ADMIN JOB PERFORMANCE MEASURE

UNIT: 2 **REV #:** 000 **DATE:** _____

SYSTEM/DUTY AREA: Conduct Of Operations

TASK: Determine NLO Fire Brigade Qualifications.

JTA#: _____

KA VALUE RO: 2.3 **SRO:** 3.4 **KA REFERENCE:** 2.1.5

APPROVED FOR ADMINISTRATION TO: RO: X **SRO:** _____

TASK LOCATION: INSIDE CR: X **OUTSIDE CR:** _____ **BOTH:** _____

SUGGESTED TESTING ENVIRONMENT AND METHOD (PERFORM OR SIMULATE):

PLANT SITE: Perform **SIMULATOR:** Perform **LAB:** _____

POSITION EVALUATED: RO: _____ **SRO:** _____

ACTUAL TESTING ENVIRONMENT: SIMULATOR: _____ **PLANT SITE:** _____ **LAB:** _____

TESTING METHOD: SIMULATE: _____ **PERFORM:** _____

APPROXIMATE COMPLETION TIME IN MINUTES: 10 Minutes

REFERENCE(S): 1015.001, Conduct of Operation, Rev 052-00-0, 1063.020, Fire Brigade Training, Rev 013-00-0, 2OPD014, Fire Brigade Eligibility Memo

EXAMINEE'S NAME: _____ **SSN:** _____

EVALUATOR'S NAME: _____

THE EXAMINEE'S PERFORMANCE WAS EVALUATED AGAINST THE STANDARDS CONTAINED IN THIS JPM AND IS DETERMINED TO BE:

SATISFACTORY: _____ **UNSATISFACTORY:** _____

PERFORMANCE CHECKLIST COMMENTS:

_____

_____

Start Time _____ **Stop Time** _____ **Total Time** _____

SIGNED: _____ **DATE:** _____

SIGNATURE INDICATES THIS JPM HAS BEEN COMPARED TO ITS APPLICABLE PROCEDURE BY A QUALIFIED INDIVIDUAL (NOT THE EXAMINEE) AND IS CURRENT WITH THAT REVISION.

ADMIN JOB PERFORMANCE MEASURE

THE EXAMINER SHALL REVIEW THE FOLLOWING WITH THE EXAMINEE:

The examiner shall review the "Briefing Checklist - System Walkthrough" portion of OP 1064.023 Attachment 6 with the examinee.

JPM INITIAL TASK CONDITIONS:

Mode 1 Full Power. Shift turnover just completed.

TASK STANDARD:

Candidate determines Danny Reed is qualified as Fire Brigade Leader and Jeff Melvin is not qualified as Fire Brigade member.

TASK PERFORMANCE AIDS:

1015.001, Conduct of Operation, Rev 052-00-0, 1063.020, Fire Brigade Training, Rev 013-00-0, 2OPD014, Fire Brigade Eligibility Memo

EXAMINER'S NOTE:

ADMIN JOB PERFORMANCE MEASURE

INITIATING CUE:

You are the oncoming CBOT performing step V.1 of the Shift Turnover Checklist. Using appropriate references, determine that the following NLOs assigned to your operating crew are qualified for assignment as fire brigade members. (Include checking actual dates of respirator qualifications/physicals, Fire Brigade Training and Qualification, Fire Brigade Leader Training & Qualifications.)

Danny Reed, Fire Brigade Leader

Jeff Melvin, Fire Brigade Member

CRITICAL ELEMENTS (C): 14, 20, 27

		PERFORMANCE CHECKLIST	STANDARDS	(Circle One)
		EXAMINERS NOTE Examinee will be given a copy of the		
	1.	Obtain Fire Brigade Eligibility Memo.	Obtained Fire Brigade Eligibility Memo.	N/A SAT UNSAT
	2.	Locate Eligibility Sheet for Danny Reed in Fire Brigade Quarterly Memo.	Located Eligibility Sheet for Danny Reed in Fire Brigade Quarterly Memo.	N/A SAT UNSAT
	3.	Check Fire Brigade Leadership training completed.	Checked Fire Brigade Leadership training completed.	N/A SAT UNSAT
	4.	Check respirator physical expiration date against current date.	Checked respirator physical expiration date against current date.	N/A SAT UNSAT
	5.	Determine respirator physical qualification is satisfactory.	Determined respirator physical qualification is satisfactory.	N/A SAT UNSAT
	6.	Check respirator training expiration date against current date.	Checked respirator training expiration date against current date.	N/A SAT UNSAT
	7.	Determine respirator training qualification is satisfactory.	Determined respirator training qualification is satisfactory	N/A SAT UNSAT
	8.	Check quarterly training class attendance expiration date against current date.	Checked quarterly training class attendance expiration date against current date.	N/A SAT UNSAT
	9.	Determine quarterly training class attendance qualification is satisfactory.	Determined quarterly training class attendance qualification is satisfactory	N/A SAT UNSAT
	10.	Check annual practice class attendance expiration date against current date	Checked annual practice class attendance expiration date against current date.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	11.	Determine annual practice class attendance qualification is satisfactory.	Determined annual practice class attendance qualification is satisfactory	N/A SAT UNSAT
	12.	Check annual drill attendance expiration date against current date	Checked annual drill attendance expiration date against current date.	N/A SAT UNSAT
	13.	Determine annual drill attendance qualification is satisfactory.	Determined annual drill attendance qualification is satisfactory	N/A SAT UNSAT
(C)	14.	Determine that Danny Reed is qualified to be assigned as Fire Brigade Leader for crew	Determined that Danny Reed is qualified to be assigned as Fire Brigade Leader for crew.	N/A SAT UNSAT
	15.	Locate Eligibility Sheet for Jeff Melvin in Fire Brigade Eligibility Memo.	Located Eligibility Sheet for Jeff Melvin in Fire Brigade Eligibility Memo.	N/A SAT UNSAT
	16.	Check Fire Brigade Leadership training completed.	Checked Fire Brigade Leadership training completed.	N/A SAT UNSAT
	17.	Check respirator physical expiration date against current date.	Checked respirator physical expiration date against current date.	N/A SAT UNSAT
	18.	Determine respirator physical qualification is satisfactory.	Determined respirator physical qualification is **unsatisfactory**.	N/A SAT UNSAT
	19.	Check respirator training expiration date against current date	Checked respirator training expiration date against current date.	N/A SAT UNSAT
(C)	20.	Determine respirator training qualification is satisfactory.	Determined respirator training qualification is unsatisfactory.	N/A SAT UNSAT
EXAMINERS NOTE Examinee may declare that Jeff Melvin is **not** qualified at this point and not review the remainder of the dates on the Eligibility Memo.				
	21.	Check quarterly training class attendance expiration date against current date.	Checked quarterly training class attendance expiration date against current date.	N/A SAT UNSAT
	22.	Determine quarterly training class attendance qualification is satisfactory.	Determined quarterly training class attendance qualification is satisfactory	N/A SAT UNSAT
	23.	Check annual practice class attendance expiration date against current date.	Checked annual practice class attendance expiration date against current date.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	24.	Determine annual practice class attendance qualification is satisfactory.	Determined annual practice class attendance qualification is satisfactory.	N/A SAT UNSAT
	25.	Check annual drill attendance expiration date against current date.	Checked annual drill attendance expiration date against current date.	N/A SAT UNSAT
	26.	Determine annual drill attendance qualification is satisfactory.	Determined annual drill attendance qualification is satisfactory.	N/A SAT UNSAT
(C)	27.	Determine that Jeff Melvin is NOT qualified to be assigned as Fire Brigade member for crew	Determined that Jeff Melvin is NOT qualified to be assigned as Fire Brigade member for crew.	N/A SAT UNSAT
END				

