Best Practice Title: Reporting Programmatic And Repetitive Noncompliances in NTS and SSIMS

Facility: The guidance contained in this document is based upon philosophies used at multiple sites across the DOE complex.

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Brief Description of Best Practice: This document provides guidance in judging if an identified Worker Safety & Health, Nuclear Safety and/or Classified Information Security noncompliance, or series of noncompliances, is reportable in NTS or SSIMS as either programmatic or repetitive. It was developed collaboratively by members of the EFCOG Safety Working Group, Regulatory and Enforcement Subgroup (SWG-RE) and the DOE Office of Enforcement.

Why the best practice was used: Most Department of Energy (DOE) Noncompliance Tracking System (NTS) and Safeguards and Security Information Management System (SSIMS) reporting criteria are easy to interpret because they are tied to specific occurrence or security reporting criteria. However, there are certain reporting criteria that are much more difficult to interpret. Programmatic and repetitive noncompliances are two of these criteria. The "programmatic" criterion is very non-prescriptive and as such subject to varying interpretation across the complex as to what constitutes a "broad management or process control problem." In contrast, the "repetitive" reporting criterion is very restrictive as written (two or more similar noncompliances), and a literal interpretation could easily result in over reporting of low-level issues. The "repetitive" criterion requires contractors to make a subjective reporting decision based upon frequency and significance of the noncompliance. The bottom line is that both programmatic and repetitive noncompliances rely a great deal on judgment to determine if an NTS or SSIMS report should be issued.

What are the benefits of the best practice: It provides guidance for judging whether a noncompliance(s) is programmatic or repetitive and thus reportable. It includes a breakdown of the reporting criteria and identifies key considerations in determining reportability. It further provides a diversified set of examples of actual events and issues were reported as programmatic or repetitive in both NTS and SIMMS for use as reference material in judging reportability.

What problems/issues were associated with the best practice: The Contractor Community repeatedly expressed difficulty in understanding the programmatic and repetitive reporting criteria and judging NTS and SIMMS reportability which resulted in the development of this document. The use of the guidance does not make this any less of a judgment call so it is still subject to varying interpretations.

How the success of the Best Practice was measured: This guidance document is new and so it does not have a history performance with which to evaluate its success or failure. This guidance document was developed over a two year period during which it was vetted through the EFCOG Community and the DOE Office of Enforcement. A great deal of in input was received and incorporated and has resulted in guidance document that portrays a consensus of opinions including that if the DOE Office of Enforcement.

Description of process experience using the Best Practice: This guidance document is new and so it does not have a history of process experience to describe. However the philosophies it contains is a compilation of processes used successfully at multiple sites around the DOE complex.

Programmatic or repetitive noncompliances typically represent inherent weakness in a program causing significant undesired safety outcomes. By recognizing when a programmatic or repetitive noncompliance exists, it is expected that a contractor will provide the level of attention needed to determine and address the underlying cause(s) with corrective actions that will be effective in preventing recurrence.

EFCOG Guidance Document:

Reporting Programmatic
And
Repetitive Noncompliances in NTS and SSIMS

Prepared by:
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Regulatory and Reporting Technical Subgroup
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I.   Introduction

Most Department of Energy (DOE) Noncompliance Tracking System (NTS) and Safeguards and Security Information Management System (SSIMS) reporting criteria are easy to interpret because they are tied to specific occurrence or security reporting criteria. Therefore, if the event/issue is a noncompliance or the cause of the event/issue is determined to be the result of a noncompliance with a Worker Safety & Health (WS&H), Nuclear Safety or Security regulation, it is automatically reportable in NTS or SIMMS. However, there are certain reporting criteria that are much more difficult to interpret. Programmatic and repetitive noncompliances are two of these criteria. A programmatic or repetitive noncompliance typically represents an inherent weakness in a program, process or procedure, or its implementation, causing a significant undesired outcome. It is important to recognize programmatic and repetitive noncompliances so that they receive the level of attention needed to determine and address the underlying cause(s) with corrective actions that will be effective in preventing recurrence.

The "programmatic" criterion is very non-prescriptive and as such subject to varying interpretation across the complex as to what constitutes a "broad management or process control problem." In contrast, the "repetitive" reporting criterion is very restrictive as written (two or more similar noncompliances), and a literal interpretation could easily result in over reporting of low-level issues. The "repetitive" criterion requires contractors to make a subjective reporting decision based upon frequency and significance of the noncompliance. The bottom line is that both programmatic and repetitive noncompliances rely a great deal on judgment to determine if an NTS or SSIMS report should be issued.

