

July 27, 2005

Mr. Thomas A. Kerr  
Executive Director  
Conference of Radiation Control Program Directors  
205 Capital Avenue  
Frankfort, KY 40601

Dear Mr. Kerr:

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) is a non-profit, non-partisan association of State regulators who implement the federal and State hazardous and solid waste laws, the remediation of contaminated waste sites, and the regulation and cleanup of underground storage tanks and federal facilities. Our members are trained in the necessary sciences, engineering, and public policy procedures to carry out these responsibilities, and bring special expertise to these issues. In particular, our Radiation Focus Group routinely reviews and comments on federal programs, cleanup activities, regulations and guidance that relate to low-level radioactive waste, and other radioactive materials entering hazardous and non-hazardous waste streams for disposal.

The work of our Radiation Focus Group has overlap with that of the CRCPD, in that most States have the responsibility for protecting the environment, and health and safety of its citizens from toxic and hazardous material contaminants, including sources of radiation exposure. State program staffs are often members of both our organizations, and our organizations have designated liaisons to facilitate our communications. We are writing to request your assistance in developing a Suggested State Regulation regarding radiation monitoring at solid waste facilities.

With increasing frequency, radioactive material is detected in municipal and residual solid waste by radiation monitors installed at RCRA D waste processing and disposal facilities (e.g., transfer facilities, landfills, resource recovery facilities). The materials that set off these facility radiation alarms may be regulated through specific or general license, but more likely are deregulated, exempt or unregulated. Experience has shown the vast majority of detection events are due to commonly used short-lived nuclear medicine radionuclides (e.g., I-131, Tc-99m, Tl-201, etc.), where human or animal patients have returned home, and inadvertently contaminated household waste. Regardless of the fact that the most probable type of radioactive material found in solid waste is relatively benign levels of short-lived medical radionuclides, numerous States expend considerable effort in responding to alarms, causing a measurable impact on other program activities, such as x-ray equipment and licensed radioactive material user inspections. Additionally, naturally occurring radioactive material (NORM), technologically enhanced NORM (TENORM), consumer products with RAM, or lost sealed sources (e.g., Ra-226, Cs-137, Am-241) are often detected. The disposition of such radioactive materials may or may not be straightforward for the State or facility in possession of the materials.




It would be of great assistance to States to have both model regulations and standards for a rational, uniform and practical approach to radiation monitoring at solid waste facilities. Under separate cover, we are requesting the Health Physics Society ANSI N13 Standards Committee to develop an ANSI standard to address radiation level alarm set point, system background limitation, gamma energy discrimination level, and other technical and overall administrative processes for notification, radiation exposure and source control, and onsite worker training and protection in handling such alarms.

Several years ago the Commonwealth of Pennsylvania promulgated new regulations and guidance for the radiation monitoring of solid waste. We are not aware of any other State or federal regulator that requires such radiation monitoring of solid waste to be performed. The Radiation Focus Group believes this is a significant gap in State regulatory authority. Based on the success of the Pennsylvania program, and the experience of Focus Group members in States without such regulations, it is evident that the opportunity exists to provide all States with the tools needed to appropriately manage these materials if they wish to do so. In that the CRCPD has and continues to develop model State regulations in the form of Suggested State Regulations for the many areas of radiation protection, we respectfully request the CRCPD consider the development of a Suggested State Regulation (SSR) for "Radiation Monitoring of Solid Waste."

We believe that the work done in Pennsylvania will make the development of an SSR much easier. For example, their regulations and related guidance require the facility to: monitor the solid waste for radiation, develop a Radiation Protection Action Plan, state the instrumentation to be used, and outline the procedures, performance checks, training and records. A graded response to alarms utilizing two Action Levels, and appropriate onsite radioactive materials characterization, has allowed the facilities and the state to more effectively manage the radioactive materials detected in solid waste. Should the CRCPD undertake the development of a new SSR, they might consult the Pennsylvania radiation control program. Much information, including an example of their regulations for municipal landfills, can be found on their web site: [http://www.dep.state.pa.us/dep/deputate/airwaste/rp/Radiation Control Division/SolidWasteRadMonitoring.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/rp/Radiation%20Control%20Division/SolidWasteRadMonitoring.htm).

The positive aspects of these two actions by the CRCPD and Health Physics Society will (hopefully) be the availability of a rational, uniform and practical approach for radiation monitoring at solid waste facilities. In closing I would like to thank you and the CRCPD for their consideration of this request. Should you have any questions, please do not hesitate to contact Jeff Deckler, Chair of the ASTSWMO Radiation Focus Group at (303) 692-3387, or via e-mail at: [Jeff.Deckler@state.co.us](mailto:Jeff.Deckler@state.co.us).

