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## Medical Facilities Turn to Alternative Waste Disposal Options

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On October 6, 2009, the United States Environmental Protection Agency ("EPA") published a Final Rule entitled "Standards of Performance for New Stationary Sources and Emissions Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators" ("Rule"). 74 Fed. Reg. 51369. The Rule applies to any device used to burn hospital waste and/or medical/infectious waste. Hospital waste is defined as discards generated at a hospital, and medical/infectious waste consists of any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals. The Rule was promulgated under Sections 111 and 129 of the Clean Air Act and amends several sections of Title 40, Part 60, Subpart Ce of the Code of Federal Regulations.

EPA promulgated the Rule to serve two functions: (1) as a the statutorily-required five-year review of the standards for Hospital/Medical/Infectious Waste Incinerators ("HMIWI"), last promulgated by EPA on September 15, 1997; and (2) as a further response to the March 2, 1999 remand by the U.S. Court of Appeals for the District of Columbia in Sierra Club v. EPA, 167 F.3d 658, which had sought further explanation of EPA's reasoning in determining the minimum regulatory "floors" in the 1997 standards. EPA first published a proposed response to the Court of Appeals' remand on February 6, 2007. After public comments and several rulings by that Court, EPA re-assessed its response and, on December 1, 2008, published another proposed version. EPA subsequently took public comments on the proposal and after consideration of same published its final rule last month.

The main function of the Rule is to control the release of air pollutants by HMIWI. The air pollutants regulated by the Rule include particulate matter; heavy metals including lead, cadmium, and mercury; toxic organics including chlorinated dibenzo-p-dioxins/dibenzofurans; carbon monoxide; nitrogen oxide; and acid gases including hydrogen chloride and sulfur dioxide. The Rule establishes new, and more stringent, "maximum achievable control technology" ("MACT") standards for reducing emissions of these air pollutants for both new and existing HMIWI in different categories.

Categories for HMIWI	New	Exiting
Large	>500lb/hr of waste	>500lb/hr of waste
Medium	>200 to ≤500lb/hr of waste	>200 to ≤500lb/hr of waste
Small	$\leq$ 200 lb/hr of waste	$\leq$ 200 lb/hr of waste
Small Rural	N/A	Small HMIWI >50 miles from boundary of nearest SMSA, burning <2,000 lb/wk of waste

The revised emission limits for existing HMIWI are based on the average of the best performing 12 percent

of sources for each pollutant subcategory. EPA surmises that most sources should be able to meet the revised limits using control technology already available in the industry (i.e., wet scrubbers, dry scrubbers, or some combination of these controls). 74 Fed. Reg. at 51396. EPA further expects that, due to the stringent nature of the revisions to the emission guidelines for new HMIWI, new HMIWI are unlikely to be built and sources instead will utilize alternative waste disposal options. 74 Fed. Reg. at 51398.

All HMIWI that complied with the New Source Performance Standards ("NSPS") promulgated in the 1997 rule are "existing" sources under the Rule. These sources are required to meet the emissions limits under the revised Emissions Guidelines ("EG") or the 1997 NSPS, whichever is more stringent, by the applicable compliance date for the revised EG (December 7, 2009). "New" units under the Rule are defined as those units for which construction commenced after the December 1, 2008 proposal, or for which modification is commenced on or after April 6, 2010. Those new units would be subject to the more stringent MACT limits under the Rule and must comply with those standards by April 6, 2010 or upon startup, whichever is later.

The Rule makes other changes to the HMIWI regulations including allowing existing sources to use previous emissions test results to demonstrate compliance with the revised limits; annual inspections of air pollution control devices; a one-time visible emissions test of ash handling operations; carbon monoxide continuous emissions monitoring systems and bag leak detection systems for new sources; several approved monitoring alternatives; changes regarding requirements for nitrogen oxides and sulfur dioxide; performance testing requirements for small rural HMIWI; monitoring requirements for HMIWI that install selective non-catalytic reduction technology to reduce nitrogen oxides emissions; waste segregation; removal of exemptions regarding startup, shutdown, and malfunction; and procedures for test data submittal.

Although EPA states that its purpose is not to discourage use of HMIWI, recognizing the costs involved in incineration control technology, EPA promulgated these revised MACT standards with an understanding that they will cause most medical facilities to use alternative waste disposal options, including in particular, use of an autoclave followed by landfilling of sterilized waste. 74 Fed. Reg. at 51396. The overall purpose, of course, is to encourage segregation of wastes and minimize the quantities of wastes that are incinerated. For those sources that plan to continue to operate HMIWI and/or modify existing HMIWI, it will be important to assess the compliance status of those facilities with reference to the new federal MACT standards and guidelines, as well as the corresponding regulations found in State Implementation Plans approved under the federal Clean Air Act, and any independent state-law based regulatory programs that may apply to same.