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247 - 247 - FIELD TEAM DIRECTOR

REMOVE MANUAL TABLE OF CONTENTS DATE: 06/24/2003

ADD MANUAL TABLE OF CONTENTS DATE: 06/26/2003

CATEGORY: PROCEDURES TYPE: EP
ID: EP-PS-247
REMOVE: REV:1

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PROCEDURE COVER SHEET

PPL SUSQUEHANNA, LLC	NUCLEAR DEPARTMENT PROCEDURE	
FIELD TEAM DIRECTOR: Emergency-Plan-Position-Specific Instruction		EP-PS-247 Revision 2 Page 1 of 3
QUALITY CLASSIFICATION: ( ) QA Program (X) Non-QA Program	APPROVAL CLASSIFICATION: ( ) Plant ( ) Non-Plant (X) Instruction	
EFFECTIVE DATE: 6-26-2003 PERIODIC REVIEW FREQUENCY: Two Years PERIODIC REVIEW DUE DATE: 6-26-2005		
RECOMMENDED REVIEWS: ALL		
Procedure Owner: Nuclear Emergency Planning Responsible Supervisor: Primary Dose Assessment Supervisor Responsible FUM: Supv.-Nuclear Emergency Planning Responsible Approver: General Manager-Plant Support		

FIELD TEAM DIRECTOR: Emergency-Plan-Position-Specific Instruction

WHEN:	Activation of the Emergency Operations Facility
HOW NOTIFIED:	Paged/Telephone
REPORT TO:	Dose Assessment Supervisor
WHERE TO REPORT:	Emergency Operations Facility

OVERALL DUTY:

Direct the emergency environmental field monitoring efforts to determine the significance of airborne and liquid releases

MAJOR TASKS:	TAB:	REVISION:
Initial actions and status determination for the Field Team Director.	TAB A	1
Field Team monitoring with the Remote Monitoring System, (RMS), **fully operational.**	TAB B	1
Field Team monitoring with the RMS **partially operational:** * Loss of Locational Telemetry and/or * Loss of Radiological Telemetry	TAB C	2
Field Team monitoring with the RMS **inoperable.**	TAB D	1
Performance of liquid release calculations	TAB E	2
Shift Turnover	TAB F	0

SUPPORTING INFORMATION:	TAB:
Met/Vent Data Acquisition Options	TAB 1
RMS Instructions	TAB 2
Field Monitoring Strategy Notes	TAB 3
Liquid Discharge Data Sheets	TAB 4
Emergency Personnel Dose Assessment & Protective Action Recommendation Guide	TAB 5
County Decontamination Facility Locations	TAB 6
Forms	TAB 7
* Shift Takeover Checklist	
* Survey Data Form with RMS Partially Operable	
* Survey Data Form with RMS Inoperable	
* Calculation and Tracking Sheet for Estimated Iodine CDE and TEDE Doses	
* Potassium Iodide (KI) Tracking Form	
* Responsibilities of Initial and Augmented EOF Radiological Assessment Staff after turnover.	TAB 8

REFERENCES:

