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January 30, 2003

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Ken Kirk

*VIA FACSIMILE and REGULAR U.S. MAIL*

**RE: NATIONAL RESEARCH COUNCIL BIOSOLIDS REPORT**

Dear Tracy:

As you know, by April of this year your office has committed to issuing a notice for public comment outlining how the Agency plans to respond to the recommendations contained in the National Research Council report on biosolids released July 2, 2002. The report, entitled *Biosolids Applied to Land: Advancing Standards and Practices* (the *NRC Report*), found no scientific evidence that the Agency's Part 503 regulations for biosolids had failed to protect public health. At the same time, the report made a number of recommendations for additional scientific work that may help to reduce lingering concerns regarding the potential for adverse human health impacts from biosolids exposure. The Agency's response to the *NRC Report* is likely to serve as an important guide for the biosolids program in the coming years.

As your office prepares a plan to address the *NRC Report's* recommendations, AMSA would like to highlight what it believes are the most critical actions your Agency can take to best reassure the public and scientific community of the safety and benefits of biosolids land application. Given the Agency's limited budget and the number of recommendations made in the *NRC Report*, AMSA expects that EPA will prioritize its resources to maximize benefit to the program. On this basis, AMSA recommends that EPA concentrate on the areas outlined in this letter.

**1. Exposure-Assessment Studies to Compile Additional Human Health Data.** Communities across the U.S. that are considering or have established bans or restrictions on the land application of biosolids consistently cite the lack of information on the human health effects of exposure to biosolids. This is where EPA can have the most impact on preserving land application as a long-term, sustainable management alternative for biosolids. The *NRC Report* makes a number of recommendations regarding this issue, foremost of which is the need to conduct preplanned exposure-assessment studies to characterize the exposures of workers and the general public who come into contact with the constituents of biosolids either directly or indirectly. The studies “would require identification of microorganisms and chemicals to be measured, selection of measurement methods for field samples, and collection of adequate samples in appropriate scenarios” (*NRC Report*, p. 6). Simply put, the studies would determine the makeup of emissions (e.g., odors, bio-aerosols, volatiles) from biosolids land application sites, measure the exposure potential for workers, such as applicators and farmers, as well as nearby communities, and assess the human health impacts.

AMSA supports EPA undertaking such studies. Should the results of these exposure-assessment studies suggest a negative impact on human health, additional resources could be committed to conducting a complete epidemiological study of biosolids use to provide evidence of “a causal association, or lack thereof, between biosolids exposure and adverse human health effects” (*NRC Report*, p. 6). AMSA is aware of a number of research efforts, either currently underway or being considered by organizations such as the Water Environment Research Foundation, which could provide critical information for such studies. In addition, as with previous EPA efforts, AMSA’s members would be willing to work with the Agency and provide additional information.

**2. Response Team for Biosolids Health Reports.** Equally important is the need for a systematic approach for investigating claims of disease or illness following exposure to biosolids. Alleged or unsubstantiated claims of adverse health effects are more damaging to local biosolids programs than any other issue. Without the proper response and investigation by a credible authority, citizens have no choice but to believe the limited evidence that is presented to them. Biosolids managers, and more importantly, those responsible for overseeing the biosolids program, must be capable of responding to these claims. The logistics of an incident response team capable of investigating past and future claims of health impacts are complicated. There must be a method for timely notification and a process for tracking and recording incidents. Federal involvement is key, as many of the questions regarding biosolids management are raised on a national level, but the process must also acknowledge that most biosolids issues are local. EPA Headquarters and Regional offices, states, and local governments should have a role, and the additional expertise of the Centers for Disease Control and Prevention may also be necessary. Finally, a tracking system to document the details of each investigation would be vital to ensure biosolids managers, regulators, and the public have the information they need to make educated decisions concerning the land application of biosolids.

**3. Compliance Staff and Resources.** Compliance assistance and enforcement are necessary components of any regulatory program. The *NRC Report* notes that one of the most common complaints of EPA’s biosolids program is the lack of a federal presence to ensure compliance with existing regulations. The NRC recommends that EPA increase the funding and staff resources devoted to the biosolids program,

and encourages EPA to support and facilitate greater delegation of authority to states to administer the federal biosolids regulations. AMSA's members are top performers in the industry and would welcome any increase in resources, at the Federal or state level, deemed necessary by the NRC or EPA to strengthen the program.

**4. New National Sewage Sludge Survey.** AMSA recommends that EPA consider conducting a new national sewage sludge survey that would include a survey of pathogen occurrence in raw and treated sludge. AMSA believes that through the Part 503 regulations and other environmental controls, such as the National Pretreatment Program, great strides have been made to reduce the concentrations of pollutants in biosolids. A new survey would serve as a benchmark for the program and allow EPA and the wastewater treatment community to evaluate trends in pollutant concentrations. Furthermore, a new survey would provide EPA with the information necessary to assess the current standards and provide the feedback necessary for "continuous improvement in the science and technology of biosolids applied to land" as recommended by the *NRC Report* (p. 4).

The recommendations outlined in the *NRC Report* will require the commitment of additional government resources. Again, AMSA believes it would be impossible for the Agency to address every recommendation, even over the next three to five years, and believes the Agency must make an effort to identify those recommendations that will provide the most vital information to the ongoing debate over land application. AMSA is confident that those efforts related to human health effects, specifically the exposure-assessment studies and the framework for human health investigations, will provide the most benefit for the biosolids program, the nation's publicly owned treatment works, and the communities they serve.

We look forward to working with you in the coming months following the issuance of the notice. I would be happy to meet with you to discuss these issues further. Please feel free to contact me directly at 202/833-4653.

Sincerely,

A handwritten signature in black ink, appearing to read "K Kirk". The signature is stylized with a large "K" and a cursive "Kirk".

Ken Kirk  
Executive Director

cc: Ben Grumbles, Deputy Assistant Administrator for Water, EPA  
Geoff Grubbs, Director, Office of Science and Technology, EPA