

Minutes For January 21, 2003 - Special Meeting - Biosolids

The Solano County Board of Supervisors met in special session on this day at 11:00 a.m. Chairman Kromm called the meeting to order at the Fairfield-Suisun Sewer Treatment Plant. Present were Supervisors Silva, Vasquez and Chairman Kromm. Supervisor Kondylis arrived at 2:00 p.m.

(Item 3) TOUR OF THE FAIRFIELD-SUISUN SEWAGE TREATMENT PLANT

General Manager/District Engineer Richard Luthy, Jr. gave a brief overview of the wastewater treatment process noting that the Fairfield-Suisun Plant uses a three stage treatment process that is more stringent than the process for drinking water.

Senior Environmental Scientist Larry Bahr provided a brochure on the Fairfield-Suisun Sewer District, a Biosolids Fact Sheet, and an outline of the Biosolids Process, incorporated herein by reference. Mr. Bahr conducted a walking tour of the plant explaining the process of each phase of the treatment process with added emphasis on the dewatering process where excess water is removed from the digested solids resulting in dry residue/Class B Biosolids.

The Solano County Board of Supervisors reconvened at the Board of Supervisors Chambers this day at 2:00 p.m. with the Pledge of Allegiance and a moment of silence.

(Item 6) OVERVIEW OF BIOSOLIDS BACKGROUND INFORMATION

Terry Schmidtbauer, Department of Environmental Management, presented an overview, as outlined in the visual presentation, incorporated herein by reference, of the current regulations governing biosolids, new information and trends, types of biosolids, and local biosolids practice.

(Item 7) PRESENTATION RE PRODUCTION METHODS AND SAMPLING RESULTS FROM EAST BAY MUNICIPAL UTILITY DISTRICT AND CITY OF SAN FRANCISCO TREATMENT FACILITIES, RECEIVED

Donald Gabb, Senior Engineer East Bay Municipal Utility District (EBMUD), presented a visual presentation, incorporated herein by reference, outlining the service area of EBMUD, the basic wastewater treatment process, treatment goals of EBMUD, regulatory requirements and oversight, their source control program and the measured results, quality control, pollutant levels in biosolids, land application oversight, their new environmental management system, and water dilution comparisons. Mr. Gabb noted EBMUD has been providing safe drinking water for over 75 years, has been protecting San Francisco Bay and the environment with their waste water treatment systems for over 50 years, and the district intends to be around for along time. EBMUD understands the people of Solano County respect their land and want to be able to pass the land to future generations, and the district wants to work with

the people of Solano County to ensure that what EBMUD does is in respect of the environment and the people of Solano County. Mr. Gabb provided the Board with Biosolids Fact Sheet from the California Association of Sanitation Agencies, incorporated herein by reference.

Responding to questions posed by Chairman Kromm regarding the spreading of biosolids in Alameda or Contra Costa County, Mr. Gabb noted during restricted periods in Solano County, EBMUD applies biosolids in Sacramento County and sometimes in Merced County. Currently EBMUD does not apply biosolids in Alameda or Contra Costa County due to the small areas available for application, but would prefer to apply there.

Bonnie Jones, Associate Engineer City of San Francisco Public Utilities District (SFPUD), provided the Board with a packet of supporting documents, incorporated herein by reference, for the visual presentation reviewing the processing capacities of three treatment plants in San Francisco, a schematic of the SFPUD treatment process that includes waste water and storm drain water.

John Graveson, Chief Chemist Bureau of Environmental Regulations SFPUD, discussed the strict SFPUD pretreatment program that includes monitoring of industrial and commercial discharge, the goal of the program to keep pollutants out of the system, and the random monitoring of discharge and biosolids. Mr. Graveson discussed the monitoring and testing of emerging contaminants.

Ms. Jones continued the presentation on the SFPUD treatment process, photos of land application of biosolids, quality control program, distribution points of biosolids in Solano County and the Redwood and Hay Road Landfills. SFPUD and EBMUD are among 50 demonstration agencies across the nation to doing a control quality; Ms. Jones discussed a third-party audit program being done in Orange County.

