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CCP-TP-117

Revision 0

CCP
MOVER Ventilation and Differential Pressure Test

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1.0 PURPOSE

This procedure establishes the process for performing a test of the indication panel located in the Mobile Visual Examination and Repackaging (MOVER) unit.

1.1 Scope

This procedure defines the activities required to perform the MOVER Indication Panel Verification. Compliance with this procedure ensures that each photohelic and transducer in the MOVER is operational and that the communication from the instruments to the indication panel are working properly.

2.0 REQUIREMENTS

2.1 References

Baseline Documents

- DOE/CBFO-94-1012, *U.S. Department of Energy Carlsbad Field Office Quality Assurance Program Document* (QAPD)
- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan* (QAPjP)
- CCP-PO-002, *CCP Transuranic Waste Certification Plan* (WCP)

Referenced Documents

- CCP-QP-002, *CCP Training and Qualification Plan*
- CCP-QP-008, *CCP Records Management*
- CCP-TP-044, *CCP Startup and Shutdown of the MOVER*

2.2 Training Requirements

2.2.1 This procedure shall be performed by trained and qualified personnel as specified in CCP-QP-002, *CCP Training and Qualification Plan*.

2.3 Equipment List

2.3.1 Pens

2.3.2 Current procedure

2.3.3 Paper

2.3.4 Light bulbs, Model 387

2.4 Precautions and Limitations

2.4.1 If during the course of executing this procedure, an off-normal situation occurs that causes a deviation from the normal process and this off-normal condition can NOT be corrected as directed in this procedure, operators shall IMMMEDIATELY STOP WORK and notify the MOVER Technical Supervisor (TS).

2.4.2 All personnel involved with the MOVER Indication Verification must perform activities in accordance with the approved Integrated Work Sheet (IWS).

2.4.3 Prior to opening any door, assure that the green door light is illuminated, and the red door light is NOT illuminated. If a red door light is illuminated, DO **NOT** proceed into the MOVER. If entering through one of the MOVER exterior doors, assure the Continuous Air Monitor (CAM) and VENTILATION lights are **NOT** illuminated (flashing). If illuminated (red or yellow flashing), DO **NOT** enter the MOVER, **AND** immediately contact the Visual Examination (VE) TS or Host Site Facility Health Physics/Subcontract Technical Representative (STR).

2.4.4 The Two-Person Rule is in effect for the MOVER. Entrance to the MOVER requires at least two people, one of which must be a qualified MOVER Operator.

2.5 Prerequisite Actions

2.5.1 TS coordinate with the STR to ensure that all necessary documentation (e.g., IWS) is complete and site-specific requirements are fulfilled before beginning operations.

2.5.2 TS review tasks of the day and associated special safety considerations with the operators and the Radiological Control Technician (RCT).

2.5.3 Confirm the MOVER Daily Pre-operational Checklist and MOVER Logbook have been completed per CCP-TP-044, *CCP Startup and Shutdown of the MOVER*, prior to starting work.

3.0 RESPONSIBILITIES

3.1 Technical Supervisor (TS)

3.1.1 Ensures all site-specific safety and operational requirements are met before beginning operations.

3.1.2 Ensures that personnel follow this procedure.

3.1.3 Provides overall direction for transport and set up for the MOVER.

3.2 VE Operator (VEO)

3.2.1 Performs the indication panel test.

NOTE

At Lawrence Livermore National Laboratory (LLNL), the function of RCT is performed by the Hazards Control Health and Safety Technician.

3.3 Radiological Control Technician (RCT)

3.3.1 Performs radiological surveys.

3.4 Facility Records Custodian

3.4.1 Processes and transmits records in accordance with CCP-QP-008, *CCP Records Management*.

4.0 PROCEDURE

4.1 Ventilation and Differential Pressure Test

NOTE
The VEO performs all the steps in this procedure unless otherwise indicated.

4.1.1 Obtain Attachment 1, *MOVER Indication Panel Checklist*.

[A] Complete Date and Time in #1.

[B] **IF** any of the alarm settings checked are NOT applicable (i.e., not in service or not in use),
THEN record NA for the non applicable alarm settings, **AND** describe conditions or remarks in #16, “Comments”.

NOTE

The operation of setting the alarm indicators OFF on the multiple photohelics requires the use of two VEOs.

All photohelics in the MOVER measure the differential pressures between the different zones in the MOVER and the units are measured in inches of water.

On the face of ALL the photohelics in the MOVER there are two knobs. The knob on the left moves the LOW alarm set point and the knob on the right moves the HIGH alarm set point.