ADMIN JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

Mode 1 Full Power. Shift turnover just completed.

INITIATING CUE:

You are the oncoming CBOT performing step V.1 of the Shift Turnover Checklist. Using appropriate references, determine that the following NLOs assigned to your operating crew are qualified for assignment as fire brigade members. (Include checking actual dates of respirator qualifications/physicals, Fire Brigade Training and Qualification, Fire Brigade Leader Training & Qualifications.)

Danny Reed, Fire Brigade Leader

Jeff Melvin, Fire Brigade Member

ADMIN JOB PERFORMANCE MEASURE

UNIT: 2 **REV #:** 000 **DATE:** _____

SYSTEM/DUTY AREA: Plant Monitoring System (PMS)

TASK: Setup programmable alarm on PMS.

JTA#: _____

KA VALUE **RO:** 3.0 **SRO:** 3.0 **KA REFERENCE:** 2.1.19

APPROVED FOR ADMINISTRATION TO: **RO:** X **SRO:** X

TASK LOCATION: **INSIDE CR:** X **OUTSIDE CR:** _____ **BOTH:** _____

SUGGESTED TESTING ENVIRONMENT AND METHOD (PERFORM OR SIMULATE):

PLANT SITE: Simulate **SIMULATOR:** Perform **LAB:** _____

POSITION EVALUATED: **RO:** _____ **SRO:** _____

ACTUAL TESTING ENVIRONMENT: **SIMULATOR:** _____ **PLANT SITE:** _____ **LAB:** _____

TESTING METHOD: **SIMULATE:** _____ **PERFORM:** _____

APPROXIMATE COMPLETION TIME IN MINUTES: 10 Minutes

REFERENCE(S): 2106.008 Rev 025-00-0 and skill of craft

EXAMINEE'S NAME: _____ **SSN:** _____

EVALUATOR'S NAME: _____

THE EXAMINEE'S PERFORMANCE WAS EVALUATED AGAINST THE STANDARDS CONTAINED IN THIS JPM AND IS DETERMINED TO BE:

SATISFACTORY: _____ **UNSATISFACTORY:** _____

PERFORMANCE CHECKLIST COMMENTS:

_____

_____

Start Time _____ **Stop Time** _____ **Total Time** _____

SIGNED: _____ **DATE:** _____

SIGNATURE INDICATES THIS JPM HAS BEEN COMPARED TO ITS APPLICABLE PROCEDURE BY A QUALIFIED INDIVIDUAL (NOT THE EXAMINEE) AND IS CURRENT WITH THAT REVISION.

ADMIN JOB PERFORMANCE MEASURE

THE EXAMINER SHALL REVIEW THE FOLLOWING WITH THE EXAMINEE:

The examiner shall review the "Briefing Checklist - System Walkthrough" portion of OP 1064.023 Attachment 6 with the examinee.

JPM INITIAL TASK CONDITIONS:

Mode 1 Full Power. Performing initial conditions of 2106.008, Steam Generator Operations section 8.2.

TASK STANDARD:

Programmable alarm setup on PMS for blowdown activity (R4425).

TASK PERFORMANCE AIDS:

PMS operating

EXAMINER'S NOTE:

Check no PMS programmable alarms are set.

ADMIN JOB PERFORMANCE MEASURE

INITIATING CUE:

The SS/CRS directs, "Place a programmable alarm on 2K01-J9 for blowdown activity (R4425) high of 1.0E3.

CRITICAL ELEMENTS (C): 3,4,5,6,7,9,10,and 11

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
NOTE: Steps 3 through 7 may be performed prior to steps 1 and 2.				
	1.	Select "Programmable Annunciator Assignment Screen for 2K01-J9" on PMS.	At PMS keyboard, typed "J9" and depressed "ENTER" key. Verified Programmable Annunciator Assignment Screen for 2K01-J9 appears on touch screen.	N/A SAT UNSAT
	2.	Add "R4425"point on Programmable Annunciator Assignment Screen.	At PMS keyboard, selected a point location on Programmable Annunciator Assignment Screen. Typed "R4425" and depressed "ENTER" key.	N/A SAT UNSAT
(C)	3.	Select Database Maintenance from Programmable Annunciator Assignment Screen.	At Programmable Annunciator Assignment Screen, touched "DBM" touch button on lower portion of touch screen. Verified Analog Input Point Template Screen appears.	N/A SAT UNSAT
(C)	4.	Select "R4425" on Analog Input Point Template Screen.	At PMS keyboard, typed "R4425" and depressed "ENTER" key. Verified that point "R4425" is selected.	N/A SAT UNSAT
(C)	5.	Select "Power Operations " alarm setpoint for update.	At PMS keyboard, depressed right or left arrow key to place cursor on either "Power Operations High Alarm" position.	N/A SAT UNSAT
(C)	6.	Change "High" alarm setpoint to "1.0E3".	At PMS keyboard, typed "1.0E3" and depressed "ENTER" key.	N/A SAT UNSAT
(C)	7.	Save changes to alarm setpoint.	At PMS keyboard, depressed "F-3" key to save.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	8.	Select "Programmable Annunciator Assignment Screen for 2K01-J9" on PMS.	At PMS keyboard, typed "J9" and depressed "ENTER" key. Verified Programmable Annunciator Assignment Screen for 2K01-J9 appears on touch screen.	N/A SAT UNSAT
(C)	9.	Add "R4425"point on Programmable Annunciator Assignment Screen.	At PMS keyboard, selected a point location on Programmable Annunciator Assignment Screen. Typed "R4425" and depressed "ENTER" key.	N/A SAT UNSAT
(C)	10.	Type "S" in process code and depress "ENTER".	At PMS keyboard, typed "S" in process code and depressed "ENTER" key.	N/A SAT UNSAT
(C)	11.	Save changes to alarm setpoint.	At PMS keyboard, depressed F3 key to save.	N/A SAT UNSAT
END				

ADMIN JOB PERFORMANCE MEASURE

QUESTION:

ANSWER:

ADMIN JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

Mode 1 Full Power. Performing initial conditions of 2106.008, Steam Generator Operations section 8.2.

