

U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

AUDIT REPORT

Issues Management at the Los Alamos Field Office

OAI-M-16-02 December 2015



Department of Energy

Washington, DC 20585

December 7, 2015

MEMORANDUM FOR THE MANAGER, LOS ALAMOS FIELD OFFICE

Danie M. Weller

FROM: Daniel M. Weeber

Assistant Inspector General for Audits and Administration Office of Inspector General

SUBJECT: <u>INFORMATION</u>: Audit Report on "Issues Management at the Los

Alamos Field Office"

BACKGROUND

The National Nuclear Security Administration's (NNSA) Los Alamos Field Office (Field Office) is responsible for administering the Department of Energy's (Department) Los Alamos National Laboratory (LANL) contract. As part of NNSA's nuclear security enterprise, LANL's primary mission is to ensure the safety, security, and reliability of the Nation's nuclear stockpile, including plutonium processing at nuclear facilities, packaging and transporting nuclear materials, and managing radioactive and hazardous waste.

The Department is committed to operating its nuclear facilities and conducting work activities to ensure environment, safety, and health concerns are considered and addressed in the performance of its mission. Therefore, the Department has policies requiring contractors and field offices to establish an issues management program. Field offices are specifically required to develop and implement (1) a corrective action program to identify and correct deficiencies, (2) an employee concerns program that allows its employees and contractors to raise concerns and have those concerns independently investigated without fear of retaliation, and (3) a process to resolve differing professional opinions.

An effective issues management program is critical to continuous improvement in safely and efficiently operating Department programs and facilities. As such, we initiated an audit to determine whether the Field Office and the LANL contractor had effective issues management programs. This report covers the results of our review of the Field Office's issues management program; we will be issuing a separate report for our review of the contractor's system.

RESULTS OF AUDIT

We found that the Field Office had not implemented an effective issues management program. Specifically, the Field Office frequently did not enter issues identified in assessments into its corrective action tracking system. Furthermore, of those issues that were entered, 81 percent

were not entered within the first 90 days following receipt of the assessment report, and 59 percent of the records had incomplete, inaccurate, or invalid closure data. Additionally, we could not determine the effectiveness of the Field Office Employee Concerns Program (ECP) because of inconsistencies in documenting cases. With regard to the Differing Professional Opinions (DPO) process, although the Field Office's record keeping did not fully meet the DPO requirements, nothing came to our attention to indicate that the process was not generally effective in managing the three DPO submissions we identified.

The identified problems occurred because the Field Office issues management programs either lacked complete procedures or the procedures were not consistently followed. As a result, neither we nor the Field Office could verify and validate corrective actions because of incomplete information, as well as insufficient and invalid closure data. Additionally, inconsistent or incomplete documentation diminished the effectiveness of the ECP and the DPO process at the Field Office. Thus, the issues management programs were not always effective in identifying, correcting, and preventing the recurrence of safety-related deficiencies and problems.

Corrective Action Program

The Field Office did not effectively use its corrective action system, ePegasus, for tracking and correcting deficiencies. Department Order 226.1B, *Implementation of Department of Energy Oversight Policy*, requires the Field Office to implement a structured system to capture and track corrective actions. For significant corrective actions involving high risk deficiencies, the system should provide for causal analysis, as well as an effectiveness evaluation after the corrective action is complete. In addition, one goal of the corrective action process is to prevent recurrence of deficiencies. While the Field Office had implemented such a system, it was not consistently used. Specifically, complete information on deficiencies, as well as sufficient and valid closure data had not been recorded in the system. As such, we could not validate the effectiveness of the corrective action system using data from the ePegasus management system.

Capturing Deficiencies

The Field Office did not always enter deficiencies discovered during internal and external assessments into ePegasus. Field Office policies MP 00.15, *LASO Self-Assessments for Federal Operations*, and MP 00.08, *Implementation of Los Alamos Site Office Line Oversight*, require that deficiencies discovered by external assessments and self-assessments should be entered and managed in a management system and include requirements intended to prevent recurrence of deficiencies. We examined a random sample of 34 of the 110 deficiencies that were entered into the ePegasus system between January 2009 through February 2014 (see attachment 2 for our sampling methodology and results). In addition, we reviewed Field Office self-assessments and the Chief of Defense Nuclear Safety (CDNS) reviews of Los Alamos nuclear safety performance that were completed in 2009 and 2012. We found that the Field Office had not entered at least 53 of the deficiencies identified in these reports into ePegasus. The following examples demonstrate the recording and tracking issues we identified:

- We reviewed 6 of the Field Office self-assessments that were dated during fiscal year 2011 and found that none of the 20 deficiencies from those assessments were entered into ePegasus. For example, findings regarding the lack of training on conducting self-assessments and the lack of emergency management annual exercises were missing from the system. According to Field Office officials, the management system was not routinely used for tracking deficiencies and local management had not consistently required its use.
- The Field Office only entered 6 of 38 deficiencies identified during the 2012 CDNS assessment. The deficiencies omitted included findings related to Federal and contractor training and qualifications, as well as quality assurance.

