

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-323

REV. NO. 1

EMERGENCY OFF-SITE RADIATION SURVEY TEAMS

TECHNICAL REVIEW

PORC REVIEW DATE 6-30-82

J. Bodini
QC REVIEW

Robert [Signature]
PLANT SUPERINTENDENT

7-7-82
EFFECTIVE DATE

QA NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 27 PAGES

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EMERGENCYOFF-SITERADIATION SURVEY TEAMS1.0 PURPOSE:

- 1.1 The prime objective of the Emergency Off-Site Radiation Survey Teams is to rapidly survey areas downwind of the plant site in order to determine the extent and magnitude of any uncontrolled release of radioactive materials following an incident. It should be stressed that the initial off-site survey is of great importance. Decisions regarding the extent and types of protective actions required will be based upon data reported by the survey teams.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
2.2 SC-421 Determination of Iodine or Particulate

3.0 INSTRUCTIONS:

- 3.1 Obtain appropriate Off-Site Survey Team footlocker as directed by Tag Board assignment. If seal is broken, use equipment list inside footlocker to inventory equipment. Request the assistance of the Survey Center Manager in obtaining replacement equipment if necessary.
- 3.2 Obtain following equipment which is not stored in footlocker.
- 3.2.1 Personnel film badge and TLD.
- 3.2.2 One full face mask and charcoal filter for each team member. Mask will be donned upon instructions of the Dose Assessment Manager.
- 3.2.3 One 0-500 mr dosimeter and one 0-5 R dosimeter for each team member. Sign-in on dosimeter log sheet.
- 3.2.4 Pack of 12 environmental TLD's from lead storage container.
- 3.2.5 Hand-held radio and magnetic mount car antenna.

- 3.2.6 RADECO H-809C Portable High Volume Air Sampler with filter holder.
- 3.2.7 RM-14 Radiation Monitor with HP-190 Probe.
- 3.2.8 Auto-Digimaster or RO-2 dose rate meter.
- 3.3 Complete the following items prior to departing on the assigned survey route.
 - 3.3.1 Check operation of radio system, portable air sampler, radiation count rate monitor, and dose rate meter using equipment check-out procedures in Appendix I.
 - 3.3.2 Obtain transportation and check vehicle for contamination by taking a swipe survey or end window survey on the horizontal surfaces with an HP-190 probe and count rate meter. If survey indicates surface contamination of more than 250 CPM above background contact the Survey Center Manager for decontamination instructions.
 - 3.3.3 Load survey equipment into vehicle, fill in Survey Team Status Board, and inform Survey Center Manager of your departure. Obtain wind direction and speed data.
 - 3.3.4 Log time, date, and survey team members on survey map.
 - 3.3.5 Establish radio communications with Technical Support Center Radio Operator and advise of teams departure.
- 3.4 Perform radiation surveys using the appropriate instructions of Appendix II while following the Primary Survey Route instructions contained in Appendix III.
 - 3.4.1 At each assigned survey point the team should report the following information to the Radio Operator:
 - Location
 - Completed Actions
 - Results of Surveys
 - Departure for next Survey Point

- 3.4.2 If radio contact can not be made, report using a telephone. Call collect on one of these numbers.

315-524-4446
315-524-4984
315-524-4973
716-546-7845
716-546-4015

- 3.4.3 Upon completion of Primary Survey Route inform radio operator. The Dose Assessment Manager will assign an Alternate Survey Route or direct you to return to the Survey Center.
- 3.5 Full face masks with charcoal filters will be worn as directed by the Dose Assessment Manager. Potential internal contamination will be determined by a Whole Body Count after the survey.
- 3.6 Upon returning to the Survey Center perform a survey of team personnel for contamination. If any contamination greater than 100 CPM above background is found contact the Survey Center Manager for decontamination instructions.
- 3.6.1 Conduct a survey of the vehicle for contamination. If any contamination greater than 250 CPM above background is found contact the Survey Center Manager for decontamination instructions.
- 3.6.2 Give all filter cartridges, particulate filters, survey maps, and data records to Survey Center Manager.
- 3.6.3 Dispose of contaminated and potentially contaminated waste in an approved manner.
- 3.6.4 Re-stock, inventory, and seal Survey Team Equipment Footlocker, stow in Survey Team Room.
- 3.6.5 Return radio system, portable air sampler, radiation count rate meter, and dose rate meter to the Survey Team Room and place on charge as appropriate.
- 3.6.6 Return 0-500 mr and 0-5R dosimeters and sign-out on dosimeter log sheet.
- 3.6.7 Fill out Survey Team Status Board and inform Survey Center Manager.

A P P E N D I X I

EMERGENCY OFF-SITE RADIATION SURVEY TEAM

EQUIPMENT CHECKOUT AND OPERATION

RADIO SYSTEM

The radio system consists of a hand-held radio and magnetic mount car antenna. To checkout and operate the system, complete the following steps.

