

WP 04-AD3027

Revision 4

TSR Violation Response and Recovery

Management Control Procedure

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APPROVED FOR USE

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INTRODUCTION

This procedure establishes the response and recovery requirements for violations of Technical Safety Requirements (TSRs) as described in DOE/WIPP-07-3373, Waste Isolation Pilot Plant Technical Safety Requirements.

Violations of a TSR occur as a result of the following criteria:

1. Failure to complete REQUIRED ACTIONS within the specified completion time. Entrance into REQUIRED ACTIONS is made through the following pathways:
 - a. Limiting Conditions of Operation (LCO) requirement not met, or
 - b. Surveillance Requirement (SR) not met.
2. Failure to perform a SR within the required FREQUENCY.
3. Failure to comply with a directed action SPECIFIC ADMINISTRATIVE CONTROL (SAC) statement.
4. Programmatic breakdown of a Programmatic Administrative Control (PAC) (or Safety Management Program [SMP] by reference).

A programmatic breakdown is determined by tracking and trending noncompliances and deviations. Failure to maintain all aspects of one of these programs will not result in a violation unless the failure is significant enough to render the hazards and accident analysis assumptions invalid. Programmatic breakdown of a PAC (or SMP by reference) could also occur with a single event if the basis of the hazards and accident analysis is invalidated, or if the results of the event are significant.

For example, if a credited design feature of a safety significant or safety class structure or component is invalidated by unauthorized work or design change, a programmatic violation has likely occurred.

REFERENCES

BASELINE DOCUMENTS

- DOE/WIPP-07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis*
- WP 02-AR3001, Unreviewed Safety Question Determination
- WP 13-1, Washington TRU Solutions LLC Quality Assurance Program Description

REFERENCED DOCUMENTS

- DOE/WIPP-07-3373, *Waste Isolation Pilot Plant Technical Safety Requirements*
- WP 04-AD3001, Facility Mode Compliance
- WP 12-ES3918, Reporting Occurrences in Accordance with DOE Order 231.1A
- WP 12-NS1002, Safety Basis Implementation and Maintenance

PERFORMANCE

NOTE

Emergency actions that depart from an approved TSR may be taken when no actions consistent with the TSR are IMMEDIATELY apparent, and when these actions are needed to protect workers, the public, or the environment from imminent and significant harm. Such actions must be approved by a person in authority as designated in the TSR. This authority is delegated to the Facility Shift Manager (FSM)

In an emergency, if a situation develops that is not addressed by the TSR, the FSM SHALL take actions to correct or mitigate the situation. Also, the FSM may take actions that depart from a requirement in the TSRs provided that:

1. An emergency situation exists;
 2. These actions are needed IMMEDIATELY to protect the workers, public and environment from imminent and significant harm, and
 3. No action consistent with the TSR can provide adequate or equivalent protection.
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1.0 TSR VIOLATION FOR LCO OR SR NOT MET

- 1.1 **IF** a TSR violation is suspected to exist because a SR is not performed within the required frequency.

OR

IF the REQUIRED ACTIONS of an LCO are **NOT** met,
THEN proceed as follows:

- 1.1.1 Person discovering OR observing the TSR violation, immediately notify the FSM via the Central Monitoring Room (CMR).
- 1.1.2 FSM investigate the suspected TSR violation.

1.1.3 **IF** the REQUIRED ACTIONS of LCO are **NOT** met,
THEN FSM, perform the following:

[A] Place the affected Process Area(s) in a safe condition by performing the applicable LCO REQUIRED ACTIONS as described in DOE/WIPP-07-3373,

AND

[B] Identify the TSR violation in the FSM and/or CMR log book,

AND

[C] Notify the Manager, Site Operations and Disposal or designee,

AND

[D] Notify the U.S. Department of Energy (DOE) by informing the Facility Representative (FR),

AND

[E] Notify the Facility Manager Designee (FMD) for reporting in accordance with WP 12-ES3918,

AND

[F] **GO TO** Section 4.0 of this procedure.