In addition to not always entering deficiencies into ePegasus, we also found that the Field Office did not promptly enter deficiencies to enable tracking. While the Department order does not state a specific timeframe, it requires timely entry of deficiencies into the management system so they can be tracked through completion. In addition, the Field Office procedures also lacked specific timeframes for entering deficiencies. In what we believe to be a conservative approach, we evaluated entries to determine whether they had been recorded in ePegasus within 90 days after the assessment report was received. We found that 22 of 27 deficiencies (81 percent) originating from assessments were entered more than 90 days after the assessment report date.

Data Accuracy

The Field Office had incomplete, inaccurate, or invalid closure data for 20 of the 34 records sampled (59 percent). Specifically, records lacked sufficient detail on how the corrective action was resolved and/or lacked adequate closure evidence. The 2012 CDNS report also identified deficiencies in closure details and closure evidence for deficiencies previously identified in the 2009 CDNS report. The deficiencies related to conduct of engineering, fire protection, facility representative staffing, and maintenance. In addition, we found that 5 of 34 Field Office deficiency records had inaccurate closure data, and 6 of 34 records had closure data that was invalid because the corrective action was not completed at the time of closure, usually because the closure was based on a planned action, rather than completed action. For example:

- No objective evidence was provided for closing a 2009 finding that the Field Office was
 not performing effective oversight of LANL's nuclear maintenance program. The Field
 Office closed the issue by stating that it performed fiscal year 2010 assessments.
 However, we found that the Field Office did not complete the planned assessment.
- Another external assessment finding concerned the Field Office not processing fire
 protection exemptions for the Los Alamos Neutron Science Center. The corrective action
 plan stated that the contractor was to submit a viable corrective action plan rather than the
 Field Office granting exemptions. Although the record asserted the action was complete
 when the Field Office closed the issue in 2010, we found the Field Office had not
 resolved the deficiency until 2013.

An external Federal assessment found that the Field Office was not conducting a
comprehensive triennial assessment of the contractor's fire protection program. The
closure data indicated that the Field Office would complete the corrective action in the
future. However, we found the Field Office closed the deficiency before completing the
action. Furthermore, a subsequent assessment reported that the Field Office had not
effectively addressed this deficiency.

We could not verify the accuracy or effectiveness of many of the Field Office's corrective actions because of incomplete data entry, as well as insufficient and invalid closure data for Field Office deficiencies. As previously stated, we identified 53 missing issues in addition to the 20 issues in our sample that lacked sufficient and valid data for us to assess the effectiveness of the corrective actions. Moreover, when we were unable to find data in the system to determine the status or resolution of some deficiencies, we attempted to contact the personnel responsible for the records as an alternate means of validation. However, we were unable to do so because some personnel responsible for the records had left the Field Office.

Employee Concerns Program

The Field Office ECP lacked the consistent documentation needed to determine its effectiveness. We sampled 68 of 221 Field Office ECP records and found that the records did not always include the documentation required by Department Order 442.1A, *Department of Energy Employee Concerns Program*. The Order states that employee concerns must be documented in sufficient detail to permit investigation or other appropriate levels of review. Given this requirement, we would expect to see the date the ECP manager was contacted by the employee, a case number, the nature of the concern, the date the concern was closed out, and documentation on the resolution of the concern. Overall, we could not determine the open date for 12 cases (18 percent), the closure date for 25 cases (37 percent), or the final resolution for 17 cases (25 percent) in our sample. However, we found that ECP record keeping improved over time and that the records for 2013 and 2014 were substantially better than the records earlier in the period we reviewed. Overall, only 16 percent of the records in our sample had all four pieces of information in the log and/or the case file. For 2013, 54 percent of the records had all of the information, and for 2014, that figure was 33 percent.

