

Oil Spill Decontamination Procedures

Each incident may require different decontamination operations. The nature of the incident, the type of oil, the weather, the temperature, the number of people to be decontaminated, and the number of trained personnel available are a few of the factors which dictate the method, size, and type of decontamination operation that will be required. All response personnel should be briefed on decon procedures before entering the Hot Zone. The Decon zone should always be kept as clean and organized as possible. This will ensure efficient decontamination operations and the safety of all personnel.

Basic decontamination procedures are described below. These steps may be utilized for most oil spill incidents. Oil spill response incidents involving highly viscous oils may require a more sophisticated operation and more personnel. Basic decontamination steps and procedures include the following:

- ❑ Establish and clearly identify the Decontamination Corridor. The best location for a decon station would be uphill from the hot zone, and upwind so that airborne contaminants blow back toward the hot zone. If the wind changes, the decon station may have to be relocated.
- ❑ Close proximity to vital services (running water, electricity) is extremely beneficial for decontamination operations.
- ❑ The Decontamination Zone should be accessible to emergency medical units.
- ❑ Cover the entire Decontamination Corridor with plastic sheeting or tarps. Sorbents rolls should be used to line the decontamination corridor to reduce slippage and absorb oil.
- ❑ Clearly identify the Decontamination Corridor using barrier tape, delineator posts and traffic cones. Place the delineator posts and traffic cones on the top of the plastic sheeting or tarps, and then attach barrier tape to these units to clearly mark the decontamination Corridor.
- ❑ Establish and clearly identify the point of entry from the Hot Zone into the Warm Zone and the exit corridor into the Cold zone.
- ❑ Clearly identify, using barrier tape, delineator posts and traffic cones a clean (uphill) side and a dirty (downhill) side of the Decontamination Corridor. The clean side should be used to pass uncontaminated supplies and equipment into the Warm Zone, while the dirty side contains all of the contaminated equipment and supplies used or removed during decontamination operations.

- ❑ Weather conditions will be a significant factor during decon operations. Suitable shelter (tents) should be utilized for inclement weather conditions.
- ❑ Inflate the decon tanks using a manual hand pump and the inflation valve adapter. When this has been completed place the wading pools inside of the decon pools for the primary and secondary wash. (See decon set-up diagrams) If required construct a berm to control runoff from decontamination operations.
- ❑ Water used during decon procedures must be carefully controlled and kept to a minimum. **Water generated from decontamination procedures will always be treated as hazardous waste.** Runoff and liquids from the decon zone can be pumped using an (1"1/2 Honda pump) or scooped using 5 gallon pails into a floating collar tank, or other (45 gallon drums) until appropriate disposal can be arranged.
- ❑ Establish an equipment drop zone at the edge of the Hot Zone for contaminated equipment. Small equipment such as pumps and hand tools should be placed into wading pools in this zone. If required this equipment may be re-used in the Hot Zone without decontaminating.
- ❑ Disposable personal protective equipment that is heavily contaminated will be disposed of without decontaminating. Contaminated raingear, tyvec suits, gloves etc. should be placed into garbage pails lined with 6-mil debris bags.
- ❑ Establish a primary decontamination wash (wading pool) and rinse (wading pool) as the first step near the Hot Zone to wash the most significant contamination off of the PPE.
- ❑ Establish a secondary decontamination wash (wading pool) and rinse (wading pool) about 10 feet away from the first wash to assure thorough decontamination of PPE.
- ❑ (Decontamination Solution) Any dish washing liquid, especially ones with enhanced grease cutting properties diluted with water are acceptable as the decon solution for PPE. The decon solution should be mixed in the provided white 5 gallon pails. A stronger Citrus based cleaning solution can be used for wiping down equipment and hand tools. The decon trailer is outfitted with three sizes of decon cleaning brushes. Different factors will influence the type of brush to be used. (type of oil, viscosity, temperature, and weather conditions)
- ❑ When decontaminating personnel the brush strokes should always be done in a downward motion. This will reduce the risk of any backsplash into the facial area. Sorbents can also be used for wiping off contaminated areas of clothing or equipment. Wiping should mainly be done in the secondary wash after the heaviest contamination has been removed in the primary decon wash.

- Oiled sorbents and rags generated during decon procedures should be placed into garbage pails lined with 6ml debris bags and when full should be labeled and placed into a port a tank. Chairs will be utilized in the decon zone and can be placed in any areas where response personnel are being decontaminated, such as in the decon pools or where PPE is being removed.
- **Splash goggles must always be left on until decon procedures have been fully completed.**
- **All Debris bags should be labeled appropriately and placed into a Port-a tank until appropriate disposal can be arranged.**
- Establish an area to change respirator cartridges if required. Contaminated cartridges will be placed into 6ml debris bags that will be labeled and kept segregated from other waste for appropriate disposal.
- Establish an area near the Cold Zone end of the Decontamination Corridor to remove rainsuits, Tyvec suits, rubber boots and other items, that can be reused during spill response operations. These items will be placed into an appropriate container (wading pool) for further inspection before being reissued back into the field.
- After the responders PPE has been removed hand wipes and facial wipes will be available to those personnel that require further cleaning.
- All used equipment and hand tools (pumps, rakes, shovels etc) and other contaminated items should remain in the Decontamination Corridor until it can be determined if these items can be decontaminated.
- All contaminated articles (tarps, plastic sheets, wading pools, delineator posts etc. must be collected for further decon or disposal. All contaminated items will be placed into lined (6-ml debris bags) garbage pails or lined overpack drums and must be properly and clearly labeled for proper disposal, or further cleaning.

SEAPRO Basic Personnel Decon Area Setup

