

EGS Technical Assessment

Emergency Gas Scrubber Site assessment process and check list.

Pre-visit

- -Pull original order Submittals for information about the installation.
- -Check previous MLA results to see the testing frequency and history of results.
- -Make sure to bring below necessary tools:
 - 14 airtight or ziplock bags per unit being sampled
 - A Sharpie pen
 - Socket set (electric impact recommended)
 - Screwdriver
 - Tape measure
 - Anemometer
 - Tachometer
 - Steel sampling rod
 - Hammer

Storage Facility

- -Take pictures of chlorine storage room
- -How many chlorine tanks are hooked up at one time?
- -How often do you change the chlorine tanks? (Leaks can occur during change over)
- -Has there been a release? Estimate on how much was released?
- -Check exterior of the ductwork
- -Check inlet vent(s) that is connected to our unit (ensure it is not blocked)
- -Measure area of the inlet vent(s)

While the unit is running

- -use Anemometer to measure airflow at inlet and outlet vents(exhaust stack)
 - Measure several areas in the vent (9 areas- top, mid, bottom, 3 each- use average)
 - Calculation will be FPM (to get CFM- multiply by area of vent in feet)
 - CFM should be higher than 5000.

EGS

- -Take pictures of all sides of the unit
- -Examine the structure of unit to ensure no damage
 - Entire unit
 - Exhaust stack
 - Chlorine sensor on exhaust
 - Control Panel
- -Check gauges and sensor screen for damage
- -Check motor/blower (and check tension of the belt)
- -Check name plates for blower/motor (Take pictures)

While the unit is running

- -Use the tachometer to check RPM of motor or blower using pulley/bearing. (Blower is recommended)
- -Make sure rpm matches what the nameplate says
- -Take picture of pressure gauge while unit is running

Media

- -Verify with site if they have sampling rod (so that they can continue sampling)
- -Take samples from each sample port. The extensive sampling procedure can be used on older installations or when there are questions about the MLA results.
- -Unscrew the lid on top of unit and take samples from the top.
 - For circular units, take 2 samples at different depths from the center and the 12, 3, 6, and 9 clock positions around the unit.
- -Mark each sample bag using the sharpie with exact locations, the media being tested, and the equipment serial number.