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Job Performance Measure

Startup the Control Room Ventilation System (VC) in the High Radiation Mode (alternate path)

JPM Number: 3402.0101

Revision Number: 00

Date: 7/8/2003

Developed By:	**T. Pickley**	**7/8/03**
	Instructor	**Date**
Validated By:	**M. Griffin**	**10/17/03**
	SME or Instructor	**Date**
Review By:	**P. K. Ryan**	**7/28/03**
	Operations Representative	**Date**

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

_____ 1. Task description and number, JPM description and number are identified.

_____ 2. Knowledge and Abilities (K/A) references are included.

_____ 3. Performance location specified. (in-plant, control room, or simulator)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating and terminating cues are properly identified.

_____ 6. Task standards identified and verified by SME review.

_____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

_____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____

_____ 9. Pilot test the JPM:
a. verify cues both verbal and visual are free of conflict, and
b. ensure performance time is accurate.

_____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

_____ _____
SME/Instructor Date

_____ _____
SME/Instructor Date

_____ _____
SME/Instructor Date

Revision Record (Summary)

1. **Revision 00,** Converted from 011288J001, to an alternate path.

JPM NUMBER: 3402.0101 **REVISION: 00**

Operator's Name:_____
Job Title: ❑RO ❑ SRO

JPM Title: Startup the Control Room Ventilation System (VC) in the High Radiation Mode

JPM Number: 3402.0101
Revision Number: 00
Task Number and Title: 340201.16

K/A Number 2.3.10 Importance: 2.9/ 3.3

Suggested Testing Environment: Simulator

Actual Testing Environment: ❑ Simulator ❑ Plant ❑ Control Room

Testing Method: ❑ Simulate ■ Perform **Alternate Path / Faulted:** ■ Yes

Time Critical: ❑ Yes

Estimated Time to Complete: 15 minutes **Actual Time Used:** _____ minutes

References: CPS No. 3402.01 CONTROL ROOM HVAC (VC)

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ❑ Yes ❑ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ❑ Satisfactory ❑ Unsatisfactory

Comments:_____

Evaluator's Name: _____

Evaluator's Signature:_____ Date: _____

JPM NUMBER: 3402.0101 **REVISION: 00**

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

Initialize to any suitable IC, ensure a VC train is running in normal mode.
OPEN/verify OPEN outside damper 0VC01YB
Override 5050 and 5052 7M HI RADIATION CONT RM HVAC SYSTEM DIVISION 1 and 2 to the alarm status.
Insert malfunctions and I/Os to cause:
PR009A and 0RI-VC075 (P801-66B) to indicate 11 mR/hr - 5397
PR009C and 0RI-VC076 (P801-66B) to indicate 4 mR/hr - 2895
PR009B and 0RI-VC175 (P801-67B) to indicate 12 mR/hr - 4290
PR009D and 0RI-VC176 (P801-67B) to indicate 5 mR/hr – 3300
Insert I/Os to prevent depressing both Cont Rm Mu Trn Hi Rad initiation push-buttons with conditions to clear the I/Os when the Sply Air Fltr Dmprs 0VC09YA/10YA/11YA (0VC09YB/10YB/11YB) control switch is in the FILTER position.

TASK STANDARDS:

The VC System is running in the High Radiation Mode with Minimum Outside Air Damper 0VC01YA OPEN. The task has been completed within 20 minutes

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3402.01, CONTROL ROOM HVAC
CPS No. 5050.06M HI RADIATION CONT RM HAVAC SYS DIVISION 1
CPS N0. 5140.64,MCR AIR INTAKE 1RIX-PR009A, B, C, D

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.
If AR/PR is not functioning a Radiation Level Data Sheet is attached for providing examinee radiation level information available on 1H13-P801. This data sheet may be handed to the examinee when they pursue the information.

JPM NUMBER: 3402.0101 **REVISION: 00**

INITIAL CONDITIONS AND INITIATING CUE:

This is a time critical JPM. Respond to the annunciators on P801 insert 5050 and 5052.

NOTE
If AR/PR doesn't function, when examinee pursues reading the Radiation Level indicators on P801 or PRM provide the information using the attached briefing sheet.

START TIME: _____

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PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

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PERFORMANCE STEPS

NOTE

Hi Radiation Isolation Logic is 1 out of 2 twice.

A single monitor will initiate the HI RADIATION CONT RM HVAC SYST DIVISION 1(2) annunciator, but will not initiate isolation.

Cause of such an alarm will need to be investigated and appropriate action taken.

Step 8.3.3.1 may be used to initiate operation of VC system in HI RAD mode.

The remainder of procedure should be followed regardless of whether initiation was automatic or manual. ***Refer to ITS LCO 3.3.7.1 for further guidance****.*

Run time with flow through VC make up filter train 0VC09SA(B) and VC supply filter train 0VC07SA(B) shall be tracked per CPS 9094.01, Cumulative Data Report. «LBD-1»

8.3.3 High Radiation Isolation

8.3.3.1	IF THEN	Manual Initiation of a High Radiation Isolation is required, Depress both Cont Rm Mu Trn Hi Rad initiation push-buttons.

Standard Both pushbuttons are depressed, located on 1H13-P801

CUE Respond as RP if a notified for the abnormal radiation conditions

Comments

SAT UNSAT Comment Number

8.3.3.2 Verify Supply Air Trn A(B) un-isolates as follows:
1) 0VC09YA(B), Sply Air Trn A(B) Filt Inlet Dmpr opens.
2) 0VC10YA(B), Sply Air Trn A(B) Filt Byp Dmpr closes.
3) 0VC11YA(B), Sply Air Trn A(B) Filt Outlet Dmpr opens.

