

TRI-TAC LAND COMMITTEE
ISSUE SUMMARY
LAST UPDATED JANUARY 2008

1. LEGISLATIVE UPDATE

San Joaquin Valley Unified Air Pollution Control District Rule 4565

On March 15, 2007, the San Joaquin Valley Unified Air Pollution Control District adopted Rule 4565 pertaining to Biosolids management. This rule governs land application, ADC, composting and even regulates the use of animal manures. The private and public wastewater industry, in concert with CASA and Tri-TAC, discussed the Rule with SJVAPCD staff, submitted written comments, and testified at the hearing, with only limited success.

The outcome of the rule is as follows:

1. **Alternative Daily Cover** - Eliminates the option of using biosolids (except cured compost) as landfill alternative daily cover (ADC) in the SJVAPCD boundaries and potentially other air districts in the future. This is a major concern because, while biosolids are not currently used as ADC in the SJVAPCD, 21% of California's biosolids are beneficially used as ADC.

2. **Land Application** - Essentially requires incorporation of biosolids into the land within 3 hours of receipt at a land application site, or covering it with a waterproof covering. Fortunately, after a great deal of discussion, the SJVAPCD added in a provision to allow biosolids received after 6:00 PM to be incorporated by noon the next day, taking safety into consideration. This regulation will certainly add to the cost and complexity to use biosolids as a soil amendment.

3. **Composting** - Essentially requires that existing composting facilities be upgraded to aerated static pile or in-vessel composting, as well as employ other mitigation measures, if they process over 100,000 tons of total feedstocks per year. New facilities must meet Best Available Control Technology (BACT), which may be more restrictive than Rule 4565.

Due to the above capacity restrictions, as well as capital expenditures, and extreme operational conditions, we can expect to see added cost for land application and composting in the Central Valley, as we approach the 2008 compliance dates.

Contact: Liz Ostoich, Synagro
Last Updated: November 2007

SB55

Senator Dean Florez introduced SB 55, which would further regulate the transportation and reuse of biosolids. The Bill has many negative features, including onerous POTW testing requirements (i.e. test every load), costly statewide analysis of alleged constituents of concern, and indemnification for unspecified harm (including diminution in value of land). The Bill was stalled in Committee due to the cost of statewide research and analysis, and is effectively dead unless re-raised by Florez during a later session.

*Contact: Liz Ostoich, Synagro
Last Updated: November 2007*

Assembly Bill 1207 (Smyth)

To address the bans and restrictive ordinances regarding biosolids land application, the City of Los Angeles has sponsored statewide legislation, Assembly Bill 1207 (Smyth), that would provide uniform standards for the land application of biosolids in California. The standards would be set by the California Integrated Waste Management Board. The statewide legislation would also rescind previously adopted ordinances and prohibit future ordinances from being adopted.

The bill was introduced in February 2007 by Assembly Member Cameron Smyth and is a two-year bill. The proposed bill seeks to:

- Regulate the use of biosolids through land application
- Establish uniform standards for management of biosolids
- Limit or restrict local jurisdictions from adopting ordinances or restricting the use of biosolids that is not in line with established standards established by California Integrated Waste Management Board

In March 2007, the proposed bill was double referred to the Assembly Environmental Safety and Toxic Material and Natural Resources Committee. The City solicited support for the bill from other wastewater agencies and industry associations and organizations. Discussion about the pre-emption language in the bill was held with several cities and agencies.

In April of 2007, the bill was held in the Assembly Natural Resources Committee for the remainder of the legislative year due to the committee chair's strong concerns about provisions of the bill that would have pre-empted local ordinances that establish restrictions on the land application of biosolids. At that time, the bill garnered opposition from the Sierra Club California, the California Farm Bureau and the Western Growers and potential opposition from the League of California Cities. Over the course of the year, staff and members of the Integrated Waste Management Board expressed concern about the provisions of AB 1207 that would require them to establish uniform standards.

In January 2008, the bill was amended by the author to remove the preemption language and clarify several sections. The bill was considered by the Assembly Environmental Safety and Toxic Material committee on January 8, 2008. The bill was passed by the committee with unanimous vote of 7-0. The bill was re-referred back to the Natural Resource Committee and set for hearing on January 14, 2008. The bill author was asked to consider additional amendments to the bill language. After further discussion with bill sponsor and the author, the Natural Resources Committee hearing was canceled. At this time the bill will not be considered.