SSES Emergency Plan

National Interim Primary Drinking Water Regulations, EPA 570/9-76-003

Commonwealth of Pennsylvania State Emergency Plan, Appendix 6, Annex E

NUREG 0654, Planning Standards and Evaluation Criteria

NUREG 0731, Guidelines for Utility Management Structure and Technical Resources

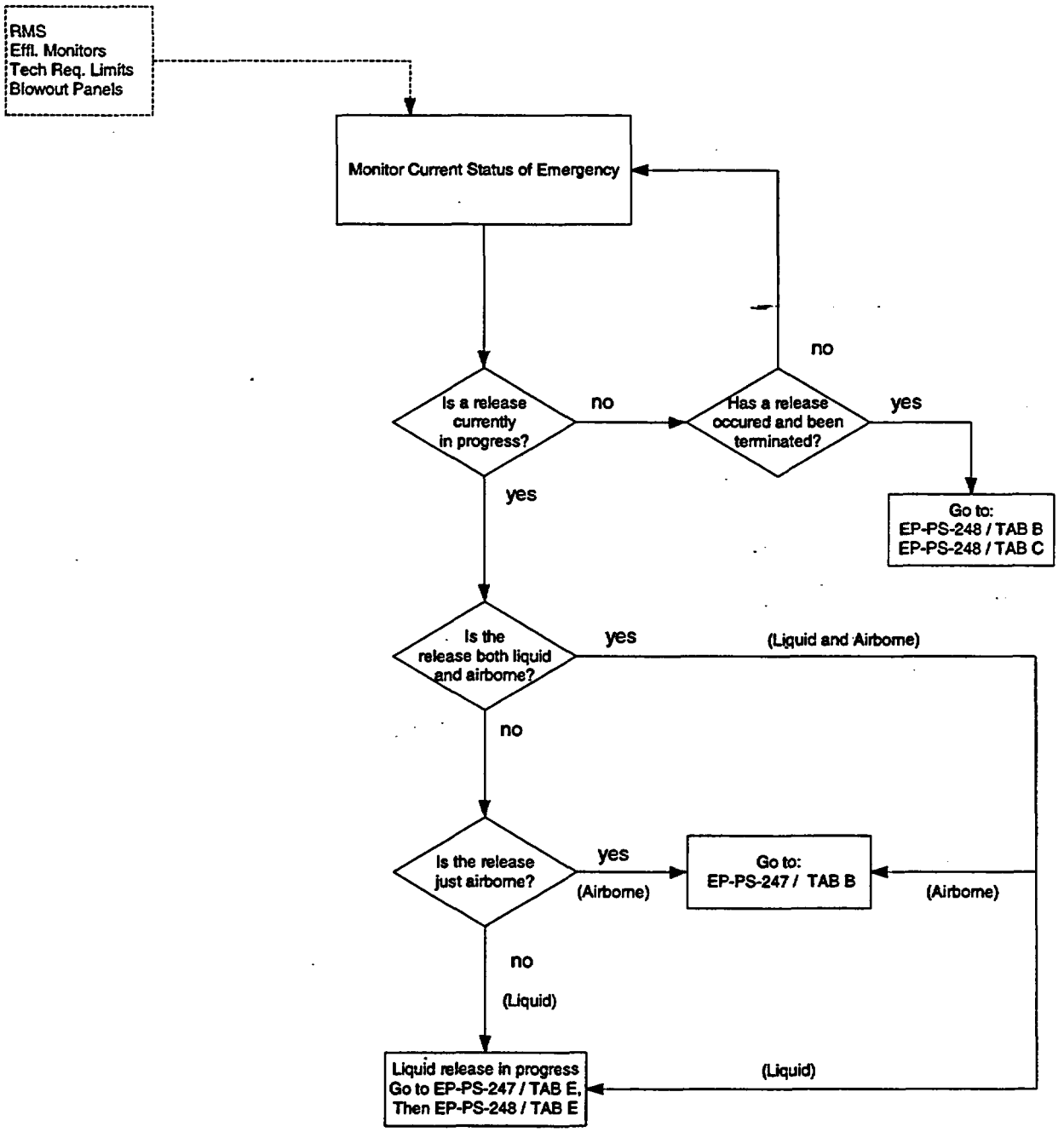
NUREG 0696, Functional Criteria for Emergency Response Facilities

MAJOR TASK:

Initial actions and status determination for the Field Team Director (FTD).

SPECIFIC TASKS:	HOW:
1. Notify the Dose Assessment Supervisor (DASU) of your arrival.	
2. Obtain information on the history and current state of the emergency.	2a. Obtain the following information: (1) Whether a release has occurred or is occurring. (2) The nature of the release. (3) The wind direction, speed, and atmospheric stability **HELP** **Met/Vent Data Acquisition Options** **See TAB 1** (4) The emergency classification.
3. Fill out the FTD part of the *Shift Takeover Checklist*, and turn it in to the DASU.	**HELP** **Shift Takeover Checklist** **See TAB 7**
4. Use the FTD / ESD Status Determination Chart on following page to determine your next course of action.	

FTD/ESD STATUS DETERMINATION CHART



MAJOR TASK:

Field Team Monitoring with RMS fully operational.

