UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Joseph M. Madden, Ph.D.
Strategic Manager for Microbiology
Center for Food Safety and Applied Nutrition
Food and Drug Administration
200 C St., SW
Washington, D.C. 20204

Dear Mr. Madden:

This letter is in response to your request for guidance on the suitability of disposing of frozen strawberries that may be contaminated with hepatitis A virus (HAV) in a municipal solid waste landfill. As you explained, recently, certain batches of frozen strawberries sold in the United States by a specific company have been potentially contaminated with HAV.

Discussions were held between the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA) and the Centers for Disease Control and prevention (CDC) about the disposal of these frozen strawberries. We considered many factors in these discussions. The quantity and viability of the virus in the current situation were considered. The strawberries are not expected to be extensively contaminated since the epidemiological data suggest that contamination is relatively focal (possibly just one lot or part of lot) and the virus will not replicate unless it is in a human host. Rats, insects and other species often found in the landfill environment are not vehicles of transmission for the virus. In addition, the viability of the virus degrades with time. For this virus, the primary infection pathway is through the oral-fecal route (ingestion). No documented outbreaks of landfill or sewage workers contracting hepatitis A in the workplace have been reported in the literature and waterborne outbreaks are rare.

Further discussion centered on risk of infection based on landfill conditions. Although it is unlikely that the temperatures achieved in a landfill are sufficient to inactivate HAV, we agreed that the virus being released to the environment through groundwater contamination is unlikely in a properly designed and maintained municipal solid waste landfill. As the primary infection pathway is through ingestion, potential aerosolization and subsequent inhalation are not of concern. Additionally, the strawberries in this situation will be rendered inedible under FDA requirements.

After careful consideration of the facts involved in the current situation, the Agencies believe that disposal of these strawberries in a properly operated and maintained municipal solid waste landfill is appropriate and does not pose a risk of infection to disposal workers or the general public. This determination does not rule out consideration of other options for disposal, such as incineration in a municipal solid waste combustor.

Although the federal EPA does not have regulatory requirements regarding the disposal of this specific waste stream, most states are authorized to implement their own Resource Conservation and Recovery Act (RCRA) programs. Therefore, many state and local regulatory agencies have their own regulations which may differ from federal regulations. These agencies should be contacted for specific information on state and local requirements.

Thank you for your concern about safe waste management. Please do not hesitate to contact Kristina Meson of my staff with any questions or concerns. Kristina may be reached at (703) 308-8488.

Sincerely,

Elizabeth A. Cotsworth, Acting Director
Office of Solid Waste