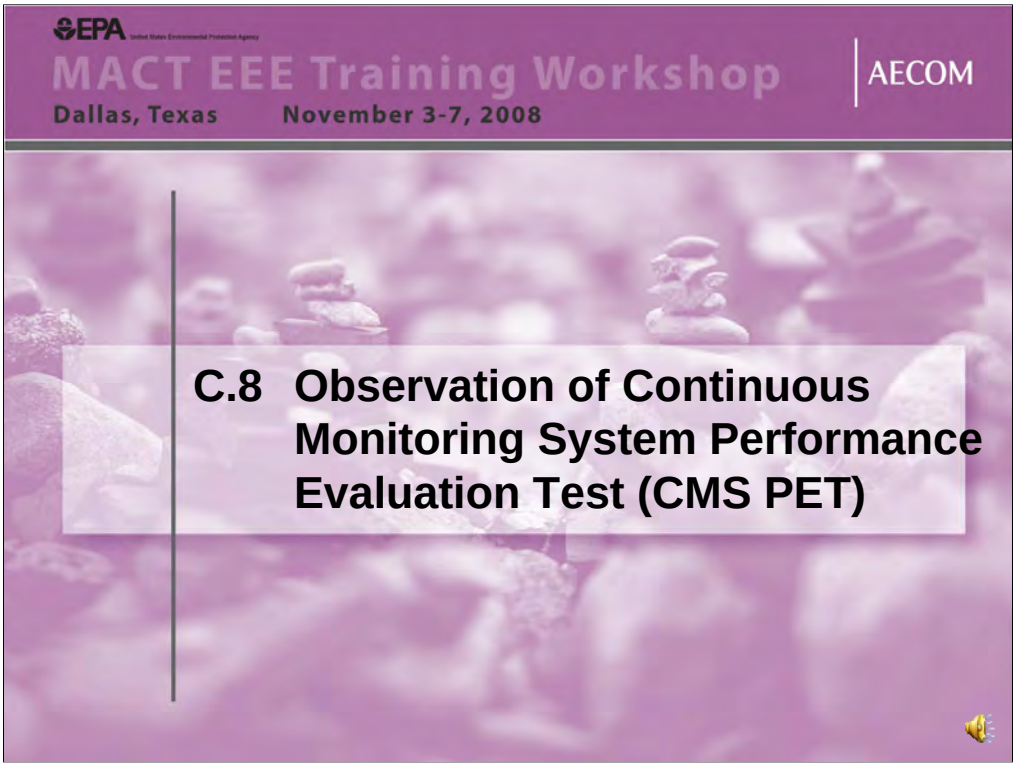
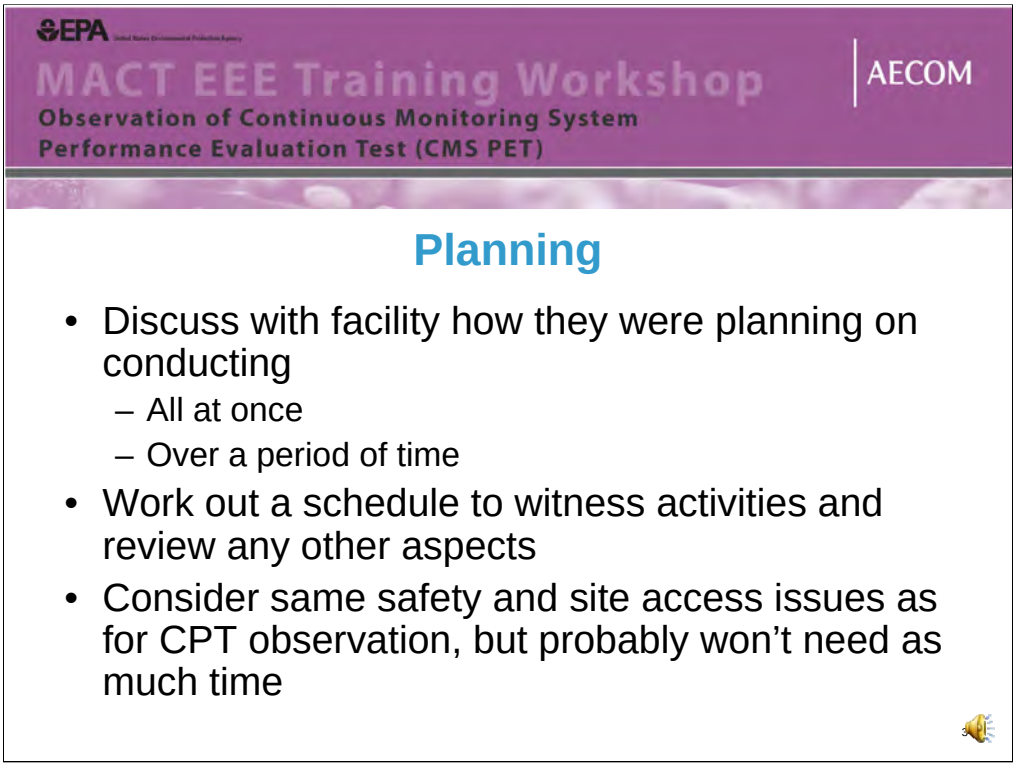