1. Ensure the vehicle roof is free of ice and snow.
2. Hold the magnetic mount antenna in the palm of your hand with the antennal wire pointed towards the rear of the vehicle and the base of the mount at an angle of about 45 degrees to the vehicle roof.
3. Position the front edge of the mount in the approximate center of vehicle roof.
4. Lower the mount onto the vehicle roof. It will be held in place by magnetic force.

***** C A U T I O N *****

DO NOT ATTEMPT TO MOVE THE ANTENNA BY SLIDING IT.
YOU WILL SCRATCH THE SURFACE OF THE VEHICLE.
ALWAYS REMOVE THE MOUNT BY LIFTING FROM THE REAR.

***** C A U T I O N *****

5. Route the antenna lead wire into the vehicle between the door jamb. With any amount of weather striping the lead should not be damaged.
6. Affix the lead wire near the head liner with a piece of tape.
7. Unscrew the telescoping or black flexable antenna from the radio and store it in the footlocker.
8. At the upper left rear corner of the radio (when viewed from the top) there is a rubber plug covering a hole marked "ANT". Remove the plug and tape it where it will not get lost.
9. Insert the jack from the mobile antenna into the hole from step 8.
10. Turn the channel selector switch to channel 1.
11. Turn the squelch knob fully CCW.

12. Turn the Volume knob CW to turn the radio on and adjust the volume level. A rushing sound should be heard.

NOTE: If no sound is heard unit is inoperable. Obtain new unit and inform Survey Center Manager).

13. Adjust squelch knob CW just enough to quiet radio. If squelch knob is turned too far CW weak signals will not be heard.
14. The general procedure for communicating on the radio should be as follows.
 - a) Station Called
 - b) Red/Green/Orange Team
 - c) Message
 - d) "Over"

During a drill or exercise all fictitious data will be preceded with the words "This is a drill.....".

Examples:

"TSC, Red Team, At location number 1, Over"

"TSC, Green Team, This is a drill, Results of the general area survey at location 36 are 6,500 Counts Per Minute above background, Over"

15. To transmit depress the push-to-talk switch on the side of the radio. Speak in a normal voice into the speaker/mike.
16. To receive, release the push-to-talk switch.
17. There may be times that the TSC or EOF will be receiving communications from a team that you can not hear. If this happens the Radio Operator will tell you to wait or standby. After he has completed his traffic he will ask you to transmit your information. Remember this is one big party line; everyone can't talk at once.
18. When you have been directed to secure your Survey Team, turn the radio off, disconnect the antenna lead, install the rubber plug in the "ANT" hole, install the antenna removed in step 7, and remove the magnetic mount antenna from the vehicle by lifting up at the rear of the mount.

Place the radio in the charger located in the Survey Team Room at the Survey Center, and place the magnetic mount antenna on the bench.

RADECO H 809C HIGH VOLUME AIR SAMPLER

EQUIPMENT CHECK:

1. Ensure power switch on air sampler is off.
2. Ensure battery Charger is de-energized and in the 12 volt position.
3. Connect air sampler power cables to the battery charger, RED clip to positive and BLACK clip to negative.
4. Energize battery charger.
5. Turn power switch on air sampler on.
6. Check flow meter on air sampler. Flow meter should be off scale high with no filters in place.
7. Turn power switch on air sampler off.
8. De-energize battery charger and disconnect air sampler power cables.

EQUIPMENT OPERATION FROM VEHICLE

1. Ensure power switch on air sampler is off.
2. Connect BLACK power clip to vehicle ground (engine block, chassis, etc.) and RED power clip to positive post of vehicle battery.
3. Ensure the filter assembly contains a GY-130 Silver Zeolite cartridge and a particulate filter.
4. Turn air sampler on and record the sample date, time, location, and air flow rate (normal is 1.5 CFM) on a sample envelope.
5. Run sampler for approximately 10 minutes.
6. Record air flow rate and time.
7. Turn air sampler off.

RM-14 RADIATION SURVEY METER

EQUIPMENT CHECK:

1. Disconnect power cord from back of meter taking care not to turn test switch on.
2. Ensure that an HP-190 probe is connected to the detector jack.
3. Turn range switch to battery. Meter should read in the "BATT-OK" area.
4. Perform instrument source check.
5. Turn range switch off.

EQUIPMENT OPERATION:

1. Turn range switch to X1.
2. Place response switch in the "SLOW" position.
3. Adjust the volume control so that the audio indication (a click) can be heard.
4. The range switch should be adjusted such that the highest reading gives a mid-scale deflection.
5. All readings must be multiplied by the range switch setting (X1, X10, X100).
6. 2,200 CPM is approximately 1 mrem/hour.
7. Upon completion of the survey turn the unit off and return to the Survey Team Room. Unit should be recharged before the next use.

