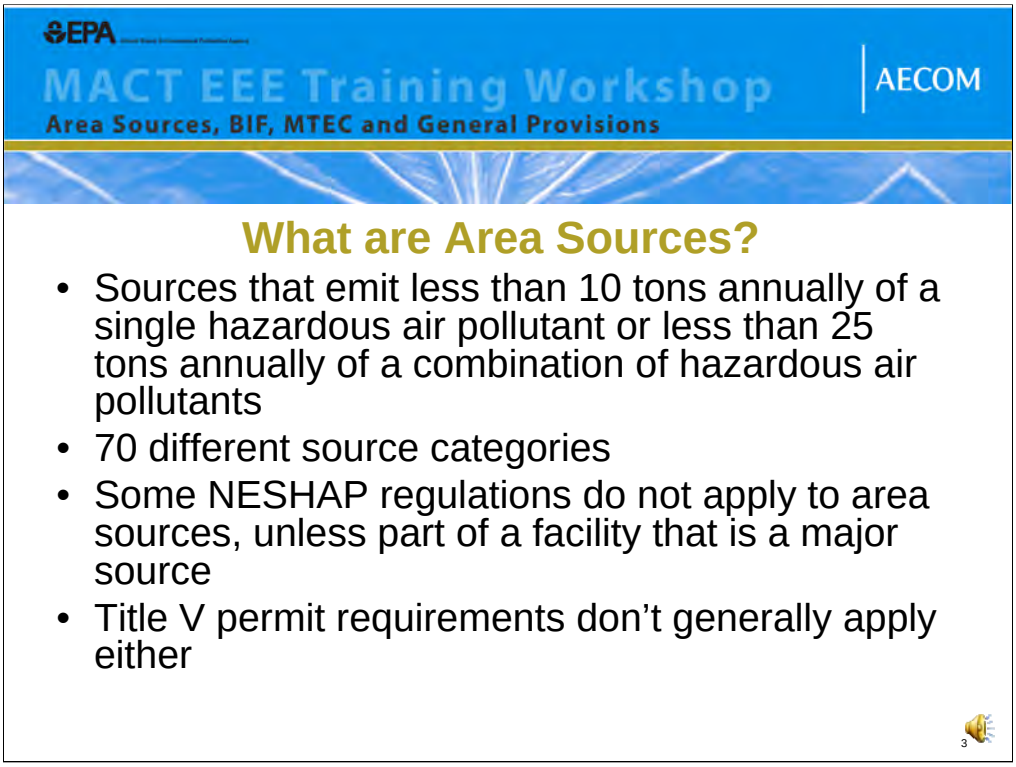
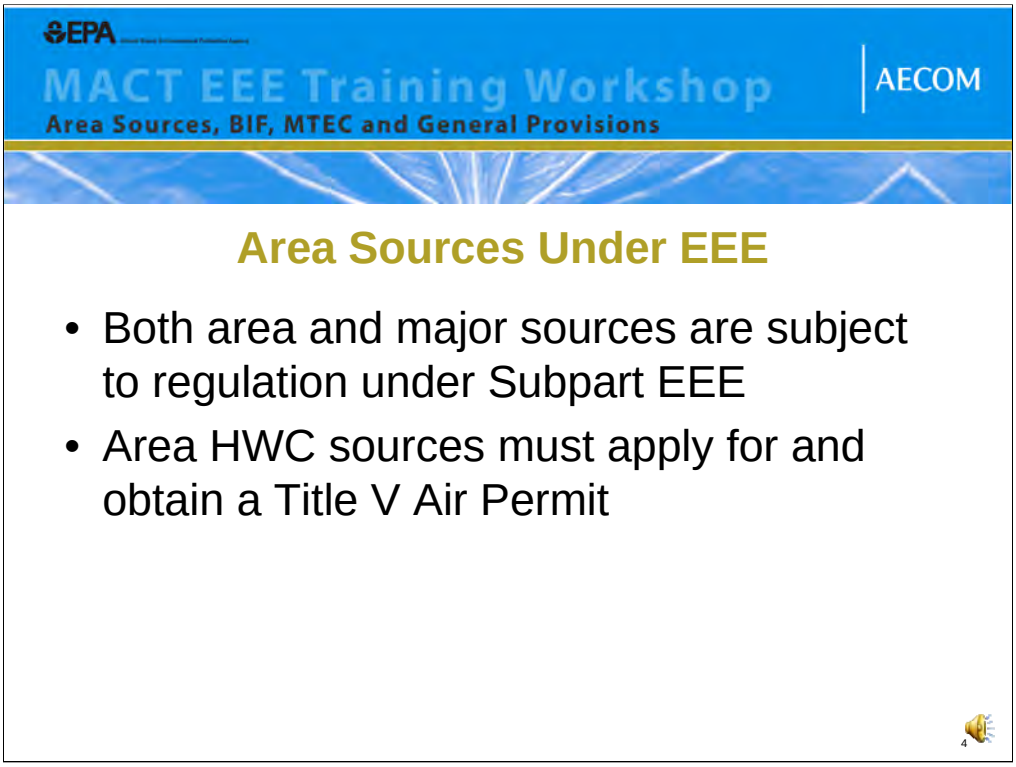
This module will cover several topics that are relevant to units operating under Subpart EEE

