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TO: GERLACH ROSE M 01/27/2004
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THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY OR ELECTRONIC MANUAL ASSIGNED TO YOU:

244 - 244 - DOSE ASSESSMENT STAFFER

REMOVE MANUAL TABLE OF CONTENTS DATE: 11/12/2003

ADD MANUAL TABLE OF CONTENTS DATE: 01/26/2004

CATEGORY: PROCEDURES TYPE: EP
ID: EP-PS-244
REPLACE: REV:7

REPLACE: PCAF 2003-1484 REV: N/A

UPDATES FOR HARD COPY MANUALS WILL BE DISTRIBUTED WITHIN 5 DAYS IN ACCORDANCE WITH DEPARTMENT PROCEDURES. PLEASE MAKE ALL CHANGES AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX UPON RECEIPT OF HARD COPY. FOR ELECTRONIC MANUAL USERS, ELECTRONICALLY REVIEW THE APPROPRIATE DOCUMENTS AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX.

A-045

EOF DOSE ASSESSMENT FLOWCHART

TAB 14
EP-PS-244-14

ACTIVATION REQUIREMENTS
- Dose Assessment Supervisor
  - DAST & FTD Available
- Dose Assessment Staffer
  - MIDAS Available &
  - PICSY or TSC Communications Available
- Field Team Director
  - Communications Link Available

EVENT STATUS
- RPC to DASU
- TSC DC to DAST
- HP Radioman to FTD
- "A" and "B" Team Briefing
- Staff Briefing and Info Exchange

TURNOVER RPC to DASU
- ALL Calculations
- Control of Field Teams
- DEP/BRP Communications
- Event/Source Term Agreement
- Liquid/Airborne Release
- Previous Data Transferred

Turnover Time ___:___

DEFAULT RATIOS
- Noble Gas to I-131 = 1,000
- Noble Gas to Particulate = 10,000

Field Threshold Values
- RMS (Fixed & Mobile) Gamma detectors = 0.1 mr/hr
- OSCAR Iodine monitor = 68.4 mrem/hr
- Field Team I-131 Air Sample = 100 ncpm

Vent Flow Rates (cc/minute)
- U#1 RB = 3.5E+9 cc/min U#2 RB = 3.2E+9 cc/min
- U#1 TB = 4.4E+9 cc/min U#2 TB = 2.7E+9 cc/min
- SBGT (10,100 scfm) = 2.9E+8 cc/min w/outside air dilution

Secondary Containment Flow to SBGT
- Max Flow Rate (4000 scfm max)= 1.1E+8 cc/min

Filter Efficiencies
- SE Charcoal Acceptance Criteria = 99.825%
- SE Particulate Acceptance Criteria = 99.95%

Containment High Radiation Monitor
- Background @ 100% power ~ 3 R/hr

MONITOR EFFLUENT RELEASE AND PLANT STATUS
- * PICSY Met Vent Data
- * Field Team and Fixed Monitor Data
- * In-Plant Conditions

A

> Default Accident triggers (note 3 pg. 2) — YES / NO

Filtered Design Basis Leakage Release? — YES / NO

Blowout Panel Concern? — NO / YES

> NUREG 1228 Triggers? (note 4 pg. 2) — YES / NO

PICSY NG Data Is White? — NO / YES

SBGT Systen Running ? — YES / NO

White NG Data Is Only on Affected RB ? — YES / NO

White NG Data Is Only on Unaffected Unit ? — YES / NO

Default Accident Calculation MIDAS Menu D

NUREG 1228 Calculation MIDAS Menu C

Blowout Panel Calculation MIDAS Menu G

USE Noble Gas Vent Totals with Default or Measured Noble Gas to Iodine (Particulate) Ratio

Use Vent Totals Until Alternate Data Is Available for vents which are white

ALTERNATE DATA
- Manual SPING Data (Sum of Hi Alarm Channels)
- Chemistry SPING Vent Samples
- PAVSS Noble Gas Readout
- PAVSS Vent Sample
- HP Air Sample

Vent Release? (note 1 pg 2) — YES / NO

FORWARD CALCULATION using Vent Data MIDAS Menu B

Alternate Vent Data Available? — YES / NO

GO TO A

Concurrent Activities

Validate Assumptions & Results with Engineering

For Measured Dose Rates ≥ Threshold Values Calculate
Measured EDE/Projected EDE Ratio
&
Measured CDE/Projected CDE Ratio