AUTO DIGI-MASTER DOSE METER

EQUIPMENT CHECK:

1. Turn unit on to be sure that the digital display lights.
2. Perform instrument source check.

EQUIPMENT OPERATION:

1. Allow unit to complete one cycle (display will blink) before reading when turning unit on or when radiation level changes significantly.
2. Unit will automatically change from one range to the next. The reading is always direct.
3. The Digi-Master may be used to detect the presence of Beta but cannot be used for dose measurement of Beta. Also, Beta detection is only effective when the unit is operating in the mrem/hr range.
 - a. Take a reading with the Beta window closed and record.
 - b. Take a reading with the Beta window opened and record.
 - c. If the reading with the Beta window open is greater than the reading with the Beta window closed there is Beta radiation present.
 - d. If a Beta dose rate is needed a survey with an RO-2 or equivalent instrument must be made.
4. Upon completion of the survey, turn the unit off and return to the Survey Team Room. Unit should be recharged before the next use.

RO-2 DOSE RATE METER

EQUIPMENT CHECK:

1. Turn the function selector switch to the "BATT 1" and "BATT 2" positions. Meter should indicate above the battery cut-off line.
2. Perform instrument source check.

EQUIPMENT OPERATION:

1. Zero the meter by turning the function selector switch to "ZERO" and turning the "ZERO ADJ" knob as necessary. The zero adjust may be made in a radiation field by placing the function selector switch at "ZERO ADJ".
2. To measure the radiation field, position the function selector switch to the lowest range which provides a mid-scale deflection of the meter.
3. With the Beta shield closed the meter will read the whole body Gamma dose rate.
4. To obtain a Beta dose rate measurement perform the following:

CAUTION: THE FACE OF THE BETA WINDOW IS VERY THIN.
WHENEVER THE BETA SHIELD IS OPEN GUARD THE SHIELD
AGAINST DAMAGE OR CONTAMINATION BY DUST OR DIRT

- a. Take an area measurement with the Beta shield closed.
 - b. Open the sliding Beta shield on the bottom of the case and take an area measurement.
 - c. Subtract the closed shield reading from the open shield reading and multiply by the Beta correction factor marked on the instrument.
 - d. This number is the Beta dose rate for that area.
5. When the survey is completed turn the function selector switch to OFF.

A P P E N D I X I I

RADIATION SURVEY INSTRUCTIONS

GENERAL AREA RADIATION SURVEY

1. A general radiation area survey should be conducted while moving between defined survey points, and at the specific survey points.
2. The survey should be conducted using an RM-14 Radiation Monitor with an HP-190 probe.
3. When conducting a moving survey the HP-190 probe should be installed in the mounting bracket and positioned outside a vehicle window. The detection window of the HP-190 probe should be horizontal and pointed to the rear of the vehicle to protect the detector from the elements and wind.
4. Vehicle speed should not exceed 15 mph during a mobile survey.
5. If the R_{β} reading changes more than 1,000 CPM stop and do survey for Beta using the Auto Digi-Master or RO-.
6. Report the results of the mobile survey to the Radio Operator at the next survey point, or after completion of the Beta survey.

SURVEY TO DETERMINE PRESENCE
OF BETA RADIATION

1. If the General Area Radiation Survey shows a change of 1000 CPM on the RM-14, or if the "plume" is suspected to be in your area, a survey to detect the presence of Beta radiation should be conducted.
2. Using an Auto Digi-Master, or RO-2 dose rate meter conduct the following surveys.
 - a. With the detector window aimed up:
Beta shield open _____
Beta shield closed _____
Difference #1 = (open reading - closed reading)
 - b. With the detector window aimed down:
Beta shield open _____
Beta shield closed _____
Difference #2 = (open reading - closed reading)
3. If either difference #1 or difference #2 from step 2 is positive this is an indication that Beta radiation is present.
 - a. If both difference #1 and #2 are positive, this is an indication that you are in the plume.
 - b. If only difference #1 is positive, this is an indication that the plume is overhead.
4. Report the results of the survey to the Radio Operator and await further instructions from the Dose Assessment Manager.

INSTALLATION OF TLD

1. Specific locations for TLD's will be listed on the survey route instructions or will be given by the Dose Assessment Manager.
2. Hammer a nail into a utility pole at the specified location. The nail should be positioned on the pole at head height and on the side closest to the site.
3. Affix a TLD to the nail using tape. Ensure the TLD window is oriented towards the site.
4. Record the location (either survey point number or road intersections), utility pole number, date, time, and TLD number on the back of the survey map.

HIGH VOLUME AIR SAMPLE

1. Draw approximately 15 cubic feet of air through a GY-130 silver zeolite cartridge and particulate filter using a RADECO H 809C High Volume air sampler. This will take approximately 10 minutes.
2. Record the sample date, time, and location (either survey point number or road intersections) on two sample envelopes, and on the back of the survey map.
3. Determine the background radiation level using the RM-14 Radiation Monitor and HP-190 probe. Record the reading on each envelope, and on the survey map. If background reading is greater than 200 CPM move to lower background prior to taking readings.
4. Using onion skins remove the GY-130 silver zeolite cartridge from the sample holder and read the activity level with the RM-14 Radiation Monitor and HP-190 probe by holding the probe window on the inlet side of the cartridge filter. DO NOT TOUCH THE PROBE WINDOW WITH THE CARTRIDGE. Record the reading on one envelope and place the cartridge in THE ENVELOPE. Record the reading on the back of the survey map.

