

Lock and Tag Reporting

MSC-PRO-18090

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Approved for Public Release;
Further Dissemination Unlimited

Lock and Tag Reporting

1.0 PURPOSE

This procedure outlines the Mission Support Alliance (MSA) process for consistency in reporting hazardous energy control lock and tag errors. This document establishes specific criteria for reporting lock and tag occurrences across MSA projects and facilities.

2.0 SCOPE

This Level 2 Management Control procedure applies to MSA management personnel that evaluate errors for reportability under [MSC-PRO-060](#), *Reporting Occurrences and Processing Operations Information*, or [MSC-PRO-052](#), *Corrective Action Management*.

Project/Facility/Functional Area (P/F/F) management shall ensure that hazardous energy control (HEC) errors considered to be technical in nature are processed through an investigation, causal analysis, and corrective action process consistent with that specified for a Significance Category 3 reportable occurrence (see MSC-PRO-060, *Reporting Occurrences and Processing Operations Information*, Appendix D).

A technical error is one that if subsequent controls (i.e., technical review, installation, verification, safe condition check, safe-to-work check) inherent to the hazardous energy control process were not performed, the condition could result in unidentified hazardous energy being present in the work location, thus creating a situation that has the potential to cause physical injury or harm. For example, if a verifier signs the tagout authorization form, but does not sign the Danger-Do Not Operate (DDNO) tag, then there is no evidence that the tag was actually field-verified. This is a *technical* error because there is a potential safety impact if the component position was not properly verified. If a Controlling Organization (CO) worker installs and signs the DDNO tag, but forgets to sign the tagout authorization form, it is an *administrative* error because the tag can be verified to be physically installed.

3.0 IMPLEMENTATION

This procedure is effective upon publication.

4.0 REQUIREMENTS

NOTE: For the tables in this section under the requirement "type" column, "V" means verbatim and "I" means interpreted.

#	REQUIREMENT	TYPE V or I	SOURCE
1.	Establish consistent criteria for reporting lock and tag issues among the different facilities.	I	10 CFR 851

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5.0 PROCESS

5.1 General Overview

1. The information in [Table 1](#) categorizes specific lock and tag errors as technical or administrative. If a particular error is not identified, use the criteria discussed in Section 2.0 to make a determination. Some cases identified in the table relate to a missing signature. If the facility manager determines that the work was done correctly and in the right sequence, but the responsible person forgot to sign the Tagout Authorization Form (TAF), then the facility manager can determine the problem to be administrative in nature.
 - All technical errors should be evaluated for reportability under [MSC-PRO-060](#). Technical errors that are evaluated and do *not* meet the criteria of MSC-PRO-060 are to be processed through [MSC-PRO-052](#) on an Issue Identification Form (Site Form [A-6002-898](#)).
 - Administrative errors are to be processed through MSC-PRO-052 on an Issue Identification Form (Site Form A-6002-898).
 - Operational Assurance will monitor the trends as a minimum on a quarterly basis.
2. Errors are generally *not* reportable if they are found prior to authorizing work to begin. For these criteria, work is considered to be authorized to begin when the associated work document has been released for work (safe condition and/or safe-to-work) checks have been completed. There may be instances when hazardous energy is found unexpectedly that, when investigated, prove that the lock and tag process failed. These should be evaluated for reporting under the MSC-PRO-060 criteria and evaluated in accordance with MSC-PRO-052.

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Facility Manager	a.	<p>Evaluate the error per the MSC-PRO-060 reporting criteria.</p> <ul style="list-style-type: none"> • If the error is reportable, then continue on through MSC-PRO-060. • If the error has initiated a critique per MSC-PRO-058, <i>Event/Near Miss Investigation and Critique</i>, and a <i>Critique Notification Report Form</i>, BD-6001-320 is completed and processed; it is NOT required to document the error on an <i>Issue Identification Form</i>. • If the error does <i>not</i> meet the MSC-PRO-060 reporting criteria, then continue.
	b.	Determine if the error is administrative or technical per Table 1 .

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
	c.	Document the error on an <i>Issue Identification Form</i> (A-6002-898) and process per MSC-PRO-052 .
	d.	Though not considered to be a reportable error, document when hazardous energy is discovered during the safe-to-work check on an Issue Identification Form and process per MSC-PRO-052.

