

TRI-TAC LAND COMMITTEE

ISSUE SUMMARY

1. SWRCB BIOSOLIDS GENERAL ORDER (GO) & ENVIRONMENTAL IMPACT REPORT (EIR)

Summary

The General Order (GO) for the Land Application of Biosolids was adopted by the State Water Resources Control Board (SWRCB) on July 22nd. The GO allows for continued land application of biosolids (Class B and Class A) in California via a general permit mechanism. There are two significant changes to this GO. These changes are:

- The addition of policy language that articulates the SWRCB support of beneficial use options for biosolids management; and
- The addition of a mitigation measure to address the low potential for the presence of radioactive materials in biosolids.

CASA and Tri-TAC are currently working with the SWRCB on compliance guidelines for this new mitigation measure.

Background

A GO has been in effect in California since 2000. The GO was challenged on two occasions. On the first occasion, the Court upheld the GO and the underlying Program Environmental Impact Report (PEIR). Upon appeal, the Appellate Court directed the SWRCB to revise the PEIR by expanding the alternative analysis section to include a Class A only alternative and a food crop limitation alternative.

The revision of the PEIR was completed in February 2004 and a Draft PEIR was released for public review and comment. The Draft PEIR found that the land application of Class B biosolids was the environmentally superior alternative. Additional information on Draft PEIR public comment process can be found in the April 2004 CASA Biosolids Bulletin.

Upon conclusion of the public comment period, a Final PEIR was prepared. The Final PEIR contains copies of all of the comment letters received by the SWRCB, the responses to these comments, and changes to the Draft PEIR that were made in response to the comments. Some of the changes to the Draft PEIR include: the incorporation of cost information to convert from Class B to Class A treatment technologies, as supplied

by wastewater treatment agencies; updated information on biosolids management practices in California, as supplied by the U.S. EPA Region IX; current information on landfill and ADC practices, as supplied by the California Integrated Waste Management Board; and a reference to an additional mitigation measure to be incorporated into the GO. The additional mitigation measure is discussed later in this article.

The Final PEIR was released for public review and comment in late June 2004 and a SWRCB workshop was held on July 7th. The written comment period closed on July 16th. On July 22nd, the SWRCB held a meeting where, after a brief public comment period, the SWRCB considered actions to decertify the original PEIR, vacate the existing GO, certify the current PEIR, and adopt the new GO.

At the conclusion of the oral comment period, the SWRCB voted unanimously to approve the proposed actions and a new GO was adopted. Four of the five Board members were present. These members were Chairman Baggett and members Carlton, Silva, and Sutley.

Content of the New GO

The GO has been revised from the Modified GO that was most recently in effect. The main revisions to the GO are the addition of a new mitigation measure and the incorporation of a policy statement.

What is the New Mitigation Measure?

A mitigation measure has been added to address the potential for the presence of radioactive materials in biosolids. This was identified as an area of potential significance in the PEIR based on the review of the draft report prepared by the Interagency Steering Committee on Radiation Standards (ISCORS) titled "ISCORS Assessment of Radioactivity in Sewage Sludge: Recommendations on Management of Radioactive Materials in Sewage Sludge and Ash at Publicly Owned Treatment Works." This report can be accessed at <http://www.iscours.org/subcomms/sewage.html>.

The mitigation measure states that "Operators that produce land applied biosolids are to follow the recommendations contained in the ISCORS's November 2003 draft report entitled "Assessment of Radioactivity in Sewage Sludge: Recommendations on Management of Radioactive Materials in Sewage Sludge and Ash in Publicly Owned Treatment Works" (ISCORS Technical Report 2003-04), for screening, identification, and consultation."

Addition of a Policy Statement

A policy statement has been added to the GO that explicitly articulates the SWRCB's support of the beneficial use of biosolids. The policy statement reads:

"This General Order establishes a regulatory system to manage biosolids in a manner that is reasonably protective of public health and the environment to the extent of present scientific knowledge. The beneficial use of biosolids through land application under this General Order is environmentally sound and preferable to non-beneficial disposal."

Additional clarifying language from the adopting resolution further articulates the SWRCB's position on biosolids. This language reads:

"The SWRCB finds that the Class A Only Alternative is infeasible because it would restrict the options available to POTWs for the land application of biosolids and substantially increase their management costs. . .