In order for the alarm signal to be sent to the indication panel, the set points must be moved past the current gauge reading at the time.

The indication panel that contains all the LOW and HIGH Alarm Lights is located in ZONE 2. The white light is the indication of a LOW alarm and the yellow light is the indication of a HIGH alarm.

Communication from Zone 3A and Zone 3B to Zone 2 will be done using the intercom in the MOVER.

NOTE

If during the performance of this procedure a light on the indication panel DOES **NOT** illuminate and UNSAT is checked on Attachment 1, then VEO may replace the light bulb, verify the new light bulb works, and document the actions taken and the results in #16 of Attachment 1.

4.1.2 Photohelic for 3A to Outside

[A] VEO 1, identify the location of the digital readout for the photohelic for 3A to outside on the indication panel.

[B] VEO 2, locate Zone 3A to outside photohelic in Zone 3A and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #2 on Attachment 1 and GO TO step 4.1.2[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #2 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.10.

[H] VEO 2, set the LOW alarm back to 0.10.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #2 on Attachment 1 and GO TO step 4.1.2[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #2 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 0.70.

[P] VEO 2, set the HIGH alarm back to 0.70.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.3 Photohelic for 3B to outside

[A] VEO 1, identify the location of the digital readout for the photohelic for 3B to outside on the indication panel.

[B] VEO 2, locate Zone 3B to outside photohelic in Zone 3B and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #3 on Attachment 1 and GO TO step 4.1.3[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #3 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.10.

[H] VEO 2, set the LOW alarm back to 0.10

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #3 on Attachment 1 and GO TO step 4.1.3[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #3 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** it is okay to set the HIGH alarm back to 0.70.

[P] VEO 2, set the HIGH alarm back to 0.70.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.4 Photohelic for Zone 2 to Zone 3A

[A] VEO 1, identify the location of the digital readout for the photohelic for Zone 2 to Zone 3A on the indication panel.

[B] VEO 2, locate Zone 2 to Zone 3A photohelic in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #4 on Attachment 1 and GO TO step 4.1.4[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #4 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.05.

[H] VEO 2, set the LOW alarm back to 0.05.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #4 on Attachment 1 and GO TO step 4.1.4[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #4 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 0.70.

[P] VEO 2, set the HIGH alarm back to 0.70.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.5 Photohelic for Zone 2 to Zone 3B

[A] VEO 1, identify the location of the digital readout for the photohelic for Zone 2 to Zone 3B on the indication panel.

[B] VEO 2, locate Zone 2 to Zone 3B photohelic in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #5 on Attachment 1 and GO TO step 4.1.5[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #5 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.10

[H] VEO 2, set the LOW alarm back to 0.10.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #5 on Attachment 1 and GO TO step 4.1.5[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #5 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 0.70.

[P] VEO 2, set the HIGH alarm back to 0.70.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.6 Photohelic for Zone 2 to Outside

[A] VEO 1, identify the location of the digital readout for the photohelic for Zone 2 to outside on the indication panel.

[B] VEO 2, locate Zone 2 to outside photohelic in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #6 on Attachment 1 and GO TO step 4.1.6[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #6 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.20.

[H] VEO 2, set the LOW alarm back to 0.20.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated ,
THEN check SAT in #6 on Attachment 1 and GO TO step 4.1.6[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #6 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 1.00.

[P] VEO 2, set the HIGH alarm back to 1.00.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.7 Photohelic for Zone 1 (glovebox) to Zone 2

[A] VEO 1, identify the location of the digital readout for the photohelic for Zone 1 (glovebox) to Zone 2 on the indication panel.

[B] VEO 2, locate Zone 1 (glovebox) to Zone 2 in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #7 on Attachment 1 and GO TO step 4.1.7[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #7 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.20.

[H] VEO 2, set the LOW alarm back to 0.20.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #7 on Attachment 1 and GO TO step 4.1.7[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #7 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 0.40.

[P] VEO 2, set the HIGH alarm back to 0.40.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.8 Photohelic for Filter F4

[A] VEO 1, identify the location of the digital readout for the photohelic for Filter F4 on the indication panel.

[B] VEO 2, locate Filter F4 photohelic in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #8 on Attachment 1 and GO TO step 4.1.8[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #8 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.00.

[H] VEO 2, set the LOW alarm back to 0.00.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #8 on Attachment 1 and GO TO step 4.1.8[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #8 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 1.00.