INITIATING CUE:

The SS/CRS directs, "Place a programmable alarm on 2K01-J9 for blowdown activity (R4425) high of 1.0E3."

ADMIN JOB PERFORMANCE MEASURE

UNIT: 2 **REV #:** 000 **DATE:** _____

SYSTEM/DUTY AREA: Equipment Control

TASK: Evaluate Containment Atmospheric Conditions (using computer - normal operations).

JTA#: 21035010201

KA VALUE **RO:** 3.0 **SRO:** 3.4 **KA REFERENCE:** 2.2.12

APPROVED FOR ADMINISTRATION TO: **RO:** X **SRO:** X

TASK LOCATION: **INSIDE CR:** X **OUTSIDE CR:** _____ **BOTH:** _____

SUGGESTED TESTING ENVIRONMENT AND METHOD (PERFORM OR SIMULATE):

PLANT SITE: Simulate **SIMULATOR:** Perform **LAB:** _____

POSITION EVALUATED: **RO:** _____ **SRO:** _____

ACTUAL TESTING ENVIRONMENT: **SIMULATOR:** _____ **PLANT SITE:** _____ **LAB:** _____

TESTING METHOD: **SIMULATE:** _____ **PERFORM:** _____

APPROXIMATE COMPLETION TIME IN MINUTES: 10 Minutes

REFERENCE(S): OP 2104.033 Rev 039-01-0

EXAMINEE'S NAME: _____ **SSN:** _____

EVALUATOR'S NAME: _____

THE EXAMINEE'S PERFORMANCE WAS EVALUATED AGAINST THE STANDARDS CONTAINED IN THIS JPM AND IS DETERMINED TO BE:

SATISFACTORY: _____ **UNSATISFACTORY:** _____

PERFORMANCE CHECKLIST COMMENTS:

_____

_____

Start Time _____ **Stop Time** _____ **Total Time** _____

SIGNED: _____ **DATE:** _____

SIGNATURE INDICATES THIS JPM HAS BEEN COMPARED TO ITS APPLICABLE PROCEDURE BY A QUALIFIED INDIVIDUAL (NOT THE EXAMINEE) AND IS CURRENT WITH THAT REVISION.

ADMIN JOB PERFORMANCE MEASURE

THE EXAMINER SHALL REVIEW THE FOLLOWING WITH THE EXAMINEE:

The examiner shall review the "Briefing Checklist - System Walkthrough" portion of OP 1064.023 Attachment 6 with the examinee.

JPM INITIAL TASK CONDITIONS:

100% steady state power operations. The PMS computer is available.

TASK STANDARD:

Containment atmospheric conditions have been evaluated in accordance with Technical Specifications.

TASK PERFORMANCE AIDS:

OP 2104.033, Supplement 4 ; calculator

EXAMINER'S NOTE:

ADMIN JOB PERFORMANCE MEASURE

INITIATING CUE:

The SS/CRS directs, "Perform an evaluation of containment atmospheric conditions using OP 2104.033 Supplement 4."

CRITICAL ELEMENTS (C): 3, 5, 6, 7

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	1.	Verify computer points available. POSITIVE CUE: All required computer points available.	On SPDS terminal or on the PMS computer, verified the following computer points available: - T5605-5 - T5606-6 and at least three of the following: - P5601-1 through - P5601-4	N/A SAT UNSAT
	2.	Record containment temperature. POSITIVE CUE: Containment temperatures are: T5605-5 116.9°F T5606-6 115.7°F	On SPDS terminal or on the PMS computer, displayed following containment temperature points: T5605-5 T5606-6 Recorded containment temperature readings in OP 2104.033 Supplement 4 Step 2.1.	N/A SAT UNSAT
(C)	3.	Calculate average containment temperature to be 116.3°F.	Used formula provided in OP 2104.033 Supplement 4 and readings from SPDS or PMS computer to calculate average containment temperature of 116.3°F. Recorded average containment temperature on OP 2104.033 Supplement 4 Step 2.1.	N/A SAT UNSAT
	4.	Record containment pressure. POSITIVE CUE: Containment pressures are: P5601-1 14.1 psia P5602-2 14.2 psia P5603-3 14.2 psia P5604-4 14.1 psia	On SPDS terminal 2C69 or on the PMS computer, displayed at least three of the following containment pressure points: P5601-1 P5603-3 P5602-2 P5604-4 Recorded containment pressure readings in OP 2104.033 Supplement 4 Step 2.2.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
(C)	5.	Calculate average containment pressure to be 14.15 psia.	Used table provided in OP 2104.033 Supplement 4 Step 2.2 and readings from SPDS or from PMS computer to calculate average containment pressure of 14.15 psia. Recorded average containment pressure on OP 2104.033 Supplement 4 Step 2.2.	N/A SAT UNSAT
(C)	6.	Plot average containment pressure vs average containment temperature.	Plotted calculated parameters on OP 2104.033 Supplement 4, Figure 1.	N/A SAT UNSAT
(C)	7.	Compare containment Atmospheric parameters to Technical Specification requirements.	Used containment pressure-temperature point plotted on Figure 4-1 to determine if containment atmospheric conditions are within the region of acceptable operations. Completed OP 2104.033 Supplement 4 Section 3.0 to indicate Technical Specification 3.6.1.4 compliance.	N/A SAT UNSAT
END				

ADMIN JOB PERFORMANCE MEASURE

QUESTION 1:

ANSWER:

ADMIN JOB PERFORMANCE MEASURE

EXAMINEE'S COPY

JPM INITIAL TASK CONDITIONS: 100% steady state power operations. The PMS computer is available.

INITIATING CUE:

The SS/CRS directs, "Perform an evaluation of containment atmospheric conditions using OP 2104.033 Supplement 4."