*Contact: Diane Gilbert, City of Los Angeles
Last Updated: January 2008*

2. BAY AREA EFFORT ON DEVELOPING A REGIONAL FACILITY

Background

Seven wastewater treatment agencies (EBMUD, SFPUC, DDS, DSRSD, FSSD, USD, and Millbrae) in the San Francisco Bay Area are pursuing the feasibility of developing a regional biosolids facility. The main impetus for proceeding with this study is the increasingly restrictive environment throughout the state for recycling biosolids. Two preliminary feasibility studies were completed by the Bay Area Clean Water Agencies (BACWA) Biosolids Committee. The studies concluded there were three interested agencies to host a biosolids drying facility. From those studies, the seven agencies executed the Joint Exercise of Powers Agreement (JEPA) in July 2006 to further evaluate the costs and impacts of a facility. The JEPA provides the framework for cost sharing and decision making for the Phase 3 efforts which include facility planning and environmental documentation for a regional thermal drying facility. The seven agencies went through a consultant selection process and retained Carollo Engineers to assist with engineering and environmental evaluation at the viable sites. Delta Diablo Sanitation District is the project coordinator and the project manager for the consultant contract. The first task was completed in March 2007 and identified interim solutions with costs that could be implemented if land application solutions are significantly restricted by legislation or regulation.

October 2007 Update

Following Task 1 but prior to initiating the feasibility analysis for a thermal dryer, the consultant was asked to evaluate a waste-to-energy option that was excluded from Phase I and Phase II studies. Although originally assumed to be too difficult to permit in the Bay Area; the agencies wanted to confirm the project could be permitted, confirm the waste-to-energy costs as compared to the thermal dryer and understand the Greenhouse Gas Emissions as compared to the alternatives. Early analysis indicates a waste-to-energy facility could meet BAAQMD permit requirements with Best Available Control Technology to reduce emissions. Costs for a waste-to-energy facility will be prepared and compared to the thermal drying which will lead to a decision on the treatment technology.

Contact: Gary Darling, Delta Diablo Sanitation District

Last Updated: October 2007

3. MAJOR RESEARCH INITIATIVES

National Science Foundation Water Quality Center Fall Meeting

EDCs in wastewater and biosolids - This project will investigate the fate of EDCs in WWTPs and the fate of EDCs in biosolids when used for land application. This project will also develop an advanced oxidation process, such as combined UV treatment and hydrogen peroxide, to remove EDCs from WWTP effluent.

20-year Class B land application study - Samples were collected after the twentieth year of land application. Surface soil samples were subjected to microbial analyses, with no bacterial or viral pathogens found in the biosolids amended soil. The analyses indicated an enhanced soil bacterial community following 20 years of land application. Subsurface soil samples were subjected to chemical analyses, which indicated that it did not appear that any chemical entity would likely limit land application. The study concluded that Class B land application has been sustainable with respect to a lack of adverse impacts on soil microbial and chemical properties.

Biosolids application onto mine tailings - Biosolids were applied to two sites in 1998 and 2000, and have been monitored for HPC, vegetation, nitrates and TOC. Results include a maximum of 78% revegetation and indicate a continued potential for plant growth and normal soil microbial processes.

National Study on the incidence of pathogens and indicator organisms in Class B biosolids - The scope of this project is to collect samples from approximately 30 WWTPs for bacteria, virus and helminth analyses. The last national study was performed in the early 1990s (pre 503s).

Sustainability of land application of Class B liquid biosolids - This project includes an evaluation of previous research performed (bioaerosols, ARBs, endotoxins, virus transport, Salmonella regrowth, 20-year land application study, etc.). Results of all studies indicate that risks of infection from pathogens associated with Class B biosolids are low. Lastly, the study concludes that in Southwestern USA, land application of Class B liquid biosolids is sustainable.

Fate of prions in land applied biosolids - The major objectives of this study is to determine the survival of prions in soil, in groundwater, and during composting of biosolids, and the inactivation of prions in lime treated biosolids. A new laboratory designed for working with prions has been outfitted and approved by the US Dept. of Agriculture.

PBDEs in biosolids - This study has focused on the fate of PBDEs at WWTPs, during soil aquifer treatment and after land application, and the relative risk of indoor air PBDE exposure. Results so far show that PBDEs persist in agricultural soils with degradation half-lives of decades or longer.

