

Director

## State of California—Health and Human Services Agency Department of Health Services



ARNOLD SCHWARZENEGGER Governor

November 13, 2006

Ms. Carrie Hyke San Bernardino County Land Use Services Department, Advance Planning Division 385 North Arrowhead Avenue San Bernardino, CA 92392

Dear Ms. Hyke:

The Environmental Health Investigations Branch, Site Assessment Section (SAS), of the California Department of Health Services (CDHS), has been contacted by the Barstow Unified School District and community members, regarding public health concerns about the Nursery Products Hawes Composting Facility. The Nursery Products Hawes Composting Facility is proposed to operate eight miles west of Hinkley, in San Bernardino County. The purpose of this writing is to provide comments on the Draft Environmental Impact Report (EIR), prepared for the County of San Bernardino, by URS (cover dated September 2006). The SAS works under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR).

As a public health agency, CDHS's review focused on identifying areas or omissions from the EIR that might indicate a potential health risk from the project as it is currently proposed. CDHS identified four areas of concern: 1) "Potentially Significant Impact" from Volatile Organic Compounds (VOCs) emissions exists from proposed operations; 2) the lack of analysis of all site-related contaminants, such as releases of hydrogen sulfide ( $H_2S$ ), carbon disulfide, and dimethyl sulfide; 3) odor and other potential impacts to nearest resident and: 4) a pathogen risk assessment was not conducted.

In section four of the EIR, it is shown that VOC emissions from the Nursery Products composting operations will exceed state and federal air quality standards. The daily VOC emissions are estimated at 1,963.7 pounds, which is 14 times the threshold value of 137 pounds/day, set by the Mojave Desert Air Quality Management District. The EIR states that there is no way to mitigate the "Significant Impact", due to the magnitude of the operations proposed. Enclosed facilities, such as those operating in Los Angeles and Riverside Counties and throughout the country, have been shown to be effective in controlling emissions (VOCs, pathogens, bioaresols, dust, odors). However, this option

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was not considered to be feasible because of the cost to the applicant (Nursery Products, LLC).

CDHS recognizes the challenge San Bernardino faces in dealing with its' wastes. However, the long-term implications for county and its' residents from the degradation of air quality should not be ignored. Air quality (VOCs in air) is linked to number of health related issues, such as asthma, lung and other respiratory diseases, and heart disease.

According to the EIR, emissions of hydrogen sulfide ( $H_2S$ ) could not evaluated, because applicable emission factors are not available for this type of operation. In the absence of default data (emission factors), the authors of the EIR should have conducted a review of the literature or search for comparable emission data to understand the magnitude of  $H_2S$ , carbon disulfide, and dimethyl sulfide emissions.

The EIR estimated (based on modeling) that the "proposed facility could expose some members of the public to objectionable odors". These odors are a result of compounds such as  $H_2S$ , carbon disulfide, dimethyl sulfide and ammonia, which are formed during the composting process (page 4-21). An important point is that while smelling the odor is unpleasant, the individual is also being exposed to those compounds, which may result in health implications. Children may be more sensitive to these compounds than adults because of the relatively smaller diameter of their airways. As stated above, the EIR does not evaluate  $H_2S$  emissions or the other odor producing compounds or the potential health implications from these exposures.

A pathogen risk assessment was not conducted as part of the EIR. A pathogen risk assessment is an evaluation of the airborne transport of pathogens from the facility and while in transport to the facility (uncovered trucks). In 2002, the National Research Council (NRC) of the National Academy of Sciences released a report concluding that the potential adverse human health impact from exposure to biosolids is uncertain and there is a need for the USEPA to update the scientific basis of Rule 503<sup>1</sup>. The NRC recommended a number of activities/studies be conducted related to pathogen/disease causing microorganisms (bacteria, viruses, and parasites) standards, as there is question to whether "current management controls are adequate to maintain minimal exposure concentrations over an extended period of time." To date, the data gaps identified by the NRC remain unanswered.

In conclusion, the EIR inadequately identifies the possible impacts from the proposed Nursery Products Hawes Composting Facility; when a "significant impact" to the

<sup>&</sup>lt;sup>1</sup> In 1993, the USEPA established regulations (Code of Federal Regulations Title 40, Part 503 commonly referred to as Rule 503) governing composting and land application of biosolids. Rule 503 was implemented without an evaluation of the health risks from exposure to pathogens.

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environment is identified, it is apparently outweighed by the cost that would be incurred by the project developer (Nursery Products, LLC).

CDHS appreciates your consideration of these comments. If you have any questions, pleasedo not hesitate to call Tracy Barreau (510) 620-3670 or Marilyn Underwood, Ph.D. (510) 620-3610.

Sincerely,

Tracy Barreau, REHS Staff Environmental Scientist Environmental Health Investigations Branch

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