
Tri-TAC
Jointly Sponsored by:
League of California Cities
California Association of Sanitation Agencies
California Water Environment
Association

Reply to: Layne Baroldi
Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, CA 92708

August 21, 2002

Supervisor William J. Carroll
Solano County Board of Supervisors
580 Texas Street
Fairfield, CA 94533-6321

Subject: Biosolids Management in Solano County

Dear Supervisor Carroll:

Tri-TAC appreciates the opportunity to comment on Solano County's biosolids program and concurs with staff's recommendation that the Board of Supervisors support alternative number one. Tri-TAC agrees with staff that the existing Solano County biosolids ordinance is "sufficiently protective of public health and the environment, provides a service to Solano County farmers and wastewater treatment plants, and provides for the safe, beneficial re-use of a waste product."

Tri-TAC is a statewide organization comprised of members from public agencies and other professionals responsible for wastewater treatment. Tri-TAC is jointly sponsored by the California Association of Sanitation Agencies (CASA), the California Water Environment Association (CWEA), and the League of California Cities. The constituency base for CASA and Tri-TAC collects, treats, and reclaims more than two billion gallons of wastewater each day and serves most of the sewered population of California. Tri-TAC agrees that there is a clear need for reasonable biosolids regulations and strongly supports Solano County's existing biosolids ordinance.

Existing Regulations

The Solano County Agenda Submittal on the Review of Solano County's local biosolids program provides a thorough summary of current status of biosolids regulations. The object of these regulations is to ensure that land application of biosolids is safe to human health and the environment. Tri-TAC strongly believes that human health and safety is protected by these existing regulations.

The pathogen reduction requirements in the federal biosolids regulation (503 Rule) are based on a large body of sound science that has accumulated through many years of experience in managing wastewater and its residuals in the United States and abroad. In the development of the 503 Rule, the EPA developed two options for pathogen reduction, known as Class A and Class B pathogen reduction requirements. Class A biosolids are regulated with respect to the levels of salmonella, enteric viruses, and viable helminth ova that may be present in the biosolids. Class B biosolids are regulated with respect to the density of fecal coliform bacteria and must be produced according to one of a series of process

alternatives. Class B biosolids are also subject to land use restrictions, which are designed to further reduce pathogens that result in as safe a practice as the use of Class A biosolids.

As mentioned in the staff report, the State of California further regulates biosolids under State Water Resources Control Board Water Quality Order No. 2000-10-DWQ – General Waste Discharge Requirements for the Discharge of Biosolids to Land for use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities (“General Order”). With respect to pathogens, the General Order, supported by an Environmental Impact Report (EIR), states that “Public health problems can be prevented with appropriate control over public access to the application areas and restrictions on the type and use of crops grown on the application sites. Buffer zones around water supply wells, surface water drainage courses, and public areas are designated to prevent transmission of pathogens to the public.” In addition, the General Order (Section 10) contains specific requirements for Class B biosolids including surface water runoff restrictions, land use restrictions, and size of buffer zones.

Biosolids Production

Class B biosolids can be produced by any of the five methods approved by the EPA (i.e., aerobic digestion, air drying, anaerobic digestion, composting, and lime stabilization) or by any other method that has received EPA’s certification as a process equivalent to a Process to Significantly Reduce Pathogens (PSRP) specified in the 503 Rule. All of these processes stabilize organic solids contained in the raw sewage sludge to produce a very consistent Class B biosolids product. All of the biosolids that are currently being applied in Solano County meet the vector attraction reduction requirements within the treatment plant.

Biosolids Management

Class B biosolids are being applied to only a very few sites that have very limited public contact. Land application of Class B biosolids in Solano County is being performed in full compliance with the management practice criteria specified in 503 Rule, and the General Order, that ensure the protection of public health and safety of the environment. Nationally, many millions of tons of Class B biosolids have been spread in the United States since the implementation of the 503 Rule. Class B biosolids have been used in every state for a variety of applications including agriculture, silviculture, and land reclamation purposes. Despite this widespread use, there have been no reliably documented cases of illness associated with exposure to biosolids that have been treated, applied, and managed in accordance with the 503 Rule. Numerous scientific studies have confirmed the safety of biosolids application.

At the request of the EPA, the National Academies’ National Research Council (NRC) reviewed the 503 Rule, and published in 1996 its report entitled, *Use of Reclaimed Water and Sludge in Food Crop Production*. The major conclusion of the report states that:

While no disposal or reuse option can guarantee complete safety, the use of [municipal wastewater and biosolids] in the production of crops for human consumption, when practiced in accordance with existing federal guidelines and regulations, presents negligible risk to the consumer, to crop production, and to the environment.

Specifically with respect to risk of contraction of disease from pathogens in Class B biosolids, the report states:

One must keep in mind that there are a great many sources of these infectious disease agents other than reuse of wastewater or sludge, such as prepared food and person-to-person contact. Therefore, the potential added increment of pathogen exposure from the proper reuse of reclaimed water or sludge is minuscule compared to our everyday exposure to pathogens from other sources.

Recently, in July 2002, the NRC published its second review report on the 503 Rule entitled *Biosolids Applied to Land: Advancing Standards and Practices*. This review was conducted at the request of the EPA which charged the NRC "To independently review the technical basis of the chemical and pathogen regulations for biosolids, focusing only on human health." In an unusual format, the NRC reported its Overarching Findings; "There is no documented scientific evidence that the 503 Rule has failed to protect public health." Tri-TAC support's the Report's recommendation to continue to update the scientific basis of the 503 Rule to (1) ensure that the chemical and pathogen standards are supported by current scientific data and risk-assessment methods, (2) demonstrate effective enforcement of the 503 Rule, and (3) validate the effectiveness of biosolids management practices.

Conclusion

In short, the multiple critical technical reviews to which the 503 Rule have been subjected during the last decade (including that of the second NRC), have found no fundamental flaws with its underlying scientific base or its effectiveness to protect public health and the environment. The scientific evidence shows that Class B biosolids may be beneficially used without adverse effects on public health or the environment if the biosolids are managed in accordance with the 503 Rule and the General Order.

Tri-TAC appreciates the opportunity to comment on Solano County's biosolids program and concurs with staff's recommendation that the Board of Supervisors support alternative number one. Tri-TAC agrees with staff that the existing Solano County biosolids ordinance is "sufficiently protective of public health and the environment, provides a service to Solano County farmers and wastewater treatment plants, and provides for the safe, beneficial re-use of a waste product." Please contact me at (714) 593-7458 if you have any questions regarding these comments.

Layne T. Baroldi
Tri-TAC Land Committee, co-chair

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c: Supervisor Barbara Kondylis
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