This module reviews some key activities that agency observers can review related to Continuous Monitoring System Performance Evaluation Tests or “CMS PETs”.

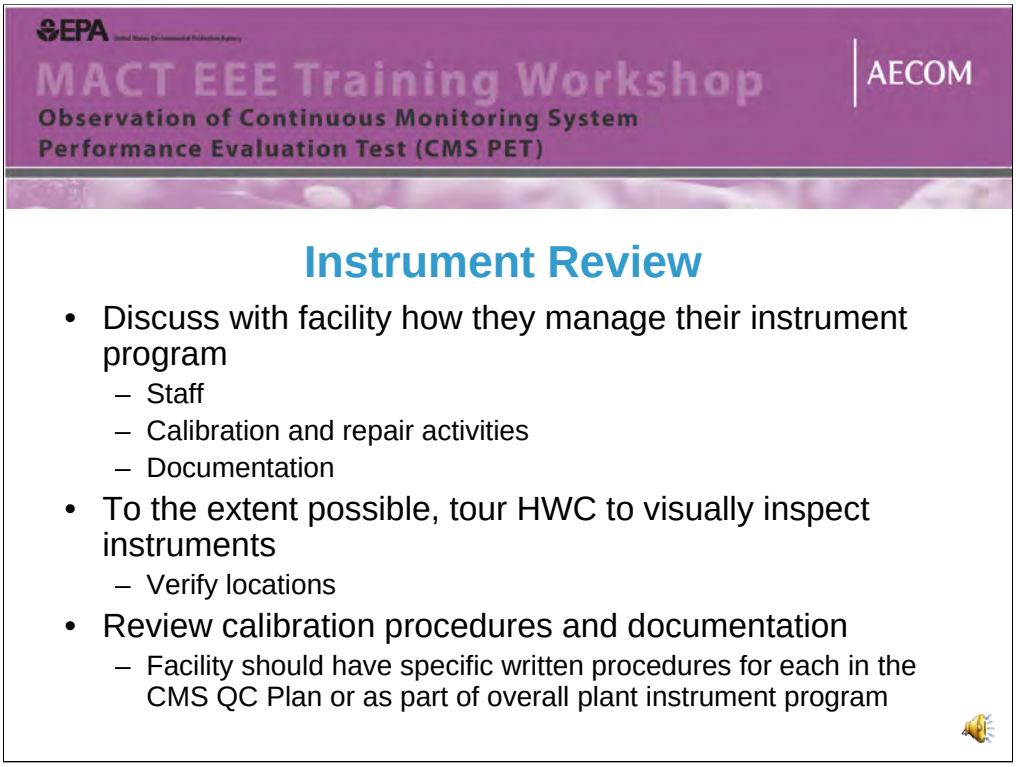
Presentation Overview

- Planning
- Instruments
- Control and data storage systems
- AWFCO system
- CEMs/COMs
- Calculations