NOTE: *Process hazardous energy control technical errors via a critique or fact-finding meeting, apparent cause analysis (at a minimum), and completion of an Issue Identification Form (IIF) for corrective action documentation per MSC-PRO-052.*

6.0 FORMS

Issue Identification Form, Site Form [A-6002-898](#)
Critique Notification Report Form, [BD-6001-320](#)

7.0 RECORD IDENTIFICATION

Records Capture Table

Name of Document	Submittal Responsibility	Retention Responsibility
<i>Issue Identification Form</i>	Facility Manager In accordance with MSC-PRO-052	CAM Organization
<i>Critique Notification Report Form</i>	Facility Manager In accordance with MSC-PRO-058, <i>Event/Near Miss Investigation and Critique</i>	CAM Organization

8.0 REFERENCES

8.1 Source References

10 CFR 851, Worker Safety and Health Program

8.2 Working References

CRD M 231.1-2 (Supplemented Rev 7), *Occurrence Reporting and Processing of Operations Information*

[MSC-PRO-052](#), *Corrective Action Management*

[MSC-PRO-058](#), *Event/Near Miss Investigation and Critique Process*

[MSC-PRO-060](#), *Reporting Occurrences and Processing Operations Information*

[MSC-RD-210](#), *Records Management Program*

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TABLE 1
Error Type Determination

TAF Block #	Tech or Admin	Potential Errors	Basis
1. Lockout/ Tagout No.	Admin	Assigned but not completed on the Tagout Authorization Form (TAF).	Does not affect the technical adequacy of the lock and tag.
2. Page No.	Admin	Not completed on the TAF.	Does not affect the technical adequacy of the lock and tag.
3. System	Admin	Not completed on the TAF.	Does not affect the technical adequacy of the lock and tag.
4. Controlled Drawings, ECNs, Documents	Tech	Existing data not used to help establish isolating boundary.	Incorrect isolation boundary established.
5. Lockbox Information	Admin	Not entered, or information entered is not correct.	Does not affect the technical adequacy of the lock and tag.
6. Work Authorization/ Documentation	Admin	Not entered, or information entered is not correct.	Does not affect the technical adequacy of the lock and tag.
7. Applicable Tag Nos.	Tech	Tags not listed or incorrectly listed.	The list of tags defines the boundary.
8. Reason for Lockout/Tagout	Admin	Not completed on TAF.	This is a repeat of the work package/procedure information. The information is available to the worker.
9. Personnel Hazards (Mandatory for Danger Tags)	Admin	Not completed on TAF.	This is a repeat of the work package/procedure information. The information is available to the worker.
10. Lockout/Tagout Preparer	Admin	Not signed or Dated.	Does not affect the technical adequacy of the lock and tag.
11. Technical Review	Tech	Not signed or Dated.	Not verified as having been completed, or performed as "independent".
12. Lockout/Tagout Work Completed	Tech	Not Signed or Dated.	If such non-action results in existence of an unsafe condition.
13. Tag Nos.	Admin	Assigned but not completed on the TAF.	Does not affect the technical adequacy of the lock and tag.

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TAF Block #	Tech or Admin	Potential Errors	Basis
14. Special Instructions	Tech	Not completed.	Special instructions were not communicated, which could lead to an injury-producing event.
15. Reason for Partial Clearance /Addition of Tags	Tech	Not completed when a partial clearance is required; added tags not identified.	A partial clearance or adding tags changes the safe condition boundary. This is a technical error if the boundary is incorrect. It is an administrative error if the reason for the clearance is not noted on the TAF.
16. Surveillance Record	Tech or Admin	Surveillance not completed, or initialed as complete.	Could have an adverse impact on the established boundary for the tagout if tags are hanging for a long time and some have been destroyed or fallen off. However, likely does not affect the technical adequacy of the lock and tag.
17. Lockout/ Tagout Number	Admin	Not re-entered from Block 1.	Does not affect the technical adequacy of the lock and tag.
18. Page No.	Admin	Not completed on the TAF.	Does not affect the technical adequacy of the lock and tag.
19. Tag Nos.	Admin	Assigned but not completed on the TAF.	Does not affect the technical adequacy of the lock and tag.
20. Component Tagged	Tech	Incorrect component identified.	Identification of the correct component is vital to personnel safety.
21. Component Location	Tech	Location not listed, or listed on TAF incorrectly.	There are facilities that have confusing component identifications that listing the wrong location could have the installer hang the tag in the wrong location. If the incorrect location has caused a potential safety concern, then it is a technical error.
22. Lock No.	Admin	No lock number listed.	Does not affect the technical adequacy of the lock and tag.