Responding to questions posed by Chairman Kromm regarding the third-party audit process, Ms. Jones noted with the Environmental Management System that each demonstration agency will go through a third-party audit, Orange County is the first to implement it. Ms. Jones discussed the consequences for any type of violation for incorrect reporting of information, and noted the books of SFPUD are open for public review.

Responding to questions posed by Supervisor Kondylis regarding any increase in metals or pesticides from collection of storm water, Mr. Graveson noted levels are lower during wet weather.

Supervisor Kondylis discussed biosolid regulations in Europe. Mr. Graveson noted many of the constituents being tracked in Europe are not required to be tracked in the United States. There was a brief discussion regarding endocrine disrupters.

Responding to questions posed by Chairman Kromm regarding the additional requirements to get the biosolids to a Class A status, Ms. Jones gave a brief description of the studies being done at EBMUD to produce Class A biosolids. Over the next five years SFPUD will embark on a capital improvement project which will include a new solid handling facility.

Responding to comments by Chairman Kromm regarding the product used for daily land cover at the landfill, Mr. Kalson noted the product for land application and that used at the land fill are the same. There have been some complaints from neighbors of the landfill about odor and the increase in the number of flies in the area.

(Item 8) PRESENTATION BY DR. ALAN RUBIN UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Dr. Alan Rubin, Environmental Protection Agency (EPA), reviewed a visual presentation, incorporated herein by reference, outlining the Sixty Second History of Part 503, Background on National Research Council (NRC) Report: Biosolids Applied to Land: Advancing Standards and Practices, Overarching Findings, EPA Response to NRC Report. Dr. Rubin continued with the Summary of Findings and Recommendations from NRC Report including Statements of "Support or Agreement", Major Findings, Chemical and Pathogen Standards, Risk Assessment, Additional Findings, Actions Recommended – with the Health Effects, Sewage Sludge Survey, Expand Oversight Activities for Chemicals and Pathogens, Rulemaking, Resources; and the EPA Desk Statement on National Academy of Sciences (NAS) Report on Sewage Sludge.

(Item 9) PUBLIC QUESTIONS

1. For Dr. Rubin. As communities expand what do you feel, in regards to land application of biosolids, is a safe distance from homes, families, children, and animals?

Dr. Rubin, The EPA is going to be looking at the results of those studies by the EPA, USDA, University of Arizona, and the State of Pennsylvania for the collecting of information on what is coming off these fields, determining what is at the edge of the field and what is down wind. After that the EPA will be developing some sort of a notion of risk. It is going to take some time to do all that. At this point in time I do not have the answer.

2. For EBMUD and/or SFPUD. Both Speakers made comments on enforcement and monitoring applications by Synagro, the vendor. How many times in a land application season do they come out to the fields?

Maura A. Bonnarens, Senior Civil Engineer Supervisor of Wastewater Planning for EBMUD, noted they inspect the land application at least once a week during the application period, which includes following the truck from the EBMUD facility out to the site to make sure the truck drivers are following proper procedures even en route to the site. A very detailed form is completed at the site.

Ms. Jones noted SFPUD inspects at the land application site once each season.

3. For Dr. Rubin. Are you or the EPA aware of any documented safety

problems associated with Class B biosolids land application relative to: human health, animal health, or the environment?

Dr. Rubin noted the EPA is aware of reports, allegations, and news and media reports on this. The EPA is also aware of some high profile cases that have been in the news for some time in New Hampshire and Pennsylvania, and we do follow them very closely. In terms of documentation, I do not have that. These are not "documented" cases, but are aware of incidents of that type. One of the recommendations of the NRC is to get much more closely involved when these reports come in. The EPA, the state or the locals need to go out to begin to understand what is causing the problem and do something about it.

4. To EBMUD and/or SFPUD. Please explain dilution, i.e. if the effluent leaving the plant is clean, then the solids must harbor more pollutants?