Contact: Matt Bao, LACSD
Last Updated: December 2007

4. LOCAL ORDINANCES

Kern County

On June 6, 2006, nearly 83 percent of Kern County voters approved Measure E, an initiative banning the land application of both Class A and Class B biosolids in *unincorporated* Kern County. The initiative impacts two farms (City of L.A.'s Green Acres and Tule Ranch) consisting of over 8,000 acres of Class A biosolids-permitted land where Kern County claims approximately one third of the state of California's biosolids are currently managed. The initiative went into effect on July 22, 2006, and requires all land application to cease by January 22, 2007. The initiative contains provisions for extensions of the termination of land application for six months upon a showing of a "hardship". On August 4, 2006, Tule Ranch's hardship extension was

denied by Kern County staff. Tule Ranch has appealed staff's decision to the Kern County Board of Supervisors.

In anticipation of litigation, the Los Angeles City Counsel approved the request for \$800,000 to hire two legal firms, Washington D.C.-based Beverage and Diamond and Bingham McCutchen. The City of Los Angeles (who manages over 99 percent of its biosolids at its Kern County farm) supported by several co-plaintiffs, including CASA, LACSD, OCSD and several private parties, filed a lawsuit in federal court on August 15, 2006 challenging Kern County's initiative. In the lawsuit, the plaintiffs ask the court to invalidate Kern County's ban via several legal causes of action and, by doing so, validate EPA's regulations that encourage the beneficial use of biosolids through land application. A preliminary injunction will be filed in early September 2006.

Contact: Layne Baroldi, OCSD

Current as of: September 2006

Kings County

On June 7, 2005, the Tulare County Superior Court adopted the Kings County's statement of decision as the decision of the Court, thus upholding the validity of the Ordinance allowing for the use of Class A/EQ compost as the only form of biosolids to be allowed in Kings County.

In April 2006, the Kings County Planning Commission granted a two-year extension for a permit to build a 500,000 ton/year biosolids composting facility near Kettleman City. The facility's output would then be land applied on 12,000 acres of nearby farmland owned by the Sanitation Districts of Los Angeles County. The Kings County Board of Supervisors approved the project in 2004.

Contact: Layne Baroldi, OCSD

Current as of: September 2006

Solano County

The Solano County revised ordinance permitting the continued land application of Class B biosolids has been in effect since Spring 2003, and was renewed with some changes in October 2007. The most significant change to the ordinance is that it requires those POTWs who wish to continue land applying Class B biosolids in Solano County to have "a portion of their biosolids produced as Class A Exceptional Quality biosolids, converting biosolids to energy, or otherwise diverting Class B biosolids away from landspreading or landfilling." In addition, the POTWs must report annually to the Solano County Board of Supervisors on their progress towards this goal.

The annual reporting requirement will be coordinated through the BACWA biosolids committee, to facilitate transmission/coordination of information. The report will also include updates on the Bay Area Regional Facility project, which would meet the intent of the ordinance for those agencies involved. In addition, representatives of various POTWs, including San Francisco, Union Sanitary District, East Bay Municipal Utilities District, and Fairfield Suisun Sanitary District, will continue to be engaged in a series of biosolids stakeholders meetings. These meetings, led by Solano County Department of Resource Management Staff, aim to have an open dialogue for all stakeholders with regards to biosolids regulation in the County. POTW participants have attested to quality

management practices, concern for the community and public health, and a desire for continual improvement.

*Contact: Natalie Sierra, SFPUC
Current as of: December 2007*

Ventura County

The Ventura Regional Sanitation District (VRSD) was successful at the Los Angeles RWQCB hearing on December 6, as unanimous approval was given to the issuance of their WDR permit for their Class A drying process to be cited at their Toland Road landfill. The dried biosolids will be used as alternate daily cover (ADC) at the landfill. This approval followed unanimous approval of the project by the Ventura County BOS on September 11. Approvals were received through the excellent and diligent work of VRSD in overcoming a vocal, articulate, and well organized opposition group of neighbors. The biosolids will be used as alternative daily cover. Methane generated in the landfill will be utilized to power the dryers and excess energy will be sold to the grid. This will eliminate the need to flare landfill gas as is currently practiced. This project will also eliminate a million truck miles per year and an emission of 1800 tons of carbon dioxide to the atmosphere.

*Contact: Greg Kester, CASA
Current as of: December 2007*