TYPE: OPEN REFERENCE

KA VALUE RO: 2.7 SRO: 3.2 KA REFERENCE: 2.3.11

REFERENCES: OP2104.014, LRW and BMS Operations Rev 031-03-1, Supplement 2, Step 1.

RO EXAM -- SUBJECT A.3

QUESTION 1:

A liquid release is in progress on Waste Condensate Tank 2T21A. Unit 1 experiences a loss of 6900V Bus H1. What action(s) should be performed given 2104.014, Supplement 1?

ANSWER:

Terminate the liquid release from 2T21A.

Note to Examiner:

H1 and H2 are the power supplies for the Unit 1 Main Circulating Water Pumps. These pumps provide the dilution flow rates used to calculate the permissible release rates for the Unit 2 liquid release.

COMMENTS:

EXAMINEE'S COPY

TYPE: OPEN REFERENCE

RO EXAM -- SUBJECT A.3

QUESTION 1:

A liquid release is in progress on Waste Condensate Tank 2T21A. Unit 1 experiences a loss of 6900V Bus H1. What action(s) should be performed given 2104.014, Supplement 1?

TYPE: OPEN REFERENCE

KA VALUE RO: 2.5 SRO: 3.1 KA REFERENCE: 2.3.4

REFERENCES: 1012.021, Exposure Limits and Controls, Rev 004-01-0, Steps 4.5, 4.7, 4.19, 6.2.2

EXAM LEVEL: RO

RO EXAM -- SUBJECT A.3

QUESTION 2:

A worker has been assigned the task of breaking Incore Flanges. The year to date dose for the worker is:

- Deep Dose Equivalent (DDE) = 0.3 Rem
- Committed Effective Dose Equivalent (CEDE) = 0.2 Rem
- Shallow Dose Equivalent (SDE) = 0.6 Rem
- Eye Dose Equivalent (LDE) = 0.7 Rem

What is the maximum time the individual can work in the area and not exceed his administrative Total Effective Dose Equivalent (TEDE) limit with a 1 R/Hr gamma dose rate in the area?

ANSWER:

TEDE = DDE + CEDE
TEDE = 0.3 Rem + 0.2 Rem
TEDE = 0.5 Rem

Admin TEDE limit for rad worker is 2 Rem/yr.
Admin Limit – TEDE = Allowable dose
2 Rem – 0.5 Rem = 1.5 Rem

Stay time = dose/dose rate
Stay time = 1.5 rem/1.0 rem/hr
Stay time = 1.5 hours.

COMMENTS:

EXAMINEE'S COPY

TYPE: OPEN REFERENCE

RO EXAM -- SUBJECT A.3

QUESTION 2:

A worker has been assigned the task of breaking Incore Flanges. The year to date dose for the worker is:

- Deep Dose Equivalent (DDE) = 0.3 Rem
- Committed Effective Dose Equivalent (CEDE) = 0.2 Rem
- Shallow Dose Equivalent (SDE) = 0.6 Rem
- Eye Dose Equivalent (LDE) = 0.7 Rem

What is the maximum time the individual can work in the area and not exceed his administrative Total Effective Dose Equivalent (TEDE) limit with a 1 R/Hr gamma dose rate in the area?

TYPE: OPEN REFERENCE

KA VALUE RO: 3.3 SRO: 3.1 KA REFERENCE: 2.4.39

REFERENCES:

1903.030, Evacuation, Rev 024-01-0, Section 6.2.2
1903.066, Emergency Response Facility–Operational Support Center (OSC)

RO EXAM SUBJECT A.4

QUESTION 1:

As an off-shift RO assigned to the Steam Generator Replacement Team, you are escorting two red badge contract engineers to a meeting in the System Engineering Building.

The following announcement is heard over the plant page system:

"Attention all personnel. A Site Area Emergency has been declared on Unit 2. A plant evacuation has been declared. All emergency response and emergency standby personnel report to your designated assembly areas immediately."

State the action(s) you would take, where and who you would report to?

ANSWER:

1. Return visitors to guard house and check them out for accountability (required).
2. Report to Operations Support Center (OSC) located in Maintenance Facility (required).
3. Check in with OSC Director or member of OSC staff. (optional)

COMMENTS:

EXAMINEE'S COPY

TYPE: OPEN REFERENCE

RO EXAM -- SUBJECT A.4

QUESTION 1:

As an off-shift RO assigned to the Steam Generator Replacement Team, you are escorting two red badge contract engineers to a meeting in the System Engineering Building.

The following announcement is heard over the plant page system:

"Attention all personnel. A Site Area Emergency has been declared on Unit 2. A plant evacuation has been declared. All emergency response and emergency standby personnel report to your designated assembly areas immediately."

State the action(s) you would take, where and who you would report to?

TYPE: OPEN REFERENCE

KA VALUE RO: 2.6 SRO: 4.0 KA REFERENCE: 2.4.29

REFERENCES:

1903.010, EAL Classification, Rev 036-00-0, Step 4.16.1.B.
1903.010, EAL Classification, Rev 036-00-0, Attachment 4, 1.3, 1.4

RO EXAM -- SUBJECT A.4

QUESTION 2:

Given the following plant conditions:

- Plant operating in Mode 3.
- Manual reactor trip initiated ten (10) minutes ago due to "B" RCP seal failure.
- RCS leakage calculated at 62 gpm inside Containment.
- Post SPTA brief in progress.

The Shift Superintendent states during the brief that an Alert EAL has been declared and the conditions for upgrade to Site Area Emergency (SAE) include greater than 1% failed fuel.

State two methods that could be used to determine when 1% failed fuel is exceeded?

ANSWER:

1. Nuclear Chemistry analysis of RCS Sample.
2. Containment Radiation Levels increasing.
3. Engineering assessment of core damage.

EXAMINEE'S COPY

TYPE: OPEN REFERENCE

RO EXAM -- SUBJECT A.4

QUESTION 2:

Given the following plant conditions:

- Plant operating in Mode 3.
- Manual reactor trip initiated ten (10) minutes ago due to "B" RCP seal failure.
- RCS leakage calculated at 62 gpm inside Containment.
- Post SPTA brief in progress.

The Shift Superintendent states during the brief that an Alert EAL has been declared and the conditions for upgrade to Site Area Emergency (SAE) include greater than 1% failed fuel.

State two methods that could be used to determine when 1% failed fuel is exceeded?

ADMIN JOB PERFORMANCE MEASURE

UNIT: 2 **REV #:** 000 **DATE:** _____

SYSTEM/DUTY AREA: Conduct Of Operations

TASK: Determine Operating Staff Watchstanding Qualifications.