SPECIFIC TASKS:	HOW:
1. Verify operational status of Remote Monitoring System (RMS).	**HELP** **RMS Instructions** **See TAB 2, Section 1.0**
	1a. If there is no evidence of radiological telemetry being transmitted to the System Summary Screen: (1) Have OSCAR verify the operational status of the RMS equipment inside the Van. (a) If the RMS equipment inside the OSCAR Van is fully operational, then continue Field Team monitoring in accordance with TAB C. (b) If the RMS equipment inside the OSCAR Van is determined to be inoperable, then continue Field Team monitoring in accordance with TAB D.
2. Verify operation of the VHF radio.	2a. Contact HP Radioman by radio in the TSC to let him know that you have arrived at the EOF.
3. Ensure that the HP Radioman has communicated or transmitted available logs containing relevant data from OSCAR and any other field team(s) dispatched, to the Field Team Director (FTD) at the EOF.	3a. Obtain the following information from the HP Radioman in the TSC: (1) OSCAR Team Member's name (2) OSCAR's initial dose (YTD)

SPECIFIC TASKS:	HOW:
	(3) Team Members' names, initial doses (YTD), and team designator (e.g., ALPHA) for any other field team(s) dispatched from the TSC.
	(4) Current dose extensions
	(5) Sectors / Locations monitored, and by which field teams
	(6) Results for previously monitored sectors /Locations
4. Direct the Field Teams	4a. Determine Monitoring Strategy
	(1) If all Fixed Monitors are <u>not functional</u>, consider filling the resulting gap(s) in the monitoring coverage when determining placement of the Field Teams.
	HELP **Field Monitoring Strategy Notes** **See TAB 3, Sections 2.0 and 4.0**
	4b. Take Control of OSCAR and any other field team(s) dispatched from the TSC.
	(1) Obtain a target time from DASU for taking control of the field team(s), and coordinate with HP Radioman in TSC.
	(2) When directed by DASU, take control of the field team(s).
	(3) Inform the field team(s) and the HP Radioman that the field team(s) is/are now being directed by the FTD in EOF.

SPECIFIC TASKS: **HOW:**

4c. Brief and dispatch Field Teams:

NOTE:
Ensure Field Team members have signed in on RWP #8002 (RWP #8001 is applicable to OSCAR).

NOTE:
If Field Teams have already been dispatched, conduct briefing via radio or cell telephone.

HELP

Field Monitoring Strategy Notes
See TAB 3, Section 1.0

(1) Log names, YTD dose, and cell phone numbers in FTD Log.

(2) Describe the monitoring strategy; including the sectors to be monitored.

(3) Record a summary of the completed Field Team briefing in FTD Log.

(4) Verify VHF Radio or Cell Phone operability with Field Teams.

(5) Verify RMS is receiving radiological and locational telemetry via Mobile Survey Plot Screen or System Summary Screen.

NOTE:
If RMS is not receiving radiological telemetry from Field Team(s), refer to step 1a.

SPECIFIC TASKS:	HOW:
5. Notes on Communications between the FTD and the Field Teams.	5a. From the EOF to Nanticoke, cell phones are usually the best means for communications between the FTD and the Field Teams. 5b. South of Nanticoke the VHF Radio is usually the best means for communications between the FTD and the Field Teams. 5c. The hilly terrain of the monitoring area within the EPZ can cause periodic losses of a Field Team's locational telemetry (i.e. the affected Field Team's location marker will not be displayed on the Mobile Survey Plot Screen). (1) In most cases the lost locational telemetry will reestablish itself once the Field Team moves to a location offering less terrain interference. (2) If the loss of locational telemetry persists despite the relocation of the Field Team, refer to TAB C.
6. Employ RMS Monitoring Strategy	**HELP** **RMS Instructions** **See TAB 2, Section 2.0**
7. FTD must track Field Teams' Whole Body exposure by periodically recording their SRD readings in the FTD General Log.	7a. Immediately notify the DAST if a Field Team member requires an extension or if team radiological control warrants additional management attention. **HELP** **Field Monitoring Strategy Notes** **See TAB 3, Section 5.0**

