
Daya Bay RPC Gas System Installation Plan

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Outline of the installation schedule

The tasks relevant to RPC gas system installation in MuonInstallationRLS.mpp

| WBS | Task Name | Start | Stop | Duration | resource |
|--------|---|---------|----------|----------|----------------------------|
| 3.1.12 | RPC gas system | 6/30/10 | 6/30/10 | 0 | Princeton |
| 6.4.6 | Install RPC Gas Mixing System and GC systems | 7/8/10 | 8/5/10 | 20 | Princeton |
| 6.4.7 | Install Gas Distribution & Digital Bubblers | 8/5/10 | 8/26/10 | 15 | Princeton/Labor contractor |
| 6.4.8 | Install & Route Gas Lines in Tray | 8/26/10 | 9/2/10 | 5 | Labor contractor |
| 6.8 | RPC: Connect Utilities to Modules 1.7.9.3.2.5 | 9/17/10 | 9/30/10 | 10 | Princeton/Labor contractor |
| 6.9 | RPC Final Connections & Startup | 10/1/10 | 12/20/10 | 55 | Princeton |
| | | | | | |
| | | | | | |



Gas/Gas Mixing Rooms



Door of gas mixing room, gas cylinders will be entering gas rooms through this door. The door is 1.2m wide and 2m height.

Open louvers here to allow air circulation between gas/mixing rooms.



View from gas mixing room to EH#1, water pool can be seen through the door. The Air ventilation pipe is installed on the wall. Fresh air flows into the gas mixing room through this pipe. The air circulation is driven by this pipe and the exhaust pipe in the gas room, which is under negative air pressure.

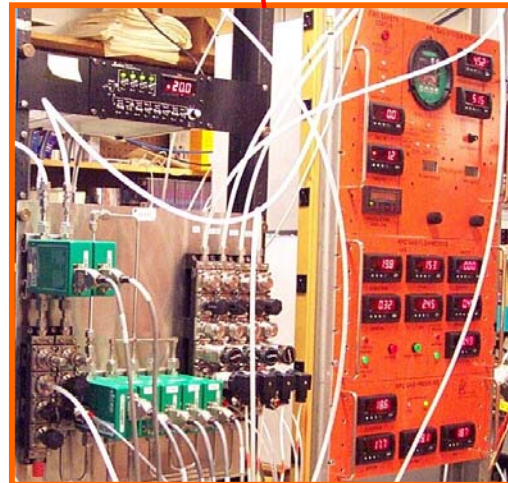
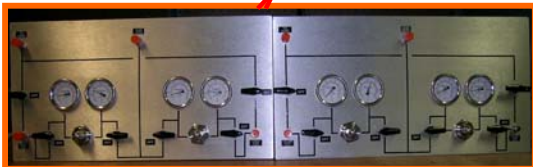
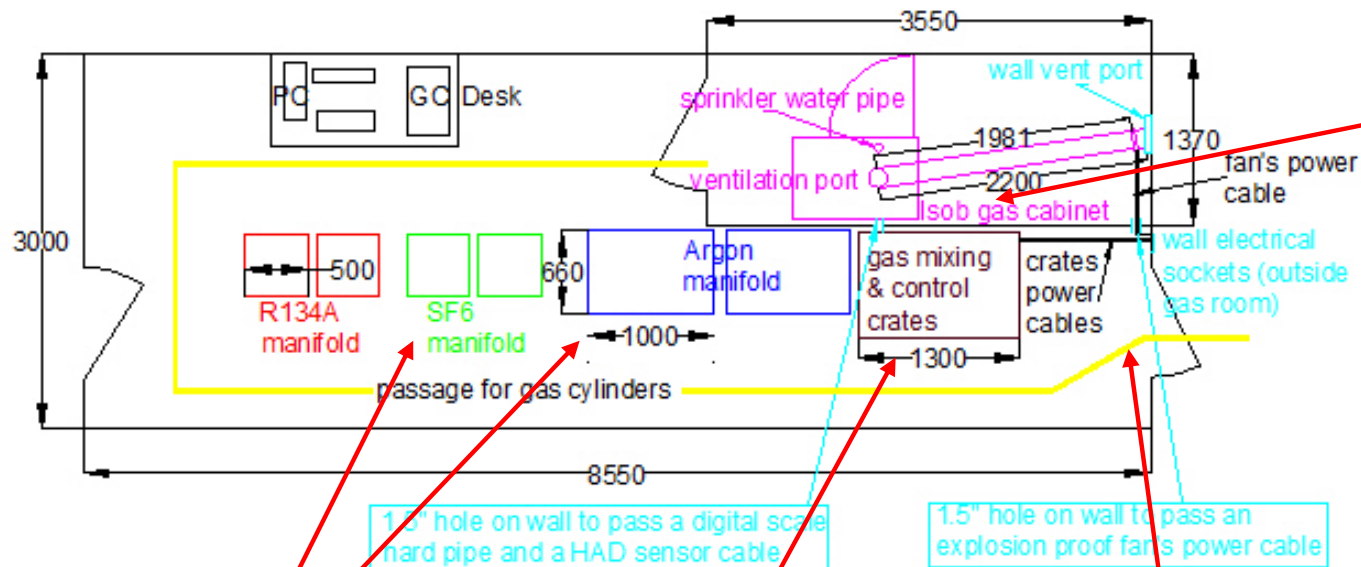