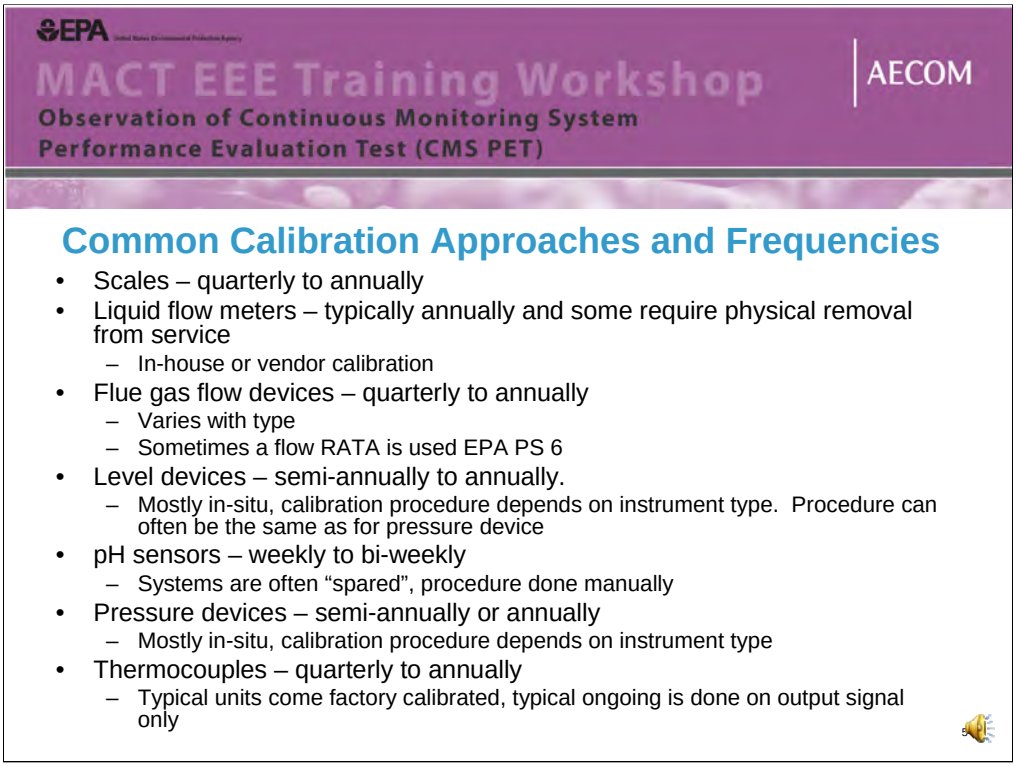
The topics to be discussed in the module are included on this slide.



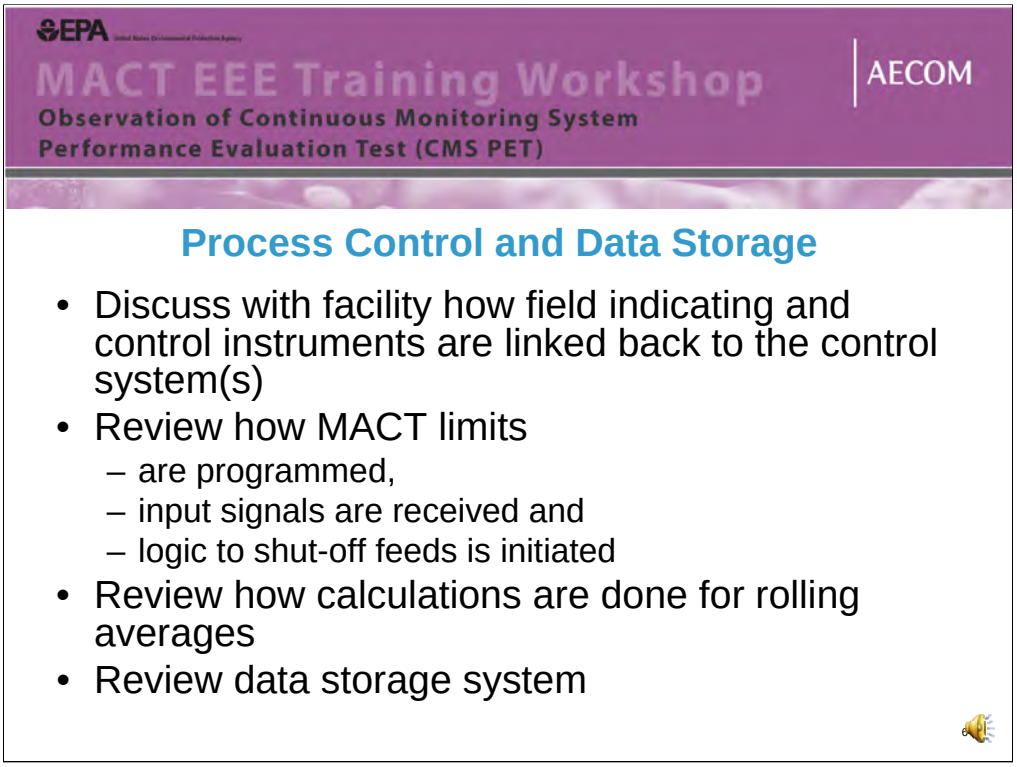
The conduct of a CMS PET can be different and distinct from conducting the actual CPT in the very often, this is done by facility staff internally. Therefore, if observation of this is of interest to agency personnel, it is important to discuss that with the facility to see how they had envisioned actually doing the work and then establish a schedule so that the various activities can be observed. Site access and safety issues are similar to what has been discussed in the previous module, however, it is likely that less time on site will be needed for observation activities.



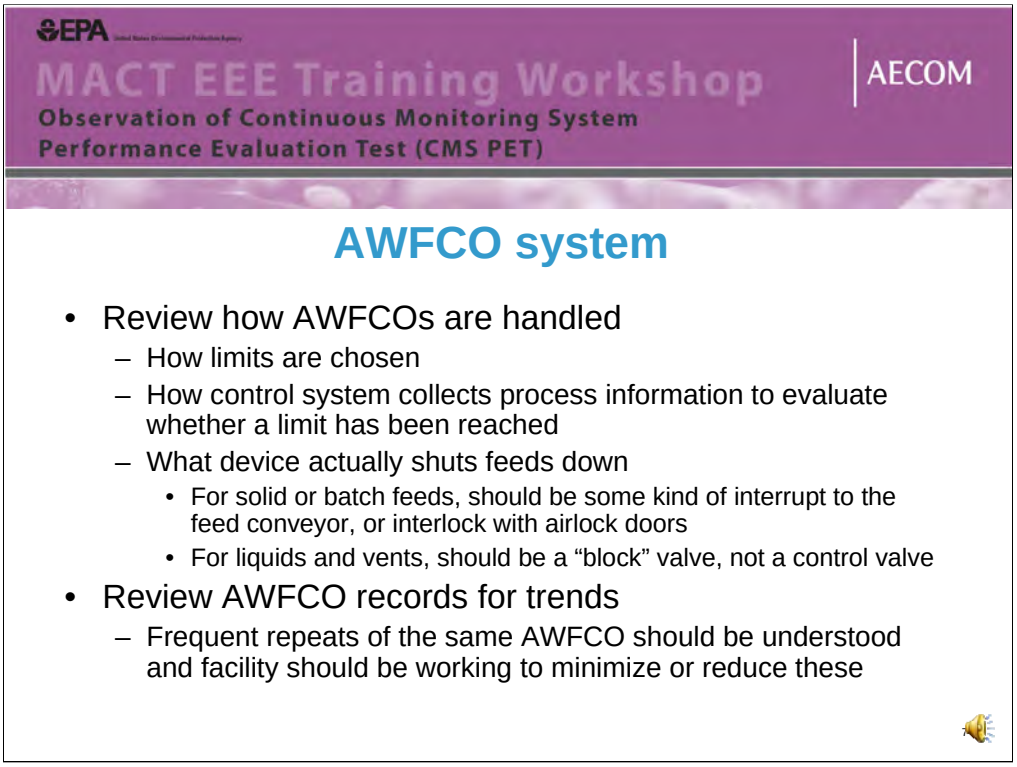
Of central importance to this effort is to gain a good understanding of how the facility manages their instrument program. Once onsite, using the list of CMS instruments referred to in the CMS PET and CPT Plan, physically tour and to the extent possible, verify locations of the instruments. This may not always be possible as some may be located under insulation or in area, such as an elevated pipe rack, that cannot easily be seen or reached. The facility should have specific written calibration procedures for each of their CMS instruments and be able to have someone responsible for that work explain how the work is accomplished and documented.