In addition, for 35 cases in our sample (52 percent), the case number could not be identified, the files contained conflicting or altered case numbers, or the records lacked any case number. For example, case numbers were not assigned to consultations in which individuals contacted the ECP manager to make an inquiry about the program. However, the Order and the Field Office procedure do not differentiate between these initial consultations and other concerns. Since both types of concerns involve time and effort on the part of the ECP manager, we believe it would be useful to assign case numbers to document the extent of use of the program. In addition, according to the ECP manager, case information was entered into two separate logs, which may have resulted in inconsistent numbering, a practice that the manager discontinued because it was time-consuming. Finally, during part of the period under review, ergonomic cases were included under the ECP, but those were later separated from ECP when the ergonomic need could be

readily addressed with existing resources. Because of inconsistencies between the log and the case files and changes in the treatment of some types of cases, the data on cases could not readily be matched to the actual case files.

Differing Professional Opinions Program

Nothing came to our attention to indicate that the Field Office's DPO process was not generally effective in managing the three DPO submissions we identified. However, the Field Office process did not fully implement the record keeping requirements of Department Order 442.2, *Differing Professional Opinions for Technical Issues Involving Environmental, Safety, and Health Technical Concerns*. Specifically, the Field Office did not have a consistent method of record keeping. Therefore, we could not determine whether we were provided with all the DPO records.

The Field Office process did not require local DPO documentation records to be included in the approved records management system. Nonetheless, the Field Office was able to provide DPO conclusion forms from employees' personal files and the Field Office's correspondence system for the three DPOs. However, neither of these methods provided the Field Office and NNSA ready access to the complete set of DPO records. Additionally, the Field Office DPO policy only required that local DPO conclusion documents be maintained. Thus, there was no record of local DPO submittals that were rejected for review or the basis for their rejection. The risk of incomplete documentation could have been mitigated had the Field Office maintained a DPO log and assigned tracking numbers to DPOs, as required by the NNSA and Office of Environmental Management supplemental directive SD G 442.2, *Differing Professional Opinions (DPO) Process.* Without properly maintained DPO records, there is no assurance that the Field Office has a complete record of submittals to reference.

Issues Management Procedures

These issues occurred because the Field Office's issues management program either lacked complete procedures or the procedures were not consistently followed. Specifically, the corrective action program had procedures that were not consistently followed. For the ECP, the procedures did not provide specific guidance on how to document cases to ensure that they were accurately cross-referenced between the logs and the case files. Finally, the DPO procedures lacked formal record management requirements that would provide a complete set of documentation for tracking, trending, or review. Field Office officials acknowledged that the procedures needed revision.

Regarding corrective actions, NNSA had not issued formal guidance to its field offices defining its expectations for management of corrective actions. The 2012 CDNS report similarly identified the lack of policy guidance for timeliness of issue entry, but the Field Office did not address this deficiency. We found that the ECP manager used the log books developed by a predecessor, but there was no local procedure that clearly defined what information should be recorded or when a formal file should be developed. The Field Office did not maintain

complete, formal records of issues submitted to their DPO process because the Field Office's policy did not provide adequate guidance to ensure that these records were entered into the official records management system.

Impact

In the absence of an effective issues management program, neither we nor the Field Office could verify and validate corrective actions because deficiencies were not always entered into ePegasus and, when entered, the records often contained insufficient and invalid closure data for Field Office deficiencies. Additionally, incomplete data entry made it difficult to trend and gauge the effectiveness of corrective actions or prevent issues from recurring. In addition, the Field Office did not completely and consistently document concerns raised through ECP and DPO, which resulted in programs that were not effective in providing information on safety-related concerns to management.

Field Office officials acknowledged that their implementation of the Field Office issues management program could be improved, but stated that to ensure safe and efficient operations, they must focus their limited resources on overseeing the contractor. They noted that, as a result, consistent use of issues management processes may not occur.

We acknowledge the importance of the Field Office's contractor oversight responsibilities and also recognize that the types of environment, safety, and health issues that are likely to occur in an office setting would not have the widespread consequences that could occur in nuclear facilities. However, we also note that the Field Office has an important responsibility to ensure that its employees' issues are identified and effectively resolved to protect the environment and the safety and health of employees, as well as to facilitate effective Field Office operations. For example, a deficiency in fire safety in the Los Alamos Field Office building was entered into the ePegasus system. However, while this issue could affect employee safety, the record was closed before corrective action was completed. Failure to implement an effective issues management program increases the risk that the Field Office may not be identifying and resolving environment, safety, and health issues in an effective and timely manner.

RECOMMENDATIONS

To improve the Field Office's issues management program, we recommend that the Manager of the Los Alamos Field Office:

- 1. Issue guidance for the issues management corrective action process to ensure timely data entry and improved documentation of corrective action plans, corrective actions, and resolution of Federal issues:
- 2. Issue guidance to ensure the consistent and formal documentation of employee concerns and their resolution;

- 3. Formalize records management requirements for local DPO submissions; and
- 4. Ensure the consistent and timely use of the issues management process.