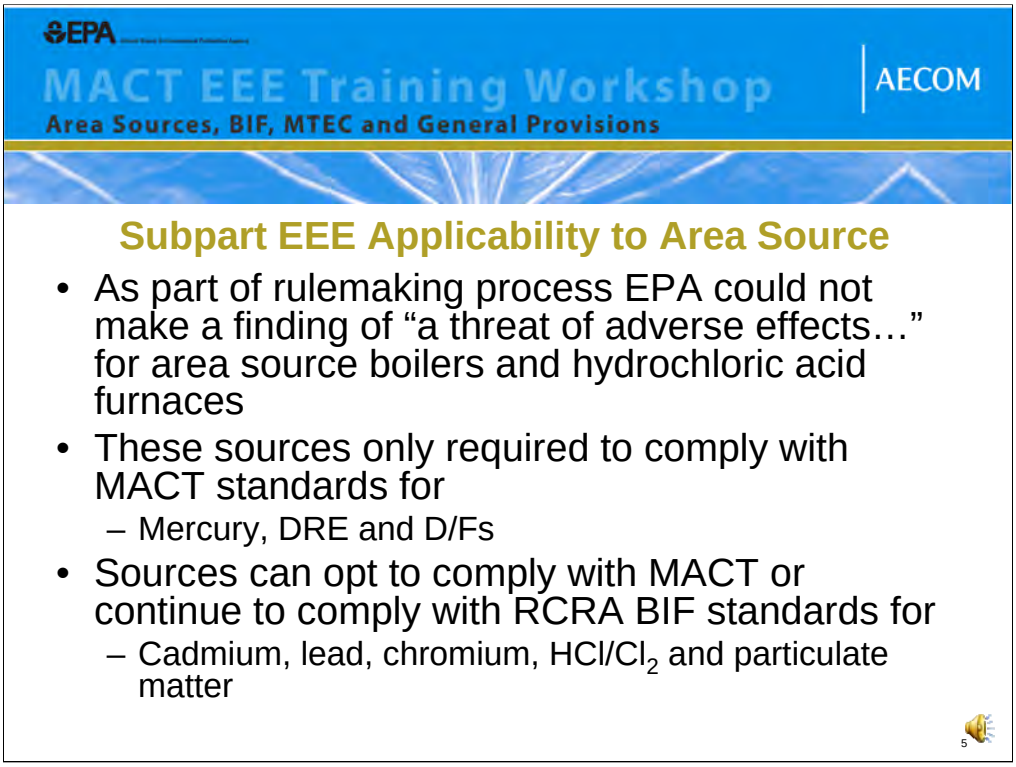
These topics include the applicability of Subpart EEE to Area (versus major) sources, calculation of the maximum theoretical emissions concentration (or MTEC) and an overview of the General Provisions of the NESHAP regulations.



