

SAMPLING PROCEDURE FOR THE SORBENT TUBES

DNPH SORBENT TUBES (yellow): NOTE-These tubes must remain cold until used for sampling

- 1) Calibrate personal sampling pump to flow at 1000 ml/min, with the gas pressure not to exceed 10 psig. Use the lowest possible pressure to achieve the desired flow.
 - a) Break ends of 2 DNPH sorbent sampling tubes and connect them in series to personal sampling pump and calibrator with arrows on the sorbent tube pointing towards the pump.
 - b) Adjust small screw on front of sampling pump to achieve 1000 ml/min.
 - c) *Record flow.*
- 2) Break the ends of 2 new (different) sorbent tubes and connect in series. Connections to the gas stream should be made with Silcosteel/Sulfinert or similar coated stainless tubing (preferred), Teflon tubing, silicone tubing, or stainless steel tubing. Do not use Tygon or other plastic tubing.
- 3) Attach tubes to the personal sampling pump with arrows pointing toward the pump.
- 4) Connect the pump inlet to the sampling port and the outlet of the tubes to an exhaust/vent line.
- 5) Open the sampling port or sampling valve.
- 6) Turn on pump.
- 7) *Record sample ID, start time & date.*
 - a) *DNyymmdd-xx a/b*
- 8) After 4 hours, turn off pump, close the sampling port valve.
 - a) *Record stop time.*
 - b) *Record temperature.*
- 9) Cap sorbent tubes with caps provided and label each tube. Wrap in aluminum foil.
- 10) Take a blank (control) sample at each site by performing steps 2-5, and 7 above on a fresh sampling tube, but do not purge any gas through the tubes. The tube may be immediately disconnected and labeled.
- 11) Store and ship to lab all used tubes in cooler with ice pack. .

XAD SORBENT TUBES (white): NOTE-These tubes do not have to remain cold until used for sampling

- 1) Calibrate personal sampling pump to flow at 2000 ml/min with the gas pressure not to exceed 10 psig.
 - a) Break ends of 2 XAD sorbent sampling tubes and connect them in series to personal sampling pump and calibrator with arrows on the sorbent tube pointing toward the pump.
 - b) Adjust small screw on front of sampling pump to achieve 2000 ml/min
 - c) *Record flow*
- 2) Break the ends of 2 new (different) sorbent tubes and connect in series. Connections to the gas stream should be made with Silcosteel/Sulfinert or similar coated stainless tubing (preferred), Teflon tubing, silicone tubing, or stainless steel tubing. Do not use Tygon or other plastic tubing.
- 3) Attach tubes to the personal sampling pump with arrows pointing toward the pump.
- 4) Connect the pump inlet to the sampling port and the outlet of the tubes to an exhaust/vent line
- 5) Open the sampling port or sampling valve
- 6) Turn on pump
- 7) *Record sample ID, start time & date*
 - a) *XAyymmdd-xx a/b*
- 8) After 4 hours, turn off pump, close the sampling port valve
 - a) *Record stop time*
 - b) *Record temperature*
- 9) Cap sorbent tubes with caps provided and label each tube Wrap in aluminum foil.
- 10) Take a blank (control) sample at each site by performing steps 2-5, and 7 above on a fresh sampling tube, but do not purge any gas through the tubes. The tube may be immediately disconnected and labeled.
- 11) Store and ship to lab all used tubes in cooler with ice pack.