II.   Purpose

The purpose of this document is to provide guidance in judging if an identified noncompliance or series of noncompliances are symptomatic of an inherent weakness in a program, process, or procedure, or its implementation, and thus reportable in NTS or SSIMS as either programmatic or repetitive.

III.   Breaking Down the Reporting Criteria

To determine what is expected by these reporting criteria this guidance document will begin by breaking down the specific language in the criterion.

a. Programmatic

"A programmatic problem generally involves some weakness in administrative or management controls, or their implementation, to such a degree that a broader management or process control problem exists and requires broad corrective actions."

The DOE Enforcement Coordinator Handbook further clarifies this criterion with the following: "When management determines that a problem or series of events or conditions dictates the need for broad corrective actions to improve management or process controls, management has concluded that the problem is programmatic."

Breakdown:
- Weakness in administrative or management controls
- Broad management or process control problem exists
- Need for broad corrective actions.

b. Repetitive

"Two or more different events or conditions separated in time with comparable causes/circumstances and which involve substantially similar work activities, locations, equipment, or individuals where it would be reasonable to assume that the contractor's corrective actions for the first occurrence should have prevented the subsequent event/condition."

Breakdown:
- Two or more similar noncompliances
- Similar causes
- Implementation of the corrective actions was less than adequate and/or not effective in preventing recurrence.

IV. Analysis of Events and Issues

An effective causal analysis can provide the information necessary for determining if a condition constitutes a programmatic or repetitive noncompliance. Extent of Condition reviews are also very useful in determining if a noncompliance is recurring and if a broader systemic issue exists.

A **programmatic noncompliance** is one in which a process as prescribed or implemented has inherent weaknesses, causing an undesired result that takes the form of significant noncompliance. An isolated operator error would typically not constitute a programmatic deficiency. Some examples of noncompliances that would be considered programmatic include the following:

- Written procedures that do not meet regulatory requirements or are poorly written and difficult to follow

- Inadequate training and qualification specified for a specific task such that workers do not have the required skills, knowledge, and experience needed to effectively implement that task
- Less than adequate management emphasis on following procedures, e.g., production takes priority over procedures.

A programmatic noncompliance may be represented by a single deficient element of a program that causes a widespread and recurring noncompliance, or it may be represented by a breakdown in multiple elements of a program such that multiple different noncompliances are occurring. A programmatic noncompliance that is not corrected is likely to result in repetitive noncompliances.

A **repetitive noncompliance** is a condition in which the same or similar noncompliance continues to occur and is the result of a common or similar root cause suggesting a common solution. Causes that are sufficiently different such that they require different solutions should not be considered repetitive. When evaluating a potential repetitive noncompliance, it may be necessary to revisit the causal analysis (apparent or root) of the previous event(s) and confirm that it was thorough and looked deeply enough at the issue(s) to reasonably identify an appropriate solutions to the problem. If this is not the case, then corrective actions that have already been developed and implemented will likely not be effective in preventing recurrence.

If the cause(s) are similar and determined to be accurate, then the condition is most likely the result of corrective actions that were not effective in addressing the root cause(s), or implementation of the corrective actions was less than adequate. A graded approach should be used in determining if a repetitive noncompliance is reportable (see the key considerations detailed below). Also, consider the Occurrence Reporting and Processing System (ORPS) reporting criteria for reporting "Recurring "events. Contractor Enforcement Coordinators should work closely with their ORPS counterparts in evaluating recurring/repetitive events and should utilize the ORPS Recurring Events Criteria Worksheet to facilitate this evaluation. When ORPS recurring events are the result of noncompliances with Nuclear Safety and/or WS&H regulations, they should also be considered for reporting into NTS as repetitive and sometimes as programmatic noncompliances.

V.   Key Considerations in Determining Reportability

a. Programmatic
- Is the condition systemic/widespread?
- Is a weakness in a process control (procedure) or training and qualification causing a significant or systemic deficiency?
- Is a weakness in management control or oversight causing a significant or systemic deficiency?

b. Repetitive
- Has the same or similar noncompliant condition been repetitive or recurring?