Sincerely,

  
Stephen Hammond *JK*  
ASTSWMO President

cc: Debra McBaugh, Chairperson, CRCPD  
Edgar Bailey, Past Chairperson, CRCPD  
Kathleen McAllister, Chair, CRCPD SSR Council  
ASTSWMO Board of Directors  
ASTSWMO Radiation Focus Group

July 27, 2005

Mr. Richard J. Burk, Jr.  
Executive Secretary  
Health Physics Society  
1313 Dolley Madison Blvd., Suite 402  
McLean, VA 22101

Dear Mr. Burk:

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) is a non-profit, non-partisan association of State regulators who implement the federal and State hazardous and solid waste laws, the remediation of contaminated waste sites, and the regulation and cleanup of underground storage tanks and federal facilities. Our members are trained in the necessary sciences, engineering, and public policy procedures to carry out these responsibilities, and bring special expertise to these issues. In particular, our Radiation Focus Group routinely reviews and comments on federal programs, cleanup activities, regulations and guidance that relate to low-level radioactive waste, and other radioactive materials entering hazardous and non-hazardous waste streams for disposal.

The work of our Radiation Focus Group has overlap with that of the Health Physics Society, in that our member organizations employ health physicists who have the responsibility for protecting the environment, and health and safety of the public from toxic and hazardous material contaminants, including sources of radiation exposure. We are writing to request your assistance in developing an ANSI standard regarding radiation monitoring at solid waste facilities.

With increasing frequency, radioactive material is detected in municipal and residual solid waste by radiation monitors installed at RCRA D waste processing and disposal facilities (e.g., transfer facilities, landfills, resource recovery facilities). The materials that set off these facility radiation alarms may be regulated through specific or general license, but more likely are deregulated, exempt or unregulated. Experience has shown the vast majority of detection events are due to commonly used short-lived nuclear medicine radionuclides (e.g., I-131, Tc-99m, Tl-201, etc.), where human or animal patients have returned home, and inadvertently contaminated household waste. Regardless of the fact that the most probable type of radioactive material found in solid waste is relatively benign levels of short-lived medical radionuclides, numerous States expend considerable effort in responding to alarms, causing a measurable impact on other program activities, such as x-ray equipment and licensed radioactive material user inspections. Additionally, naturally occurring radioactive material (NORM), technologically enhanced NORM (TENORM), consumer products with radioactive material, or lost sealed sources (e.g., Ra-226, Cs-137, Am-241) are often detected. The disposition of such radioactive materials may or may not be straightforward for the State or facility in possession of the materials.



It would be of great assistance to States to have both model regulations and standards for a rational, uniform and practical approach to radiation monitoring at solid waste facilities. Under separate cover, we are requesting the Conference of Radiation Control Program Directors (CRCPD) to develop Suggested State Regulations. By this letter we respectfully request the Health Physics Society ANSI N13 Standards Committee to consider organizing a working group to develop an ANSI standard for "Implementing Radiation Monitoring Programs at Solid Waste Facilities." This standard would address radiation level alarm set point, system background limitation, gamma energy discrimination level, and other technical and overall administrative processes for notification, radiation exposure and source control, and onsite worker training and protection in handling such alarms.

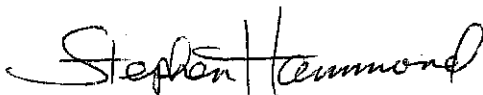
We believe that similar work done in Pennsylvania will make the work of developing such an ANSI standard much easier. For example, their regulations and related guidance require the facility to: monitor the solid waste for radiation, develop a Radiation Protection Action Plan, state the instrumentation to be used, and outline the procedures, performance checks, training and records. A graded response to alarms utilizing two Action Levels, and appropriate onsite RAM characterization, has allowed the facilities and the State to more effectively manage the radioactive materials detected in solid waste. Should the Health Physics Society ANSI Standards Committee undertake the development of a new standard, they might consult the Pennsylvania radiation control program. Much information, including an example of their regulations for municipal landfills, can be found on their web site:

[http://www.dep.state.pa.us/dep/deputate/airwaste/rp/Radiation Control Division/SolidWasteRadMonitoring.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/rp/Radiation_Control_Division/SolidWasteRadMonitoring.htm).

The positive aspects of these two actions by the CRCPD and Health Physics Society will (hopefully) be the availability of a rational, uniform and practical approach for radiation monitoring at solid waste facilities. Even if States do not adopt the proposed Suggested State Regulations, with a Health Physics Society ANSI Standard available, a needed tool will be readily available to States and facilities for the protection of facility staff, the public and the environment.

In closing I would like to thank you, the Health Physics Society and the ANSI Standards Committee for their consideration of this request. If the Chair of your ANSI Standards Committee and others feel this project should move forward, please advise who should receive a completed ANSI project initiation notification system (PINS) form. Should you have any questions, please do not hesitate to contact Jeff Deckler, Chair of the ASTSWMO Radiation Focus Group at (303) 692-3387, or via e-mail at: [Jeff.Deckler@state.co.us](mailto:Jeff.Deckler@state.co.us).

Sincerely,



Stephen Hammond  
ASTSWMO President

cc: Raymond A. Guilmette, President, Health Physics Society  
Ruth E. McBurney, President Elect, Health Physics Society  
ASTSWMO Board of Directors  
ASTSWMO Radiation Focus Group  
Joseph P. Ring, HPS ANSI N13