

1	Upon arrival at Field Team Center (FTC), receive a status briefing from Field Sampling Team Leader (FSTL) and review this SOP to familiarize yourself with what might be required. Clarify any questions with FSTL or FTC Coordinator before departing on sampling assignments. Verify communications, radio channels, cell phone numbers, FTC number, etc.
2	Receive sampling assignment(s) from FSTL.
3	Inventory sampling kit using Attachment 1. Obtain any missing items from Field Team Center.

IF	THEN
Assignments are outside of the Restricted Zone	Proceed with Item #4
Assignments include locations inside Restricted Zone	<p>If needed, request assistance from FSTL or FTC staff in plotting routes to assigned locations.</p> <p>Request briefing on dosimetry and use of any protective gear issued.</p> <p>Request any information on stay time restrictions.</p> <p>Request monitoring station location.</p> <p>Review sampling techniques, procedures, requirements, and locations with assigned escort.</p> <p>Follow the escorts instructions regarding cross-contamination and exposure control measures.</p>

IF	THEN
FSTL advises that samples are to be split (processed at different labs to verify accuracy).	<p>Make two complete collections at assigned sample site per normal procedures.</p> <p>Indicate this information on both data sample sheets and containers.</p>

**Prior to Traveling to the Sample Site**

4	Label all containers with as much information as possible.
5	Fill out the Sample Laboratory Data Sheet with as much information as possible and have the sampler sign the chain of custody section.
6	Ensure the vehicle has adequate fuel, paper liner on floorboards and cargo area, trash box with liner or trash bag with duct tape, sample transport container, receptacle for reusable equipment (for decon), maps, and communication equipment.
7	Turn on GPS unit. Turn on Survey Meter and perform operational check.
8	Verify calibration on air sampler and perform operational check.
9	Place the following items into backpack or equipment caddy: Air Sampler, Silver Zeolite Cartridge, Filter Paper, 4x6 plastic bags, 9x12 plastic bags, pen, markers, disposable wipes, sampling instructions, and Sample and Laboratory Data Sheet.
10	Don PPE (Tyvek Suit, Mask, Eye Protection, Boot covers, and Gloves).

**Upon Arrival to Sample Site**

10	Radio Field Team Center of arrival and explain purpose of sampling to the property owner (if appropriate) while verifying the exact address for the Sample and Laboratory Data Sheet. Conduct an area survey taking note of background readings in the margin of the Sample and Laboratory
12	Utilized lined trash box or prepare a garbage bag to receive waste by taping it in place on an easily accessible area in the work vehicle.
13	Select sample location away from potential sources of contamination.
14	Use the survey meter to take a radiation reading at a height of one (1) meter above (or away from) the sample area. Record the reading on Sample Data Sheet as Field 1 Meter Reading.
15	Position the sampler so the air intake is not close to potentially contaminated surface and take care to protect the filter paper from rain, snow, etc.
16	Connect the air sampler to 12-volt battery. Verify that the sample volume is set to 10 cu. ft.. Press the start button and record the start time on Sample and Laboratory Data sheet. Record the time the sampler finishes.
	Remove the the filter paper and place it in a 4x6 plastic bag. Remove the cartridge and place it in a separate plastic bag. Complete the information on the labels.
17	Use the survey meter to take radiation reading at a maximum of 3-5cm from removed filter paper. Do not make contact with sample container. Record reading on Sample Data Sheet as Sample Contact Reading.
19	Complete the sample submission sheet recording time, GPS latitude, and longitude.
20	Place the sample sheet and bagged samples (cartridge, filter) into second resealable bag and seal. Ensure all information on sample sheet is visible.
21	Disconnect sampler from power supply and return equipment to vehicle.
22	Place used paper towels and previously removed glove(s) into small trash bag

**Returning to Vehicle**

23	Secure samples in transport container (cooler).
24	Place reusable equipment, if any, in decon container for decontamination.
25	Place continuous use equipment (survey meter, backpack, etc.) in equipment container.
26	Place disposable equipment in waste container.
27	Remove one layer of gloves and place in waste container.
28	Contact Field Team Center to update status of Field Sampling Team and proceed to next sample point as previously instructed.

**Sampling Equipment Inventory Sheet**

This list covers all items needed for air samples.

- Equipment Caddy
- Backpack
- Protective Gloves
- Latex Boot Covers
- Disposable shoe covers
- Tyvek Coveralls
- (2) 9"x12" Resealable Bags
- (2) 4"x6" Resealable Bags
- Masking Tape
- Tweezers
- Disposable Wipes
- Air Sampler
- (4) Silver Zeolite Cartridges
- Filter Paper for Air Sampler
- (2) Permanent Markers
- Paper Towels
- Clipboard
- Sampling Instructions
- Sample Labels
- Sample and Laboratory Data Sheet
- Ink Pen
- Survey Meter
- GPS Unit (wrap in plastic)
- Hand Held Radio (wrap in plastic)
- Utility belt (Optional)
- Small Trash Bag
- Knife

Note: Split samples will require filter paper, silver zeolite, and Sample and Laboratory Data Sheet. If assignment exceeds four samples, obtain additional supplies from Field Team Center.

(Items such as coolers and ice for perishable samples and protective clothing/dosimetry/respirators for sampling within the Restricted Zone would be provided by the Field Team Center.)

**Instructions for Completing Sample and Laboratory Data Sheet**

Plant - Beaver Valley Power Station

Sector - Leave Blank if Unknown

Distance - Leave Blank if Unknown

Date Collected - MM/DD/YYYY (ex. 06/31/2010)

Mil Time - Use 24 hour clock

Code - See the key on sheet (ex. "CC" for Cartridge or "FP" for Filter Paper)

Agency Log No. - Given by Field Team Center for tracking

Street - Leave Blank if Unknown

GPS Latitude - Enter Direction and Degrees-Minutes Decimal

GPS Longitude - Enter Direction and Degrees-Minutes Decimal

Collected by - Enter Your Name and agency

Sampling Info - Fill out info for Vegetation sample under other (Comment any irregularities)

Field 1 Meter Reading - Reading obtained in Step 14 before sample

Field Contact Reading - Reading obtained in Step 15 before sample

Sample Contact Reading - Reading obtained in Step 17 after sample

Duplicate/Split # - Enter split or duplicate number if applicable

Chain of Custody - Print name, sign, date and time