leaching approaches will be adopted where moisture will be deliberately added to landfills to encourage conversion of the fermentable organics to methane and CO₂ and to leach the wastes to remove those components that tend to lead to long-term groundwater threats.

Enclosed is some back-up information on these issues. If there are questions about these comments or this information, please contact me.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'G. Fred Lee', written in a cursive style.

G. Fred Lee, PhD, DEE

GFL:oh
Enclosures