Ms. Jones noted some pollutants that come in are treated, they are degraded by the process in the digesters to methane, so they are going off as gases. The pollutants are being degraded. If this relates to heavy metals, there are aggressive pretreatment programs to prevent it from coming into the plant, a metal is not degraded to gas it will be soluble and go out with the effluent or stay with the biosolids. SFPUD is monitoring heavy metals, which are testing at about 1/10th of the most stringent EPA EQ limits. Regarding dilution, Ms. Jones gave an example of a 200-milliliter bottle of amoxicillin, which is not water soluble, being put down a toilet. In the digesters the effective concentration would be the equivalent of ¼ teaspoon out of 7 digesters. This product is greatly diluted due to the vast quantities of wastewater going into the treatment plant. In the biosolids it would be about .05 parts per million.

Ms. Bonnarens noted it is just the idea that if you have a gallon of contaminant versus 10,000 gallons that you are treating, it is a higher concentration than if you got that same one gallon of contaminant in a 100,000 million gallons, there is a less concentrated effect on either biosolids or receiving water. The quantity of the contaminate is the same, but it's effect because it is not in as high a concentration is not as great as it otherwise would be.

5. For Dr. Rubin. A) When will these public health related studies begin and where, and what is the criteria for an area qualifying? B) Why weren't these done prior to turning sludge loose on the American public?

Dr. Rubin, A) Some of the studies have commenced, I had mentioned the work that is being done cooperatively with EPA and the US Department of Agriculture in suburban Washington and also Maryland. Studies are being conducted by the University of Arizona and the State of Pennsylvania. We are just beginning to do this. We have not yet made any final determination of how big or comprehensive the studies will be, or what communities will be involved. Pennsylvania has already selected some sites. The criteria we eventually use to figure out what communities get studied have not been done yet. We believe

some of the studies will have to be done by people with expertise from the Centers for Disease Control (CDC) and/or the National Institute of Occupational Safety and Health (NIOSH). The CDC and the NIOSH have their own criteria for how studies are run. The answer basically is that we have not yet settled on how many studies are going to be out there and eventually what they are going to look like, and what communities are going to participate in them. Obviously we are going to have to be able to answer these, at least internally, then communicate that to you by April 2, 2003.

Dr. Rubin, B) the EPA has been looking and been studying sewage sludge since the 1960's. We really believe the emphasis over the years has been on food chain contamination through the crops, the animals, the ground water, the drinking water, and the soils from pollutants in sewage sludge. We did a very preliminary risk assessment on just a few volatile organic pollutants when we did the round one rule, pollutants that might reach neighboring communities. From our analysis we did not see any impact on it. Some of the issues being raised now are being triggered by odors in communities. Finally, put the issue of what is coming off of the fields is being put squarely in front of the EPA and other government agencies such as USDA and CDC. Traditionally the EPA has been preoccupied strictly on food chain contamination. We are now saying by responding by this NRC report, that it is time that we looked at the direct exposure through the air.

6. For SFPUD and/or EBMUD. If class B biosolids are stabilized, why do some fields (Loads) stink more than others and why do some fields still stink?

Ms. Bonnarens feels odors are one of the biggest issues with respect to biosolids and one that has a lot of research going on as to what actually causes the odors and what can be done to minimize them? I don't have a direct answer for that. I know that the Class B product does have the odor. I know that Class A product can also have an odor, so it is not an indication of the level of pathogens within the material, and causing it to remain.

Dr. Rubin noted Rich Giani of the Pennsylvania Department of Environmental Protection, is probably the leading researcher on what causes odors in sewage sludge, either at the plant or out in the fields. Mr. Giani is doing studies along with Arizona. Part of that study will be looking at what is coming off the fields in terms of pathogens or endotoxins, but also the issue of what is creating the odors. There has been quite a bit of research on odors and there will be much more. I can't say odor is going to be regulated by EPA, as far as I know. The industry has what is called an environmental management system process setup through the National Biosolids Partnership that EPA is involved in. That program goes well beyond complying with Federal, state, and local rules. The number one issue they are tackling now is how to reduce odors in biosolids.

Ms. Jones noted the San Francisco southeast plant is one of eleven plants in a Work Water Environment Research Foundation study where the plants were sampled at all the different points. It was documented what the odor is and what practice is different at these different plants, to help determine what

is causing this odor. The idea is to work backwards and try and figure this out. Of those plants, San Francisco was among the three lowest in terms of odor. Yet we get documented odor complaints. It is something SFPUD is tackling all the time. What they are finding is that there are some undigested proteins in the material and as they degrade slowly the bacteria that degrade them emit the odor. Some materials have a high odor threshold.

7. For Dr. Rubin. In your opinion what is the relative safety associated with the land application of Class B biosolids? Is it relatively safe (low/negligible risk) or relatively unsafe?

Dr. Rubin noted closer to relatively safe. The National Academy of Sciences says there is no indication that the 503 rule is not protective. That is an important statement of us to make. There is a lot of scientific uncertainty and we are going to be spending the next several years responding to the NRC report's recommendations. One of the pathways that has not been studied in the entire 503 development is of direct emissions of materials from fields. The EPA will then be looking at the data and develop a sense of risk from the direct inhalation coming from fields. Until I get that information I have to say it is closer to relatively safe.

8. For SFPUD and/or EBMUD. Do you test for hormones in biosolids, if so what have you found?

Ms. Bonnarens is not sure if EBMUD tests for hormones, but will check and report back at the next workshop.

Dr. Rubin noted one of the recommendations in the NRC report is to look for compounds like endocrine disrupting compounds, such as estrogen, hormone type products and pharmaceuticals. The EPA will deal with that as an issue. In terms of a survey and if found what does it mean in terms of risk, because what we believe are low levels that are in environmental media, including soils and not necessarily in fish tissue or in human tissue, but in environmental media that we think the risk should be fairly low. Until we quantify what's in the sewage sludge, and until we can get some sort of notion on risk, I can not make a final statement on that. That is one of the issues that we are going to be evaluating and responding to in the NRC report.

9. For Dr. Rubin. Given that the additional studies will take some time to complete, may the EPA adopt some additional interim rules? Since public health is at issue, could some other agency have a role in such interim rule making? What do we do in the meantime while people are saying it is making them sick and the agencies can't demonstrate it isn't?

Dr. Rubin noted he would fully expect for the public to see in the April 2, 2003 proposed response to the NRC report, a proposed action plan. It is reasonable for the public, when they see this laid out for comment, to suggest to the EPA that in the interim perhaps the EPA should consider some sort of additional interim requirements. I do not know how the EPA will respond to

that, but the public can bring that up and send comments into the EPA. The EPA will have to deal with that public comment. Dr. Rubin suggested getting some activity going as soon as possible for somebody, either EPA, CDC, state health agencies, or local health agencies getting out there and seriously beginning to document what is happening in communities. I believe that the reports we are getting are real, in that people feel sick out there. I read 4-5 reports everyday, and I have a stack that is almost 2 feet tall. The EPA is taking the NRC recommendations very seriously particularly in going back and looking and tracking incidents.

Chairman Kromm asked Dr. Rubin if the process we are going through here in Solano County; would be an appropriate venue to make recommendations back to the EPA, which Dr. Rubin agreed. When you see the April 2, 2003 response, send in your recommendations based on your response. Send in comments on what the EPA intends to do about events like this. Based on your recommendations, if you see a response that's not real strong, let the EPA know what Solano County has found, and what you think should be done.