"Having options available is necessary in order to enable POTWs to effectively manage their biosolids at a realistic cost. The health-related distinction between Class A biosolids and Class B biosolids, when applied subject to Part 503 regulations and the additional provisions of the GO, is negligible. Both result in essentially the same level of protection for the public. As discussed in the FEIR, there have been no documented cases of health impacts directly related to the land application of biosolids. Adoption of the Class A Only Alternative would create an additional economic burden for POTWs for negligible advantages in health and safety protections."

[Excerpted from CASA Biosolids Newsletter, August 2004]

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Current as of: February 2005

2. BACWA's WORK ON DEVELOPING A REGIONAL FACILITY

Eighteen wastewater treatment agencies in the San Francisco Bay Area have pursued the conceptual feasibility of developing a Regional Biosolids Processing Facility. The main impetus for proceeding with this study is the increasingly restrictive environment for recycling biosolids via land application and associated anticipated biosolids management cost increases. The majority of the agencies participating in the study have very limited biosolids management options in place.

The participating agencies have recognized there are potential synergies and benefits associated with developing a regional solution to biosolids management, including:

- Economies of scale; especially compared to each POTW developing and operating its own processing facilities or Class A solids handling facilities;
- Enables larger agencies to diversify beneficial use and disposal options;
- Provides a viable alternative for smaller agencies that have less biosolids and therefore less influence in the market;
- Assurance that biosolids products can be locally developed and beneficially used, which supports the credibility of Bay Area POTWs;
- Relative ease of permitting a single facility versus multiple facilities; and
- Reduction in competition among agencies for marketing of similar products

The feasibility study, which was completed in July 2004 and led by the Bay Area Clean Water Agencies (BACWA) Biosolids Committee, evaluated a range of potential

technologies, sites for facilities, and governance structures for implementation of a regional biosolids management program.

The Committee has determined that a Regional Biosolids Facility is feasible based on the following factors:

- There is interest in the facility from a broad cross-section of Bay Area wastewater agencies.
- Technologies have been identified that are suitable for a regional facility.
- There are available sites within the 9-county Bay area to accommodate a regional facility.
- There appears to be agreement on conceptual governance issues related to a regional facility.

The next phase of the project will refine the governance structure for the project as well as the siting and technology analysis. It is expected this work will be completed in the spring of 2005. At that point, detailed facility planning and environmental documentation will be started.

Update: The BACWA Board approved at its September meeting a consultant contract with CH2MHill for entering into the second phase of work. Work will begin in August.

Second Update: Two workshops were held in November. The first focused on governance issues and the second on technologies that are being considered. Site visits are scheduled in December. Additional workshops on both governance, technology and siting will occur after the first of the year.

Third Update: A workshop for agency attorneys was held at the CASA Winter Conference in Palm Springs, CA. Governance issues were the prime subject of discussion. The next workshop is March 4, 2005, at which participants will narrow down the siting selection, and discuss draft terms and conditions for the viable governance structures still under consideration.

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Last Updated: February 2005

3. EPA Ongoing Projects to Respond to NAS July 2002 Report

EPA announced in the 12-31-03 Federal Register its final action plan to address the recommendations made in the National Research Council's July 2002 report on the land application of biosolids. Included in the plan are 14 specific projects to enhance its ongoing research and outreach activities.

The project steering committee for the top ranked project (Rapid Incident Response for Health Related Complaints) was formed in January 2005. This committee will develop the RFP for the project.

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Current as of: February 2005*

4. LOCAL ORDINANCES

Kern County

Kern County Water Agency

- The Kern County Water Agency (KCWA) is concerned about the potential for contamination that may be caused by the land application of biosolids over "useable groundwater".
- KCWA officials say there's no proof that biosolids have polluted Kern's groundwater, but "they don't want to take chances."
- KCWA drafted a RFP to facilitate the relocation of ~7,000 acres to land on the west side of the County. Of the existing biosolids-permitted acreage, only a 2,700-acre portion of Tule Ranch will remain viable since it is not located over useable groundwater (this is where OCSD manages ~35% of its biosolids).
- Six proposals were received and staff is currently reviewing them and should have a list of selected proposals available early February for generator and KCWA review and considerations.
- Based on KCWA's time line and schedule, the process to move sites would occur in late 2005

Senator Florez (D – Shafter)

- Senator Florez has taken up a crusade against dumping "LA's" wastes in Kern County (green waste, manure & biosolids)
- Senator Florez held a Senate Committee hearing on Biosolids in Bakersfield on December 20th
- The Senator's questions were: Are we threatening the groundwater with biosolids? Is sufficient enforcement taking place and if not, what more needs to

be done? Is Kern County being unfairly burdened with waste? How should we handle biosolids coming into Kern County?