NOTE

Surveillances do not have to be performed on INOPERABLE equipment as Stated in SR 4.0.1.

1.1.4 **IF** a SR frequency is **NOT** met,
THEN FSM perform the following:

[A] Declare the system or component INOPERABLE as required by SR 4.0.3,

AND

[B] Identify the TSR violation in the FSM and CMR log book,

AND

[C] Notify the Manager, Site Operations and Disposal or designee,

AND

- [D] Notify the U.S. Department of Energy (DOE) by informing the FR,

AND

- [E] Notify the FMD for reporting in accordance with WP 12-ES3918,

AND

- [F] Perform the required SR within 24 hours or up to the limit of the specified frequency, whichever is less, prior to entering the required LCO action(s) to permit completion of the SR and thus allow recovery in accordance with the required actions of the applicable LCO. The delay period commences at the time it is determined that a surveillance has not been performed. (Refer to DOE/WIPP-07-3373, SR 4.0.3)

- 1.1.5 **IF** the SR acceptance criteria is successfully met, **THEN**, FSM, perform the following:

- [A] Document completion of the SR on the appropriate EA04AD3001-SR form in accordance with WP 04-AD3001,

AND

- [B] **GO TO** Section 4.0 of this document.

- 1.1.6 **IF** the SR acceptance criteria is **NOT** successfully met, **THEN** enter the REQUIRED ACTIONS of the applicable LCO,

AND

- [A] Notify the Manager, Site Operations and Disposal or designee,

AND

- [B] Notify the DOE and the FMD,

AND

- [C] **GO TO** Section 4.0 of this document.

2.0 SAC VIOLATION

2.1 **IF** a SAC violation is suspected to exist,
THEN proceed as follows:

2.1.1 Person discovering **OR** observing the SAC violation, immediately notify the FSM via the CMR.

2.1.2 FSM, investigate the suspected SAC violation.

2.1.3 **IF** a SAC violation is confirmed,
THEN FSM perform the following:

[A] Place the affected Process Area(s) in SAFE CONFIGURATION as described in DOE/WIPP-07-3373,

AND

[B] Identify the TSR violation in the FSM and/or CMR log book,

AND

[C] Notify the Manager, Site Operations and Disposal or designee,

AND

[D] Notify the DOE by informing the FR,

AND

[E] Notify the FMD for reporting in accordance with WP 12-ES3918.

AND

[F] **GO TO** Section 4.0 of this document.

3.0 PAC VIOLATION

NOTE

For the purposes of this procedure, the Administrative Controls (ACs) identified in Section 5.0 of DOE/WIPP 07-3373 will be treated as PROGRAMMATIC ACs (PACs).

- 3.1 **IF** a PAC violation is suspected to exist,
THEN proceed as follows:
- 3.1.1 Person identifying suspect PAC violation, immediately notify the Manager Site Operations and Disposal or the Chief Nuclear Engineer and provide information supporting the suspected PAC violation. (Information may include, but is not limited to, WIPP Forms, trending, training records, and rounds sheets)
- 3.1.2 Manager Site Operations and Disposal or Chief Nuclear Engineer, convene a meeting of the Nuclear Review Board (NRB) with the appropriate attendees.
- 3.1.3 NRB, perform an evaluation of the provided information to determine whether or not a PAC violation has occurred and whether affected operations should be suspended.
- 3.1.4 **IF** the NRB determines that a PAC violation did not occur,
THEN perform the following:
- Document the results in the NRB meeting minutes.
- 3.1.5 **IF** the NRB determines that a PAC violation did occur,
THEN NRB perform the following:
- Determine whether affected operations should be suspended.
 - Determine whether a RESPONSE PLAN should be generated.
 - Document the results in the NRB meeting minutes.
 - Notify the FSM including instructions to suspend affected operations, if applicable.
 - Notify the DOE by informing the FR,
 - Notify the FMD for reporting in accordance with WP 12-ES3918.

3.1.6 **GO TO** Section 4.0 of this document.