NOTE: If cartridge is reading off scale move probe approximately 1" from cartridge. Report and log Data as being taken at 1".
5. Read the activity level of the particulate filter using the RM-14 Radiation Monitor and HP-190 probe. DO NOT TOUCH THE PROBE WINDOW WITH THE PARTICULATE FILTER. Record the reading on the other envelope and place the particulate filter in the envelope. Record the reading on the back of the survey map.
6. Remove the onion skins and discard in a plastic bag. Treat as contaminated material.
7. Report the following information to the radio Operator:
 - a. Sample location
 - b. Time sample was taken
 - c. Volume of air sample in CF
 - d. Background count rate in CPM
 - e. GY-130 silver zeolite cartridge count rate in CPM
 - f. Particulate filter count rate in CPM

NOTE: Field calculations of the airborne activity level may be performed as follows:

Iodine-131 (GY-130 Cartridge)

$$\frac{(\text{CPM Sample} - \text{CPM Background}) (3.0 \times 10^{-9})}{(\text{Volume of Sample in Cubic Feet})} = \frac{\text{uCi/cc}}{\text{Iodine-131}}$$

Particulate

$$\frac{(\text{CPM Sample} - \text{CPM Background}) (8.38 \times 10^{-10})}{(\text{Volume of Sample in Cubic Feet})} = \frac{\text{uCi/cc}}{\text{Particulate}}$$

CHANGING FILTERS AT FIXED ENVIRONMENTAL STATIONS

1. Record the following information on the sample envelope left from the previous filter change:
 - a. Date
 - b. Time
 - c. System Vacuum (inches)
 - d. Gasmeter reading (cubic feet)
 - e. Total hour meter (record in column marked "OFF")
2. Turn pump off
3. Using onion skins remove the filter holder at the quick disconnect joint.
4. Unscrew the outside retaining ring and remove the particulate filter from the holder and place in the sample envelope.
5. If a charcoal cartridge was in use transfer the information on the particulate filter envelope to a new envelope and place the charcoal cartridge in the envelope.
6. Place the new GY-130 silver zeolite cartridge in the sample head.
7. Place a new particulate filter in the holder, replace the retaining ring and reconnect holder to the pump at the quick disconnect joint.
8. Remove onion skins and place in a plastic bag. Treat as contaminated.
9. Turn the pump on.
10. Record the following information on two new envelopes. Mark one envelope "GY-130 silver zeolite".
 - a. Station number
 - b. Date
 - c. Time
 - d. System vacuum (inches)
 - e. Gasmeter reading (cubic feet)
 - f. Total Hour meter (record in the "ON" column)
11. Place the new envelopes inside the monitor cabinet.
12. Bring the envelopes containing the cartridge/filter removed to the Survey Center at the completion of your assigned route or when directed by the Dose Assessment Manager.

A P P E N D I X I I I

OFF SITE RADIATION SURVEY TEAM INSTRUCTION

RED TEAM
PRIMARY SURVEY ROUTE
INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From the Training Center driveway travel east on Lake Road to Knickerbocker Road (1.1 miles). Place a TLD near the intersection of Lake Road and Knickerbocker Road (#1).
2. Go south on Knickerbocker Road to Brick Church Road (1.0 miles). Place a TLD near the intersection of Knickerbocker Road and Brick Church Road (#2).
3. Continue south on Knickerbocker Road to Kenyon Road (1.3 miles). Take a high volume air sample at the intersection of Knickerbocker Road and Kenyon Road (#9).
4. Go west on Kenyon Road to Slocum Road (1.9 miles).
5. Go north on Slocum Road to Brick Church Road (1.3 miles). Place a TLD near the intersection of Slocum Road and Brick Church Road (#4).
6. Continue north on Slocum Road to Lake Road (1.0 miles).
7. Report to Radio Operator for further instructions.

RED TEAM

SECONDARY SURVEY ROUTE

(WEST OR NORTHWEST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From the intersection of Lake and Slocum Road.
2. Go south on Slocum Road to State Route 104 (3.1 miles)
3. Go east on State Route 104 to state Route 350/Ontario Center Road (1.0 miles).
4. Go south on State Route 350 to State Route 441/Walworth Road (6.3 miles).
5. Go east on State Route 441/Walworth Road to main intersection in Village of Walworth (Walworth-Ontario Road, 1.0 miles). Place a TLD near the intersection (#26).
6. Report to the Radio Operator for further instructions.