View from gas room to mixing room, air ventilation pipe can be seen through the door.





Layout of the gas/gas mixing rooms



Detailed plan for WBS items

- 3.1.12 Daya Bay near hall RPC gas system and three GC systems delivered to Daya Bay by 6/30/2010;
- 6.4.6 Install gas mixing/control system and 3 GC systems in 7/8 - 8/5/2010

Prerequisites:

Shipping boxes of gas mixing/control system and GCs delivered to gas/gas mixing rooms;

Network wall plugs activated;

Desk for PC and GC;

Power line activated;

Water line for sprinkler installed.

Manpower:

C. Lu, S. Chidzik (Princeton) + Chinese labor contractor.



Detailed plan for WBS items (cont'd)

Chinese labor contractor tasks:

- Install gas manifolds for Argon, SF6 and R134A in gas mixing room;
- Route copper gas pipe from gas mixing panel to EH1;
- Hook up 6" gas ventilation pipe of the gas cabinet to gas room venting port;
- Connect water pipe to gas cabinet sprinkler;
- Mount emergency shut-off switch on wall and route wires to gas control panel.

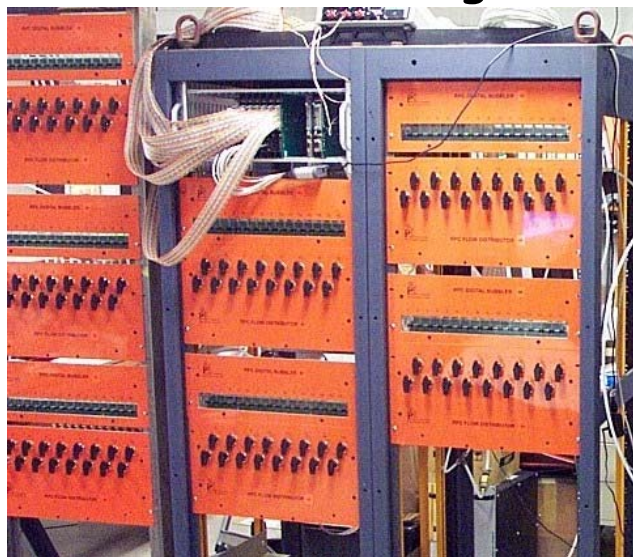
Coordination with other Muon installation tasks:

Since this part of gas system installation is within gas/gas mixing rooms, it won't interfere with any other installation tasks.



Detailed plan for WBS items (cont'd)

6.4.7 Install gas distribution and digital bubbler system in 8/6 - 8/26/2010



Prerequisites:

Gas racks are installed on RPC module supporting structure.

Manpower:

Princeton will take care of this installation. Occasionally may need 1 or 2 assistants from labor contractor.

Coordination with other Muon installation tasks:

There is no foreseeable conflict with other installation tasks during this period.



Detailed plan for WBS items (cont'd)

6.8 Connect gas tubing between RPC modules and gas distribution & digital bubbler crates in 9/17 - 9/30/2010.

Prerequisites:

Gas distribution/digital bubbler crates installed and tested;

Utility tray on RPC module supporting structure installed.

Manpower:

Princeton will supervise the installation, Chinese labor will perform the installation.

Coordination with other Muon installation tasks:

Since HV cables also need to be installed into the utility tray, we need to coordinate these two tasks.

Chinese labor contractor's tasks:

Cut plastic tubing to length and label two ends of each tube;

Connect each end to its destination connector.



Detailed plan for WBS items (cont'd)

6.9 RPC system test in 10/1 - 12/20/2010

Princeton will maintain the gas system at this start-up period, locally or remotely. Right now it is still too early to make detailed plan for this task.

