

DECONTAMINATION PROCEDURES

ABC COMPANY

1. Minimization of Contamination

The following measures will be taken to prevent or minimize exposure to potentially contaminated materials:

ABC Company Personnel

- Do not walk through spilled materials
- Do not handle, touch, or smell sample media directly
- Make sure PPE has no cuts or tears prior to use
- Protect and cover any skin injuries
- Stay upwind of airborne dusts and vapors
- Do not eat, drink, chew gum or tobacco, or smoke in the work zones.

Sampling Equipment and Vehicles/Vessels

- Use care to avoid getting sampled media on the outside of sample containers
- If necessary, bag sample containers before filling with sampled media
- Place clean equipment on a plastic sheet to avoid direct contact with contaminated media
- Keep contaminated equipment and tools separate from clean equipment and tools
- Fill sample containers over a plastic tub to contain spillage
- Clean up spilled material immediately to avoid tracking around the vehicle/vessel

2. Decontamination Equipment

All vehicles, vessels, and equipment that have entered potentially contaminated areas will be visually inspected and, if necessary, decontaminated prior to leaving the area.

If the level of vehicle contamination is low, decontamination may be limited to rinsing tires and wheel wells with an appropriate detergent and water.

If the vehicle is significantly contaminated, steam cleaning or pressure washing may be required. Large tools will be cleaned in the same manner. Small reusable sampling equipment, including bowls, spoon, and knives, will be rinsed, washed in phosphate-free detergent, and rinsed again.

Rinsate from all decontamination activities will be collected for proper disposal. Decontamination of equipment and tools will take place within the Contamination Reduction Zone (CRZ).

The following supplies will be available to perform decontamination activities:

- Wash and rinse buckets
- Tap water and phosphate-free detergent (i.e., Alconox)
- Scrub brushes
- Distilled/deionized water
- Deck pump with pressurized freshwater hose (aboard the vessel)
- Pressure washer/steam cleaner, if appropriate
- Paper towels and plastic garbage bags.

3. Personnel Decontamination

The Field Lead (FL) will ensure that all site personnel are familiar with personnel decontamination procedures as listed below. All personnel wearing PPE in an Exclusion Zone/Hot Zone (EZ) work area must undergo decontamination prior to entering the Support Zone/Clean Zone (SZ).

Personnel will perform the following decontamination procedures:

- Wash and rinse outer gloves and boots in portable buckets to remove gross contamination. The surface of the site is contaminated with waste materials that will stick to boots. Disposable boot covers will be used if terrain and ground conditions are such that the use of disposable boot covers does not present a slipping hazard. If disposable boot covers are not used, particular attention must be applied to decontaminating boots thoroughly.
- If suit is heavily soiled, rinse it off. If disposable boot covers are used, they will be removed at this station.
- Remove outer gloves; inspect and discard if damaged. Leave inner gloves on. Personnel will remove their outer garment and gloves, dispose of them, and properly label container or drum. Personnel will then decontaminate their hard hats and boots with an aqueous solution of detergent or other appropriate cleaning solution. These items then will be hand-carried to the next station. Remove protective suit and then inner gloves.
- Thoroughly wash hands and face before leaving CRZ.

4. Sampling and Processing Equipment Decontamination

To prevent sample cross-contamination, sampling, and processing equipment in contact with soil, sediment, biota, or water samples will undergo the following decontamination

procedures when work is completed in the CRZ and prior to additional use:

1. Rinse with potable water and wash with scrub brush.
2. Scrub with phosphate-free detergent (Alconox®).
3. Visually inspect the sampler and repeat the scrub and rinse step, if necessary. If scrubbing and rinsing with Alconox® is insufficient to remove visually observable contamination on equipment, the equipment will be scrubbed and rinsed using hexane (or similar type solution) until all visual signs of contamination are absent.
4. Rinse external sampling equipment with potable water three times prior to use. Rinse homogenizing equipment once with potable water and three times with distilled water prior to and between sample processing.

5. Handling of Investigation-Derived Waste

All remaining soil or sediment, fluids used for decontamination of sampling equipment, and sample collection disposable wastes (e.g., gloves, paper towels, foil, or others) will be placed into appropriate containers and staged on site for disposal.

6. Disposable PPE

Disposable PPE may include Tyvek suits, inner latex gloves, outer gloves, and disposable boot covers. Dispose of PPE according to the requirements of the client and state and federal agencies.

7. Non-Disposable PPE

Non-disposable PPE includes items such as boots. When decontaminating non-disposable PPE, observe the following practices and procedures:

- Decontaminate the PPE outside with a solution of detergent and water; rinse with water prior to leaving the site.
- Protect the PPE from exposure by covering with disposable covers such as plastic to minimize required decontamination activities.

8. Sanitizing of Personal Protective Equipment

Reusable protective clothing and other personal articles must not only be decontaminated before being reused, but also sanitized. The insides of face shields and protective clothing become soiled due to exhalation, body oils, and perspiration. If practical, reusable protective clothing should be machine-washed after a thorough decontamination; otherwise, it must be cleaned by hand.

9. Emergency Personnel Decontamination

Personnel with medical problems or injuries may also require decontamination. There is the possibility that the decontamination may aggravate or cause more serious health effects. If prompt lifesaving, first aid, and medical treatment are required, decontamination procedures will be omitted. In either case, a member of the site management team will accompany contaminated personnel to the medical facility to advise on matters involving decontamination.

10. Containment of Decontamination Fluids

As necessary, spill control measures will be used to contain contaminated runoff that may enter into clean areas. Use plastic sheeting, hay bales, or install a spill control system to prevent spills and contain contaminated water.

11. Pressure Washing

The following procedure is required when using high-pressure washing equipment for decontamination purposes:

- Wear modified Level D protection, including a face shield and safety goggles.
- Ensure that other personnel are out of the area prior to decontamination.
- Secure the area around the decontamination pad with cones, caution tape, or barricades.
- Ensure that safe work practices and precautions are taken to minimize the potential for physical injury from high-pressure water spray. Follow the manufacturer's operating instructions.
- The pressure washer wand must be equipped with a safety release handle.
- Ensure that the area is clean after equipment is decontaminated. Barricades, cones, or caution tape must be left in place and secured at all times.