- The next step to be taken is for the southern California generators (specifically the City of L.A.) to work with KCWA to review the proposals and facilitate the relocation. If the City of L.A. does not relocate, then it is anticipated that pressure from both Senator Florez and the KCWA will result in the Kern County Board of Supervisors reacting by amending the existing ordinance that at a minimum, bans the use of any form of biosolids over Kern County's groundwater bank.
- Since the existing site owners will not be compensated for any loss of their investment that may result from the relocation process, the landowners may not comply with the relocation.
- It is anticipated that, Senator Florez will introduce legislation that will essentially say that counties have the ability to restrict or prohibit the importation of biosolids produced in counties outside their jurisdiction.
- Since our last meeting, Senator Florez held joint press conference with now-Kern County Supervisor Michael Rubio -- Florez's former aide of four years -- where the Senator highlighted a legal opinion from state attorneys saying county supervisors have the authority to ban sludge imports for use over potable groundwater.
- Rubio said he plans to bring forth such an ordinance.

Kern County - Litigation

- The Fifth District Court of Appeal will hear oral arguments on February 16, 2005 in the lawsuit filed by six parties, including OCSD, challenging a Kern County ordinance banning the land application of Class B biosolids.
- The petitioners sued to invalidate the ordinance, on the grounds that an environmental impact report (EIR) was required for its adoption.
- The suit also raised constitutional claims and challenged the validity of the biosolids impact "fee" assessed under the ordinance.
- A Tulare County judge upheld the ordinance, and the petitioners appealed the decision.
- A second lawsuit filed in Kern County Superior Court, challenging a subsequent ordinance adopted by Kern County in 2002, has been stayed pending the outcome of the appeal.

Contact: Layne Baroldi OCSD

Current as of: February, 2005

Kings County

- OCSD begins trial in Visalia on Monday, January 31st.
- OCSD has the three following causes of action to argue that survived Kings County's summary judgment motion: Commerce Clause, Inverse Condemnation and Denial of equal protection for the chemical stabilization Class A/EQ process (i.e., OCSD's claim that there is no rational basis for Kings County to use their police powers to distinguish between Class A/EQ biosolids compost and all other forms of Class A/EQ biosolids)
- Kings County has filed several motions in an effort to exclude all evidence beyond that contained in the administrative record and facts of which the Court can take judicial notice.
- The Court ordered the parties to submit (by Monday) proposed pre-trial orders identifying the evidence to be proffered/excluded and our respective reasons in brief. The Court said it would sign the pre-trial order it liked best. Unfortunately, this means OCSD will not have a decision that will guide its trial preparations until probably no earlier than Wednesday, January 26.

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Current as of: February, 2005*

Riverside County

In response to complaints and local demonstrations during biosolids land application at some sites, Riverside County is considering a revision of their ordinance that could possibly ban Class B biosolids. Regulators, generators, and applicators are meeting to address and resolve issues.

On March 20, 2001, after almost three hours of testimony, the Riverside County Board of Supervisors (Board) postponed their vote on two biosolids related agenda items; the approval of the Riverside County Health Services Agency's report on the "Health Effects Related to the use of Pesticides and Sewage Sludge" (Report), and the proposed prohibition of land application of biosolids on County owned land. The Report affirmed that the existing regulations provided adequate health and safety measures to protect the citizens of Riverside County finding that "[t]he minimal risk of disease transmission or causation makes the adoption of any additional mitigation, up to and including a full ban, a policy decision based on the quality of life issues as opposed to a Public Health necessity." The Report also determined that the quality of life issues "apply equally to the similar uses of manure." Subsequent to the Report, Riverside County staff concluded that virtually all complaints attributed to biosolids were the result of manure use.

The Board instructed staff to form a "Blue Ribbon Committee" to address the issues surrounding the land application of biosolids. The Committee will be limited to eight individuals, formed by the Board, from a pool of representatives of the Riverside County Farm Bureau, scientist from the University of California at Riverside, Riverside County regulators, concerned citizens and the biosolids industry. It is anticipated that the committee will provide a report to the Board within sixty days of its formation.