MANAGEMENT RESPONSE

Management concurred with the recommendations and provided detailed specific actions taken and planned to address the recommendations, as well as timelines for completion.

AUDITOR COMMENTS

Management's comments and corrective actions, taken and planned, are responsive to our recommendations.

Management's comments are included in attachment 4.

Attachments

cc: Deputy Secretary
Administrator, National Nuclear Security Administration
Chief of Staff

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

The objective of this audit was to determine whether the National Nuclear Security Administration's (NNSA) Los Alamos Field Office (Field Office) had an effective issues management program.

SCOPE

This audit was conducted between January 2014 and December 2015, at the Los Alamos Field Office, located in Los Alamos, New Mexico. Our scope was issues management, including the corrective action, employee concerns, and differing professional opinions programs from 2009 through 2014. The audit was conducted under Office of Inspector General project number A15LA021.

METHODOLOGY

To accomplish the audit objective, we:

- Reviewed regulations, policies, and procedures pertaining to the Department of Energy oversight, including the issues management program, Employee Concerns Program (ECP), and the Differing Professional Opinions (DPO) process.
- Held discussions with NNSA personnel.
- Randomly selected 34 of 110 records from the Field Office corrective action tracking system, ePegasus, for a detailed review of entry timeframe, completion of corrective actions, and effectiveness of issue resolution (see attachment 2).
- Judgmentally selected 68 of 221 Field Office ECP records for a detailed review of timely case triage and resolution, record completeness, and notification of investigative outcome. The criteria for selection included case type and the extent of investigative work required.
- Reviewed Field Office DPO submittals and interviewed NNSA Headquarters and Field Office staff.

We conducted this performance audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Accordingly, the audit included tests of controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed compliance with the *GPRA Modernization Act of*

Attachment 1

2010 and identified performance measures related to issues management. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We did not rely on computer-processed data. However, the audit included a detailed examination of data contained in the Field Office's ePegasus corrective action system. As such, we evaluated the accuracy and completeness of this data by comparing it to source documents. We determined that many records were inaccurate and the system did not contain all reported deficiencies. Our analysis of this data was essential to our audit objective and, therefore, we made recommendations to address this finding. In addition, our audit work included the examination of the ECP and DPO data that we relied on to reach our conclusions.

NNSA waived the exit conference.

SAMPLING METHODOLOGY FOR DEFECIENCIES AND CORRECTIVE ACTIONS

We selected a random sample of 34 records from the 110 unique records in the Los Alamos Field Office (Field Office) ePegasus system, using a 95 percent confidence level. We reviewed the data in ePegasus and followed up with Field Office staff to validate the system data. We categorized our results based on five attributes. In addition, we established a sixth category that encompasses the five attributes. Because the attributes were not mutually exclusive, the extrapolated results cannot be summed. We defined the categories as follows:

- Insufficient closure data records for which there was insufficient evidence to support closure and/or insufficient detail to understand what corrective action was taken.
- Inaccurate closure data records for which the description of the resolution did not match the supporting closure data.
- Closed before action was complete records for which the corrective action was a statement that a task would be done rather than evidence that the task was complete when the record was closed.
- Insufficient data to verify action records for which we were unable to verify the corrective action described due to incomplete and/or invalid closure data and staff turnover or attrition.
- Insufficient data to validate effectiveness records for which we unable to validate the corrective action described due to incomplete and/or invalid closure data and staff turnover or attrition.
- Incomplete, inaccurate, or invalid closure data encompasses the attributes shown above and includes records for which there was insufficient closure data, inaccurate closure data, insufficient objective evidence to support closure, and/or insufficient detail to understand what corrective action was taken.

Table 1: Results of Sampling 34 of 110 Field Office Deficiencies and Corrective Actions

	Sample Results		Expected	Expected Range in Universe			
			Results in	Minimum		Maximum	
Description	Number	Percent	Universe	Number	Percent	Number	Percent
Insufficient closure data	18	52.9%	59	42	39.0%	73	66.9%
Inaccurate closure data	5	14.7%	17	5	4.8%	27	24.6%
Closed before action							
complete	6	17.7%	20	7	7.0%	31	28.3%
Insufficient data to verify							
action	9	26.5%	30	15	14.1%	42	38.8%
Insufficient data to validate							
effectiveness	8	23.5%	26	12	11.7%	38	35.4%
Overall Category:							
Incomplete, inaccurate, or							
invalid closure data	20	58.8%	65	49	45.1%	79	72.6%