- Is there a common or similar cause?
- Were corrective actions for previous event(s) effective?
- Are process controls in place and adequate (if not, also consider programmatic criteria)?
- Was an ORPS "R" report issued and does it involve a noncompliance?
- Apply a graded approach to avoid over reporting:

  - ✓ Consider time between occurrences - the longer the period of time between noncompliances, the less likely it is to be reportable
  - ✓ Consider failure rate - compare frequency of noncompliance to the number of opportunities for failure
  - ✓ Consider tolerance for failure - the more significant the consequence, the lower the tolerance.

VI. Examples

The following examples are not inclusive of all possible circumstances and conditions that may trip repetitive or programmatic reporting. They are intended to be used for comparison purposes. If Enforcement Coordinators are having difficulty judging reportability, they are encouraged to consult with other EFCOG members and counterparts or with DOE Office of Enforcement staff if considered necessary.

a. Programmatic

Example 1:

Noncompliance: A contamination event occurred that resulted in radioactive contamination on equipment, facilities, personnel, and vehicles, including a personal vehicle that was determined to have left the site. The event was reported in ORPS because contamination levels tripped ORPS criteria (10 x 10 CFR 835 Appendix D), but levels were below the NTS reporting threshold for contamination events (100 x 10 CFR 835 Appendix D). A causal analysis concluded that critical engineered and administrative controls to assure the proper use, vehicular movement, and configuration of sealed radioactive sources were not specified or applied.

Determination: Although the contamination levels did not trip NTS reporting, the less than adequate sealed source process controls, both engineered and administrative, indicated a **programmatic** breakdown with the Sealed Source Control Program and was reported in NTS.

Example 2:

Noncompliances: An employee identified two noncompliances that had existed for several years: 1) employees had not consistently used retrieval systems or methods when entering confined spaces that require the use of retrieval equipment for a non-entry rescue, and 2) employees had not been trained to properly perform rescue duties, including the use of rescue equipment.

Determination: A repetitive noncompliance was initially reported to NTS. A root cause analysis of the repetitive noncompliance determined that they were the result of deficiencies/noncompliances that existed with the prescribed confined space program and the reporting threshold was changed to **programmatic**.

Example 3:

Noncompliance: An internal effectiveness review of an Environment, Safety and Health (ESH) training program was completed and identified several areas of noncompliance with 10 CFR 851. The noncompliances included less than adequate processes for: approving workers for work not covered by procedure; authorizing work not covered by operating procedures; communicating changes in procedures and processes to workers; identifying authorized workers on site-specific forms; training managers and other staff responsible for ESH processes; and documenting qualification of Laser Operators.

Determination: The assessment identified process weaknesses in several different elements of the ESH Training Program that represented noncompliance with multiple 10 CFR 851 requirements. This condition was judged to be a **programmatic** breakdown and reported in NTS.

Example 4:

Noncompliance: An Electrical Authority Having Jurisdiction (AHJ) Program has been implemented at the Laboratory for several years with a significant number of employees trained as a Program Electrical AHJ, Building Electrical AHJ, or AHJ Field Representative. An internal assessment of this program was completed to verify effectiveness and compliance. The assessment included tours of work areas across the Laboratory and identified a significant amount of electrical equipment in service that was not approved by an AHJ or a Nationally Recognized Testing Laboratory (NRTL) in violation of 10 CFR 851, OSHA 1910.7, and NFPA 70E.

Determination: The causal analysis of this condition identified weaknesses in the Laboratory procedures for requesting AHJ inspections as well as weaknesses in communicating AHJ inspection requirements. In addition, the analysis noted that inspection for AHJ/NRTL approval is not consistently or rigorously evaluated as part of the Laboratory assessment program. The weaknesses in procedures, communications, and oversight, which resulted in a Laboratory-wide noncompliance issue, were judged to be a **programmatic** deficiency and reported in NTS.

Example 5:

Noncompliance: During a management assessment of the sites multiple waste streams it was determined there is a site-wide demonstrated failure to protect and control classified information and controlled unclassified information (CUI). This assessment, as well as incidents of security concern related to the protection and control of classified matter represents a noncompliance with 10 CFR 824 due to the failure to fully comply with applicable classified matter protection and control requirements.