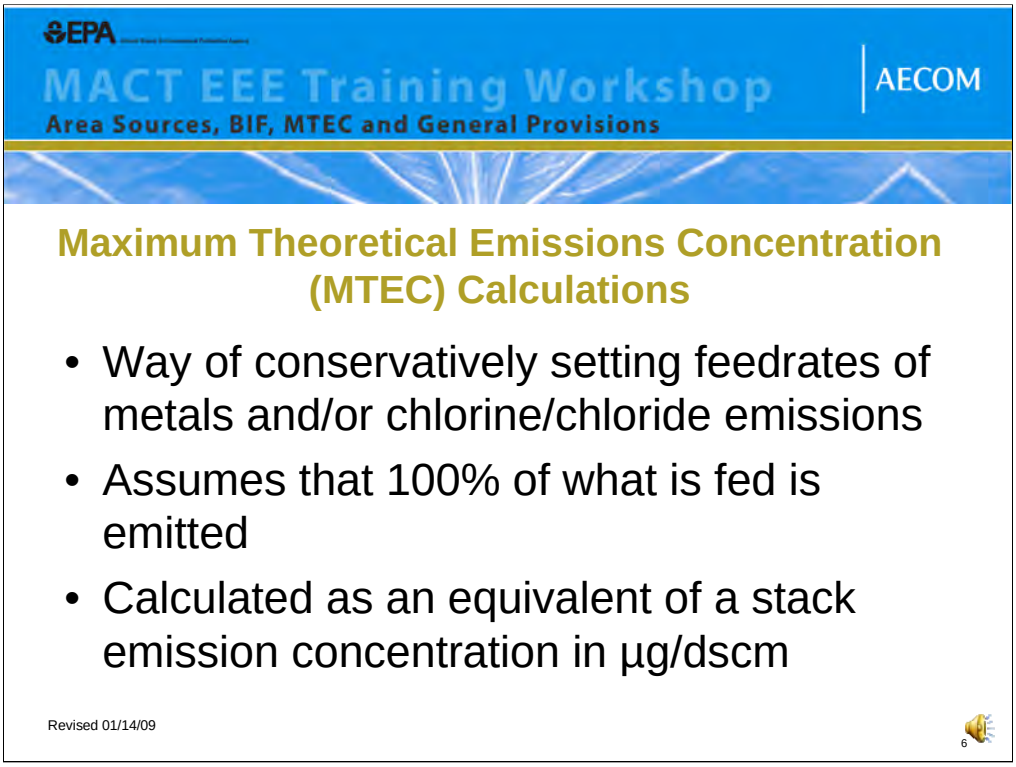
It is important to differentiate Area Sources from Major Sources in that some NESHAP regulations do not apply to Area Sources. Area Sources are defined as those that emit less than 10 tons per year or less of a single hazardous air pollutant (or HAP) or less than 25 tones per year of a combination of HAPs. EPA has identified 70 different source categories of area sources. For those sources that are strictly area sources, not only do certain NESHAPs regulations not apply, but Title V don't generally apply either.



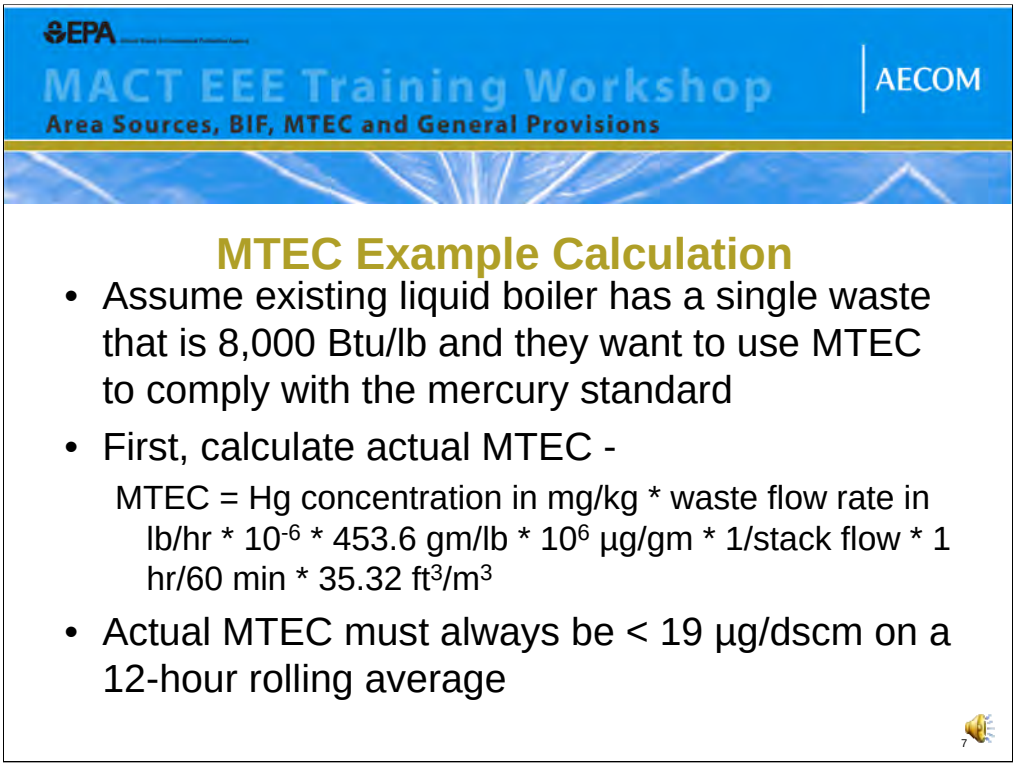
However, Subpart EEE regulations apply to all sources as do the requirements to apply for and obtain a Title V Air Permit with some exceptions as described on the next slide.