The “Blue Ribbon Committee” was to look at two issues: 1) a ban on land application of biosolids on publicly owned land and 2) a review of the Health Department Report. A preliminary report was due out of the group by June 5 2001 with the final due June 15, 2001.

A draft ordinance banning land application of Class B biosolids was made available October 24, 2001. Staff implemented a policy requiring half-mile setback of application of Class B material from all buildings. This effectively implemented a ban on all but 600 acres in the County. The final ordinance banning land application of Class B biosolids has been enacted. Land application in the County has ceased except for some in-County Class A solar dried biosolids. The Ordinance banning Class B biosolids land application was adopted in November 2001.

In response to local anti-biosolids activist comments on the National Academy of Science (NAS) biosolids Report, the Riverside County Board of Supervisors directed its Community Health Agency to review the NAS Report and to report back on August 13, 2002 on the Report’s implications with regard to land application of biosolids in Riverside County. Specifically, staff recommended:

1. That the Prohibition of the land application of Class B Sludge, instituted under Riverside County Ordinance No. 812, and codified as County Code Chapter 8.129 remain in effect, and;
2. Riverside County Ordinance No. 812, codified as County Code Chapter 8.129, be amended, or an additional Ordinance be developed, to prohibit the land application of bulk (un-bagged) quantities of all Class A material.

Riverside County staff chose to emphasize the many “uncertainty” (i.e., need for additional research only, etc.) quotes found in the NAS report as a basis for their recommendation. These “uncertainties” included:

1. That the “unanswered questions about the safety, environmental effects and propriety of land application of sewage sludge” referenced in the 2001 Prohibition of Land Application of Class B Sludge remain unanswered, thus confirming support for the continued prohibition of the practice, and
2. Similar unanswered questions are raised regarding the safety of Class A sludge processing and application, which suggest consideration of restrictions, if not a similar outright prohibition.

In its staff report, Riverside County stressed that “additional scientific work is needed to reduce persistent uncertainty about the potential for adverse human effects from exposure to biosolids. There have been anecdotal allegations of disease, and many scientific advances have occurred since the Part 503 Rule was promulgated. To assure the public and to protect public health, there is a critical need to update the scientific basis for the 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”.

“In Summary [Riverside County stated]:

1. We are unable to determine that the practice is safe,
2. We are unable to determine that the practice is unsafe, unhealthy or is otherwise responsible for public health impacts,
3. Standards must be developed using currently accepted, up-to-date scientifically valid analytical methods.”

The staff report went on to say “while there are a wide variety of processes that can be used to achieve Class A standards, none reduce heavy metals or chemicals; and with regard to the adequacy of the chemical risk analysis, the Report makes no distinction between Class A and Class B sludge. Absent other restrictions, there is a real potential that past or future applications of Class A sludge may include harmful chemicals for which the standards have not been established using current risk analysis standards, or for which standards were never adopted.”

During the public comment period, the Board heard from several speakers in opposition to a ban on Class A biosolids. No anti-biosolids comments were made. The speakers represented Synagro, Coachella Water District, the City of Corona, the Riverside County Farm Bureau, the University of Arizona (Dr. Chuck Gerba), Industrial Recycling Services, and Precision Soil Products. The speakers stressed waste diversion, lack of biosolids management options, increase in truck traffic, adverse impact on business, increased costs, etc. The Board, especially Supervisor Buster, was concerned over the ***importation*** of Class A biosolids and stressed that each county should manage its own biosolids.

The Board concurred with Staff’s first recommendation to continue the ban on the land application of Class B biosolids but continued for 180 days a decision on the second recommendation, pending additional review of the NAS report by a yet to be assembled committee to be chaired by Dr. Gary Feldman, Director of the Riverside County Community Health Agency. It is expected that Dr. Ian Pepper, microbiologist from the University of Arizona and a member of the 16-member NAS Report team will be on Dr. Feldman’s committee. As with the Class B biosolids committee, the committee is to consist of members from farming, local POTWs, anti-biosolids activist, Synagro, Riverside County staff, and academia.

