PALISADES SITE EMERGENCY PROCEDURE

Card No. 8

Job Title - Plant Health Physics Superintendent/Plant Health Physicist

Principal Position - Emergency Team No. 11 Member

Alternate Position - None

Responsibilities - Insure the implementation of proper radiation protection measures during and after the incident.

Immediate Action:

- Report to Assembly Area II (Technical Support Center) and assist General Manager - Site Emergency Director as directed.
- 2. In the event the Control Room must be evacuated, report to the designated alternate assembly area and await further instructions.
- As conditions dictate:
 - Initiate a radiation monitoring regimen in and around the plant (on site).
 - b. Dispatch designated emergency monitoring team to verify plume location as soon as wind direction has been determined from the meteorology data. Equipment to be used by emergency monitoring team is located in emergency response vehicle (located in parking lot key in Rad Pro office). INSTRUCT MONITORING TEAMS TO TAKE PORTABLE RADIO WITH THEM TO COMMUNICATE WITH THE CONTROL ROCM.
 - c. Establish off site radiation dose rates and/or water contamination levels as applicable.
 - 1. Dose rates in air should be measured as close to the site boundary as practical in the downwind direction. The attached map indicates recommended monitoring point. Monitoring should be initiated when stack monitor RIA-2318 has exceeded 62,000 net cpm for a period of greater than 12 minutes (12 minutes is represented by 2 data points on the process monitor chart recorder).
 - 2. If high activity liquid effluents have been released, it may be appropriate to provide a portable water monitoring instrument for use by City Water Department (Filtration Plant) personnel (see EIS-2, "Gross Beta Determination in Water Samples"). As a first approximation, assume South Haven intake water may be as high as 0.001 times the peak concentration in the mixing basin.



d. If the range of stack monitor RIA-2318 has been exceeded, release rates will be determined using the high range effluent monitor. This monitor will be used according to the procedure EI8-4, "Emergency High Range Effluents Monitor".

NOTE: In the event this procedure is implemented, do not attempt to remove charcoal filtering media from any system that exhausts to the stack or attempt to remove the stack sample cartridge for at least five (5) days following the accident. After 5 days, remove filtering media with extreme caution and monitor the area continuously.

- e. Obtain completed form EI4-1 from Shift Supervisor. Calculate off site doses per procedure EI8-1, "Estimate of Off Site Dose". If high range effluent monitor is used, obtain appropriate data sheets per procedure EI8-4.
- f. Compare results of calculating per procedure EI8-1 with dose rate monitor results at site boundary. If monitoring results are significantly lower than calculations, consider monitoring adjacent sectors to establish true plume location.

NOTE: Plume may remain some distance overhead and thus not provide a "submersion" dose rate. However, plume may reach ground at some greater distance from site. Consider monitoring at "outer ring" points indicated on attached map if plume cannot be located by measurements near site boundary.

- g. If Site Emergency Director determines there is a possibility of extensive reactor core damage, make estimate of degree of damage using EI8-3, "Determination of Extent of Core Damage".
- 4. Within 1 (one) hour after establishing that there has been significant (greater than 1%) core damage and upon authorization of the Site Emergency Director, dispatch Chemistry and Health Physics (C/HP) Technicians to complete the following procedures:
 - a. EI8-6, "Sampling and Analysis of High Activity Reactor Coolant"
 - b. EI8-7, "Sampling and Analysis of High Activity Containment Atmosphere"
- 5. If it is determined that it is necessary and it has been authorized by the Site Emergency Director, dispatch a C/HP technician to complete procedure EI8-5, "In-plant Airborne Iodine Monitoring and Thyroid Blocking Agent Administration Under Accident Conditions".



Subsequent Actions:

- 1. Upon authorization by the Site Emergency Director, dispatch two C/HP technicians (if available) off site to complete the following actions:
 - a. Change out accident TLD's in accordance with EI8-8, "Off Site Accident TLD Procedure".
 - b. At a location specified by the Site Emergency Director complete procedure EI8-9, "Off Site Airborne Monitoring Under Accident Conditions."
- 2. Following a major liquid or atmospheric release, initiate collection of environmental samples. These samples may include, as appopriate:
 - a. TLD's from environmental monitoring stations. Send to analytical contractor immediately for analysis; use attached TLD Report Sheet and station location map. Replace TLD dosimeters with film.
 - b. Air particulate and iodine filters from environmental air monitoring stations. Send to analytical contractor immediately for analysis; use attached Air Sample Collection Data Sheet and station location map. Replace filters.
 - within a 15 mile radius of the plant; use attached Milk Sample Collection Sheet and dairy herd location list. Send to analytical contractor.
 - d. One (1) liter representative vegetation sample, including crops in season, from within a 15 mile radius of the plant; use attached Environmental Sample Collection Sheets. Send to analytical contractor.
 - e. One (1) liter representative untreated and treated water sample from the South Haven Treatment Plant. Send to analytical contractor for analysis.
 - NOTE: Before sending any environmental samples to the analytical contractor for analysis, make a gross contamination check.

 Based on resulting contamination levels make recommendations to the Site Emergency Director of appropriate actions to be taken.
- 3. Assist in organizing and equipping post accident re-entry teams.