For area source boilers and hydrochloric acid recovery furnaces, EPA did not make a finding of a threat of adverse effects determination during its rulemaking process, so these sources are not obligated to comply with all the standards applicable to the same major source subcategories except for mercury, DRE and dioxins and furans. These area sources can opt to comply with the Subpart EEE standards or for the other HAPs, they can continue to comply with the RCRA BOF standards for three metals, HCl/Cl_2 and particulate matter.



Another provision contained in Subpart EEE is the Maximum Theoretical Emissions Concentration or MTEC which can be used to establish conservative feed rate limits to comply with the emission standards for metals and chlorine/chloride. The MTEC approach assumes that 100% of what is fed is emitted and is calculated as an equivalent of a stack emissions concentration.

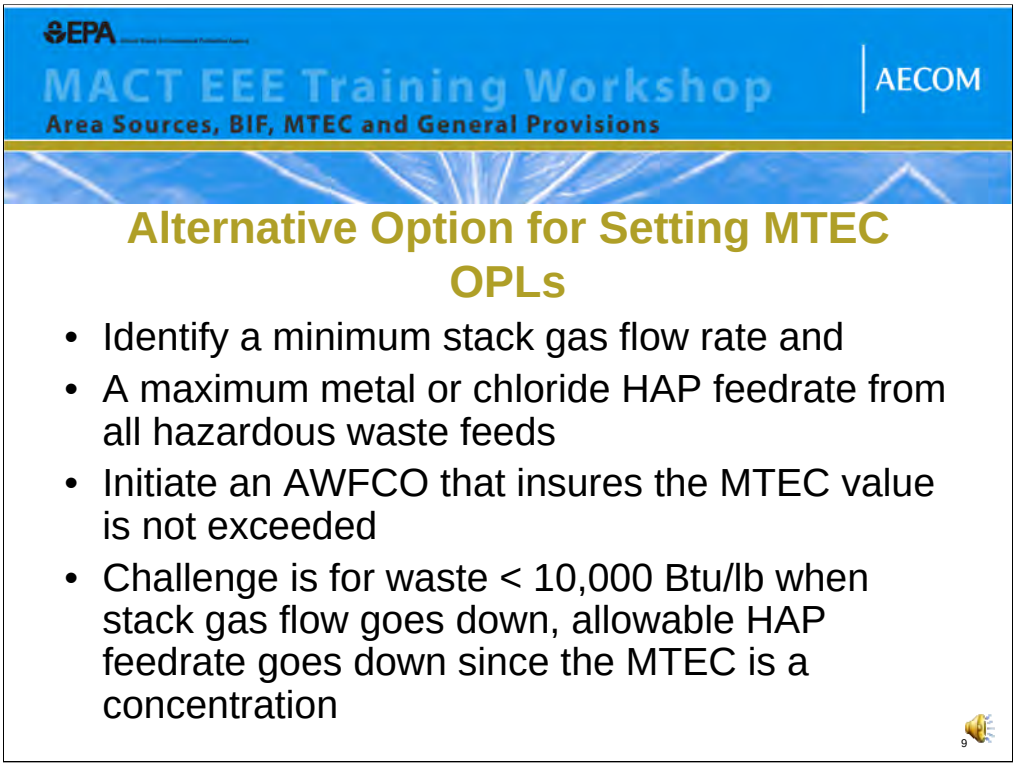


This example shows the calculation an existing liquid boiler would use to comply with the low Btu emissions standard for mercury using the MTEC approach.

