



Microbiology Sampling Protocol

For use with Cyclex-D Cassettes

This is a general list of procedures to follow in order to ensure quality and accuracy of analysis. Please refer to the User Manual of the cassette and / or pump for a complete list of instructions.

Field Equipment: Calibrated Pump and Timer
 Cyclex-D Cassettes
 Permanent marker

1) Before testing, be sure the flow rate of your pump is calibrated to 20 L/min using a rotameter (refer to owner’s manual of pump for any special calibration methods).
 NOTE: Be sure each cassette is not expired and has been stored in an environment free of excessive dust, moisture, and extreme temperatures.

2) Be sure to have at least three extra cassettes for each job: one for outside sample(s), one for a non-complaint / non-suspect area (if possible), and one for a blank sample. As a general rule, use at least one air cassette for every 1,000 square feet of space to be tested.

3) Using a permanent marker, write a unique sample number or the location of sampling on the side of the cassette.

4) Once you are ready to sample, remove the blue pin from the bottom of the Cyclex-D cassette, and connect it to the pump tubing.

5) Determine the appropriate sampling duration (See Table 1), and remove the red cap from the Cyclex-D cassette.

Table 1: Recommended Sampling Intervals for the Cyclex-D Cassette

Site Location	Sampling Duration (Minutes)	Total Volume
Outdoors or Non-Complaint Area	10.0	200 L/min.
Complaint Area	5.0 – 8.0	100 - 160 L/min.
Complaint Area with Suspected High Levels	5.0	100 L/min.



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- 6) Turn the pump on, and sample for the allotted time.
- 7) Turn off the pump, and replace both pins. NOTE: Do not pull the tubing off the cassette while the pump is on; this may cause a suction pull to crush the slide inside the cassette.
- 8) Write the sample information on the SanAir Technologies Laboratory Chain-of-Custody:
 - Sample Number (i.e. a unique sample number or the serial number of each cassette)
 - Sample Identification (e.g. location of sampling, unique sample identification number, cassette serial number)
 - Sample Type (AC)
 - Analysis Type (A1 or A2)
 - Turn-Around-Time (3, 6, 24, or 48 hours)
 - Total Volume: Total Volume in Liters is equal to the flow rate of your pump (e.g. 20 L/min) multiplied by the duration of sampling (e.g. 5 minutes). For example, an air cassette sample that was pulled for 5 minutes on a pump calibrated to 20 L/min would have a total volume of 100 L/min (20 L/min x 5 min = 100 L/min)
 - Time (Start – Stop): In order to keep track of the duration of sampling, the start and stop times of sampling (or the total time for sampling) may be noted. NOTE: If the start and stop times are noted on the COC, but the Total Volume is left blank, then the flow rate of the pump must be noted in Special Instructions so that the Total Volume can be calculated.
- 9) Sample the remaining sites, following steps 3 - 8 for each cassette.
- 10) Make sure the package used for shipping is well cushioned to avoid breakage.



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