[P] VEO 2, set the HIGH alarm back to 1.00.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.9 Photohelic for Valve V4

[A] VEO 1, identify the location of the digital readout for the photohelic for Valve V4 on the indication panel.

[B] VEO 2, locate Valve V4 photohelic in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #9 on Attachment 1 and GO TO step 4.1.9[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #9 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 1.00.

[H] VEO 2, set the LOW alarm back to 1.00.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #9 on Attachment 1 and GO TO step 4.1.9[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #9 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 1.50.

[P] VEO 2, set the HIGH alarm back to 1.50.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.1.10 Photohelic for HEPA 1

[A] VEO 1, identify the location of the digital readout for the photohelic for HEPA 1 on the indication panel.

[B] VEO 2, locate HEPA 1 photohelic in Zone 2 and locate the alarm set point knobs on the face of the photohelic.

[C] VEO 2, adjust the left knob LOW alarm set point on the face of the photohelic to at least 2 gauge increments above the current gauge reading.

[D] VEO 2, communicate to VEO 1 that the LOW alarm on the gauge has been adjusted.

[E] VEO 1, **IF** the white light on the indication panel is illuminated,
THEN check SAT in #10 on Attachment 1 and GO TO step 4.1.10[G].

[F] VEO 1, **IF** the white light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #10 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to set the LOW alarm back to 0.00.

[H] VEO 2, set the LOW alarm back to 0.00.

[I] VEO 2, communicate to VEO 1 that the LOW alarm has been reset.

[J] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

[K] VEO 2, adjust the right knob HIGH alarm set point on the face of the photohelic to at least 2 gauge increments below the current gauge reading.

[L] VEO 2, communicate to VEO 1 that the HIGH alarm on the gauge has been adjusted.

[M] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #10 on Attachment 1 and GO TO step 4.1.10[O].

[N] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #10 on Attachment 1.

[O] VEO 1, communicate to VEO 2 that the verification of the HIGH alarm set point has been validated, **AND** to set the HIGH alarm back to 1.00.

[P] VEO 2, set the HIGH alarm back to 1.00.

[Q] VEO 2, communicate to VEO 1 that the HIGH alarm has been reset.

[R] VEO 1 communicate to VEO 2 that the indication panel is clear of alarms.

4.2 Multiple Transducer Alarm Signal to the Indication Panel Test

4.2.1 Zone 3A IN Transducer

[A] VEO 1, identify the location of the digital readout for the Transducer for 3A IN on the indication panel.

[B] VEO 2, locate Zone 3A IN Transducer located in Zone 3A.

[C] VEO 2, using a piece of paper, block the air flow through the sensor.

[D] VEO 2, communicate to VEO 1 that the airflow through the sensor on the gauge has been blocked.

[E] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #11 on Attachment 1 and GO TO step 4.2.1[G].

[F] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #11 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the alarm light has been validated, **AND** to remove the paper that is blocking the airflow through the sensor.

[H] VEO 2, communicate to VEO 1 that the paper has been removed.

[I] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.2.2 Zone 3B IN Transducer

[A] VEO 1, identify the location of the digital readout for the Transducer for 3B IN on the indication panel.

[B] VEO 2, locate Zone 3B IN Transducer located in Zone 3B.

[C] VEO 2, using a piece of paper, block the air flow through the sensor.

[D] VEO 2, communicate to VEO 1 that the airflow through the sensor on the gauge has been blocked.

[E] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #12 on Attachment 1 and GO TO step 4.2.2 [G].

[F] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #12 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the alarm light has been validated, **AND** to remove the paper that is blocking the airflow through the sensor.

[H] VEO 2, communicate to VEO 1 that the paper has been removed.

[I] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.2.3 Zone 2A IN Transducer

[A] VEO 1, identify the location of the digital readout for the Transducer for 2A IN on the indication panel.

[B] VEO 2, locate Zone 2A IN Transducer located in Zone 2.

[C] VEO 2, using a piece of paper, block the air flow through the sensor.

[D] VEO 2, communicate to VEO 1 that the airflow through the sensor on the gauge has been blocked.

[E] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #13 on Attachment 1 and GO TO step 4.2.3 [G].

[F] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #13 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the alarm light has been validated, **AND** to remove the paper that is blocking the airflow through the sensor.

[H] VEO 2, communicate to VEO 1 that the paper has been removed.

[I] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.2.4 Zone 2B IN Transducer

[A] VEO 1, identify the location of the digital readout for the Transducer for 2B IN on the indication panel.

