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THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY
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108 - 108 - ONSITE EMERGENCY MONITORING TEAM
(OSCAR): EMERGENCY PLAN-POSITION SPECIFIC PROCEDURE

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OSCAR SURVEY TECHNIQUES

1.0 Getting started out of the South Gatehouse:

- 1.1 Contact the TSC/EOF for first monitoring assignment.
 - 1.1.1 Confirm that TSC/EOF is receiving Radiological/Locational telemetry from OSCAR RMS equipment.

NOTE: TSC/EOF will inform OSCAR of the operational status of RMS (i.e. *Fully Operational*, *Partially Operational*, or *Not Operational*).

- 1.1.2 Confer with the TSC/EOF while examining **TAB 1, (Onsite Emergency Monitoring Team Locations)** to determine the best access route to the affected sector(s).
 - 1.1.3 Proceed as directed to monitor the affected area(s).
- 1.2 Confer with TSC/EOF while examining **TAB 1, "Onsite Emergency Monitoring Team Locations,"** to determine the best access route.
- 1.3 Proceed as directed to the survey area(s).

2.0 If RMS is ***Fully Operational***, conduct monitoring as follows:

- 2.1 Drive the OSCAR van through the sectors called for by the TSC/EOF.
- 2.2 While conducting monitoring, the speed of the OSCAR van should not exceed 5 mph.
- 2.3 Under certain circumstances, OSCAR may be asked to monitor areas outside of the area defined by **TAB 1**.

NOTE: All radiological data (gamma and iodine levels) are *automatically* transmitted to the TSC and EOF. **No verbal reporting of radiological data by OSCAR is necessary unless specifically requested by the TSC or EOF.**

3.0 If RMS is ***Partially Operational*** (i.e., RMS equipment in the OSCAR van is working, but radiological and/or locational telemetry is **not** being transmitted to the TSC or EOF):

- 3.1 Proceed as if RMS is fully operational (per Section 2.0 above) EXCEPT that all radiological data will need to be communicated to the TSC or EOF via radio.
- 3.2 Upon completion of a monitoring traverse, radio the following data:
 - 3.2.1 Time of traverse.
 - 3.2.2 Sector (N, NNE, NE, ENE, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, NNW) containing the peak readings of the ordered traverse.
 - 3.3.3 Peak Gamma dose rate (EDE) of the traverse.
 - 3.3.4 Peak Iodine dose rate (CDE) of the traverse.

4.0 If RMS is **Not Operational**, conduct monitoring as follows:

- 4.1 The **Survey Meter** should be mounted on the console in the front of the van, set on the **x1** scale with the **beta shield** closed and the speaker "**ON.**"
- 4.2 Traverse the designated survey location(s) checking for increasing radiation levels on the survey meter (scale changes may be necessary depending on the release and atmospheric conditions). Report (via radio) to the TSC or EOF:
 - 4.2.1 Approximate location (sector) of first plume boundary and associated reading.
 - 4.2.2 Approximate location (sector) of plume centerline and associated reading.
 - 4.2.3 Approximate location (sector) of second plume boundary and associated reading.
- 4.3 Air Sampling/RMS Inverter Operational
 - 4.3.1 Prior to each air sample (in a Low Background Area), reload a new filter and cartridge into the RMS Air Sampler per **TAB 4, Section 3.1.**

NOTE: Set van's ventilation system to RECIRC.
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- 4.3.2 Drive into the affected sector as directed by the TSC/EOF; **stop the van** at the point of maximum **Survey Meter** response.

4.3.3 Initiate the 20 ft³ air sample as follows:

- a. Energize the 120-volt Dynamote; push the ON button.
- b. Unplug the power cord from the RMS Inverter and press the **RESET** button.
- c. Plug the power cord back into the BOTTOM receptacle of the inverter.
- d. Place the **AC Power Switch** in the **UP** position.
- e. Place the **PUMP Switch** in the **UP** position (commence timing of 20 min air sample).
- f. Record the **START TIME** and **FLOW RATE** (flow rate is 1 CFM) on the Particulate and Cartridge **Sample Tags**.

<p>NOTE: Stay inside the van for the duration of the 20-minute air sample; confer with the TSC/EOF regarding the need for donning respiratory protection.</p>
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4.3.4 At the conclusion of the air sample:

- a. Place the **PUMP switch** and **AC power switch** in the **DOWN** position.
- b. Record the **STOP TIME** on the Particulate and Cartridge **Sample Tags**.

4.3.5 Drive the OSCAR van, as directed by the TSC/EOF, to a Low Background area to count the air sample.

4.3.6 After donning a pair of protective gloves, open the RMS Air Sampler per **Tab 4, Steps 3.1.1 to 3.1.6**.

4.3.7 Remove and count the Particulate Filter and Cartridge per Step 4.5 below.

4.4 Air Sampling/RMS Inverter **Not** Operational

4.4.1 Drive the OSCAR van into the affected sector as directed by the TSC/EOF; **stop the van** at the point of maximum **Survey Meter** response and park such that one of the van's side windows is facing the plant.

4.4.2 **After donning protective gloves:**

- a. Open the van window facing the plant.
- b. Prop the battery powered air sampler against the door with the open window (air sample head directed out the window toward the plant) and initiate a **20 ft³** air sample.

4.4.3 Record the **START TIME** and **FLOW** on the Particulate and Cartridge **Sample Tags**.

4.4.4 After completion of the **20 ft³** air sample:

- a. Bring the air sampler back into the van and close the window.
- b. Perform a contamination survey on external surfaces of the air sampler and in the immediate vicinity of the opened window.
- c. Record the **STOP TIME** on the Particulate and Cartridge **Sample Tags**.

4.4.5 Proceed to a **Low Background area** to count the air sample.

4.4.6 Count the Particulate Filter and Cartridge per Step 4.5 below.

4.5 Counting an Air Sample Filter and Cartridge

4.5.1 With a pair of protective gloves and using a pair of tweezers, remove the particulate filter and place into a small plastic bag #1. Place the **Particulate Sample Tag** inside the same small bag #1.

4.5.2 Place the silver zeolite cartridge into small plastic bag #2. Place the **Cartridge Sample Tag** inside the same small bag #2.

4.5.3 Count the activity on the silver zeolite cartridge and the particulate filter.

- a. Hold the frisker probe in contact with the bagged silver zeolite cartridge.

NOTE: Ensure the inlet side of the cartridge is facing the probe.
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- b. Hold the frisker probe in contact with the bagged particulate filter.

- c. Determine the background count rate.
 - d. At this time, reload the air sampler you are using with a new filter and cartridge to support future sampling.
 - If using RMS Air Sampler, reload filter/cartridge per **Tab 4, Steps 3.1.8 to 3.1.12.**
 - If using the portable, battery powered air sampler, reload filter/cartridge per **Tab 4, step 2.1.4.**
- 4.5.4 After counting, place the bagged particulate filter paper (small bag #1) and the bagged silver zeolite cartridge (small bag #2) into separate larger plastic bags for possible future analysis. Ensure that "Radioactive Material" tape is used to properly identify the contents of all sample bags.
- 4.5.5 Complete the **Survey Data Form (Tab 3)** and attach the Survey Data Form Sample Tag to the back of the Survey Data Form.