RED TEAM

SECONDARY SURVEY ROUTE

(EAST OR NORTHEAST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From the intersection of Lake and Slocum Road.
2. Go south on Slocum Road to Route 104 (3.1 miles).
3. Go east on Route 104 to Route 350/Ontario Center Road (1.0 miles).
4. Go south on Route 350 to Plank Road (3.2 miles).
5. Go west on Plank Road to County Line Road (4.1 miles). Place a TLD near the intersection of Plank Road and County Line Road (#46).
6. Continue west on Plank Road to Salt Road (1.5 miles). Place a TLD near the intersections of Plank Road and Salt Road (#39).
7. Go north on Salt Road to Schlegel Road (4.1 miles). Place a TLD near the intersection of Salt Road and Schlegel Road (#42).
8. Report to Radio operator for further instructions.

GREEN TEAM
PRIMARY SURVEY ROUTE
INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. Travel west on Lake Road to Lakeside Road (1.7 miles). Place a TLD near the intersection of Lake Road and Lakeside Road (#17).
2. Go south on Lakeside Road to Boston Road (1.0 miles). Take a high volume air sample near the intersection of Lakeside Road and Boston Road (#16).
3. Continue south on Lakeside Road to Route 104 (2.0 miles).
4. Go east on Route 104 to Ontario Center Road (1.6 miles).
5. Go north on Ontario Center Road to Brick Church Road (2.1 miles). Place a TLD near the intersection of Ontario Center Road and Brick Church Road (#3).
6. Continue north to Lake Road.
7. Report to Radio Operator for further instructions.

GREEN TEAM

SECONDARY SURVEY ROUTE

(WEST OR NORTHWEST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road & Ontario Center Road, go east to Pultneyville (7.0 miles). Place a TLD in the Pultneyville area (#28) near white settler monument at the Lake.
2. Go south from Pultneyville on Route 21 to Pound Road (3.4 miles). Place a TLD along Route 21 south of Pound Road (#48).
3. Continue south on Route 21 to Farnsworth Road (4.6 miles). Place a TLD near the intersection of Route 21 and Farnsworth Road (#47).
4. Continue south on Route 21 and into the Village of Marion (3.0 miles).
5. Return to Main Street in the Village of Williamson on Route 21 (5.3 miles).
6. Report to Radio Operator for further instructions.

GREEN TEAM

SECONDARY SURVEY ROUTE

(EAST OR NORTHEAST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road and Ontario Center Road, go west to Route 250. Place a TLD near intersection of Lake Road and Route 250 (#45) (6.0 miles).
2. Continue west on Lake Road to Whiting Road (1.8 miles).
3. Go south on Whiting Road to Klem Road (1.8 miles).
4. Go west on Klem Road to Five Mile Line Road (0.4 miles).
5. Go south on Five Mile Line Road to Plank Road (3.4 miles). Place a TLD near the intersection of Five Mile Line Road and Plank Road (#51).
6. Continue south on Five Mile Line Road to Penfield Four Corners (intersection with Penfield Road, Route 441) (3.6 miles). Place a TLD near back of Baptist Church parking lot, 500' east of intersection on north side of Penfield Road. (#41)
7. Report to Radio Operator for further instructions.

ORANGE TEAMS
PRIMARY SURVEY ROUTE
INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. Travel east on Lake Road to Fisher Road (2.7 miles).
2. Go south on Fisher Road to Shepherd Road (0.7 miles). Take an air sample near the intersection of Fisher Road and Shepherd Road (#19).
3. Place a TLD near the intersection of Fisher Road and Shepherd Road (#19).
4. Continue south on Fisher Road to Trimble Road (1.1 miles). Place a TLD near the intersection of Fisher Road and Trimble Road (#20).
5. Continue south on Fisher Road to Kenyon Road (0.7 miles). Go west on Kenyon Road to Furnace Road (1.1 miles). Place a TLD near the intersection of Kenyon Road and Furnace Road (#49).
6. Go north on Furnace Road to Lake Road (2.7 miles) and radio operator for further direction.

ORANGE TEAM
SECONDARY SURVEY ROUTE
(WEST OR NORTHWEST WINDS)
INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road & Furnace Road, go south to Ridge Road. (4.2 miles)
2. Go south on Walworth-Ontario Road to Trummonds Road (2.3 miles).
3. Go east on Trummonds Road to Arbor Road (1.1 miles). Place a TLD near the intersection of Trummonds Road and Arbor Road (#22).
4. Go north on Arbor Road to Ridge Road (2.3 miles).
5. Go east on Ridge Road to Eddy Ridge Road (2.2 miles). Place a TLD near the intersection of Ridge Road and Eddy Ridge Road. (#52)
6. Continue east on Ridge Road to Tuckahoe Road (0.3 miles).
7. Go north on Tuckahoe Road to Salmon Creek Road (2.5 miles). Place a TLD near the intersection of Tuckahoe Road and Salmon Creek Road. (#53)
8. Report to Radio Operator for further instructions.