SPECIFIC TASKS:	HOW:
8. Personnel changes should occur inside the EPZ at a pre-determined location in an unaffected sector.	8a. Direct the Off-going Field Team(s) to: (1) Immediately proceed to the designated County Decontamination Facility, **HELP** **County Decontamination Facility Locations See TAB 6** (2) Return to EOF for debriefing.
	8b. The OSCAR team may return to the site Protected Area with the concurrence of the TSC radiation protection staff.
9. At the termination of the release, the Field Team vehicles will be directed (with the DASU's permission) to the designated County Decontamination Facility .	9a. Upon being decontaminated, the off-going Field Team personnel shall proceed to the EOF for debriefing and meet with environmental sampling personnel to form unified monitoring teams.
	9b. Upon vacating the Field Team vehicle, any known or suspected radioactive waste generated during the course of field monitoring activities shall be locked-up inside the vehicle until Effluents Management can take custody of the vehicle.
	9c. The Field Team vehicles will be posted as contaminated and their location/status reported to the FTD.
	9d. The OSCAR team vehicle's disposition should be discussed with the TSC radiation protection staff.

MAJOR TASK:

Field Team Monitoring with RMS **partially operational:**

- Loss of Locational Telemetry

  and/or

- Loss of Radiological Telemetry

Note:

This TAB provides guidance for the two most likely reasons RMS will be in a *partially operational* condition. The intent is for this guidance to be used in conjunction with the normal monitoring strategy specified in TAB B, TAB 2 and TAB 3.

If a different RMS deficiency occurs that also results in RMS being put-in a *partially operational* condition, consult with the DAST and DASU to determine a means of compensating for the deficiency to continue monitoring field conditions with RMS.

SPECIFIC TASKS:	HOW:
1. **Loss of** Locational Telemetry.	1a. In the event you are unable to track a Field Team location on the Mobile Survey Plot Screen (MSPS): (1) Manually track the Field Team location on the large area map in the EOF (2) Communicate monitoring location instructions via radio or cell phone using the location notation for the large area map in the EOF. (3) Track and control OSCAR location using a smaller scale map as appropriate.

SPECIFIC TASKS:	HOW:
	1b. With the affected Field Team selected on the MSPS, the associated radiological data (*Current Rate* and *Peak*) will still be displayed on the left side of the screen. In this case, reports generated by RMS will not contain: (1) Location/sector data (2) Distance data
2. Loss of Radiological Telemetry.	2a. In this case, the Field Team location marker will be displayed on the MSPS, but no radiological data will be displayed on the left side of the screen. (1) Track Field Team location by monitoring the MSPS. (2) Direct each Field Team to communicate the radiological survey data to you via radio or cell phone. (3) Record the radiological survey data reported by the Field Team on the *Survey Data Form-RMS Partially Operable* and give to DAST. **HELP** ***Survey Data Form-RMS Partially Operable*** **See TAB 7**

SPECIFIC TASKS:		HOW:	
3.	Loss of both Locational and Radiological Telemetry.	3a.	First hit the [F8] key (this will transfer the RMS display source from the EOF to the TSC via phone line). If this results in the recovery of radiological and/or locational telemetry, then the prior loss was due to a problem with the primary repeater between the TSC and EOF. Continue management of Field Teams via TSC display **NOTE:** **Since all RMS data and commands are now being communicated via phone line, expect a short time delay with RMS operations.**
		3b.	If transferal of the RMS display source does not work, simultaneously follow the guidance outlined above in steps 1 and 2.
4.	RMS System "locked-up" (i.e., system no longer responding to commands)	4a.	Attempt to restart RMS system by simultaneously depressing the CONTROL-ALT-DELETE Keys.
		4b.	The system restart is completely automatic and takes about 10 minutes. When startup completed, access Mobile Survey Plot and verify RMS operability by following **steps 1.2 - 1.7 of TAB 2.** **NOTE:** **Until RMS operability restored, conduct field monitoring via TAB D.**
5.	If RMS Keyboard is "locked-up" (i.e., depressing the CONTROL-ALT-DELETE fails to restart the system), shutdown then restart RMS System.	5a.	Open the access door (located directly under keyboard) to the base station housing and locate the PC tower.