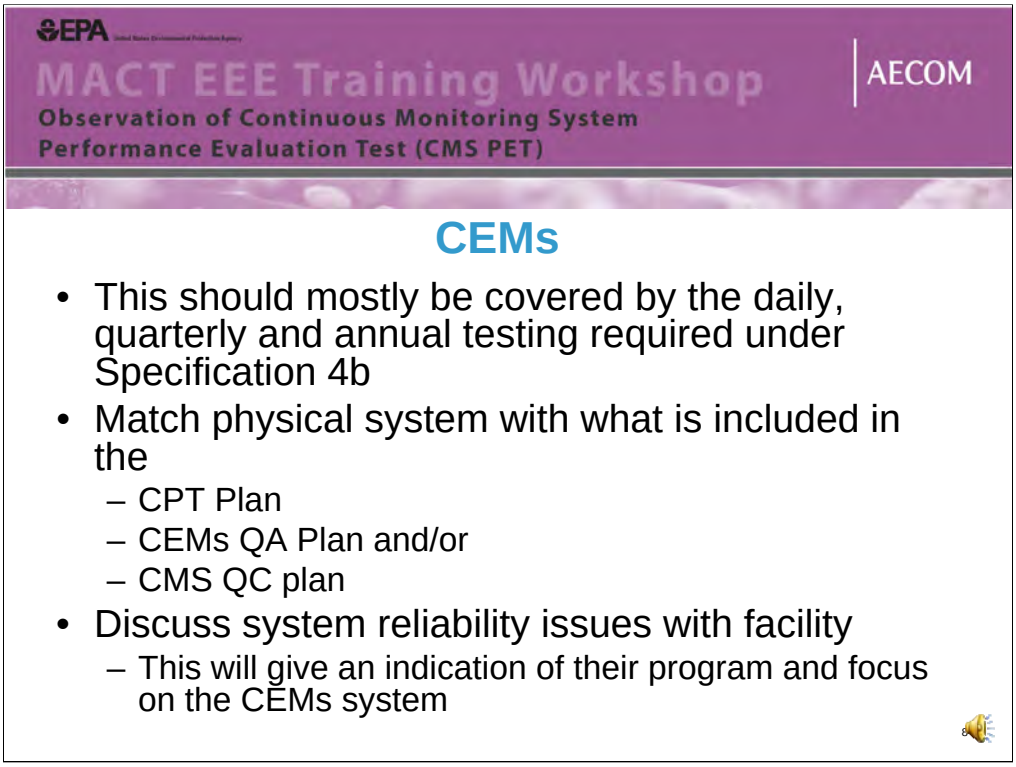
This slide provides some typical approaches and frequencies used at HWCs for their various CMS instruments. Other approaches and frequencies can be appropriate as well.



To understand how the actual process control system manages the HWC's operation, discuss with the facility how field instrument that sense process conditions, communicate with the process control system and then in turn, how output from that is communicated back to control equipment in the process. In addition, most process control systems in use today, utilize some form of programming or software that collects the process instrument data, performs calculations, and then either adjusts the process or initiates an AWFCO. MACT limits should be programmed in so that AWFCOs are automatically initiated. In addition to ongoing process control, rolling average calculations and data storage of process data should also be discussed.



Expanding on the topic of the AWFCO system, the observer should understand how the limits are chosen, how the shutoff logic is actually programmed and then how, physically, the shut off stops hazardous waste feeds. There are several ways to stop solids feeding activities, but stopping of liquid or vent feeds should be done with a block valve versus a control valve. Finally, the observer can review that actual AWFCO log to evaluate whether there are any trends or indications that there are frequent AWFCOs caused by the same issue.



Operation and performance of the permanently installed CEMs system should be addressed by the daily, quarterly and annual calibration and testing required by the relevant Performance Specification (e.g., 4b). The physical system should match what has been described in the relevant documents and system reliability issues will be evident from reviewing the AWFCO logs and will provide an indication of how well the system performs and is maintained.