

## **PQC Particle Measuring System**

**(O.I) 450-802800-002**

1. **Scope:** This specification provides the operating procedures for the Particle Measuring Systems PMS-1 particle monitoring system.

2. **Reference Documents:**

Refer to binder #212-PQC

3. **Contents:**

- 3.1 Scope
- 3.2 Reference Documents
- 3.3 Table of Contents
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4. **Safety Precaution: N/A**

5. **Equipment**

- 5.1 PMS sensors installed in fab (3 in Wafer Test)
- 5.2 MetOne handheld particle counter
- 5.3 KC-18 particle counter
- 5.3 PC in PQC running Facility View software

6. **Operating Instructions**

- 6.1 The PMS system is a continuous air sampling system installed in the U2 fab. It consists of one sensor per bay or room, three sensors located in Wafer Test and a host system with an alarm unit in the PQC room.
- 6.2 Sensors will take one sample per minute. The Facility View software in Sensor Status mode shows the last sample of each sensor. It is programmed to enter alarm mode if a particle sample for a bay has been out of spec for five of five samples.
- 6.3 Alarm codes are listed as follows:

### **SYSTEM COLOR CODES**

Black on Green: Normal readings (system sampling)

Black on Yellow: Target limits exceeded (Yellow alarm light)

Black on Orange: New out of spec condition exists

Black on Red: Out of spec condition exists for five samples-(out of spec. Audible Alarm and red light)

Black on Olive: Laser error or other instrument error.

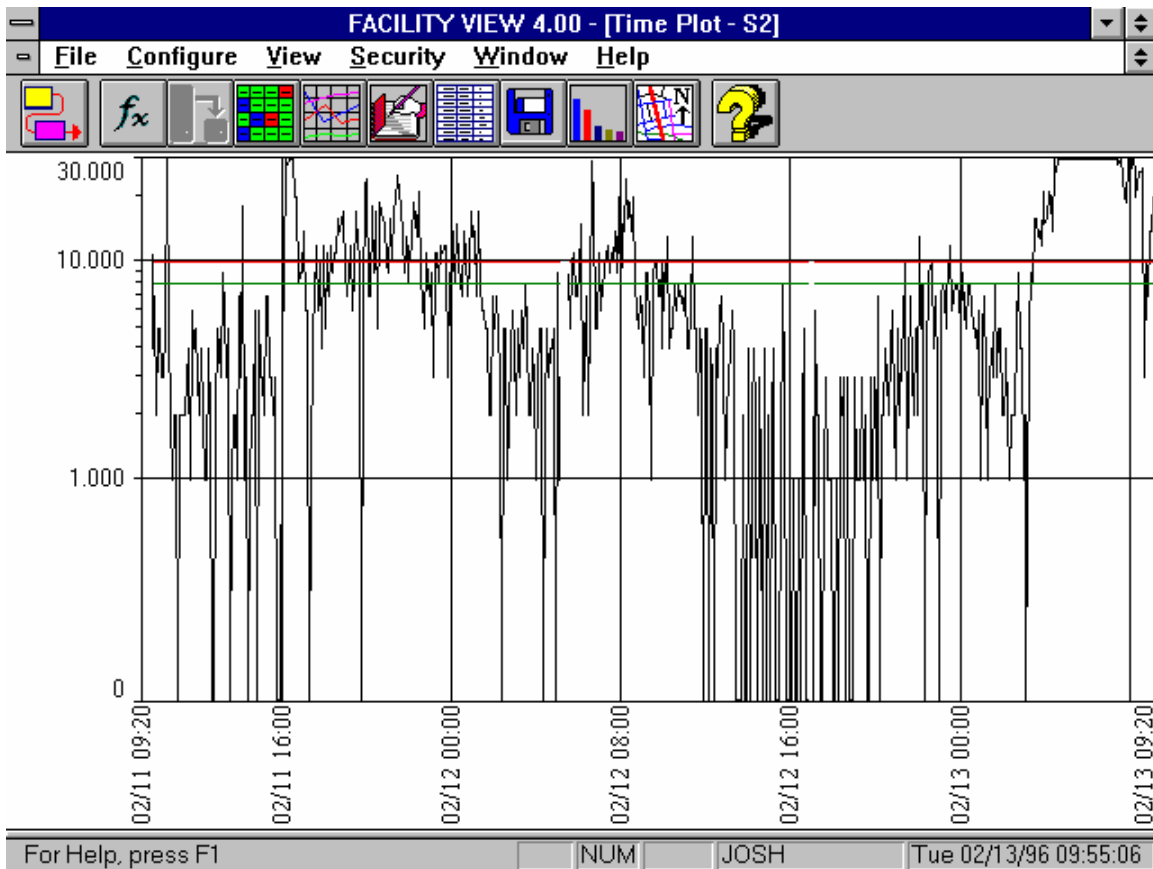
Gray on Black: Disabled sensor.

6.4 The audible alarm will sound when a bay has been out of spec for five of five samples..

- 6.4.1 Press the button on the alarm module to silence the alarm. If the situation is not rectified, the alarm will sound again a short time later. If the situation cannot be rectified or there is a sensor error that is causing an alarm, then disable that sensor and notify your lead.

- 6.4.2. Click on the Plot icon with the mouse. The computer will display a plot where you may choose a sensor or multiple sensors from which to plot data.
- 6.4.3 For PQC notice purposes, print at least the last 24 hours of data, and 48 hours if it is available.
- 6.4.4 The system will print a weekly report every Monday of the previous weeks plots, and other reports as they are deemed necessary. These reports will print on AO\_MIS\_HP\_COLOR\_1, the third floor Colorjet printer.

## Appendix I



To make a graph like above :

The plot may be printed on a network printer. The default printer is AO\_MIS\_HP\_COLOR\_1, which is the third floor HP Colorjet.

For PQC Notices:

For PQC Notice purposes, increase the size of the plot window as much as possible without losing the pen key at the bottom of the screen.

Press “PrtScr” (Print Screen) to dump the screen image onto the clipboard.

Open Paintbrush and maximize the window. Chose View--> Zoom out. Choose Edit---> Paste. A grid will appear over the picture area--this is the selected area to paste into. Choose Paste again to paste the image.

Save the picture as a .BMP file in G:\PQC\REPORTS\PMSPLOTS. Name the file as XX\_MMDD.BMP, where XX is the bay, and MMDD is the month and day (Example: N2\_0701.BMP is the plot from N2 bay on the first of July).

Attach the image and the PQC notice to the notifying cc:Mail. Staple the printout to the PQC notice.