4.0 **RESTART AFTER TSR VIOLATION OR CONDITIONS REQUIRING A RESPONSE PLAN**

NOTE

A RESPONSE PLAN is required for the following conditions:

- A liquid-fueled WASTE HANDLING EQUIPMENT becomes disabled in the VEHICLE EXCLUSION ZONE and needs to be repaired in-place.
 - Noncompliant WASTE containers are identified.
 - Conditions outside the TSRs exist (i.e., Emergency Actions or Potentially Inadequate Safety Analysis).
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4.1 **IF** conditions exist such that emergency actions outside the TSRs were taken,
THEN Manager Site Operations and Disposal/Nuclear Safety generate a RESPONSE PLAN as required by Section 1.8 of DOE/WIPP-07-3373 and submit it to DOE.

4.1.1 After NRB and DOE Approval of a RESPONSE PLAN, implement any compensatory measures or changes to the TSRs identified in the RESPONSE PLAN, in accordance with WP 12-NS1002.

4.2 **IF** a missed SR has been performed satisfactorily per DOE/WIPP-07-3373, SR 4.0.3,
THEN Manager Site Operations and Disposal perform the following:

4.2.1 Notify the FSM that operations in accordance with WP 04-AD3001 can resume.

4.2.2 Assign a team of individuals to complete a root cause analysis in accordance with Section 1.6, *TSR Violations*, of DOE/WIPP-07-3373.

4.2.3 Develop a corrective action plan to address causal factors and apparent causes in accordance with Section 1.6 of DOE/WIPP-07-3373.

4.3 **IF** a missed SR did not meet its acceptance criteria,
THEN Manager Site Operations and Disposal perform the following:

4.3.1 Assign a team of individuals to complete a root cause analysis in accordance with Section 1.6 of DOE/WIPP-07-3373.

- 4.3.2 Develop a corrective action plan to address causal factors and apparent causes in accordance with Section 1.6 of DOE/WIPP-07-3373.
- 4.4 **IF** the REQUIRED ACTIONS of an LCO (entered as a result of failure to meet an SR or LCO Action completion time) are completed satisfactorily, **THEN** Manager Site Operations and Disposal perform the following:
 - 4.4.1 Notify the FSM that operations in accordance with WP 04-AD3001 can resume.
 - 4.4.2 Assign a team of individuals to complete a root cause analysis in accordance with Section 1.6 of DOE/WIPP-07-3373.
 - 4.4.3 Develop a corrective action plan to address causal factors and apparent causes in accordance with Section 1.6 of DOE/WIPP-07-3373.
- 4.5 **IF** the SAC requirements have been re-established following a declared SAC violation, **THEN** Manager Site Operations and Disposal perform the following:
 - 4.5.1 Notify the FSM that operations in accordance with WP 04-AD3001 can resume.
 - 4.5.2 Assign a team of individuals to complete a root cause analysis in accordance with Section 1.6 of DOE/WIPP-07-3373.
 - 4.5.3 Develop a corrective action plan to address causal factors and apparent causes in accordance with Section 1.6 of DOE/WIPP-07-3373.
- 4.6 **IF** a PAC violation has been declared, **THEN** Manager Site Operations and Disposal perform the following:
 - 4.6.1 Notify the FSM when operations can resume
 - 4.6.2 Assign a team of individuals to complete a root cause analysis in accordance with Section 1.6 of DOE/WIPP-07-3373.
 - 4.6.3 Develop a corrective action plan to address causal factors and apparent causes in accordance with Section 1.6 of DOE/WIPP-07-3373.

- 4.7 **IF** the NRB determines that a RESPONSE PLAN is necessary, **THEN** Manager Site Operations and Disposal/Nuclear Safety generate the RESPONSE PLAN,

AND

Convene the NRB to approve the RESPONSE PLAN

AND

After NRB approval of the RESPONSE PLAN, submit it to DOE for approval.

- 4.8 After DOE approval of a RESPONSE PLAN, implement any compensatory measures or changes to the TSRs identified in the RESPONSE PLAN, in accordance with WP 12-NS1002.