



## JOINT STATE OFFICE

August 31, 2009

**Send by email to [regview@ciwmb.ca.gov](mailto:regview@ciwmb.ca.gov)**

CIWMB  
Attention: Ken Decio  
1001 I Street  
P.O. Box 4025  
Sacramento, CA 95812

Re: Comments regarding the Draft White Paper on Alternative Daily Cover  
Issue No. 3 and 4 – Processed C&D Waste and Materials

Dear Mr. Decio:

The California Refuse Recycling Council (CRRC) is a statewide non-profit trade association comprised of over 120 companies involved in the collection and processing of organic and waste wood products that also operate approximately 20 composting facilities, 50 material recovery facilities (MRFs), 25 construction and demolition (C&D) debris processing facilities, and over 12 landfills statewide. Our industry, in partnership with local government, has been instrumental in our state's efforts to attain the recycling mandate of 50% waste diversion from landfills, required by the California Integrated Waste Management Act of 1989 (AB 939), and will remain critical to the attainment of future sustainable goals. The ability to use C&D fines from permitted processing facilities as alternative daily cover (ADC) is imperative to the existing C&D industry.

The purpose of this correspondence is to provide comments on the above-referenced project draft White Paper specific to processed C&D materials used as alternative daily cover (ADC). CRRC has the following overarching comments:

1. A limited amount of wallboard should be allowed in C&D fines, which does not pose a threat to the public health, safety or the environment, where the CIWMB should change the definition of C&D ADC to include a limited amount of gypsum per Option No. 5 of Issue No. 3.
2. C&D fines from permitted processing facilities are already part of the Title 27 definitions for alternative daily cover (ADC) per Section 20690, where Option

3. No.1 could be utilized for some types of C&D fines that cannot meet the specification in Section 20690.

### **Issue No. 3 – Wallboard in C&D ADC**

The CIWMB should change the definition of C&D ADC to include a limited amount of gypsum per Option No. 5. Wallboard is found in mixed C&D, and upon screening – as described in the next issue – there are fines of less than 2% for wallboard. Wallboard is inorganic and not compostable or putrescible.

According to the CIWMB Waste Characterization Study of 2003, gypsum board comprised of 1.7% of the solid waste that is disposed of in landfills, or about 676,430 tons per year. With substantial more C&D processing facilities in place since 2003, wallboard is being removed from the landfill, where wallboard is recycled as a compost additive or other beneficial uses.

Wallboard in landfills in California has not shown to be problematic or contribute to the production of hydrogen sulfide. They have been cases studies back east in Florida at C&D landfills with a higher percentage of wallboard, in wetter climates and higher groundwater, and with less Subtitle D control, that have generated hydrogen sulfide. The landfills in California are much different, being Subtitle D, in drier climates, and with such a small percentage of wallboard. In fact, less wallboard is going into the landfills, as the larger sheets and pieces are removed for recovery from the very small processing facilities that are generating the C&D ADC fines, and only the fines are ending up in the landfill. The net benefit of generating C&D ADC with such a small portion of wallboard is so great, given that the C&D processing facility is removing most of the wallboard material from the landfill.

The CIWMB should change the definition of C&D ADC to include a limited amount of gypsum.

### **Issue No. 4 – Demonstration Projects for some types of C&D ADC that do not meet current definitions**

During the workshop held on July 28, 2009, CRRC was surprised to hear for the first time that the C&D fines from permitted processing facilities are considered as “other” types of ADC where demonstration projects would be required, and are not considered as part of the definition processed C&D waste and materials in Title 27.

CRRC firmly believes that most C&D ADC meets the definition below from Section 20690 of Title 27, where an allowable amount of gypsum could be clarified.

#### **20690. CIWMB - Alternative Daily Cover. (T14: Section 17682, 17258.21(b))**

(9) Processed Construction and Demolition Wastes and Materials

(A) Processed construction and demolition wastes and materials shall be ground, pulverized, shredded, **screened**, source separated, or otherwise processed, alone or mixed with soil in a manner to provide a compacted material free of open voids when applied to meet the performance requirements as alternative daily cover.

(B) Processed construction and demolition wastes and materials used as alternative daily cover shall be restricted to the following materials: rock, concrete, brick, sand, soil, ceramics, cured asphalt, lumber and wood, wood products, roofing material, plastic pipe, plant material when commingled from construction work, and **finer** derived from processing the above materials.

(C) Construction and demolition wastes shall be processed prior to being applied to the working face. Prior to spreading and compacting on the working face, these materials shall comply with a grain size specification by volume of 95 percent less than 12 inches and 50 percent less than 6 inches as determined by the EA. The CIWMB shall provide technical assistance in making this determination if requested by the EA. Alternative processing and grain size specification requirements may be approved by the EA if the EA determines that the alternative meets the performance requirements of ¶(a)(2) and (a)(3) of this section and the CIWMB concurs.

(D) Construction and demolition wastes shall be restricted to a minimum compacted thickness of 6 inches and average compacted thickness of less than 18 inches.

C&D fines from processing facilities clearly meet the definitions above, as the material is screened per Section 20690 (9)(A), as highlighted in the regulations, where fines derived from processing the materials are produce, where there are minor amounts of gypsum.

The following excerpt from the Facility Report of a typical C&D processing operation is provided describing the screening portions:

Operations: The Mixed C&D Processing Facility has the operational components to maximize material separation and recovery results and be able to process an expected 70% to 75% recycling rate. The design capacity of the processing lines is 25 tons per hour.

- A loader equipped with a grapple bucket will conduct pre-processing activity in the unloading area. The grapple-bucket will remove the larger items and place them in a stockpile in the unloading area. Larger tree stumps and large wood items will stockpile for further wood chipping on-site.
- The loader will load both the mixed C&D materials from the stockpile onto the processing in-feed conveyor with the assistance of a push wall. The loader will exhaust the stockpile which will be approximately 500 cubic yards, the maximum amount that could be delivered in one-day, and will provide a level of continuity of sorting operations on the processing line between mixed C&D handling. When loading the waste material, the grapple bucket can further crush and munch some of the larger items for easier sorting.
- The material will then be screened on a disc screen with 2 inch openings where the fines will be recovered; amounting to 15% to 20% of the material processed, and is conveyed into a roll-off bin. The disc screen allows the larger materials to propel over an incline array of spinning discs while allowing the smaller dirt, rocks, and fines to fall through the spinning disc. These fines would be classified as alternative daily cover (ADC) that could be used at a permitted landfill to replace soil as daily cover.

This process allows the C&D to be screened so that 95% passes the 2 inch screen and the rest can pass through a 6 inch screen, by far surpassing the Title 27 requirement of 95 percent less than 12 inches and 50 percent less than 6 inches.

Should you have any questions, please contact me at (916) 739-1200.

Sincerely,

A handwritten signature in black ink, appearing to read "Evan W.R. Edgar". The signature is written in a cursive, somewhat stylized font.

Evan W.R. Edgar  
For the California Refuse Recycling Council

A handwritten signature in black ink, appearing to read "Evan Edgar for George Eowan". The signature is written in a cursive, somewhat stylized font.

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George Eowan  
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