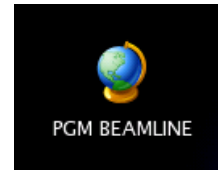


BEAMLINE Troubleshooting

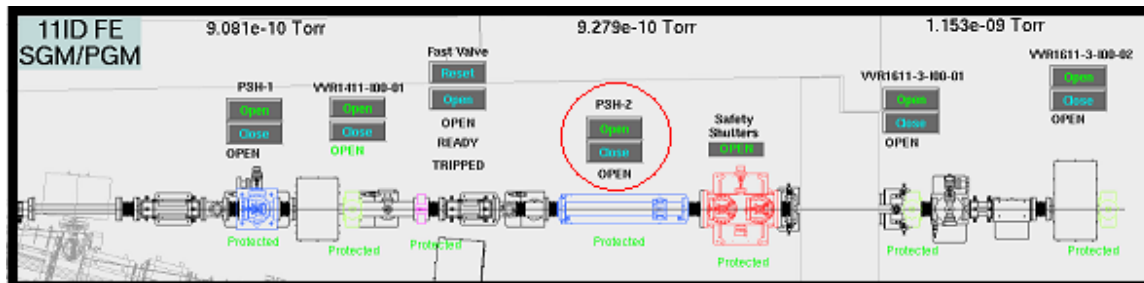
**** To be performed with the FC assistance ****

In the RARE event that you are not able to **OPEN** the Shutter two (PSH2), there are a number of things that should be check.

Start the “PGM FRONTEND” and “PGM BEAMLINE” by double clicking on the icons:



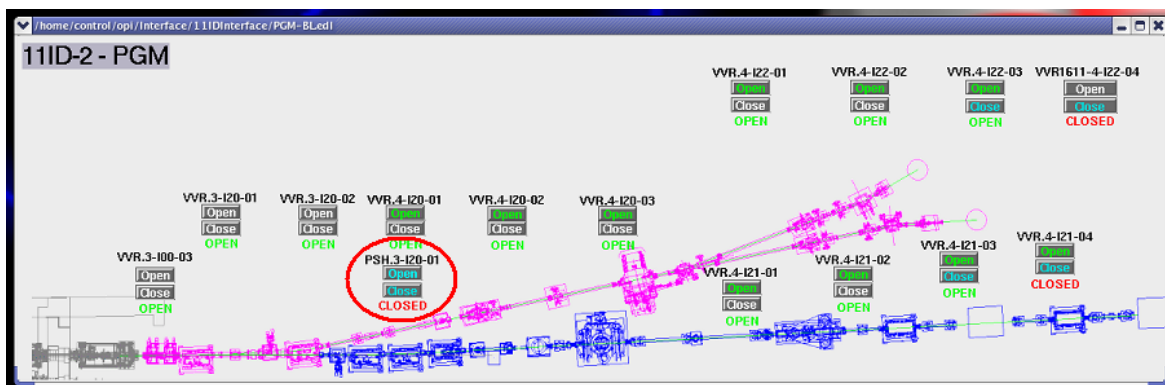
“PGM FRONTEND” panel:



Check that the beamline has been **ENABLED** by the control room and that the Safety shutter is opened by the panel outside the hutch. If closed, **MANUALLY** open the Safety shutters pushing the green button.

From the Computer screen **OPEN** the Shutter two (PSH-2) on the PGM frontend panel.

“PGM BEAMLINE” panel:




Check that all valves (VVR.*) are **OPEN** on the PGM frontend and PGM beamline panels. If closed, **OPEN** the Shutter three (PSH.3-I20-01) on the PGM beamline panel.

NB: All the valves (VVR.*) of the active Branch have to be in the **OPEN** position, to be allowed to open the Shutter three (PSH.3-I20-01).

Keep these two panels open and running on one of the Desktops.