JTA#: _____

KA VALUE RO: 2.3 **SRO:** 3.4 **KA REFERENCE:** 2.1.5

APPROVED FOR ADMINISTRATION TO: RO: _____ **SRO:** X

TASK LOCATION: INSIDE CR: X **OUTSIDE CR:** _____ **BOTH:** _____

SUGGESTED TESTING ENVIRONMENT AND METHOD (PERFORM OR SIMULATE):

PLANT SITE: _____ **SIMULATOR:** Perform **LAB:** _____

POSITION EVALUATED: RO: _____ **SRO:** _____

ACTUAL TESTING ENVIRONMENT: SIMULATOR: _____ **PLANT SITE:** _____ **LAB:** _____

TESTING METHOD: SIMULATE: _____ **PERFORM:** _____

APPROXIMATE COMPLETION TIME IN MINUTES: 10 Minutes

REFERENCE(S): 1015.001, Conduct of Operation, Rev 052-00-0, 1063.020, Fire Brigade Training, Rev 013-00-0, 2OPD014, Fire Brigade Eligibility Memo, Watchstanding Proficiency Memo.

EXAMINEE'S NAME: _____ **SSN:** _____

EVALUATOR'S NAME: _____

THE EXAMINEE'S PERFORMANCE WAS EVALUATED AGAINST THE STANDARDS CONTAINED IN THIS JPM AND IS DETERMINED TO BE:

SATISFACTORY: _____ **UNSATISFACTORY:** _____

PERFORMANCE CHECKLIST COMMENTS:

_____

_____

Start Time _____ **Stop Time** _____ **Total Time** _____

SIGNED: _____ **DATE:** _____

SIGNATURE INDICATES THIS JPM HAS BEEN COMPARED TO ITS APPLICABLE PROCEDURE BY A QUALIFIED INDIVIDUAL (NOT THE EXAMINEE) AND IS CURRENT WITH THAT REVISION.

ADMIN JOB PERFORMANCE MEASURE

THE EXAMINER SHALL REVIEW THE FOLLOWING WITH THE EXAMINEE:

The examiner shall review the "Briefing Checklist - System Walkthrough" portion of OP 1064.023 Attachment 6 with the examinee.

JPM INITIAL TASK CONDITIONS:

Mode 1 Full Power. Shift turnover just completed.

TASK STANDARD:

Candidate determines one CBOR qualified, CBOT NOT qualified, and WCO qualified as Fire Brigade Leader.

TASK PERFORMANCE AIDS:

1015.001, Conduct of Operation, Rev 052-00-0, 1063.020, 2OPD014, Proficiency Watch Qualifications.

Fire Brigade Eligibility Memo.

EXAMINER'S NOTE:

ADMIN JOB PERFORMANCE MEASURE

INITIATING CUE:

You are the oncoming Control Room Supervisor of Crew F. Using appropriate references, determine that the below listed Control Room Watchstanders assigned to your operating crew are qualified to fill the positions assigned. (Include respirator qualifications/physicals, license status, watchstanding proficiency and fire brigade qualifications)

Denver Dennis - CBOR

Steve Davis - CBOT

Danny Reed – WCO and Fire Brigade Leader

CRITICAL ELEMENTS (C): 8, 17, 25

PERFORMANCE CHECKLIST			**STANDARDS**	(Circle One)
	1.	Obtain Fire Brigade Quarterly Memo.	Obtained Fire Brigade Quarterly Memo notebook.	N/A SAT UNSAT
	2.	Locate Eligibility Sheet for Denver Dennis in Fire Brigade Quarterly Memo.	Located Eligibility Sheet for Denver Dennis in Fire Brigade Quarterly Memo.	N/A SAT UNSAT
	4.	Check respirator physical, training, fit test, classroom and practical factors expiration date against current date.	Checked respirator physical, training, fit test, classroom and practical factors expiration date against current date.	N/A SAT UNSAT
	5.	Obtain Unit 2 Licensed Personnel Active/Inactive Report	Obtain Operator Watchstanding Proficiency Report.	N/A SAT UNSAT
	6.	Locate Denver Dennis on Active/Inactive Report and determine if Active/Inactive.	Located Denver Dennis on Active/Inactive Report and determine Active Status.	N/A SAT UNSAT
	7	Obtain Operator Watchstanding Proficiency Report.	Obtain Operator Watchstanding Proficiency Report.	N/A SAT UNSAT
	8.	Locate proficiency data for Denver Dennis in Proficiency Report.	Located proficiency data for Denver Dennis in Proficiency Report.	N/A SAT UNSAT
	7.	Determine Denver Dennis's proficiency requirements met. (7 eight hour or 5 twelve hour shifts per calendar quarter)	Determined Denver Dennis's proficiency requirements met. (7 eight hour or 5 twelve hour shifts per calendar quarter)	N/A SAT UNSAT
(C)	8.	Determine Denver Dennis qualified as Control Room Watchstander.	Determined Denver Dennis qualified as Control Room Watchstander.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	9.	Obtain Fire Brigade Quarterly Memo.	Obtained Fire Brigade Quarterly Memo notebook.	N/A SAT UNSAT
	10.	Locate Eligibility Sheet for Steve Davis in Fire Brigade Quarterly Memo.	Located Eligibility Sheet for for Steve Davis in Fire Brigade Quarterly Memo.	N/A SAT UNSAT
	11.	Check respirator physical, training, fit test, classroom and practical factors expiration date against current date.	Checked respirator physical, training, fit test, classroom and practical factors expiration date against current date.	N/A SAT UNSAT
	12.	Obtain Unit 2 Licensed Personnel Active/Inactive Report	Obtain Operator Watchstanding Proficiency Report.	N/A SAT UNSAT
	13.	Locate Steve Davis on Active/Inactive Report and determine if Active/Inactive.	Located Steve Davis on Active/Inactive Report and determine INACTIVE Status.	N/A SAT UNSAT
	14.	Obtain Operator Watchstanding Proficiency Report.	Obtain Operator Watchstanding Proficiency Report.	N/A SAT UNSAT
	15.	Locate proficiency data for Steve Davis in Proficiency Report.	Located proficiency data for Steve Davis in Proficiency Report.	N/A SAT UNSAT
	16.	Determine if Steve Davis's proficiency requirements are met. (7 eight hour or 5 twelve hour shifts per calendar quarter)	Determined Steve Davis's proficiency requirements NOT met. (7 eight hour or 5 twelve hour shifts per calendar quarter)	N/A SAT UNSAT
(C)	17.	Determine if Steve Davis's qualifications as CBOT are met and if he is qualified as a Control Room Watchstander.	Determined Steve Davis is NOT qualified as a Control Room Watchstander.	N/A SAT UNSAT
	18.	Obtain Fire Brigade Quarterly Memo.	Obtained Fire Brigade Quarterly Memo notebook.	N/A SAT UNSAT
	19.	Locate Eligibility Sheet for Danny Reed in Fire Brigade Quarterly Memo.	Located Eligibility Sheet for Danny Reed in Fire Brigade Quarterly Memo.	N/A SAT UNSAT
	20.	Check respirator physical, training, fit test, classroom and practical factors expiration date against current date.	Checked respirator physical, training, fit test, classroom and practical factors expiration date against current date.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	21.	Check Danny Reed's Fire Brigade Leader Training, Quarterly Training Class, Annual Practice Class, and Annual Drill requirements are met.	Checked Danny Reed's Fire Brigade Leader Training, Quarterly Training Class, Annual Practice Class, and Annual Drill requirements are met.	N/A SAT UNSAT
	22.	Obtain Operator Watchstanding Proficiency Report.	Obtain Operator Watchstanding Proficiency Report.	N/A SAT UNSAT
	23.	Locate proficiency data for Danny Reed in Proficiency Report.	Located proficiency data for Danny Reed in Proficiency Report.	N/A SAT UNSAT
	24.	Determine Danny Reed's proficiency requirements met. (eight hours per calendar quarter)	Determined Danny Reed's proficiency requirements are met. (eight hours per calendar quarter)	N/A SAT UNSAT
(C)	25.	Determine Danny Reed qualified as WCO and Fire Brigade Leader).	Determined (WCO Name) qualified as WCO and Fire Brigade Leader).	N/A SAT UNSAT
END				