ORANGE TEAM

SECONDARY SURVEY ROUTE

(EAST OR NORTHEAST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road & Furnace Road, go west on Lake Road to Roder Parkway (access road to Ontario on the Lake) (5.1 miles). Go north on Roder Parkway to intersection with Ontario Drive and place TLD near intersection (#18) (0.5 miles).
2. Return to Lake Road, continue west to County Line Road (2.4 miles).
3. Go south on County Line Road to Berg/Schlegel Road (2.0 miles). Place a TLD near the intersection of County Line Road and Berg/Schlegel Road (#36).
4. Continue south on County Line Road to Route 104 (1.2 miles). Turn right onto Route 104 and go to Salt Road (1.2 miles). Turn left onto Salt Road to State Road (1.1 miles).
5. Go west on State Road to Route 250 (2.8 miles). Place a TLD at the intersection of State Road and Route 250 (#38).
6. Go south on Route 250 to Plank Road (1.2 miles).
7. Go west on Plank Road to RG&E Eastern Monroe Service Center, 1270 Plank Road. Report results of surveys to radio operator.
8. Return to Route 250 and go north to Main Street in the Village of Webster (2.3 miles).
9. Go east on Main Street to Phillips Road (0.6 miles).
10. Go north on Phillips Road to substation #74 driveway which is 20' north of access road to Route 104.
11. Report to Radio Operator for instructions.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
<u>COMPLETED</u>
DATE :-
TIME :-

PROCEDURE NO. SC-410

REV. NO. 2

INSPECTION OF EMERGENCY EQUIPMENT

TECHNICAL REVIEW

PORC REVIEW DATE 6-30-82

J. Bodini
QC REVIEW

[Signature]
PLANT SUPERINTENDENT

7-7-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 12 PAGES

SC-410INSPECTION OF EMERGENCY EQUIPMENT1.0 PURPOSE:

- 1.1 The equipment required by the emergency plan and the means of assuring it is available is outlined in this procedure. Inspections will be made monthly as required by Technical Specifications and after each drill or use.

2.0 REFERENCES:

- 2.1 SC-1, Emergency Plan
2.2 Tech. Specs., Table 4.1-1

3.0 INSTRUCTIONS:

- 3.1 Inspect each location using attached appendixes. Indicate number of items present in blank space on appendix.
- 3.1.1 Emergency Survey Center - Appendix A
3.1.2 Control Room - Appendix B
3.1.3 Health Physics Office, Auxiliary Building, Operational Support Center - Appendix C
3.1.4 Technical Support Center - Appendix D
3.1.5 Monthly Inspection Log - Appendix E
- 3.2 If any discrepancies are found make note on the Monthly Inspection Log (Appendix E). If there are no discrepancies, enter NONE on Log Sheet.
- 3.2.1 Discrepancies are to be corrected (or a trouble card submitted) as soon as possible and so noted on the log sheet and filed per A-1701.
- 3.3 Perform monthly operational check with check source on Emergency Plant Vent monitor (Radector III). Record discrepancies on Monthly Inspection Log - Appendix E and advise Health Physicist.

APPENDIX "A"EMERGENCY EQUIPMENT IN SURVEY CENTER

- | | | |
|--|---------|-------|
| 1. Assignment tag board - all tags in place | | _____ |
| 2. Survey team maps - Red, Green, Orange, Blue, Yellow | 15 | _____ |
| 3. Survey team boxes - Red, Green, Orange, Blue, Yellow, White - If seal is unbroken assume equipment is intact. Inventory boxes and change batteries in January and July. | 6 | _____ |
| 4. Beta - Gamma survey instruments - battery check, source check. Assure calibration and efficiency calibrations are within a six month period. | 5 | _____ |
| 5. High level dose rate meters - battery check, source check, calibration check. | 6 | _____ |
| 6. Extendable high level survey meter - battery check, source check, calibration check. | 1 | _____ |
| 7. Nucleus scaler with probe and count shelf-frequency check, source check, efficiency calibration semi-annually. | 1 | _____ |
| 8. Radiation monitor RM-3C or equivalent, with HP-260 probe equivalent, battery check, source check, calibration check. | 1 | _____ |
| 9. Area radiation monitor, stationary - change chart paper, operational check. | 1 | _____ |
| 10. Dosimeter charger with battery | 2 | _____ |
| 11. Dosimeter (High Range) - check calibration | 0-5R 8 | _____ |
| | 0-10R 8 | _____ |
| 12. Dosimeter (0-500mr) - check calibration | 12 | _____ |
| 13. Thermal luminescent dosimeters | 10 | _____ |
| 14. Packages of (6) environmental TLD badges (off-site only) | 3 | _____ |
| 15. Battery operated, low volume air samplers - calibration check. Run air sampler several minutes to check operation, semi annually totally discharge and recharge samplers (February and August) | 6 | _____ |
| 16. Battery charger - operation check, disconnect | 1 | _____ |

APPENDIX "A" (cont.)