If all the valves (VVR.*) are **OPEN** but you still cannot **OPEN** the Shutter two (PSH2) start the SGM/PGM flow switches display by double clicking on the icon:



Check that ALL the Flow-Switch indicators  are green.


The indicators beginning with SWF1611-3-* are water cooling indicators inside the SGM/PGM hutch.

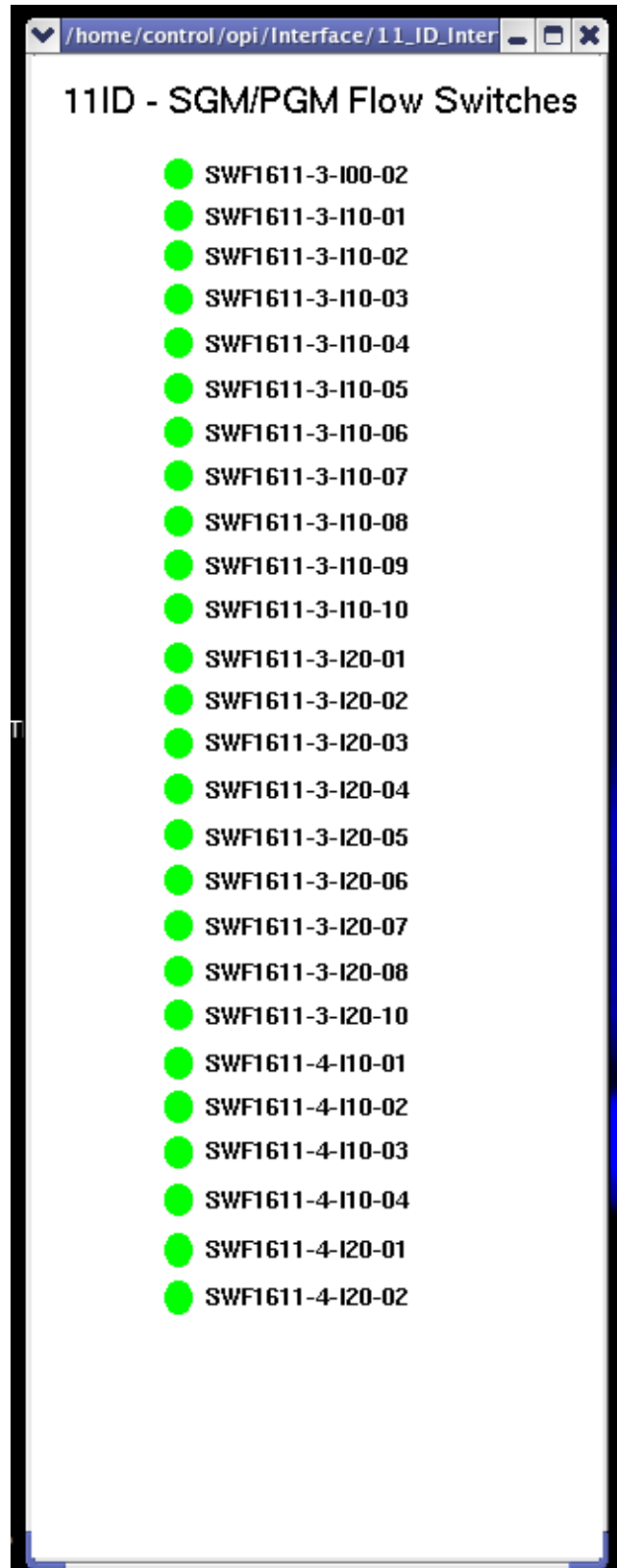
The SWF1611-4-* are water cooling indicators outside the hutch.

If any of the indicators are red  you will have to contact either

- the beamline staff or
- the Floor Coordinator (FC).

The FC will contact the on-call mech-tech.

The on-call mech-tech will re-equilibrate the water flow along the beamlines. Once done, the indicators should turn green , and you should be able to **OPEN** the Shutters and proceed as normal.