SPECIFIC TASKS:	HOW:
	5b. Depress the POWER button to turn the power off, wait 20 - 30 seconds, then depress the POWER button again to restart.
	5c. The system restart is completely automatic and takes about 10 minutes. When startup completed, access Mobile Survey Plot and verify RMS operability by following **steps 1.2 - 1.7 of TAB 2.** **NOTE:** **Until RMS operability restored, conduct field monitoring via TAB D.**
6. If <u>at any point</u> the RMS equipment inside the OSCAR Van is determined to be inoperable, **then continue radiological monitoring in accordance with TAB D.**	

MAJOR TASK:

Field Team Monitoring with RMS **Inoperable.**

SPECIFIC TASKS:	HOW:
1. Verify operation of the VHF radio.	1a. Contact HP Radioman in the TSC to let him know that you have arrived at the EOF.
2. Ensure that the HP Radioman has transmitted all available logs containing relevant field team data to the Field Team Director (FTD) at the EOF.	2a. Obtain the following information from the HP Radioman in the TSC: (1) OSCAR Team Member(s) name (2) OSCAR Team Member(s)initial dose (YTD) (3) Team Members' names, initial doses (YTD), and team designator (e.g., ALPHA) for any other field team(s) dispatched from the TSC. (4) Current dose extensions (5) Sectors / Locations monitored, and by which field teams (6) Results for previously monitored sectors / locations
3. If available, refer to a visual display of the plume path predicted by MIDAS.	

SPECIFIC TASKS:	HOW:
4. Determine monitoring strategy and brief the Field Teams.	**HELP** **Field Monitoring Strategy Notes** **See TAB 3, Sections 3.0 and 4.0**

4a. Take Control of OSCAR and any other field team(s) dispatched from the TSC.

(1) Obtain a target time from DASU for taking control of the field team(s), and coordinate with HP Radioman in TSC.

(2) When directed by DASU, take control of the field team(s).

(3) Inform the field team(s) and the HP Radioman that the field team(s) is/are now being directed by the FTD in EOF, and request that they report their present location(s).

4b. Brief and dispatch Field Teams:

NOTE:
Ensure Field Team members have signed in on RWP #8002 (RWP #8001 is applicable to OSCAR).

NOTE:
If Field Teams have already been dispatched, conduct a briefing via radio or cell telephone.

HELP
Field Monitoring Strategy Notes
See TAB 3, Section 1.0

(1) Log names, YTD dose, and cell phone numbers in FTD Log.

(2) Describe the monitoring strategy; including the sectors to be monitored.

SPECIFIC TASKS:	HOW:
	(3) Record a summary of the completed Field Team briefing in FTD Log.
	(4) Verify VHF Radio or Cell Phone operability with Field Teams.
5. Notes on Communications between the FTD and the Field Teams.	5a. From the EOF to Nanticoke, cell phones are usually the best means for communications between the FTD and the Field Teams.
	5b. South of Nanticoke the VHF Radio is usually the best means for communications between the FTD and the Field Teams.
6. Direct the Field Teams to traverse the potentially affected sectors to locate the plume with their survey meters.	**HELP** **Field Monitoring Strategy Notes** **See TAB 3, Sections 3.0 and 4.0**
7. Once plume is located, use OSCAR for further plume characterization. Alpha and Bravo Field Teams should then be used to track the plume movement by monitoring the plume boundaries.	7a. If conditions warrant it, direct OSCAR to traverse the plume and perform a manual air sample at the location inside the plume with the highest survey meter reading. 7b. If Field Team members exposure would not be unduly affected, use Alpha and Bravo team air samples to validate noble gas to iodine ratios and demonstrate iodine depletion with distance.
8. Record each survey data report from the Field Teams on a *Survey Data Form (RMS Inoperable)*, and give each form to the DAST.	**HELP** ***Survey Data Form (RMS Inoperable)*** **See TAB 7**
9. Repeat steps 6 – 8 as necessary until release is terminated, balancing the need for data with the exposure to team members to gather the data.	