17. RADECO H 809 B2 air sampler - run 120 minutes	2	_____
18. RADECO H 809 C air sampler - run 1 minute	4	_____
19. Filters for air samplers - particulate		_____
20. Filters for air samplers - silver zeolite		_____
21. Envelopes for air samples - particulate	100	_____
22. Envelopes for air samples - iodine	100	_____
23. Envelopes for smear papers	100	_____
24. Smear papers	1000	_____
25. Decontamination kit	1	_____
26. Radios, portable - radio check with security	6	_____
27. Magnetic car mount antenna	3	_____
28. Radio, stationary - radio check with security - log book entry.	1	_____
29. Full face respirator with charcoal filter - inspect mask, mark bag with inspection date and initials, check filter expiration date	22	_____
30. Voice emitters for respirators - operational check	13	_____
31. Contaminated clothing & waste containers, 55 gal drum	2	_____
32. Anti - contamination clothing, sets	25	_____
33. Step off pads	10	_____
34. Tape, rolls	1BOX	_____
35. Plastic bags, poultry	1BOX	_____
36. Plastic bags, clean, large	20	_____
36. Radioactive material bags, yellow, large	1 Roll	_____
37. Radiation rope	1 Roll	_____
38. Radiation hazard signs with inserts	10	_____

- | | |
|--|----------|
| 39. Thyroid block tablets, bottles | 25 _____ |
| 40. Pens and pencils | 10 _____ |
| 41. Batteries, D size | 10 _____ |
| 42. Extension cord | 3 _____ |
| 43. Intercom "A" - communication check with Control Room.
Call Control Room on GAI page, have them plug in
Intercom A and contact survey center | 1 _____ |
| 44. NRC Red telephone - lift receiver, tell party "This is
a Ginna Station Survey Center Communications Check". | 1 _____ |
| 45. New York State Red telephone - Push button, lift
receiver wait 10 seconds, ask if New York State,
Wayne County, Monroe County are listening? Tell
them "This is Ginna Station Survey Center
Communications Check". | 1 _____ |
| 46. Telephone books - Rochester 1, Wayne County 1 | 1 _____ |
| 46. Telephone communications link check - call | |
| 47. Wayne County (946-4878) | 1 _____ |
| 48. Monroe County (71-9-473-0710) | 1 _____ |
| 49. New York State (518-457-2200) | 1 _____ |
| 50. National Weather Service, Rochester (716-328-7633) | 1 _____ |
| 51. National Weather Service Buffalo (716-632-2223) | 1 _____ |
| 52. From 524-6711 call Control Room at 524-4984 and TSC
at 524-4973 | 1 _____ |
| 53. From extension 331 call TSC at 280 | 1 _____ |
| 54. From extension 332 call TSC at 281 | 1 _____ |
| 55. From extension 333 call ESC at 207 | 1 _____ |

Initials _____ Date _____

APPENDIX "A" (continued)EMERGENCY EQUIPMENT PER SURVEY BOX

If box is sealed inventory not required. Boxes shall be opened in January and July for battery change and inventory.

1. Coveralls	2 _____
2. Hoods, disposable	2 _____
3. Gloves, pair	2 _____
4. Booties, pair	2 _____
5. Hats, Surgeon	2 _____
6. Hoods, Rain	2 _____
7. Coats, Rain	2 _____
8. Boots, Rain, pair	2 _____
9. Suits, cold weather (carhart)	2 _____
10. Equipment Belts with Bags (On-Site team only)	2 _____
11. Flashlight with Batteries	1 _____
12. Plastic Bags	2 _____
13. Masking Tape, rolls	2 _____
14. Pencils	2 _____
15. Pencil Sharpener	1 _____
16. Tablet, writing	1 _____
17. Survey Route Maps	2 _____
18. Air Sampler Filters - Particulate	5 _____
19. Air Sampler Filters - Silver Zeolite GY-130	5 _____
20. Air Sample Envelopes (Iodine)	10 _____
21. Air Sample Envelopes (Environmental)	10 _____

APPENDIX "A" cont.

22. Dimes for Telephones (Off-site team only) 10 _____
23. Clipboard 1 _____
24. Appropriate procedure for team (Remove survey route instructions in Appendix III that do not apply to that survey team) _____
25. Hammer and 10 nails (off-site only) 1 _____
26. Thyroid Block tablets (bottle) 3 _____
27. HP-190 window clamp (off-site teams only) 1 _____
28. WB key (company locks)
29. First Aid Room key (on-site team only)