Ratio between 0.1 and 17 — YES / NO

Ratio > 1 — YES / NO

> RMS or Field Team Triggers? (note 2 pg. 2) — YES / NO

High Field Readings
Perform Back Calculation
MIDAS E-W

Unmonitored Release
If Ratio > 5

Low Field Readings < 0.1
FTD LOCATE PLUME

UNMONITORED RELEASE
MIDAS E - W
Back Calculation

Use Forward Calculation Data

- * Select appropriate TEDE and THY CDE
- * Discuss Release Pathway and Source Term with Engineering Support Supervisor
- * Report Classification and PAR Triggers to RM
- * Select PAR at Command and Control Table per PAR Guide

- * Approve PAR Forms
- * Contact DEP/BRP
  - About every 30 Minutes
  - Classification or PAR Change

- * Control Exposure and Dose
  - < 4 Rem WB
  - > 4 Rem WB - w/Emerg. Extension
  - < 5 Rem Thy CDE/Shift
  - < 10 Rem Thy CDE Total
- * Initiate Thy CDE Tracking & consider Respiratory Protection for Oscar
  - > 1000 mrem/hr Thy CDE
  - > 1200 ncpm (cartridge)
- * Consider WBC

- * Consider transition from plume to post-plume phase

Reference:
SSES Contamination Response Plan

Release Terminated? — YES / NO

DOSE ASSESSMENT EMERGENCY ACTION LEVELS

NOTE 1 VENT RELEASE TRIGGERS	NOTE 2 RMS/FIELD TRIGGERS	NOTE 3 DEFAULT ACCIDENT TRIGGERS	NOTE 4 NUREG 1228 TRIGGERS	NOTE 5 LIQUID RELEASE TRIGGERS
♦ AIRBORNE RELEASE Total NG Release Rate > 1.0E6 µci/min** or Entry into one of the following EALs* EAL 3, 15, 17, 18 or 21 with a DSC breached or Initiation of SBGT for treatment of activity within Containment* or A release above normal levels attributable to a declared event* or An unmonitored release is in progress * Perform one calculation unless directed otherwise ** Perform dose projections every 15 minutes	♦ AIRBORNE RELEASE ** ≥ 0.1 mrem/hr EDE (ASP1 or RMS gamma reading) ≥ 68.4 mrem/hr Thy CDE (OSCAR RMS Iodine) ≥ 100 ncpm on Iodine Cartridge ** Perform dose projections every 15 minutes	♦ INDICATION OF FUEL DAMAGE > 10 R/hr CHRM	♦ UNFILTERED VENT RELEASE ♦ RELEASE RATE > DESIGN BASIS 1%/DAY ♦ CORE UNCOVERED > 15 MINUTES ♦ SPENT FUEL POOL RELEASE	♦ LIQUID RELEASE Liquid Effl. ≥ TRM
♦ EAL 15.1 (Unusual Event) >2.0E6 µci/min NG for 60 min. or longer				♦ EAL 15.1 Liquid Effl. ≥ 2 x TRM for 60 min
♦ EAL 15.2 (Alert) >2.0E8 µci/min NG for 15 min. or longer		EAL 3.2 SEVERE CLAD DEGRADATION >200 R/hr CHRM or >300 µci/cc DE Iodine-131		♦ EAL 15.2 Liquid Effl. ≥ 200 x TRM for 15 min
♦ EAL 15.3 (Site Area Emergency) >6.2E8 µci/min NG for greater than15 min & dose projection not available Note: If dose projection cannot be made within 15 minute period, then declaration to be made on valid sustained NG release rate. PROJECTED DOSE @ EPB >100 mrem TEDE or >500 mrem THY CDE	♦ EAL 15.3 RMS PERIMETER MONITORING SYSTEM > 100 mR/hr for 15 min or longer FIELD TEAM SURVEY RESULTS @ EPB > 100 mR/hr & expected for 60 min or ≥ 500 mrem THY CDE for one hour of inhalation	♦ EAL 3.3 SEVERELY DEGRADED CORE > 400 R/hr CHRM or > 1000 µci/cc DE Iodine-131		
♦ EAL 15.4 (General Emergency) >6.2E9 µci/min NG for greater than15 min & dose projection not available Note: If dose projection cannot be made within 15 minute period, then declaration to be made on valid sustained NG release rate. PROJECTED DOSE @ EPB ≥ 1000 mrem TEDE or ≥ 5000 mrem THY CDE	♦ EAL 15.4 RMS PERIMETER MONITORING SYSTEM > 1000 mR/hr for 15 min or longer FIELD TEAM SURVEY RESULTS @ EPB > 1000 mR/hr & expected for 60 min or ≥ 5000 mrem THY CDE for one hour of inhalation	♦ EAL 3.4 CORE MELT > 400R/hr CHRM plus listed conditions or > 1000 µci/cc DE Iodine-131 or > 2000 R/hr CHRM		