[B] VEO 2, locate Zone 2B IN Transducer located in Zone 2 .

[C] VEO 2, using a piece of paper, block the air flow through the sensor.

[D] VEO 2, communicate to VEO 1 that the airflow through the sensor on the gauge has been blocked.

[E] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #14 on Attachment 1 and GO TO step 4.2.4 [G].

[F] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #14 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm light has been validated, **AND** it is okay to remove the paper that is blocking the airflow through the sensor.

[H] VEO 2, communicate to VEO 1 that the paper has been removed.

[I] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

NOTE

The airflow that is measured through glovebox OUT is controlled through Valve V4. Therefore, some adjustment from Valve V4 will have to be made in order for the LOW alarm light to be illuminated.

4.2.5 Glovebox OUT Transducer

[A] VEO 1, identify the location of the digital readout for the transducer for Glovebox OUT on the indication panel.

[B] VEO 2, locate Valve V4 located in Zone 2.

[C] VEO 2, using Valve V4, restrict the airflow through the sensor for Glovebox OUT.

[D] VEO 2, communicate to VEO 1 that the airflow through the sensor on the gauge has been restricted and the yellow light should be illuminated.

[E] VEO 1, **IF** the yellow light on the indication panel is illuminated,
THEN check SAT in #15 on Attachment 1 and GO TO step 4.2.5 [G].

[F] VEO 1, **IF** the yellow light on the indication panel DOES **NOT** illuminate,
THEN check UNSAT in #15 on Attachment 1.

[G] VEO 1, communicate to VEO 2 that the verification of the LOW alarm set point has been validated, **AND** to reset Valve V4 to allow airflow through the sensor.

[H] VEO 2, communicate to VEO 1 that Valve V4 has been reset.

[I] VEO 1, communicate to VEO 2 that the indication panel is clear of alarms.

4.2.6 VEO1, print name, sign and date on #17 in Attachment 1.

4.2.7 VEO2, print name, sign and date on #18 in Attachment 1.

4.3 VEO2, submit Attachment 1 to Facility Records Custodian.

4.4 Facility Records Custodian, transmit Attachment 1 in accordance with CCP-QP-008.

5.0 RECORDS

5.1 Records generated during the performance of this procedure are maintained as QA records in accordance with CCP-QP-008. The records are the following:

5.1.1 QA/Nonpermanent

[A] Attachment 1, MOVER Indication Panel Checklist

Controlled
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ATTACHMENT 1 – MOVER Indication Panel Checklist

1. Date _____ Time _____

	Set point		Lights on the Indication Panel	
Ventilation Gauge Readouts (DP Readings) Photohelics	**Low**	**High**	**White Light – LOW Alarm**	**Yellow Light – HIGH Alarm**
2. Zone 3A to Outside	0.10	0.70	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
3. Zone 3B to Outside	0.10	0.70	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
4. Zone 2 to Zone 3A	0.05	0.70	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
5. Zone 2 to Zone 3B	0.10	0.70	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
6. Zone 2 to Outside	0.20	1.00	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
7. Zone 1 (glovebox) to Zone 2	0.20	0.40	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
8. Filter F4	0.00	1.00	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
9. Valve V4	1.00	1.50	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
10. HEPA 1	0.00	1.00	SAT ☐ UNSAT ☐ NA ☐	SAT ☐ UNSAT ☐ NA ☐
Transducer Readings (airflow into the MOVER)	**Low Set point**		**Yellow Light – Low Alarm**	
11. Air flow through Zone 3A IN	50		SAT ☐ UNSAT ☐ NA ☐	
12. Air flow through Zone 3B IN	50		SAT ☐ UNSAT ☐ NA ☐	
13. Air flow through Zone 2A IN	125		SAT ☐ UNSAT ☐ NA ☐	
14. Air flow through Zone 2B IN	125		SAT ☐ UNSAT ☐ NA ☐	
15. Air flow through Valve V4 Glovebox OUT	278		SAT ☐ UNSAT ☐ NA ☐	

16. COMMENTS:

NOTE: NA (non applicable) will be used for those instruments that are out of service or not in use. If all of the above actions are **IN COMPLIANCE**, proceed with MOVER operations. If any of the above actions are **NOT IN COMPLIANCE**, **STOP WORK**, notify the TS, and make notifications in accordance with site policies and/or Statement of Work.

17. VEO 1, Print name: _____ Sign _____ Date _____

18. VEO 2, Print name: _____ Sign _____ Date _____