

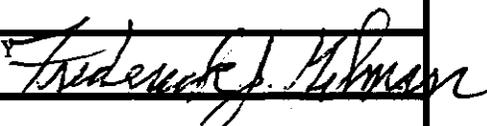
TTR Purging Procedure for Test Chambers

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Abstract:

This procedure is to establish general requirements for purging the Test Chambers before beginning into normal operating or before deactivation of a Test Chamber.

SSC LABORATORY PROCEDURE	NUMBER GEM-TN-92-154	REV	PAGE 1 of 2
	EFFECTIVE DATE 10-9-92	SUPERSEDES	
	SPONSORING FUNCTION GEM		
	APPROVED BY F. Gilman 		
SUBJECT TTR Purging Procedure for Test Chambers			

1.0 PURPOSE

This procedure is to establish general requirements for purging the Test Chambers before beginning normal operation or before deactivation of a Test Chamber.

2.0 SCOPE

The scope of this procedure is limited to the routine operation of the TTR and the Test Chambers. It either prepares the Test Chambers for the safe initiation of the flow of test gases and high voltage or it prepares it for deactivation.

3.0 DEFINITIONS

Test Chamber - one of many detection chambers that are to used in the TTR
TTR - Texas Test Rig

4.0 PROCEDURE

The following are the general procedures for purging one of the test technologies for the TTR.

Note: GEM-TN-92-152, TTR Emergency Procedures, will be followed as the situation warrants.

4.1 The Test Chambers shall be purged when any of the following applies:

- a. Initial operation of the chambers, or
- b. Chambers that have been inactive for more than four weeks, or
- c. Significant modification or maintenance action has been made to the Test Chambers, or
- d. Test Chamber is to be removed from service.

Note: Purging is not required for minor maintenance actions providing all gas lines are properly capped immediately upon disassembly.

WARNING: Failure to purge or an inadequate purging may result in a potentially explosive mixture inside the Test Chamber.

4.2 Ensure all electrical systems have electrical power disconnected or turned off.

WARNING: Failure to remove electrical power may result in a potential shock hazard.

4.3 At the gas pad, connect the appropriate system to an inert gas (Nitrogen or argon is acceptable) using positive connectors, such as the Swagelok tube fittings, if an inert gas is not already available.

WARNING: Connecting a flammable gas prior to purging the system may result in a potentially ignitable mixture inside the Test Chamber.

4.4 Allow inert gas to flow at a pressure and volumetric flow rate appropriate for the test technology being purged.

4.5 Purge for a nominal 10 volume changes of Test Chamber.

4.6 Shut off purging gas pressure and flow of the purging gas at the cylinder.

4.7 Disconnect gas cylinder from system.

4.8 After disconnecting the gas cylinder, immediately do one of the following, depending on the reason for purging:

- a. Cap the system line with an approved Swagelok fitting, or
- b. Connect the appropriate test gas to the system using approved Swagelok connectors.

4.9 Replace the safety cap back on gas cylinder.

WARNING: Failure to replace cylinder safety cap may create a hazard to personnel.

4.10 Record system, test technology, type of purging gas used, pressure, volumetric flow, date and person(s) performing the procedure. This record may be an entry in the appropriate TTR Test Chamber Log Book. Record shall include signature of person performing work and one witness to the work performed.

5.0 RESPONSIBILITIES

It is the sole responsibility of the TTR Project Manager to ensure the proper implementation of this procedure.

6.0 REFERENCES

GEM-TN-92-152 TTR Emergency Procedures
Applicable TTR Test Chamber Log Book