SPECIFIC TASKS:	HOW:
10. FTD must track Field Teams' Whole Body exposure by periodically recording their SRD readings in the FTD General Log.	10a. Immediately notify the DAST if a Field Team member requires a dose extension or if team radiological control warrants additional management attention. **HELP** **Field Monitoring Strategy Notes** **See TAB 3, Section 5.0**
11. Personnel changes will occur inside the EPZ at a pre-determined location in an unaffected sector.	11a. Direct the Off-going Field Team(s) to: (1) Immediately proceed to the designated County Decontamination Facility, **HELP** **County Decontamination Facility Locations** **See TAB 6** (2) Return to EOF for debriefing. 11b. The OSCAR team may return to the site Protected Area with the concurrence of the TSC radiation protection staff.
12. At the termination of the release, the Field Team vehicles will be directed (with the DASU's permission) to the designated County Decontamination Facility.	12a. Upon being decontaminated, the off-going Field Team personnel shall proceed to the EOF for debriefing and meet with environmental sampling personnel to form unified monitoring teams. 12b. Upon vacating the Field Team vehicle, any sampler or radioactive waste generated during the course of field monitoring activities shall be locked-up inside the vehicle until Effluents Management can take custody of the vehicle. 12c. The Field Team vehicles will be posted as contaminated and their location/status reported to the FTD.

SPECIFIC TASKS:	HOW:
	12d. The OSCAR team vehicle's disposition should be discussed with the TSC radiation protections staff.

MAJOR TASK:

Performance of liquid release calculations

SPECIFIC TASKS:	HOW:
1. Confirm a liquid release into the Susquehanna river.	1a. Contact the TSC Chemistry Coordinator or TSC Coordinator to confirm there has been a liquid release into the river equal to or exceeding Technical Requirements limits.

NOTE:
Technical Requirements limits are ten times the effluent concentrations for Unrestricted areas as listed in Appendix B, Table 2, 10 CFR20.1001-20.2402.

1b. Obtain the following release information:

(1) Time release started

(2) Time release stopped (if applicable)

(3) Cooling Tower blowdown discharge line rate.

(4) Cooling tower blowdown discharge to the river.

(5) Spray pond release rate (if applicable)

(6) Spray pond water elevation (if applicable)

(7) Radionuclide(s) and activities in the release

(8) River depth (at river intake or Env. Lab.)

(9) Sample locations

(10) Previous liquid release calculations

(11) Notifications made

SPECIFIC TASKS:	HOW:
2. Notify the Dose Assessment Supervisor, (DASU), when a liquid release into the river is equal to or exceeds Technical Requirements limits.	**NOTE:** **Remind the DASU to ensure the Radiological Liaison notifies the Danville Water Company of the release and activation of the SSES Emergency Plan.** **NO RECOMMENDATIONS SHOULD BE MADE TO THE DANVILLE WATER COMPANY.**
3. Notify the Public Information Manager when a liquid release into the river is equal to or exceeds Technical Requirements limits.	**NOTE:** **Telephone numbers are located in the Emergency Telephone Directory available at each workstation.**
4. Perform a liquid release calculation to facilitate a PAR determination.	4a. The calculation may be performed using either the Liquid Discharge Data Program software (located on the PPL intranet, shared "S" drive, as Liquid Discharge Data Program) or the Liquid Discharge Data Sheets (manual method). The methodologies and results are comparable.
	HELP **Liquid Discharge Data Sheets** **See TAB 4**
	4b. Obtain the results of the gamma analysis for a sample of the water being released into the Susquehanna river from the TSC Chemistry Coordinator or TSC Coordinator.
	4c. Determine which of the fifteen radionuclides listed in parts I, II and III of the "Liquid Discharge Data Sheet" have been identified in the sample.

SPECIFIC TASKS:	HOW:
	4d. Enter the activity concentrations, (uCi/ml), for these radionuclides in the appropriate table in the applicable part of the "Liquid Discharge Data Sheet". Enter zeros for the activity concentrations of the listed radionuclides that were not identified in the sample.
	4e. Determine the EC fraction for each individual radionuclide identified in the sample using either Part I, II or III of the "Liquid Discharge Data Sheet".
	4f. Determine the diluted sum of the EC fractions at Danville using Part IV of the "Liquid Discharge Data Sheet".
	4g. Notify the DASU when the diluted sum of the EC fractions at Danville exceeds 0.85.
5. Direct Emergency Environmental Sampling Teams in the monitoring of an unusual liquid release.	5a. Reference EP-PS-248, ("Environmental Sampling Director" instruction), Tab E.
	5b. When necessary, call out a second FTD to perform the function of Environmental Sampling Director.