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TAF Block #	Tech or Admin	Potential Errors	Basis
23. Required Position/ Condition	Tech	Position not specified, or specified incorrectly.	Technical error that has the potential to cause injury. (Example: a valve in the OPEN position instead of the CLOSED position.) Administrative error if the difference is in the terminology but the position specified would result in the same condition. (Example: an electrical breaker can be OPEN or OFF, but both result in the system being de-energized.)
24. Authorized by	Tech or Admin	Not signed or dated.	This signature verifies that the facility conditions support hanging the tags. If the tags are hung without the facility in the proper mode or condition, then there may be safety impacts. If the tags have been signed and the authorizer forgot to sign the TAF, then the intent is clear and it is an admin error.
25. Installed by	Tech or Admin	Installed on incorrect component; or installed on correct component, but component incorrectly positioned.	Potential for injury or equipment damage (Tech).
		Signatures missing	If there is no signature on the TAF, but the tag is signed, it implies that the person made the effort to install the tag but forgot to sign the TAF; or if the TAF is signed, but an unsigned tag is hanging on the proper component (Admin).
26. Verified by	Tech	Installed on incorrect component.	Potential for injury or equipment damage.
	Tech	Installed on correct component, but component incorrectly positioned.	Potential for injury or equipment damage.

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TAF Block #	Tech or Admin	Potential Errors	Basis
	Admin	No signature on TAF, but tag is signed.	Since the tag is signed, it implies that the person made the effort to verify the tag but forgot to sign the TAF.
	Tech	No signature on tag, but TAF is signed.	Since the tag is not signed, there is no indication that the person verified the tag.
	Tech	No signatures on tag or TAF.	No indication that the tag was verified.
27. Safe Condition Check by	Tech	Not signed.	No verification that the check was completed prior to performing the work.
	Tech	Check not done or done inadequately.	No validation of the safe work boundary.
	Tech	Not dated.	No verification that the check was completed prior to performing the work.
28. Removal/ Approval	Tech	No signature and tags removed without approval	Tags were removed without any approval. Has the potential to injure someone if the tags were removed prematurely.
29. Restoration Position/ Condition	Tech	Component not repositioned per instructions.	If component was left in a non-restored position, the facility does not have configuration control.
	Tech/ Admin	No position specified.	If component was left in an unknown position, the facility does not have configuration control. It may or may not have an impact to the facility.
30. Removed by	Admin	No signature.	As long as the removal was authorized, then no signature here is an Admin error.
31. Tag Nos.	Admin	Assigned but not completed on the TAF.	Does not affect the technical adequacy of the lock and tag.
32. Safe Condition Check Instructions	Tech	Not completed, or instructions provided were inaccurate.	Special instructions were not communicated, which could lead to an injury-producing event.

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Other possible errors not directly associated with the TAF:

Tech or Admin	Potential Errors	Basis
Tech	A worker is "hit" by hazardous energy.	Some aspect of the process has failed.
Admin	A block is initialed instead of signed.	The step required by the form was completed so there are not any technical issues that could affect the safety of the worker.
Admin /Tech	8 criteria checklist not used	Admin. if lock was authorized and the correct isolation was used. Technical if the checklist was not used, the work was not authorized by the controlling organization or the wrong isolation point was used.
Admin	Paperwork errors that have no bearing on the technical adequacy of the tagout.	No technical implications, just good work practice.
Tech	Locks placed on wrong lockbox.	Locks need to be on the right box to protect the worker from tags being removed on the system that he/she is working on.
Tech	Authorized Worker (AW) lockout/tagout conducted without controlling org authorization.	Violation of the procedure that could result in injury or loss of configuration control of the facility.
Tech	AW lockout/tagout conducted differently than directed/ authorized by the controlling org.	Violation of the procedure that could result in injury or loss of configuration control of the facility.
Tech	AW walkdown not conducted.	Violation of procedure that could result in injury.
Tech	AW lock not used.	Violation of procedure that could result in injury.
Tech	AW safe-to-work - check not conducted or conducted inadequately.	Violation of procedure that could result in injury.
Tech/ Admin	Locking device is discovered to be inadequate or has let go.	If the locking device is installed incorrectly and does not provide protection to the worker, then this is a technical error. If the device was installed correctly but over time has become less than adequate, then it is an administrative error.
Tech	DDNO Tags are lifted and reinstalled	Safe boundary condition compromised.
Tech	AW overlock/overtag of EU Hold-Off Tag	CO is responsible for overlock/overtag of the electrical service, prior to AW.
Tech	Justification not obtained for assignment of a Primary AW.	Express justification required for the exception to retain program control for the AW.

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Tech or Admin	Potential Errors	Basis
Tech	Justification not obtained for adding work packages to a previously installed lock and tag.	Express justification required for the exception to retain isolation boundary control.
Tech	Outside contractor performs lock and tag without direct CO interface and oversight.	Configuration control may be compromised; contractor AW who infrequently performs lock and tag lacks practiced skill.

NOTE: These items should be considered for reportability per [MSC-PRO-060](#) and [MSC-PRO-052](#), for procedure non-compliance.