

**EMIT Emissions Statement Guidance Document:  
Emission Units with Ancillary Equipment**

Sources are recorded in EMIT by permit (P), registration (R), permit-by-rule (E), and unpermitted/unregistered (U) numbers. As such, combustion units that are permitted with ancillary fuel-burning equipment should be logged in EMIT as a single source.

**How to Set-up EMIT Source for Proper Reporting of Emissions:**

Within an EMIT source, the individual units of a permitted system should be listed under the Fuel & Materials tab with an SCC for each unit and fuel consumed by that unit.

For example, a dual-fuel cogeneration turbine equipped with a duct burner that operates on a single fuel should have three SCCs displayed:

1. Duct Burner Operations
2. Turbine Operations on Fuel #1
3. Turbine Operations on Fuel #2

Fuel & Material (SCC) Details	
SCC #	Description
1-02-006-02	External Combustion Boilers Industrial Natural Gas 10-100 Million Btu/hr
2-02-001-01	Internal Combustion Engines Industrial Distillate Oil (Diesel) Turbine
2-02-002-01	Internal Combustion Engines Industrial Natural Gas Turbine

DEEP requests that the **Process Description** field under the Fuel & Materials Details tab be completed with “Ancillary Equipment – [Enter type of equipment]” on any SCC processes for ancillary equipment.

**Utilizing “STACK TEST...” Emission Factors:**

Ancillary equipment, as discussed in this guidance, is assumed to not operate independently. Therefore, stack tests are expected to be performed on the main unit with and without the ancillary equipment operating and never on the ancillary equipment alone.

Pollutants tested should be reported using a “STACK TEST...” emission factor origin on the main unit with the results from the stack test that was performed on the unit operating by itself. Emission factors for the ancillary unit should be determined by following these steps:

1. Subtract the averaged emission factor (in lb/hr) from the main unit’s tests from each emission factor (in lb/hr) calculated for each test that the ancillary unit was operating. This will provide emission factors for the ancillary equipment by itself.
  - a. Any emission factor calculated for the ancillary unit that has a value less than zero should be treated as zero for the remainder of the calculation. This is similar to how negative mass measurements are treated as zeroes in stack test calculations.
2. Convert the emission factor into lb/MMBTU by dividing the emission factors by the heat provided by the ancillary equipment during the test period.
3. Average all the emission factors to get a single averaged emission factor for the ancillary equipment.
4. Multiply the averaged emission factor by the heat content of the fuel used by the ancillary equipment to convert the emission factor into the proper units for entry into EMIT.

Emission factors with “STACK TEST...” emission factor origins should be based solely on stack tests conducted during steady-state operations.

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**Transient Operations:**

CT DEEP requests for transient operations to be reported to EMIT only in instances where transient events are frequent, such as a peaking electric generating unit, produce a significant amount of emissions, or as requested by the Commissioner. In these instances, an additional SCC should be added to the Fuel & Materials Details tab that is used exclusively to capture the emissions from transient events.

Facilities can use "STACK TEST..." emission factors to represent transient operations if a stack test was conducted on that unit during transient operations.

**How to Record Emissions from Continuous Emissions Monitoring Systems (CEMS):**

If the main unit uses CEMS to report emissions for a particular pollutant, there two ways to report emissions for that pollutant to account for the ancillary equipment:

1. Report all emissions from CEMS under the appropriate main unit SCCs corresponding to the fuel consumed with emission factor origin "CEMS – CONTINUOUS EMISSION MONITORING SYSTEM". Under the SCC for the ancillary equipment, report an emission factor of zero with emission factor origin "EMITTANT ACCOUNTED FOR" for the pollutant.
2. Use engineering judgment to apportion the CEMS data into each of the SCCs.

Regardless of which method is used, the total emissions for the monitored pollutant should be equivalent.