PRIOR REPORTS

Audit report on *Corrective Action Systems at the Pantex Plant* (OAS-L-15-01, October 2014). This review found that Babcock & Wilcox Technical Services Pantex, LLC, (site contractor through June 2014) had generally implemented corrective action systems that provided for reporting, documenting, and tracking through resolution any findings, weaknesses, and significant quality issues. However, we identified certain aspects of the program that needed improvement, issues that should be considered by Consolidated Nuclear Security (CNS), LLC, the contractor since July 2014, as they implement corrective action systems under the new contract. Because of the recent transition of the contract to CNS, we did not make formal recommendations. However, we made suggestions to the Manager, National Nuclear Security Administration Production Office to direct CNS to ensure employees fully understand requirements for corrective action systems and staffing is adequate for the Employee Concerns Program.

MANAGEMENT COMMENTS



Department of Energy

Under Secretary for Nuclear Security Administrator, National Nuclear Security Administration Washington, DC 20585



November 5, 2015

MEMORANDUM FOR RICKEY R. HASS

ACTING INSPECTOR GENERAL

FROM:

FRANK G. KLOTZ JK 11/8/2018

SUBJECT:

Comments on the Office of Inspector General Draft Report Titled "Issues Management at the Los Alamos

Field Office" (A15LA021)

Thank you for the opportunity to review and comment on the subject draft report. The National Nuclear Security Administration (NNSA) appreciates the auditors' objective review and concurs with the Office of Inspector General's recommendations,

The attachment to this memorandum details the specific actions taken and planned to address each recommendation, as well as timelines for completion. If you have any questions regarding this response, please contact Mr. Dean Childs, Director, Audit Coordination and Internal Affairs, at (301) 903-1341.

Attachment



Attachment

NATIONAL NUCLEAR SECURITY ADMINISTRATION Response to Report Recommendations

Issues Management at the Los Alamos Field Office (A15LA021)

The IG recommended the Manager, Los Alamos Field Office:

<u>Recommendation 1</u>: Issue guidance to for the issues management corrective action process to ensure timely data entry and improved documentation of corrective action plans, corrective actions, and resolution of Federal issues.

Management Response: Concur

The Los Alamos Field Office is committed to near-term improvement and will take action to reenforce existing requirements and promote adherence to Field Office issues management
corrective action procedures. In addition, the Field Office is actively engaged in NNSA's
corporate efforts to enhance governance and oversight effectiveness. A key deliverable of this
effort will be the issuance of revised Field Office guidance on federal and contractor assurance
activities, of which issues management is a key process. While nearer-term corrective actions
will address the primary issues noted in the report, we will continue to monitor progress and
evaluate this recommendation for closure in December 2017, consistent with the timelines for
updating local policies and procedures as part of the broader governance and oversight initiative.
This will also allow sufficient time to validate the on-going effectiveness of the issues
management program as part of the Biennial Site Office Review conducted by the Office of
Defense Nuclear Safety, currently scheduled for the first quarter of fiscal year 2017.

Recommendation 2: Issue guidance to ensure the consistent and formal documentation of employee concerns and their resolutions.

Management Response: Concur

The Field Office has an excellent track record of dealing with "employee concerns" utilizing a graded approach. Significant issues identified as "employee concerns" have been formally documented, while more routine operational issues (e.g., broken venetian blinds, request for ergonomic keyboard) have been quickly addressed with resolution noted rather than formally documented. To promote consistent implementation, we will develop formal policy and update existing procedures to reflect graded standards for documentation of employee concerns, with an estimated completion date of June 30, 2016.

Attachment

<u>Recommendation 3</u>: Formalize records management requirements for local Differing Professional Opinion (DPO) submissions.

Management Response: Concur

The Los Alamos Field Office Differing Professional Opinion Procedure, MP 00.18, will be revised to include the requirements for: (1) entering ePegasus action items for all submitted DPO's; (2) uploading required documents and forms; and, (3) tracking to closure. The estimated completion date for these actions is March 31, 2016.

Recommendation 4: Ensure the consistent and timely use of the issues management process.

Management Response: Concur

As noted in response to recommendation 1, Los Alamos Field Office will take near-term action to re-enforce existing requirements and promote adherence to Field Office issues management corrective action procedures, including the consistency and timeliness of activities. The ongoing effectiveness of the issues management program will be reviewed as part of the Biennial Site Office Review conducted by the Office of Safety, Infrastructure and Operations, currently scheduled for the first quarter of FY 2017.

FEEDBACK

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Office of Inspector General (IG-12)
Department of Energy
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