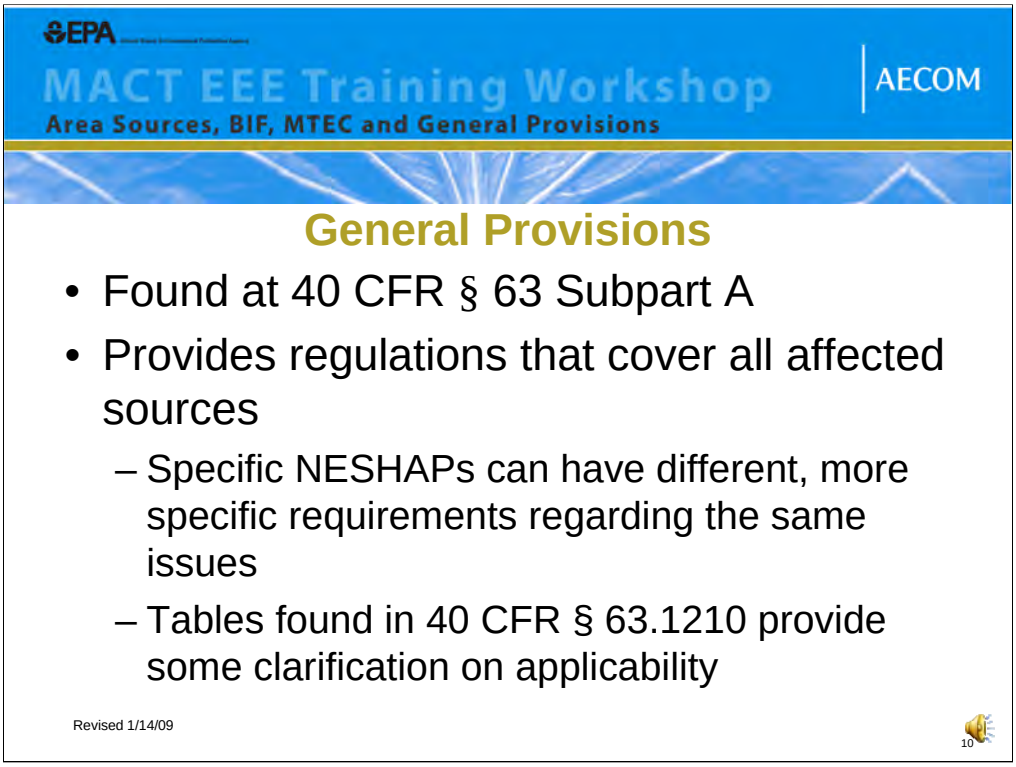
Setting the Operating Limits

- Determine feedrate of HAP in all feedstreams
- Monitor and record stack gas flow rate or surrogate
- Continuously calculate the MTEC
- Interlock the waste feed to initiate an AWFCO when the emission standard is exceeded

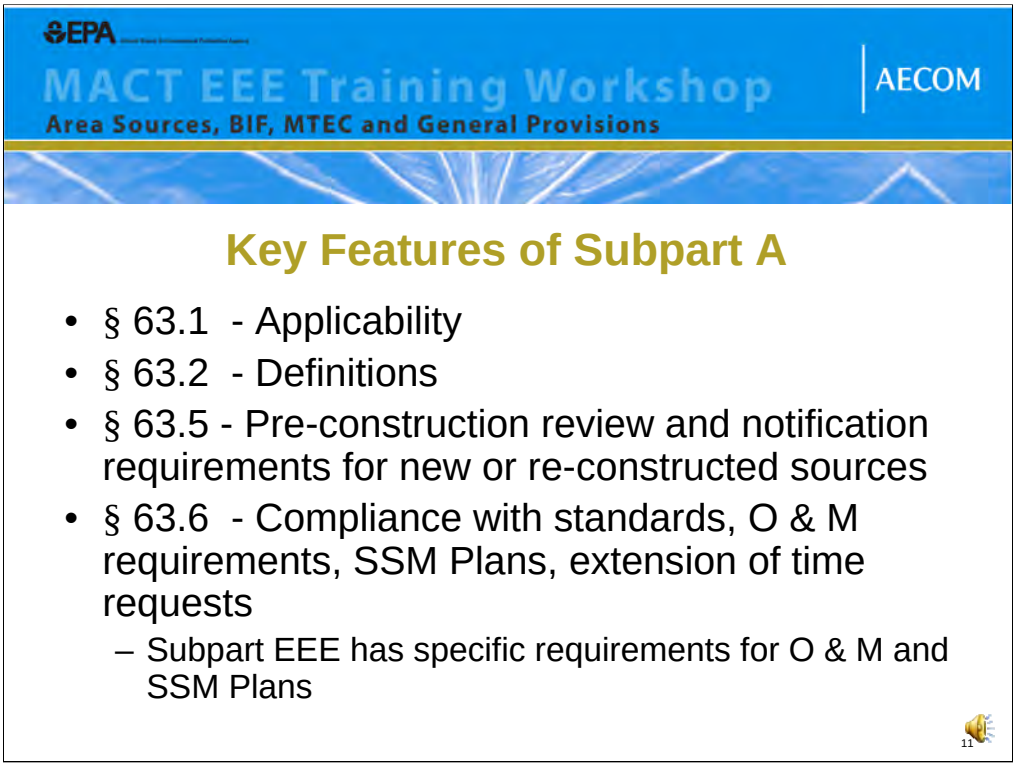
Following the example in the previous slide, this calculation would be completed for all feedstreams and using the actual stack flow rate or a surrogate, the MTEC would be continuously calculated. A waste feed interlock would be programmed into the shutdown logic to assure that hazardous waste feed was cut off if the MTEC exceeded the emission standard.



