The 3 Most Common Styles of Respirable Samplers

1. Dorr-Oliver Cyclones-
   - Operates at 1.7 liters per minute
   - Uses a 2-piece 37 mm pre-weighed PVC filter mounted upside-down and closed face in the cyclone
   - This is what OSHA uses
   - Lower flow rate = higher detection limits
   - Pain to calibrate
   - Can be a challenge to keep oriented properly
   - If cyclone is turned upside down during/following collection, non-respirable particles can deposit on the filter
   - Heavy

2. SKC Disposable PPI Samplers-
   - Comes in various flow rates- 2 liters per minute, the best for TWA sampling
   - Requires a 37 mm pre-weighed PVC filter to be mounted inside the sampler
   - Higher flow rate = lower detection limits
   - Easy to calibrate; requires a SKC with adaptor that fits over the top of the sampler
   - Easy to keep properly oriented
   - Non-respirable particles can land in sampler under certain conditions
   - Lightweight
3. Aluminum Cyclones -
- Operates at 2.5 liters per minute
- Requires a 3-piece 37 mm pre-weighed PVC filter mounted up-side-down and open faced in the cyclone and held in a cassette holder
- Higher flow rate = lower detection limits
- Easy to calibrate; requires an adaptor that fits over the stem of the cyclone
- Can be a challenge to keep oriented properly
- Moderate weight
- If cyclone is turned upside down during/following collection, non-respirable particles can deposit on the filter
- BE aware of filter compatibility issues between different brands of cyclones and cassettes (e.g. Zefon and SKC)