ADMIN JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

Mode 1 Full Power. Shift turnover just completed.

INITIATING CUE:

You are the oncoming Control Room Supervisor of Crew F. Using appropriate references, determine that the below listed Crew Watchstanders assigned to your operating crew are qualified to fill the positions assigned. (Include respirator qualifications/physicals, License status, watchstanding proficiency and fire brigade qualifications)

Denver Dennis - CBOR

Steve Davis - CBOT

Danny Reed – WCO and Fire Brigade Leader

ADMIN JOB PERFORMANCE MEASURE

UNIT: 2 **REV #:** 000 **DATE:** _____

SYSTEM/DUTY AREA: Conduct Of Operations

TASK: Perform Personnel Emergency Checklist

JTA#: _____

KA VALUE **RO:** _____ **SRO:** 2.8 **KA REFERENCE:** 2.1.16

APPROVED FOR ADMINISTRATION TO: **RO:** _____ **SRO:** X

TASK LOCATION: **INSIDE CR:** X **OUTSIDE CR:** _____ **BOTH:** _____

SUGGESTED TESTING ENVIRONMENT AND METHOD (PERFORM OR SIMULATE):

PLANT SITE: Simulate **SIMULATOR:** Perform **LAB:** _____

POSITION EVALUATED: **RO:** _____ **SRO:** _____

ACTUAL TESTING ENVIRONMENT: **SIMULATOR:** _____ **PLANT SITE:** _____ **LAB:** _____

TESTING METHOD: **SIMULATE:** _____ **PERFORM:** _____

APPROXIMATE COMPLETION TIME IN MINUTES: 10 Minutes

REFERENCE(S): 1903.023B, Rev 032-00-0; 1903.062 Rev 15

EXAMINEE'S NAME: _____ **SSN:** _____

EVALUATOR'S NAME: _____

THE EXAMINEE'S PERFORMANCE WAS EVALUATED AGAINST THE STANDARDS CONTAINED IN THIS JPM AND IS DETERMINED TO BE:

SATISFACTORY: _____ **UNSATISFACTORY:** _____

PERFORMANCE CHECKLIST COMMENTS:

_____

_____

Start Time _____ **Stop Time** _____ **Total Time** _____

SIGNED: _____ **DATE:** _____

SIGNATURE INDICATES THIS JPM HAS BEEN COMPARED TO ITS APPLICABLE PROCEDURE BY A QUALIFIED INDIVIDUAL (NOT THE EXAMINEE) AND IS CURRENT WITH THAT REVISION.

ADMIN JOB PERFORMANCE MEASURE

THE EXAMINER SHALL REVIEW THE FOLLOWING WITH THE EXAMINEE:

The examiner shall review the "Briefing Checklist - System Walkthrough" portion of OP 1064.023 Attachment 6 with the examinee.

JPM INITIAL TASK CONDITIONS:

100% steady state power operations. Report comes into control room that a mechanic (Joe McWrench) has fallen from the spiral staircase in the Unit 2 Auxiliary Building, North Piping Penetration Room and is currently located on the floor of the 335' elevation. The mechanic is unconscious and appears to have a fracture of his right leg, multiple bruises and a severe laceration on upper right arm.

TASK STANDARD:

Medical team notified by radio-voice pagers using base radio, fire tone actuated, announcement made using plant paging system, ANO Duty Nurse and ANO Physician's pagers activated.

TASK PERFORMANCE AIDS:

Form 1903.023B (Personnel Emergency Checklist), Paging Encoder Operation Instructions posted by Encoder.

Or 1903.062 (Communications System Operating Procedure) Step 7.6.1.E.

EXAMINER'S NOTE:

ADMIN JOB PERFORMANCE MEASURE

INITIATING CUE:

The SS/CRS directs, "Perform Personnel Emergency Checklist (Form 1903.023B) Steps 1 through 3 using the information provided."