Determination: The assessment determined that the preponderance of issues found represented a systemic issue, the result of human error. In most cases knowledge of fundamental security requirements existed, but the application and implementing of those requirements were lacking. Over the course of evaluating circumstances related to a significant classified information security incident, it was determined that certain information may not have been fully embedded in the security mindset. However, application of security fundamentals should instill a level of security sensitivity so that there is an abundance of caution with discussing, handling, transmitting, and disposing of information associated with classified or sensitive subject areas. This condition was judged to be a **programmatic** breakdown and reported in SSIMS.

b. **Repetitive:**

Example 1:

Noncompliances: During an assessment, the assessor found that the reporting for 20% (97 of 267) of the personnel air sampling results did not meet the requirement to report the results within ten working days after receipt. An assessment that had been conducted the year before was reviewed. It had identified that 41% (33 of 80 cases) of the personnel air sampling results did not meet the requirement to report the results within 10 working days after receipt. Corrective actions had been taken; i.e., the existing policy and process was communicated to field industrial hygienists and the timeliness was tracked, trended, and presented.

Determination: A review of the prescribed program found it to be compliant, but not effectively implemented; therefore, the noncompliance was determined to be reportable in NTS under the **repetitive** reporting threshold.

Example 2:

Noncompliance: A contractor experienced and reported four occurrences of inadequate fall protection. None of the occurrences individually met the threshold for reporting to NTS. The occurrences involved both employees and subcontractors and each apparent cause analysis pointed to workers not following fall protection

requirements. A root cause analysis and Extent of Condition review of the recurring occurrences was conducted.

Determination: The Extent of Condition evaluation determined that the noncompliances existed only within one organization. The root cause analysis identified that the prescribed fall protection program was compliant but the organization's implementation deficient. The noncompliance was determined to reportable in NTS under the **repetitive** reporting threshold.

Example 3:

Noncompliance: An ORPS "R" report was issued based on five similar events over a one-year period related to electrical safety. Each of the events involved personnel contacting, or having the potential to contact, uncontrolled hazardous electrical energy. All resulted from inadequate work planning and noncompliance with 10 CFR 851.23 "Safety and Health Standards," specifically NFPA 70E, "Electrical Safety."

Determination: The events were similar in nature and had the potential for serious safety consequences. The events all involved noncompliance with NFPA 70E and were the result of a common cause (inadequate work planning). In addition, they occurred over a relatively short period in time. The condition was determined to be reportable in NTS under the **repetitive** reporting threshold.

Example 4:

Noncompliance: Over a two year period there were several separate cases in which one or more requirements in the Contractor's Sealed Source Control Program were violated. Each of these non NTS reportable noncompliance involved the purchase, receipt and/or delivery of radioactive sealed sources, including two cases of improper procurement of sealed sources; and three cases of failure to conduct preliminary inspection and external contamination check of the package upon receipt and prior to delivery to the user facility. The recurrence of multiple similar noncompliances with the Contractor's Sealed Source Control Program over a two year period indicates that effective corrective actions had not been implemented.

Determination: Each of these noncompliances involved improper procurement, receipt inspection and/or delivery of sealed radioactive sources. Previous corrective actions taken were not effective in preventing recurrence. The root cause analysis identified weaknesses in the contractors Procurement and Receiving systems that did not provide 100% reliability in identification of items and requirements for special handling. The condition was determined to be reportable in NTS under the **repetitive** reporting threshold.

Example 5:

Noncompliance: Trending analysis of recent issues identified an increase in the number of events where either the door to a security area was not properly secured or the alarm coverage to the security area was not active. These two issue categories combined constitute a concern related to proper control of security areas and represent noncompliance with 10 CFR 824 due to the failure to fully comply with applicable classified matter protection and control requirements.

Determination: None of the issues individually were of security significance due to the other layers of security in place that were functioning as designed. However, this emerging trend involving improper control of security areas was reported in SSIMS under the **repetitive** reporting threshold.

VII.   Conclusions

The very nature of the programmatic and repetitive condition makes it very difficult to establish a set of specific criteria that will be prescriptive, all inclusive, and result in the appropriate level of reporting. For this reason, good judgment is essential in determining if either of these thresholds has been met. It should also be noted that there is often significant overlap between these two criteria, i.e., a repetitive noncompliance is often the result of a programmatic deficiency. Whether a condition is reported as programmatic or repetitive, what is most important is that it represents an inherent weakness in a program that is causing a significant undesired outcome.

The key considerations described in this document are intended to guide the Contractor in judging the significance of an issue and its reportability, be it programmatic or repetitive. Most importantly the realization that a programmatic or repetitive deficiency exists will signal the need for a thorough causal analysis and a robust corrective action plan.