Standard: Determines the Supply Air Trn A(B) is still isolated

CUE:

Comments:

SAT UNSAT Comment Number

***8.3.3.2** **IF** **Supply Air Trn A(B) did not unisolate,**
THEN **Place Sply Air Fltr Dmprs 0VC09YA/10YA/11YA (0VC09YB/10YB/11YB) control switch in the FILTER position and repeat 8.3.3.1 and 2.**

Standard: Damper lights for 0VC09YA(B) and 0VC11YA(B) indicate OPEN
Damper light for 0VC10YA(B) indicates CLOSED

CUE:

Comments:

SAT UNSAT Comment Number

***8.3.3.1** **IF** **Manual Initiation of a High Radiation Isolation is required,**
THEN **Depress both Cont Rm Mu Trn Hi Rad initiation push-buttons.**

Standard: Both pushbuttons are depressed, located on 1H13-P801, and associated red indication lights are ON.

CUE:

Comments:

SAT UNSAT Comment Number

8.3.3.3 Verify running/start 0VC05CA(B), Cont Rm HVAC A(B) MU Air Fan.

Standard: Red light ON.

CUE

Comments

SAT UNSAT Comment Number

8.3.3.4 Verify the following dampers open:
1) 0VC02YA(B), Cont Rm Trn A(B) MU Air Dmpr.
2) 0VC06YA(B), Cont Rm MU Trn A(B) Outlet Dmpr.
3) Verify 0VC114YA(B), Cont Rm MU Trn A(B) Flow Cont Dmpr modulates.

Standard: Damper lights for 0VC02YA(B) and 0VC06YA(B) indicate OPEN and 0VC114YA(B) is modulating.

CUE

Comments

SAT UNSAT Comment Number

8.3.3.6 Verify the following dampers close:
1) 0VC03YA(B), Cont Rm Trn A Min OS Dmpr.
2) 0VC05YA(B), MCR Max Intake & Purge Dmpr.
3) 0VC48YA(B), MCR Max Intake & Purge Dmpr.
4) 0VC49YA(B), MCR Max Intake & Purge Dmpr.
5) 0VC81YA(B), MCR Max Intake & Purge Dmpr.
6) 0VC115YA(B), Cont Rm Trn A Min OS Dmpr.
7) 0VC69Y, MCR Locker Rm Exhaust Dmpr.
8) 0VC70Y, MCR Locker Rm Exhaust Dmpr.
9) 0VC11C, MCR Locker Rm Exhaust Fan is not running

Standard: Damper lights for 0VC03YA(B), 0VC05YA(B), 0VC48YA(B), 0VC49YA(B), 0VC81YA(B), 0VC115YA(B), 0VC69Y, and 0VC70Y indicate CLOSED
Fan lights for 0VC11C indicate NOT running.

CUE

Comments

SAT UNSAT Comment Number

8.3.3.7 Cont Rm Trn A(B) Min Air Dmpr 0VC01YA(B) is located on the east(west) side of the plant.
Use the following table to quickly locate monitors and indicators to aid in completion of the remaining steps in section 8.3.3.

	MONITOR	LOCATION	INDICATION	LOCATION
DIV 1:	PR009A	AB 781'W	0RI-VC075	P801-66B
	PR009C	CB 825'E	0RI-VC076	P801-66B
DIV 2:	PR009B	AB 781'W	0RI-VC175	P801-67B
	PR009D	CB 825'E	0RI-VC176	P801-67B

Standard Locate monitors and obtain reading.

If AR/PR is not functioning then hand attachment with above readings to examinee when they pursue this information, if not done so previously

Cue

	MONITOR	INDICATION	LOCATION	READINGS
DIV 1:	PR009A	0RI-VC075	P801-66B	**11 mR/hr**
	PR009C	0RI-VC076	P801-66B	**4 mR/hr**
DIV 2:	PR009B	0RI-VC175	P801-67B	**12 mR/hr**
	PR009D	0RI-VC176	P801-67B	**5 mR/hr**

Comments

SAT UNSAT Comment Number

***8.3.3.8** IF A high radiation condition exists as indicated by OS Air Inlet Rad Mon on P801-66B and 67B,

THEN

1. **Open/verify open the minimum air damper (0VC01YA) with the lowest radiation level**
2. **Shut/verify shut the other minimum air damper.**

Standard Examinee opens 0VC01YA is OPEN and shuts 0VC01YB is SHUT.

CUE

Comments

SAT UNSAT Comment Number

JPM NUMBER: 3402.0101 **REVISION: 00**

TERMINATING CUES:

The VC System is running in the High Radiation Mode with Minimum Outside Air Damper 0VC01YA OPEN.

STOP TIME: _____ **TOTAL TIME:** _____

***Task must be completed within 20 minutes**

SAT UNSAT Comment Number

K/A REFERENCE NUMBERS

		Importance Rating	
K/A SYSTEM NUMBER	**K/A NUMBER**	**RO**	**SRO**
Generic	2.3.10	2.9	3.3

INITIATING CUE

This is a time critical JPM. Respond to the annunciators on P801 insert 5050 and 5052.

RADIATION LEVEL CUE

	MONITOR	INDICATION	LOCATION	READINGS
DIV 1:	PR009A	0RI-VC075	P801-66B	**11 mR/hr**
	PR009C	0RI-VC076	P801-66B	**4 mR/hr**
DIV 2:	PR009B	0RI-VC175	P801-67B	**12 mR/hr**
	PR009D	0RI-VC176	P801-67B	**5 mR/hr**