High Voltage Controller

**** To be performed with the FC assistance ****

If the HV controls **1** & **2** are not responding (i.e. you try to switch OFF or ON the 1450V of the FL detector as well any of the 80V, and nothing happen) and the pressure in the end-station chamber is better than 4.8×10^{-7} Torr; it means the HV control application has locked up.

The options are:

- During “office hour” contact the Beamline staff
- Otherwise, contact the Floor Coordinator (FC). The FC will call the on-call analyst from the Control and Instrumentation Development (CID) group.

Instruct the FC to ask the on-call CID to follow the instructions found in the CID Main Page http://wiki.clsi.ca/wiki/CID_Main_Page

- PGM section,
 - troubleshooting sub-section
 - “High Voltage Controller - Controls Unresponsive”

NB: Before the on-call CID leaves, double check that you can switched ON & OFF the High Voltages (try any of those set at 80V)

Multiple samples holder

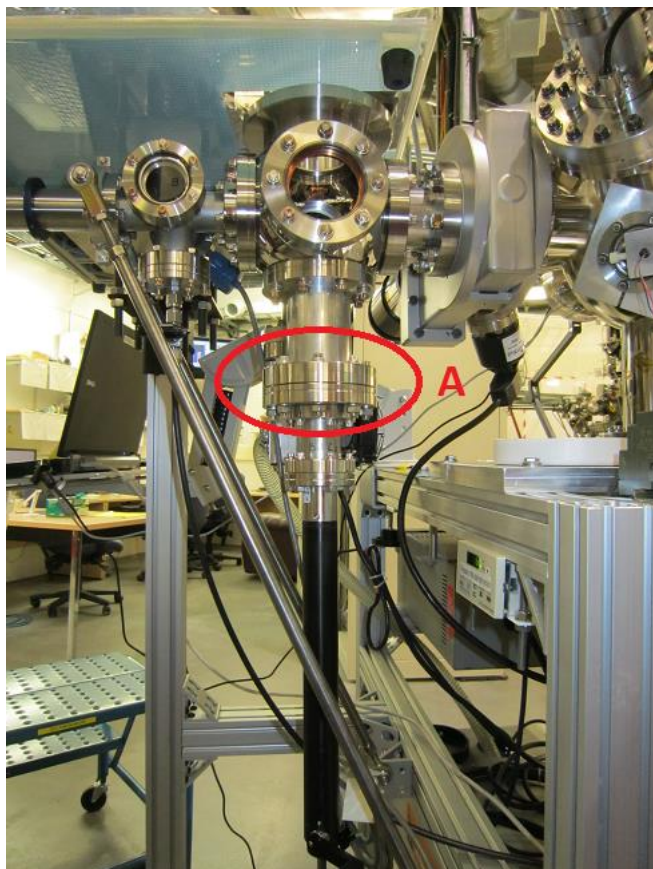
**** To be performed with the FC assistance ****

Have you dropped a sample in the loading chamber?

Is the XAS sample holding ladder jam?

In the unfortunate event the multiple samples holder is malfunctioning (usually dropped samples jamming into the bellow feed through), you will have to contact either

- the beamline staff
OR
- during unsociable hours the Floor Coordinator (FC) and ask the FC to phone the on-call mech-tech.



Users are not allowed to perform any of the following!

Procedure (for BL Staff and/or Techs):

- 1) Bring the load-lock section up to air, as when you load a new sample
- 2) Disconnect Flange **A** and lower the multiple sample ladder
- 3) Retrieve the dropped sample from the bellow and/or load lock area
- 4) Using a new copper gasket, reconnect Flange **A**
- 5) Once connected, ensure that the multiple sample ladder is properly aligned such that the transfer manipulator is able to pick up samples from all the three ladder positions.
- 6) Replace dropped sample(s) or load new sample(s) onto the multiple sample holder.
- 7) Pump the load-lock section till it reaches a pressure better than 6.7 mTorr

At this point you should be able to continue your experiment.