Update: Committee met on June 10, 2004. They discussed the monitoring plan as well as signage issues. They also discussed what indicators or pathogen testing should be done on biosolids “spot checks”. Suggestion by group to include Salmonella, as this is recognized by stakeholders and the public. County added that monitoring program was established to generate public trust and provide assurance that biosolids meets Class A standards. Fecal coliform and/or salmonella may be tested during “spot checks”, per frequency established in monitoring program. This language will be incorporated into monitoring program.

A Product Review Committee will be established after the Ordinance is enacted.

Next Steps

No need for committee to meet again. There was some discussion of a workshop. It was decided it was not necessary. Next hearing: September 14. County stressed importance of committee members to attend to voice support for Ordinance and Monitoring Program. Feldman may walk supervisors through Ordinance beforehand.

**SECOND
UPDATE:**

The Riverside County Board of Supervisors approved the Ordinance No. 830 regulating Class A biosolids for use on agricultural land. There are four regulatory "tiers" based upon the odor and nuisance potential of the Class A product. It is interesting to note that the farmers on the committee have indicated that they will only use Tier 1 material due to regulatory burden of the other tiers and the desire to minimize the impacts to their neighbors. The placing of various Class A material into tiers will be made by a yet to be formed Odor panel. Tier 1 material will be required to have pre-registration and notification prior to delivery to the site, and be placed 100 feet away from potable wells and 50 feet away from public roads and property lines. Tier 1 will also require incorporation times (within 48 hours for sites less than 20 acres and 7 days for sites greater than 20 acres).

**THIRD
UPDATE:**

The Ordinance is now in place and until the products are reviewed, all products will be treated as Tier 4, requiring a ½ mile buffer from homes and schools. The Product review panel was selected and includes 5 members from various stakeholder groups. They have met twice and have agreed on the protocol. They will begin reviewing products for classification and will start with those products currently being applied in Riverside County (i.e. solar dried material).

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Current as of: January, 2005*

Solano County

The Solano County revised ordinance permitting the continued land application of Class B biosolids has been in effect since the Spring of 2003. As part of the revised ordinance, a Scientific Research Steering Ad-Hoc Committee was established to provide recommendations to the Solano County Department of Environmental Management (DEM) on how to best utilize the research and/or education funds provided for in the revised ordinance.

The committee was comprised of a full range of interested parties including concerned citizens, representatives of local citizen groups, farmers, regulators, elected officials, management contractor representatives, representatives from the wastewater treatment community, and CASA.

On September 23, 2003, the Solano County Department of Environmental Management presented a report on the activities of the ad-hoc committee and made recommendations to the Board of Supervisors. The recommendations were:

- Establish a fee to fund biosolids research/education and authorize DEM to administer the funds. The initial fee would be \$10/acre (approximately \$0.35/ton) and is estimated to result in \$10,000 - \$15,000 per year.
- Direct DEM staff to prepare an ordinance and resolution for Board approval to officially establish the fee amount onto the 2003-2004 fee schedule. The fee would be reviewed after a period of one year.

The five-member Board unanimously approved the staff recommendations.

On January 13, 2004, the Board of Supervisors adopted the \$10 per acre research fee recommended by staff. Community feedback regarding the land application during the recent spreading season was positive as were comments regarding the outreach efforts made by the wastewater treatment community. The sunset date on the current ordinance is October of 2007.

Update: Land Application commenced this season on April 15th and to date there has been only one citizen complaint (Denverton Creek Water Quality). Synagro Technologies have completed applying the first field site and have started on an adjacent field. Posting of the fields has been assured by both SF PUC and County inspections. Solano County Department of Environmental Management (DEM) has taken several samples of delivered Biosolids for fecal coliform analysis by the County Public Health Laboratory (in May) and BioVir (in June). SF PUC has done parallel sampling and had the samples analyzed by BioVir and SF PUC Water Quality Bureau Laboratory in Millbrae. Results are quite preliminary, however, there are indications that there may be some indicator regrowth by the time the material reaches the fields as compared with the measurements at the compliance point in the plant

Update: Solano County staff presented their annual biosolids report to the Board of Supervisors on February 22, 2005. The report was well received. Staff was directed to revise the ordinance to include language that excludes biosolids land application in the Suisun secondary marsh. This language had been planned to be in the existing ordinance, but was overlooked when developing the final one. In addition, the Board approved the testing program developed by staff for possible regrowth issues when the biosolids arrive at the fields. EBMUD and SFPUC will be participating in the study. Staff intends to use the research fee that has been collected to date to fund the study.

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Current as of: February, 2005*