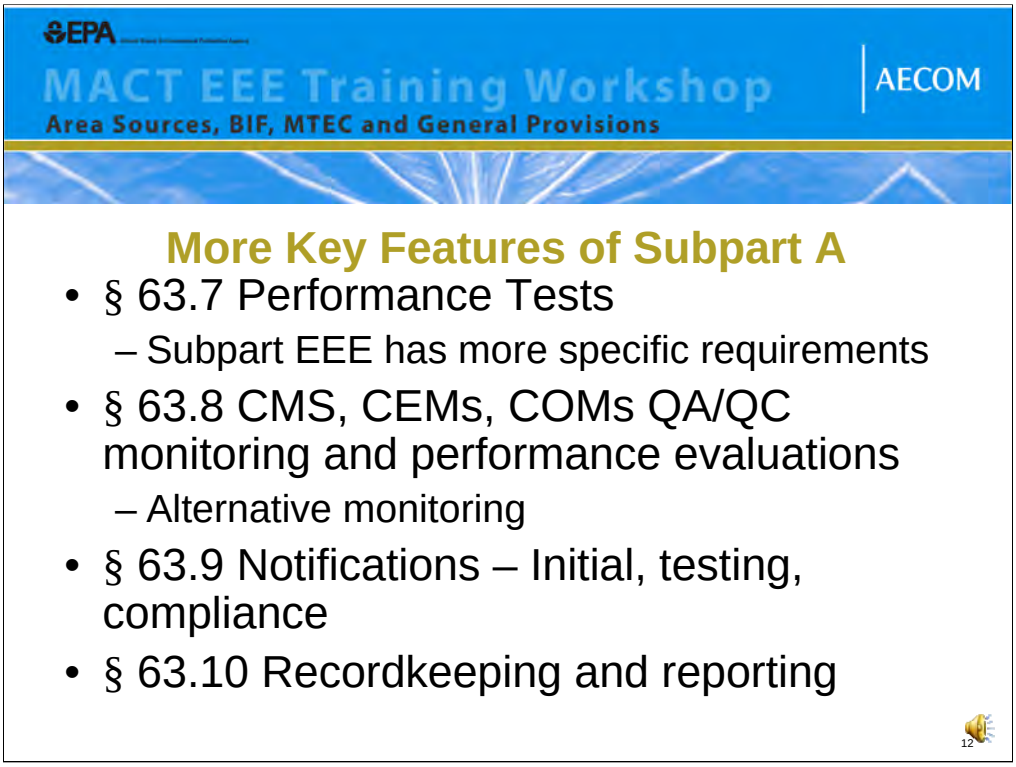
Another alternative approach to setting an MTEC limit is to identify a minimum stack gas flow rate and a maximum metal or chloride feedrate from all hazardous waste feeds that assures the MTEC is not exceeded. One problem with this approach however is that since the standards are concentration based for low Btu wastes, the allowable HAP feed rate goes down as stack flow rate decreases.



Switching now to a brief overview of the NESHAP General Provisions, these are codified at 40 CFR 63 Subpart A. These General Provisions include requirements that cover all affected sources, except as specific NESHAPs have more specific requirements. Tables are included in Subpart EEE in Section 63.1210 that clarify whether the General Provisions or Subpart EEE apply to specific requirements.



Both the General Provisions and Subpart EEE contain sections on applicability and definitions that are important to review together when reviewing related issues. Section 63.5 is not commonly used in evaluating Subpart EEE units as most all issues affect existing units. Section 63.6 has equivalent and specific language that prevails for Operations and Maintenance Plans and Start-up, Shutdown and Malfunction Plans, however, some extension of time requests may be evaluated by the lead agency under the General Provisions.



Here again, General Provisions requirements have comparable provisions in Subpart EEE and care must be taken to consult both sets of regulations to understand applicability to Subpart EEE sources.