Initials _____ Date _____

APPENDIX "B"EMERGENCY EQUIPMENT IN CONTROL ROOM

- | | |
|--|-----------|
| 1. Scott Air Pack (SCBA) - monthly inspection | 2 _____ |
| 2. High range dosimeters - calibration check | 10 _____ |
| 3. Dosimeter charger with battery - operability check | 1 _____ |
| 4. High range dose rate meter - battery check, source
check calibration check | 1 _____ |
| 5. Plant radiation survey maps (sets) | 3 _____ |
| 6. Smear papers | 100 _____ |
| 7. Envelopes for smear papers | 10 _____ |
| 8. Thyroid block tablets (bottle) | 1 _____ |
| 9. Air sampler, low volume - operability check, calibration
check | 1 _____ |
| 10. Air sampler filters - particulate | 3 _____ |
| 11. Air sampler filters - silver zeolite | 3 _____ |
| 12. Radiation monitor RM-14 or equivalent with HP-190 probe | 1 _____ |
| 13. Tape, roll | 1 _____ |
| 14. Anti-contamination clothing (sets) | 6 _____ |

Initial _____ Date _____

APPENDIX "C"EMERGENCY EQUIPMENT

OPERATIONAL SUPPORT CENTER

- | | |
|--|----------|
| 1. Fill face respirators - inspect mask and mask bag with inspection date and initials | 6 _____ |
| 2. Respirator charcoal filters - expiration date | 6 _____ |
| 3. Anti-contamination clothing (sets) | 6 _____ |
| 4. Flood lights, portable - operational check | 2 _____ |
| 5. Thyroid block tablets (bottles) | 15 _____ |
| 6. Dosimeters 0-500 mRem - check calibration | 10 _____ |
| 7. Dosimeters 0-10R - check calibration | 10 _____ |

AUXILIARY BUILDING

- | | |
|--|---------|
| 1. Scott air pack (SCBA) - monthly inspection | 1 _____ |
| 2. High range dose rate meter - battery check, source check, calibration check | 1 _____ |

HEALTH PHYSICS OFFICE

- | | |
|--|----------|
| 1. Scott air pack (SCBA) - monthly inspection | 5 _____ |
| 2. High range dosimeter - calibration check | 20 _____ |
| 3. Anti-contamination clothing (sets) | 20 _____ |
| 4. High range dose rate meter - battery check, source check, check calibration | 5 _____ |

Initials _____ Date _____

APPENDIX DEMERGENCY EQUIPMENT IN TECHNICAL SUPPORT CENTER

1. Radiation monitor RM-14 or equivalent with HP-190 probe battery check, source check, check calibration	1	_____
2. Area radiation monitor - battery check, source check, check calibration	1	_____
3. Full face respirator - inspect mask mark bag with inspection date and initials	10	_____
4. Respirator charcoal filter - check expiration date	10	_____
5. Thyroid block tablets (bottles) check expiration date	25	_____
6. Dosimeter, 500mr - check calibration	25	_____
7. Dosimeter, high range - check calibration	10	_____
8. Dosimeter charger with battery - operability check	1	_____
9. RADECO H-809 B2 air sampler - run 120 minutes	1	_____
10. Air sample filters - particulate	4	_____
11. Air sample filters- silver zeolite	4	_____
12. Anti-contamination clothing (sets)	25	_____
13. Step Off Pads	10	_____
14. Daily exposure records sheets	5	_____
15. Radioactive materials bags (yellow)	5	_____
16. Tape, rolls	5	_____
17. Smear papers	100	_____
18. Envelopes for smears	10	_____
19. Envelopes for particulate air sample	10	_____
20. Envelopes for iodine air samples	10	_____

APPENDIX D cont.

- | | |
|---|-----------|
| 21. Pens and pencils | 5ea _____ |
| 22. Radio, Portable - radio check with security | 4 _____ |
| 23. Radio, Stationary - radio check with security - log
book entry | 1 _____ |
| 24. NRC Red telephone - lift receiver, tell party "This is
a Ginna Station TSC Communication Check". | _____ |
| 25. New York State Red telephone - push button, lift receiver,
wait 10 seconds, ask if New York State, Wayne County,
Monroe County are listening? Tell them "This is Ginna
Station TSC Communication Check". | _____ |
| 26. HPN telephone- dial selected station to confirm
communication check | 1 _____ |
| 27. EOF Direct line (63PL5187) Telephone | 1 _____ |
| 28. Plant process computer and silent 700 operational check. | 1 _____ |

Initials _____ Date _____

APPENDIX "E"

EMERGENCY EQUIPMENT MONTHLY INSPECTION LOG

DISCREPANCIES NOTED

DISCREPANCIES CORRECTED

Survey Center Date _____ Initials _____

Date _____ Initials _____

Control Room Date _____ Initials _____

Date _____ Initials _____

HP Office Date _____ Initials _____

Date _____ Initials _____

Auxiliary Building Date _____ Initials _____

Date _____ Initials _____

Technical Support
Center Date _____ Initials _____

Date _____ Initials _____

Operational
Support Center Date _____ Initials _____

Date _____ Initials _____

Emergency Plant
Vent Monitor Date _____ Initials _____

Date _____ Initials _____

REVIEWED BY: _____

LIST DISCREPANCIES AND/OR CORRECTIONS: