



**Summary of February 23, 2016 Meeting between CASA and USEPA during Annual DC Public Policy Forum**

**Meeting Participants: CASA – Greg Kester (CASA); Adam Link (CASA); Paul Kelley (BAB2E)**

**USEPA – Rick Stevens (OW/OST – National Biosolids Lead); Kathryn Gallagher (Branch Chief, ERAB / HECD / OST / OW); Bob Bastian (OW/OWM – Senior Scientist); Carey Johnston (OECA)**

**Via Conference call – Lauren Fondahl (Region 9 biosolids coordinator); Amelia Whitson (Region 9 pretreatment coordinator); Amy Hambrick (OAR); Marcia Mia (OECA)**

- 1. CASA overview of regulatory and legislative issues in California as well as a summary of biosolids management practices.** – Greg noted that 688,000 dry metric tons (DMT) of biosolids were managed in California in 2014: of which 443,000 DMT were land applied (271,000 as Class A and 172,000 as Class B); 113,000 DMT used as Alternative Daily Cover (ADC); 9,000 DMT for deep well injection; and 1,000 DMT as fuel in cement kilns, as beneficial uses; as well as 60,000 DMT buried at landfills, 20,000 DMT incinerated; and 19,000 at Surface Disposal sites. It was noted that the wastewater community is poised to directly assist the state in achieving multiple legislative mandates and goals to be accomplished by 2020 and beyond, including: 75% recycling of all solid waste (as organics are phased out of landfills, land application is the most viable recycling option after sufficient treatment); achieving at least 50% of energy (by 2030) needs from renewable sources (most wastewater plants employ anaerobic digestion which produces biomethane – a clean renewable energy); achieving 1990 levels of CO<sub>2</sub> equivalent emission levels (biosolids sequester carbon in the soil and avoid the use of fossil fuel intense inorganic commercial fertilizer); and the 10% reduction in carbon intensity of transportation fuel (methane can be converted to transportation fuel which CARB has assigned a negative or very low carbon intensity in the Low Carbon Fuel Standard program. In addition legislation has been passed to reduce short lived climate pollutants (SLCP) including methane; and the Governor has introduced a Healthy Soils Initiative to ensure sustainable production agriculture for future generations and biosolids land application helps fulfill all objectives of the initiative. There are indications that all organics will be diverted from landfills by 2025. CASA conservatively estimates that wastewater plants have existing capacity that with ancillary infrastructure upgrades, could receive 75% of the food waste currently landfilled, for co-digestion. We also noted that discussion has begun with a number of counties who currently have restrictive ordinances limiting the land application of biosolids, in an effort to modify them and make application easier. The Kern County litigation will culminate in a trial at the end of April into the beginning of May, for which we are cautiously optimistic. It is critically important that land application be fully supported at the state and federal levels given that it is unlikely that more

incinerators would be permitted in California and if landfilling is lost as a viable option.

2. **Update on risk assessment underway for the 10 constituents from the 2003 biennial review – Rick** – Full risk assessment was completed and sent for external peer review. Comments have been addressed and response is in internal EPA review now. Once concurrence on response is achieved the risk assessment will be published in the federal register for public comments. Scheduled for publication in 2016 but exact date is unknown.
3. **Update on risk assessment/screening tool for the remaining 135 constituents from the Targeted National Sewage Sludge Survey – Rick** – A new screening tool, called the Biosolids Core Risk Assessment Model (BCRAM) Screening Tool has been developed and has gone through external peer review. EPA is currently responding to comments and revising BCRAM Screening Tool to address them. The modified BCRAM Tool will then be subject to internal peer review and when concurrence is achieved, the model will be published in the federal register for public comment. Release in the federal register is scheduled to occur in 2016. Once the model has been adopted following the public comment period the remaining constituents will be screened. A screening model is the first step in risk assessment.
4. **Update on new risk assessment for dioxin and dioxin like compounds – Rick** A new risk assessment has been conducted for dioxin and dioxin like compounds and a peer review has been completed for it. The current assessment considered non-cancer endpoints as compared to the 2001 risk assessment which considered only cancer endpoints. EPA is responding to peer review comments and when concurrence is achieved, it too will be published in the federal register for public comments. This is also scheduled to be released in 2016.
5. **Implementation of the electronic reporting requirements for biosolids – Greg/Carey** – CASA thanked Carey for working with us to resolve all issues during the rulemaking process, but noted there is concern that new electronic reporting format be compatible with systems already developed and employed by agencies. Carey stated that a single form will be created for all 42 non-delegated states, Native American nations, and territories and no new information will be required to be reported. An application will need to be submitted to allow electronic reporting. To ensure all works well, Carey invited CASA to be part of a focus group to test the forms and the submittal process. NOTE: we accepted this invitation and will be soliciting volunteers to be part of this group to test your systems with EPAs to make sure they do work.
6. **Potential Modifications to 40 CFR part 503 – Rick**. There are no plans to make any modifications to part 503 at this time. Should the risk assessment and reconsideration of molybdenum warrant any changes then revisions would be considered at that time.
7. **Discussion to consider reclassifying EQ products as no longer being biosolids based? – Greg** CASA noted that some members, especially those producing biosolids compost products, wonder if EPA would consider passing them out of the regulations and no longer requiring there be any connection to biosolids once quality and treatment requirements are satisfied. Bob recalled the approach taken in the proposed 503 rules in 1989, which

included a marketed product category. That approach was later rejected in the final regulation published in 1993. It is not an issue that will be taken up, given the requirements and definitions under the Clean Water Act.

8. **How to regulate pyrolysis units for biosolids that produce a biochar product – Amy/Marcia/Greg.** Greg had earlier sent information on a new technology being installed in California that includes a pyrolysis unit at the end that produces biochar. EPA Region 9 is considering it an incinerator largely due to uncertainty over how else to regulate it. We noted that the unit really is not an incinerator which combusts waste in an oxygen-enriched environment. The problem is not with meeting the new Sewage Sludge Incinerator rules under section 129 of the Clean Air Act, but rather that we have concerns over being labelled an incinerator when the technology is producing a biofuel and useful biochar product. Amy and Marcia informed us there is an “Applicability Determination Process” for which application can be made to EPA Region 9. Charles Aldred ([Aldred.Charles@epa.gov](mailto:Aldred.Charles@epa.gov)) is the appropriate contact to whom the application can be directed, with a copy to Amy ([Hambrick.Amy@epa.gov](mailto:Hambrick.Amy@epa.gov)), Marcia ([Mia.Marcia@epa.gov](mailto:Mia.Marcia@epa.gov)), and Rick ([Stevens.Rick@epa.gov](mailto:Stevens.Rick@epa.gov)). Each determination is very site specific so will depend upon the individual circumstances and process. They did note that a determination was made for the Max West gasification system in Sanford, Florida that it was not an incinerator. It was also noted that an agency could operate and meet the standards of section 129, but not call their unit an incinerator. Enforcement could however, through the inspection process, determine it is an incinerator and some enforcement action could result so this is not really a viable option.
9. **Update on new technology for producing energy from biosolids – Paul.** We provided an update on the Bay Area Biosolids to Energy Coalition activities. The key aspect of the coalition is the recognition of a need for SF bay area sanitation agencies to diversify their biosolids management options. Most agencies use land fill and land application and would like to find a non-incineration method of biosolids management that would also be energy positive. The coalition had released an RFP in 2013 and two primary technologies were proposed. We reported that the SCFI (Ireland) Company is teaming with Synagro to employ their Hydrothermal Oxidation technology that keeps biosolids in a wet state (18% solids) and uses high pressure and high heat to generate steam energy, clean water, and residuals of a silica and phosphorous dust. The analysis of the dust residual still needs to be done. Another technology is a fluidized bed gasifier – and after some bumps, the technology is moving forward again in the bay area. They are looking to combine woody debris and biosolids at a WWTP facility that could generate energy to help the facility get off the grid. Another technology (BioForce Tech) the coalition members are looking at is similar in that it uses low energy to bring biosolids from 24% to 80% solids and pyrolysis to then convert to energy. As discussed in the meeting, these technologies are attractive as long as they can process biosolids, generate energy and be classified as non-incineration. Other items covered in other sections also had applicability to the new technologies for producing energy and the need for EPA to be aware of emerging technologies.

10. **Challenge to the organic certification prohibition of biosolids – Greg/all.** We had a general discussion of the market issues raised by the USDA organic certification programs prohibition of biosolids. Agencies in some counties, especially in the Bay Area, are losing approved agricultural land due to farmers converting to organic farming. We discussed whether there was any consideration given to seeking revisions to that rule. It is not an EPA rule and thus they really don't have any control over it. CASA recounted the era in which the program was developed and believes it remains a very difficult, if not impossible, challenge to secure any modification. CASA agreed that we would continue to discuss it with our members and our sister associations.
11. **Interagency task force on bio-contaminants (Ebola, Anthrax, etc.) – Greg/Bob.** Greg and Bob attended a workshop hosted by the Homeland Security Division of EPA, the National Science Foundation and the Water Environment Research Foundation last November, on bio-contaminants. A key recommendation of the experts assembled at the workshop was that an interagency work group should be established to facilitate communication, review and recommend leading research, and make recommendations for the safe handling and management of bio-contaminated wastewater, which whether by intent or by accident, may be discharged to the wastewater system. The workgroup would be modeled after the Interagency Steering Committee On Radiation Standards (ISCORS), which reviews radioactive material which may be discharged to wastewater plants. The report on the November workshop is currently under review so no action has yet been taken.
12. **Reclamation efforts with biosolids (Superfund mines, brownfields, fire ravaged land, etc.) – Greg/Bob.** Greg provided an update on California reclamation efforts. Region 9 has again requested biosolids compost for a reclamation project involving residential yards near a superfund mine site in Arizona. We are working to provide it. Other mines in California should begin reclamation soon and CASA continues to work with EPA Region 9 to provide biosolids for the projects. We are also engaged with Dr. Nick Basta (Ohio State) who is working with the California Department of Toxic Substances Control to reclaim arsenic contaminated brownfields with biosolids. Work is anticipated to begin in 2016. The standing research team from UC Davis, UC Riverside, USEPA Region 8, Utah State, and the University of Washington remains poised to conduct demonstration projects in California on fire ravaged land. Meetings have taken place with all key regulatory agencies and all have been supportive. A meeting was held between CASA, UC Davis, and CalFire the week before our DC meeting, at the Boggs Mountain State Forest, which experienced devastating fires in 2015. It is agreed that the state forest will be an excellent location for a demonstration project. A proposal is under development and funding is necessary.