CRITICAL ELEMENTS (C): 2, 4, 5, 7, 9, 10

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	1.	Obtain Personnel Emergency Checklist (Form 1903.023B)	Obtained copy of Personnel Emergency Checklist (Form 1903.023B) from one of the following: • Get copy from procedure rack on Control Room wall. • Get 1903.023 from bookshelf in rear of Control Room and make copy. • Call up procedure on IDEAS and print copy of latest revision.	N/A SAT UNSAT
EXAMINERS NOTE: **If examinee elects to get procedure and make copy or use computer to print, provide copy of Form 1903.023B in package to expedite JPM.**				
(C)	2.	Select Channel 1 on the radio console.	Selected Channel 1 on the radio console.	N/A SAT UNSAT
	3.	Verify "SCRAMBLE OFF" is selected on radio console.	Verified "SCRAMBLE OFF" is selected on radio console.	N/A SAT UNSAT
(C)	4.	Select the response group needed from the Instant Call Keys on the encoder.	Selected the "MEDICAL" button on the Instant Call Keys on the Encoder.	N/A SAT UNSAT
(C)	5.	Verify that the appropriate Instant Call Key is selected, and press the "IC SEND" key. Wait for tones to be transmitted.	Verified the "MEDICAL" instant call key selected and pressed "IC SEND" key. Observed the red indicator flash indicating tones transmitted.	N/A SAT UNSAT
	6.	Momentarily depress and hold the "SIREN ALERT" key".	Depressed the "SIREN ALERT" and held down for two or three seconds.	N/A SAT UNSAT
(C)	7.	Transmit the appropriate message.	Depressed the microphone switch on the base radio console and gave the following message: ATTENTION EMERGENCY MEDICAL TEAM MEMBERS. A Personnel Emergency has occurred in the Unit 2 Auxiliary Building, North Piping Penetration Room, Elevation 335'. Emergency Medical Team members please respond.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	8.	Momentarily press the page fire tone push-button.	Depressed the page fire tone pushbutton and held down for two or three seconds.	N/A SAT UNSAT
(C)	9.	Using plant paging system, give message to alert personnel to remain clear of the location of the emergency.	Used plant paging system to make the following announcement: ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL. A PERSONNEL EMERGENCY has occurred in the Unit 2 Auxiliary Building, North Piping Penetration Room, Elevation 335'. The EMERGENCY MEDICAL TEAM is responding. All personnel should stay clear of North Piping Penetration Room, Elevation 335'.	N/A SAT UNSAT
(C)	10.	Notify ANO Medical Department. Positive Cue: Pagers have been activated. Simulator Phones will not allow the pager numbers to be dialed.	Notified ANO Medical Department by dialing the following pager numbers: ANO Duty Nurse Pager 964-6076 ANO Physician Pager 964-3936	N/A SAT UNSAT
END				

ADMIN JOB PERFORMANCE MEASURE

QUESTION:

ANSWER:

ADMIN JOB PERFORMANCE MEASURE

EXAMINEE'S COPY

JPM INITIAL TASK CONDITIONS:

100% steady state power operations.

Report comes into control room that a mechanic (Joe McWrench) has fallen from the spiral staircase in the Unit 2 Auxiliary Building, North Piping Penetration Room and is currently located on the floor of the 335' elevation. The mechanic is unconscious and appears to have a fracture of his right leg, multiple bruises and a severe laceration on upper right arm.

INITIATING CUE:

The SS/CRS directs, "Perform Personnel Emergency Checklist (Form 1903.023B) Steps 1 through 3 using the information provided."

ADMIN JOB PERFORMANCE MEASURE

UNIT: 2 **REV #:** 000 **DATE:** _____

SYSTEM/DUTY AREA: Emergency Procedure/Plan

TASK: Determine Protective Action Recommendations for Radiological Release

JTA#: _____

KA VALUE RO: _____ **SRO:** 4.0 **KA REFERENCE:** 2.4.44

APPROVED FOR ADMINISTRATION TO: RO: _____ **SRO:** X

TASK LOCATION: INSIDE CR: X **OUTSIDE CR:** _____ **BOTH:** _____

SUGGESTED TESTING ENVIRONMENT AND METHOD (PERFORM OR SIMULATE):

PLANT SITE: Simulate **SIMULATOR:** Perform **LAB:** _____

POSITION EVALUATED: RO: _____ **SRO:** _____

ACTUAL TESTING ENVIRONMENT: SIMULATOR: _____ **PLANT SITE:** _____ **LAB:** _____

TESTING METHOD: SIMULATE: _____ **PERFORM:** _____

APPROXIMATE COMPLETION TIME IN MINUTES: 10 Minutes

REFERENCE(S): 1903.011 Revision 025-03-0

EXAMINEE'S NAME: _____ **SSN:** _____

EVALUATOR'S NAME: _____

THE EXAMINEE'S PERFORMANCE WAS EVALUATED AGAINST THE STANDARDS CONTAINED IN THIS JPM AND IS DETERMINED TO BE:

SATISFACTORY: _____ **UNSATISFACTORY:** _____

PERFORMANCE CHECKLIST COMMENTS:

_____

_____

Start Time _____ **Stop Time** _____ **Total Time** _____

SIGNED: _____ **DATE:** _____

SIGNATURE INDICATES THIS JPM HAS BEEN COMPARED TO ITS APPLICABLE PROCEDURE BY A QUALIFIED INDIVIDUAL (NOT THE EXAMINEE) AND IS CURRENT WITH THAT REVISION.

ADMIN JOB PERFORMANCE MEASURE

THE EXAMINER SHALL REVIEW THE FOLLOWING WITH THE EXAMINEE:

The examiner shall review the "Briefing Checklist - System Walkthrough" portion of OP 1064.023 Attachment 6 with the examinee.

JPM INITIAL TASK CONDITIONS:

The plant was tripped due to a Loss of Coolant Accident with a 15% Fuel Clad Failure and samples indicate an extremely large amount of fission products present in the containment. A non-isolable release is in progress. Wind Direction is from 170 degrees. The Dose assessor has provided the following RDACS report.

TASK STANDARD:

Determination by candidate that 2 and Par 3 should be combined and that the additional zones listed from the Dose Assessment report (RDACS) should be evacuated and the remainder of the 10-Mile EPZ should be sheltered.

TASK PERFORMANCE AIDS:

Attachment 6 of 1903.11, Protective Action Recommendations for General Emergency.

Dose Assessors report from RDACS

EXAMINER'S NOTE:

ADMIN JOB PERFORMANCE MEASURE

INITIATING CUE:

The SS directs, "Determine the Protective Action Recommendations (PAR) using Attachment 6 of 1903.011, Emergency Response/Notifications and the Dose Assessors RDACS Protective Action Recommendation Report."