10. For all the experts. What are the benefits of biosolids re-use?

Dr. Rubin, since the 1970's, until the last couple of years, the EPA has been "gung ho" in terms of beneficial use of biosolids because when it is done right there is benefit. It acts as a superb soil amendment, it has a lot of organic material in it, it has nutrients both nitrogen, phosphorus and potassium just like animal manure and fertilizers. It also has micro-nutrients, which are important for plant growth. For the last couple of years, the policy tells you it is up to a community to decide what to do with their sewage sludge as long as it is in compliance with the minimum part of 503, and as long as it is in compliance with state regulations. We still think there is a benefit in terms of using this as a source of nutrients and soil amendment, but we are not telling communities any more that you have to do this in terms of recycling. We recognize there are other legitimate ways to manage sewage sludge such as burying it by its self, which is called service disposal, incineration, and sending it to solid waste municipal landfills. If it goes to the landfill it is regulated under different EPA regulations, part 258.

11. For any of the experts. Biosolids emit TMA, ammonia, and other gases during final putrefaction and desiccation. TMA is heavier than air and follows the ground; ammonia is lighter than air and rises. Do these gases contribute to ground level ozone (smog)?

Dr. Ruben, as far as he knows they do not, but it has not been looked at as an issue. More important is do those compounds effect public health by toxic impacts? The studies being done by the USDA, NSA, Arizona, and Pennsylvania are looking at a suite of materials coming off the fields, including these compounds, and on the direct impacts on communities or people that live close by.

12. For EBMUD. Do you collect (wastewater) from any military bases?

Ms. Bonnarens noted in the past EBMUD did, from the Alameda Air Station and the Oakland Army Base, but the bases have been closed and are being redeveloped.

13. For Dr. Rubin. I noticed no investigation as whether any of the chemical and other substances could get in the food chain even through animal meat or animal intake.

Dr. Rubin, the issue is not the food chain contamination including pathogens; it is direct contact and inhalation of these materials. Since we stated the rule evaluation in 1983 or 1984, EPA has looked at over 350 chemicals for impacts in the food chain both organic and in-organic. From the information we have from then and now, very few came up positive. The ones that did come up positive, we regulated. The EPA is about to make a final determination on dioxins and dioxalaide compounds, primarily in regards to the food chain. If and when a survey is done to look at other chemicals that are in sewage sludge, if they are found and there is enough information to calculate a risk, it could be that EPA could add those pollutants into further Part 503 Rule development. I feel confident that we have a pretty well described and a good feel for the very low risk to the food chain for these pollutants.

14. For SFPUD and/or EBMUD. Do your agencies believe you have continued liability for adverse impacts of your biosolids that are land applied?

Ms. Jones, cradle to grave might be the answer, but contractually Synagro owns the biosolids once they are delivered to them. In reality we are always responsible.

Ms. Bonnarens, EBMUD retains responsibility for the biosolids, and one of the reasons both agencies are embarking on this Environmental Management System. We understand the importance of tracking the biosolids from cradle to grave and ensuring that the final product is applied properly for it's intended use. By going through the Environmental Management System both agencies will be able to put into place even more controls to ensure that. We have to have a dialog with the public near our plant and near the fields where land application is done to ensure we are good neighbors about this, and that there are no adverse effects from the biosolids.

Dr. Rubin, agrees. The Part 503 Rule makes the generator responsible for the entire execution of the rule. If Synagro applies the material incorrectly to the land, yes an enforcement action can be taken against Synagro, but action may also be taken against the city. The city does have, in terms of the rule, the liability for the execution of the entire rule.

15. For Dr. Rubin. What is your opinion on land application in a high wind area, 25+ MPH on a daily basis?

I want to make this a generic issue, if anybody was spreading manure, biosolids or fertilizer and tilling the soil with a 30 to 50 MPH wind, upwind from a community close by, I don't think that is a good practice. I do not think you should be applying liquid effluent, biosolids, or manure to the land where you are disturbing the soil and you have a population down wind. That is good neighborly advice, you just don't do it.

16. For SFPUD and/or EBMUD. Do radioactive contaminants enter your waste stream (i.e. labs, medical offices, hospitals, etc)? If not, how do you know? If so, how is it monitored/treated?

