COUNTY OF SANTA BARBARA
PUBLIC WORKS DEPARTMENT
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SCOTT D. MCGOLPIN
Director

June 19, 2009

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, California 95814
Via Email to:
http://www.arb.ca.gov/lispub/comm/bclist.php

SUBJECT: AB32 Green House Gas Rule Comments

Dear ARB:

The County of Santa Barbara, Public Works Department, Resource Recovery and Waste Management Division (RRWMD) thanks you for the opportunity to submit comments on the proposed AB32 Green House Gas rule. The comments in this letter apply to the rule sector regarding Methane Emissions from Municipal Solid Waste Landfills. Our Tajiguas Landfill is a large, complex regional facility which opened in 1967 and is still in operation at present. The refuse footprint is almost 100 acres in size and a major cogeneration landfill gas-to-energy plant is located on the site. The design and construction of the facility has been based on accepted industry-wide practices dating from its inception to the current state-of-the-art standards.

Tajiguas Landfill is the cornerstone of our County waste facilities and is operated with the highest standards of safety, technology and innovation. The site won the 2001 Landfill Management Excellence Silver Award from the Solid Waste Association of North America (SWANA) and our entire County Resource Recovery and Waste Management Division (RRWMD) won the 2008 SWANA Gold Award in Integrated Solid Waste Management. The exemplary practices we use every day resulted in these honors given by the most knowledgeable, trusted international private and public industry peers. In addition, Tajiguas Landfill has a very long record of incident-free work in all aspects of the site operations including vehicle and heavy equipment use, construction work, and tasks performed by manual labor due to years of our priority on safety.

We have performed extensive quarterly surface emissions monitoring at Tajiguas Landfill in fulfillment of federal regulations using procedures that have long been reviewed and approved by

the local air district authorities. Those surface monitoring procedures state "if, in the judgment of the field technician, any slopes are deemed too steep to safely traverse, an alternate survey course may be employed" and that "the entire surface of the landfill and site perimeter will be traversed unless unsafe conditions are encountered (i.e. steep slopes or other hazards)". During the extent of the program, only an occasional exceedance of the allowable methane emissions has been found, and in every case, the flagged area has undergone remediation and the exceedance eliminated.

The proposed rule includes a requirement for surface emissions monitoring on the landfill slopes up to 30 degrees. The slopes at Tajiguas Landfill are constructed at 2 (horizontal): 1 (vertical), equivalent to a 24.5° angle, a very typical design at recent landfills statewide. Also, as typical of many landfills, we have slope angle irregularities, such as steeper portions near the lip of a bench.

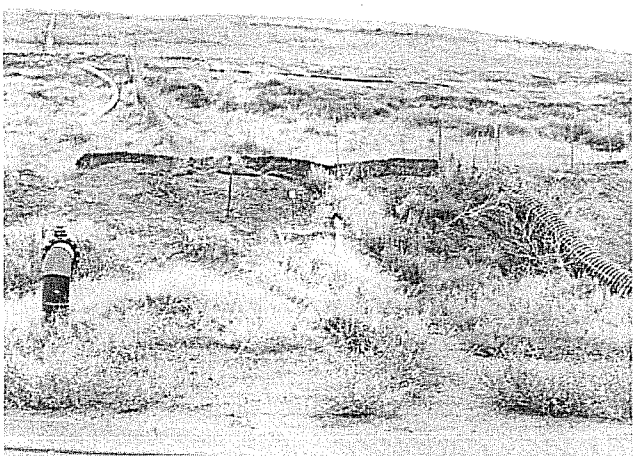
The rule requirement for slope monitoring at angles only greater than 30 degrees contradicts established, successful monitoring procedures and is contrary to our pro-active safety practices. The following specifics apply to our situation, but almost certainly occur at other similar sites:

- Monitoring Instrument Obstruction. The slopes are vegetated to retain sediment and reduce erosion as part of the National Pollutant Discharge Elimination System (NPDES) program. Vegetating slopes is one of the most effective and recommended Best Management Practices (BMPs) under NPDES. Native and drought tolerant plants are grown on the slopes and can range from several inches to several feet high (see photo). Vegetation is especially high in the spring season although dry plant material is present during the fall and all other times of the year. Due to the plant material, it would be impossible to meet the rule requirement that the monitor probe be within 3 inches of the ground surface. In addition, clearing the vegetation from the grid walk pattern is counter productive to the recommended surface water protection regulations.

ESTABLISHED VEGETATION ON EXISTING LANDFILL SLOPE, INCLUDING MATURE TREES AND BUSHES.

- Poor Footing on Surface Soils. Many slopes have an interim cover of soil and rock mixture from on-site materials. These on-site materials include shale and clays which are fine-grained and can be loose in dry weather and slippery in wet weather. We consider loose and slippery footing, especially on an inclined slope, unsafe to traverse.

- Physical Obstructions. Many different structures are built on the landfill slopes including: gas wells, gas piping, and large drain pipes (see photo). Some slopes contain a large number of obstructions which would result in a highly distorted grid pattern. Stepping over large physical obstructions or around frequent smaller obstructions, *while on a slope and also reading an instrument*, is hazardous.



SLOPE OBSTRUCTIONS SUCH AS LARGE ABOVE GROUND PIPES, POSTS, AND FENCING

- Natural Living Hazards. This landfill is located in a very large naturalized area, far away from any significant urban and developed property. Therefore, a large variety of animals and insects are present including snakes, mice, and ticks. A field worker is at higher risk of encounters and bites, even with the usual clothing precautions such as boots, long sleeves and gloves, if monitoring is done on visually obstructed areas, such as the vegetated slopes.

Based on our long safety record, extensive experience and successful large-scale landfill operations, we respectfully suggest removing the reference to a specific slope angle in AB32 Rule section 95471(c)(1)(C). The following substitute language would fulfill the rule objectives while also maintaining long term safe work practices:

> *"Portions of slopes that, in the judgment of the field technician, are deemed too steep to safely traverse shall be exempt from surface monitoring. In addition, portions of slopes shall be excluded that: contain vegetation which prohibit the instrument from meeting the surface distance requirements; contain poor surface conditions which may promote falls such as loose cover and rough terrain;, contain many surface obstructions which frequently interrupt the walking pattern and instrument readings; and harbor living hazards such as ticks, mice and snakes."*

Please do not hesitate to contact me if you have any questions or wish to discuss these comments.

Sincerely,

Nina Danza

Nina Danza
Civil Engineer

ngd