CRITICAL ELEMENTS (C): 6, 7, 9, 10, 11, 12, 13, 14, 15

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
	1.	Obtain Attachment 6 of 1903.011, Emergency Response/Notifications.	Obtained Attachment 6 of 1903.011, Emergency Response/Notifications from one of the following: • Get copy from the end rack of 2C69 procedure rack on Control Room wall. • Get 1903.011 from bookshelf in rear of Control Room and make copy. • Call up procedure on IDEAS and print copy of latest revision.	N/A SAT UNSAT
EXAMINERS NOTE: **If examinee elects to get procedure and make copy or use computer to print, provide copy of Attachment 6, Protective Action Recommendations for General Emergency.** **Provide Candidate with Dose Assessor's Report.**				
	2.	Using the Flow Chart, determine that >10% Fuel Clad Failure exists.	Used initial conditions and determined that >10% Fuel Clad Failure exists. Determined the YES decision path should be chosen.	N/A SAT UNSAT
	3.	Determine that a LOCA is in progress. **OR** Containment Atmosphere sample indicates large amounts of fission products.	Used initial conditions and determined: • that a LOCA is in progress AND • Containment Atmosphere sample indicated large amounts of fission products. Determined that the YES decision path should be chosen.	N/A SAT UNSAT
	4.	Determine if Containment Failure is projected **OR** Radiological Release is in progress.	Used initial conditions and determined that Radiological Release is in progress. Determined that the YES decision path should be chosen.	N/A SAT UNSAT
	5.	Determine if Release is in progress.	Determined that the YES decision path should be chosen.	N/A SAT UNSAT

ADMIN JOB PERFORMANCE MEASURE

PERFORMANCE CHECKLIST			STANDARDS	(Circle One)
(C)	6.	Using the RDACS Report provided by the Dose Assessor, determine that the EPA Protective Guideline of 5.0 Rem Child Thyroid is being exceeded.	Used the RDACS Report provided by Dose Assessor to determine that the EPA Protective Guideline of 5.0 Rem Child Thyroid is being exceeded. Determined that the YES decision path should be chosen.	N/A SAT UNSAT
(C)	7.	Determine that Protective Action Recommendations (PAR) 2 and 3 should be combined.	Determined that PAR 2 and 3 should be combined.	N/A SAT UNSAT
(C)	8.	Determine from the Dose Assessors report that Zone G is projected to exceed the EPA Protective Action Guidelines and should be evacuated	Determined that Zone G is projected to exceed the EPA Protective Action Recommendations.	N/A SAT UNSAT
(C)	9.	Determine, using PAR 2, and given the current wind direction, that Zones G, H, K, M, N, O, P, R & U, should be evacuated and that the rest of the EPZ should be sheltered.	Determined, using PAR 2, and given the current wind direction, that Zones G, H, K, M, N, O, P, R & U, should be evacuated and that the rest of the EPZ should be sheltered.	N/A SAT UNSAT
(C)	10.	Combine the Zones from PAR No. 2 and the Dose Assessor's Report and make the recommendation that Zones G, H, K, M, N, O, P, R & U be evacuated and the remainder of the EPZ be sheltered.	Combined the Zones from PAR No. 2 and the Dose Assessor's Report and made the recommendation that Zones G, H, K, M, N, O, P, R & U be evacuated and the remainder of the EPZ be sheltered.	N/A SAT UNSAT
END				

ADMIN JOB PERFORMANCE MEASURE

EXAMINEE'S COPY

JPM INITIAL TASK CONDITIONS:

The plant was tripped due to a Loss of Coolant Accident with a 15% Fuel Clad Failure and samples indicate an extremely large amount of fission products present in the containment. A non-isolable release is in progress. Wind Direction is from 170 degrees. General Emergency has been declared. The Dose assessor has provided the following RDACS report.

INITIATING CUE:

The SS directs, "Determine the Protective Action Recommendations using Attachment 6 of 1903.011, Emergency Response/Notifications and the Dose Assessors RDACS Report."

TYPE: OPEN REFERENCE

KA VALUE RO: 2.7 SRO: 3.2 KA REFERENCE: 2.3.11

REFERENCES:
OP2104.014, LRW and BMS Operations Rev 032-00-0, Step 5.4.
Unit 2 Technical Specifications 3.11.1, Liquid Holdup Tanks.

SRO EXAM -- SUBJECT A.3

QUESTION 1:

Due to the overhaul of the Unit 2 Turbine Generator during 2R14, a temporary tool and parts decontamination facility has been set up on the Unit 2 Turbine Deck near the train bay access. Liquids from the facility are being collected in a 500 gallon poly tank located on Elevation 354' in the train bay.

Chemistry analysis performed on a sample from the tank indicates the following isotopic content:

Cr-51	2.225E6 µci
Mn-54	1.455E6 µci
Co-58	1.382E6 µci
Fe-59	3.551E6 µci
Sr-92	1.413E6 µci

What action(s), if any, are required and what are the bases for the action(s)?

ANSWER:

1. Immediately suspend all additions of radioactive material to the affected tank.
2. Within 48 hours reduce tank contents to < 10 curies.
3. Based on Tech Spec 3.11.1, (Radioactive Effluents, Liquid Holdup Tanks).

COMMENTS:

EXAMINEE'S COPY

TYPE: OPEN REFERENCE

SRO EXAM -- SUBJECT A.3

QUESTION 1:

Due to the overhaul of the Unit 2 Turbine Generator during 2R14, a temporary tool and parts decontamination facility has been set up on the Unit 2 Turbine Deck near the train bay access. Liquids from the facility are being collected in a 500 gallon poly tank located on Elevation 354' in the train bay.

Chemistry analysis performed on a sample from the tank indicates the following isotopic content:

Cr-51	2.225E6 µci
Mn-54	1.455E6 µci
Co-58	1.382E6 µci
Fe-59	3.551E6 µci
Sr-92	1.413E6 µci

What action(s), if any, are required and what are the bases for the action(s)?

TYPE: OPEN REFERENCE

KA VALUE RO: 2.5 SRO: 3.1 KA REFERENCE: 2.3.4

REFERENCES: 1903.033 Rev 017-01-0, Protective Action Guidelines For Rescue/Repair & Damage Control Team, Step 6.1.3

SRO EXAM -- SUBJECT A.3

QUESTION 2:

Determine whose authorization is required to exceed dose limits of 10CFR20 for the given conditions?

- Large Break LOCA has occurred.
- RAS has actuated.
- Containment Spray Pump 2P35A is Out of Service
- Containment Spray Pump 2P35B has a 5.0 gpm isolable suction gage leak.
- Estimated dose is 6.1 Rem to isolate the leak.
- EAL was declared 75 minutes ago.
- Emergency Response Organization is fully staffed.

ANSWER:

TSC Director

COMMENTS:

EXAMINEE'S COPY

TYPE: OPEN REFERENCE

SRO EXAM -- SUBJECT A.3

QUESTION 2:

Determine whose authorization is required to exceed dose limits of 10CFR20 for the given conditions?

- Large Break LOCA has occurred.
- RAS has actuated.
- Containment Spray Pump 2P35A is Out of Service
- Containment Spray Pump 2P35B has a 5.0 gpm isolable suction gage leak.
- Estimated dose is 6.1 Rem to isolate the leak.
- EAL was declared 75 minutes ago.
- Emergency Response Organization is fully staffed.