Ms. Jones, we are part of a sampling. We send samples of our sludge and biosolids to the EPA for radiological monitoring. SFPUD tests for radioactivity. SFPUD monitors radioactivity as part of the upstream process through the industrial pretreatment. SFPUD does not have a treatment process for it. It would be mainly controlling it from coming into the plant. All samples have come back negative for radioactive material.

Dr. Rubin, there is a group in the Federal government, the Inter Agency that is a standing committee on radiation standards. This group is to harmonize what each Federal agency is doing to protect public health based on radioactivity in the environment or in products. There is a sewage sludge subcommittee that has been operating for about three years. There is a guidance document that will eventually tell the operators if you have this amount of radioactivity in your sewage sludge here are the actions you should take, should you land apply it or not, and if it is land applied what precautions should be taken. Drafts of the guidance document along with the survey results, the dose modeling or the risk assessment are on the internet and the final document should be ready within the next 6 to 9 months.

Ms. Bonnarens, EBMUD has a very aggressive pretreatment program and tries to minimize any of those types of discharges coming to the plant. EBMUD tests for over 300 potential contaminants in the water.

17. For Dr. Rubin. Does the NAS/NRC Report tell EPA to do an entirely new risk assessment to validate the 503 Rule?

Dr. Rubin, yes, the way the EPA interprets the report. They want a significant review of the round one risk assessment to determine if the numerical standards for round one are sufficient to protect public health and the environment. How comprehensive the review will be has not been decided yet, NAS wants a good review of the round one risk assessment.

18. For all panelists. How do metal concentrations in biosolids compare with normal soil?

Dr. Rubin, depending on the metal, some are higher than normal soil. Normal soil levels vary due to the geology of the area. Most of the levels in sewage sludge would be somewhat above the normal background levels in uncontaminated soils.

19. For all panelists. Land applied sewage sludge is required to be applied in a way so as to be stable, and not move from where placed. How are flooded sludge fields quarantined, to assure the runoff does not enter either the aquifer or other surface water?

Dr. Rubin, the rule has a provision saying "thou shalt not place sewage sludge on frozen, flooded or snow covered lands", obviously to prevent runoff. The preceding rule also included "thou shalt not put sewage sludge in a 100 year flood plane", we no longer have that provision in the rule. We believe we can manage it safely without it. States normally have additional provisions that deal with that. People have reported some incidents where you see runoff occurring. There is a general requirement in the Clean Water Act that you are to prevent or absolutely minimize the entry of pollutants into waters of the U. S. from sewage sludge. How well the sites where there is land applied sewage sludge are designed, is a function of inspection. The number of sites that get inspected has been raised, but not as high as we would like to see it. There are 16,000 wastewater treatment plants in the United States, about 11,000 to 12,000 that practice land application. Most small facilities will apply to one field where larger facilities could be permitted to apply to many fields. There will never be enough EPA inspectors to inspect all the fields, the rule does say it is a self implementing rule. People have to comply with the rule, if someone brings a problem to the attention of the permitting authority, and an inspector goes out and finds them in violation an enforcement action will probably be taken against that entity. It is a question of resources for the EPA to be able to do all the inspections to ensure you are not getting runoff.

20. For Department of Environmental Management and panelists. In April through October, 7 days a week, 24 hours a day loads are being staged and spread upstream and upwind from a community, which offers no break from exposure. So what is the cumulative effect to this type of land spreading?

Dr. Rubin, the EPA will try to identify in the EPA studies a worse, worse, worse case set if conditions such as what you described. People are reporting in this type of situation, and hopes the EPA identifies a community to study. How projects are run, the 503 Rule does not address the frequency, the issues of traffic, staging, or going upwind from an area. It is a very basic set of rules. Perhaps the California rules do address that, and if they do not that is where the local jurisdictions get involved. Even though it is not mentioned in 503 or in the state waste control board or the state water quality control board perhaps this is where the county has to step in and talk about dealing with that type of issues in terms of restrictions.

Responding to questions posed by Supervisor Kondylis regarding adequate funding of the EPA to do all the studies within a reasonable length of time, the European Union directive has banned 32 substances, and will the EPA be looking at the benefits of spreading biosolids on land versus injection, Dr.

Rubin noted that if you look at the entire menu of NRC Report Recommendations it is an enormous task. There are 54 recommendations in the study, some are more important than others. If EPA determines which recommendations are critical, it will be difficult to execute them within a reasonably short amount of time. The EPA will have to have reviews internally and with other agencies to leverage resources to do the most important ones. There are budgetary and timing restrictions. The most important ones will be done fairly quickly. The final plan will be out April 2003 outlining the priorities of the recommendations. Dr. Rubin noted awareness of the European Union (EC), one of the recommendations of the NRC report is for consideration of international activities and regulations. When the EPA considers a particular pollutant it looks at the U.S., Canadian, European and Asia studies, however many of the European countries use a principle called "the precautionary principle". There was a discussion regarding the "precautionary principle", and the U.S. practice of basing rules on risk assessment and the ability of the land to assimilate trace pollutants with adequate margins of safety to still protect public health and the environment. One of the recommendations of the NRC Report is to reevaluate management practices, which would include looking at injection.

21. For SFPUD and/or EBMUD. What does it cost per day to send biosolids to Solano County for land applications as opposed to landfill destinations?

Ms. Jones note SFPUD has been paying \$4.80 a ton for land application and \$5.75 a ton to go to the Hay Road Landfill.

Ms. Bonnarens, EBMUD uses the Altamont Landfill for alternative cover at the same cost of doing land application with the Synagro contract. If it is just dumped at a landfill it would be about \$8 to \$10 more per ton.

(Item 10) Public Comment Period

Rod Dupont, Rio Vista, had asked the Fairfield/Suisun Sewer District Senior Environmental Scientist Larry Bahr, for his personal opinion regarding land application near residential areas and Mr. Bahr feels that there should be a buffer zone of at least ½ to 1 mile from the land application. Mr. Dupont pointed out the high wind questions, and noted the importance of EBMUD and SFPUD to take all the information back and to reevaluate their application procedures in Solano County due to the high wind factor.

Marci Coglianese, Mayor City of Rio Vista, thanked all the participants, and requested the Board consider the public policy decision that will have to be made since all information will not be available. How much risk is the Board willing to let the residents of Rio Vista take until more information is known?

Bob O'Dette, Vice-President Synagro Technologies, noted the company operates in 35 states, discussed his professional credentials, his 30 years of experience, concerns with protecting the environment, risk comparisons, and the Solano County sampling data showing no pathogens emitted from the

biosolids.

Dr. Chloe Boettcher, Chairman of Solano County Citizens Committee against Biosolids Spreading, noted investigations of places where people have become ill after being exposed to land applied and composted biosolids. If it were safe and the only parallel for these areas is the exposure to Class B biosolids why are all these people getting sick. In the California Farm Bureau Alert dated December 25, 2002, incorporated herein by reference, an article was published of the Farm Bureau Policies for 2003. Policy 112, deals with Sewage Sludge Disposal. The article notes the cheapest way is not land application, and the Farm Bureau wants to get the onus off the farmers for financial liability.

CONCLUDING COMMENTS

Supervisor Silva noted studies being done regarding how far particulants are being carried by the wind when land applied, local experience regarding pretreatment programs and strict enforcement. Supervisor Silva requested additional information regarding application schedules, tonnage being brought in and testing results.

Responding to questions posed by Supervisor Kondylis regarding any tipping fees, and regarding a revenue source to pay for additional testing, Mr. Kalson noted if biosolids are brought in as alternative daily cover there is no tipping fee, and tipping fees can not be collected on diverted or recycled product for beneficial reuse. There was a brief discussion regarding tipping fees.

There was a brief discussion regarding permit and site registration fees, testing fees that are paid by Synagro and possible addition of fees to pay for the cost for on-site inspections.

ADJOURN - This meeting of the Board of Supervisors adjourned at 5:01 p.m.

DUANE KROMM, Chairman

Maggie Jimenez
Clerk to the Board of Supervisors