



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

INSPECTION REPORT

DOE-OIG-19-23

March 2019

**PREPAREDNESS FOR FIREFIGHTING
RESPONSE AT LOS ALAMOS NATIONAL
LABORATORY**



Department of Energy
Washington, DC 20585

March 28, 2019

MEMORANDUM FOR THE MANAGER, LOS ALAMOS FIELD OFFICE, NATIONAL
NUCLEAR SECURITY ADMINISTRATION

Michelle Anderson

FROM: Michelle Anderson
Deputy Inspector General
for Audits and Inspections
Office of Inspector General

SUBJECT: INFORMATION: Inspection Report on “Preparedness for Firefighting
Response at Los Alamos National Laboratory”

BACKGROUND

The National Nuclear Security Administration’s (NNSA) Los Alamos National Laboratory (Los Alamos) operates in “unique” hazardous environments, which include special nuclear materials, explosives, and hazardous chemicals, that create special fire suppression and emergency management challenges. Department of Energy Order 420.1C, *Facility Safety*, requires NNSA to ensure that Los Alamos has emergency response, including fire protection capabilities, regardless of who performs the function. In addition, the Order requires Los Alamos to provide fire protection response capabilities that include pre-incident plans, as established by the baseline needs assessment. The Los Alamos County Fire Department (Fire Department) provides fire protection for Los Alamos through a Cooperative Agreement between NNSA and the County of Los Alamos, with the NNSA Los Alamos Field Office acting as the sponsoring office. The Field Office is responsible for day-to-day oversight of the Cooperative Agreement.

The Fire Department develops and maintains 549 pre-incident plans that should be a foundation for decision-making during an emergency situation. The Fire Department has a longstanding pre-incident plan program that assigns priority to Los Alamos facilities. The pre-incident plan program also establishes a schedule for on-site visits and identifies criteria used to gather information during these visits. Between 2009 and 2014, the Office of Inspector General, the Field Office, and Los Alamos expressed concerns that pre-incident plans lacked the information necessary for firefighters to effectively respond to incidents at Los Alamos. Therefore, the objective of this inspection was to determine whether pre-incident plans complied with applicable policies.

RESULTS OF INSPECTION

While pre-incident plans are only one portion of a comprehensive fire protection program to minimize the consequence of fire-related events affecting workers, environment, property and missions, we found that some pre-incident plans may not have complied with requirements of Department Order 420.1C. Los Alamos and the Fire Department have an unresolved disagreement about the content of pre-incident plans, particularly regarding what information is necessary to support a timely and effective response to the Laboratory as required by the Order. Further, Los Alamos' actions to incorporate subject matter expert review to ensure accuracy for specified pre-incident plans were ineffective. Without determining what content was necessary within the pre-incident plans, there was a risk that a timely and effective response to the Laboratory could be adversely affected.

In 2014, the *Los Alamos National Laboratory Baseline Needs Assessment – Fire Protection and Suppression Services and Resources* (Baseline Needs Assessment) found that pre-incident plans did not provide necessary information to support timely and effective response. Specifically, both Los Alamos and the Field Office concluded that most pre-incident plans were insufficient because the plans did not contain any firefighting strategies. However, according to the assessment, the Fire Department disagreed and would rather not “crowd the [pre-incident plans] with excessive information.” This dispute over pre-incident plan content has been ongoing since at least 2009.

The disagreement over pre-incident plan content existed because the Field Office did not provide sufficient oversight to resolve the longstanding dispute. The Field Office official who was responsible for day-to-day oversight of the Fire Department acknowledged that the Field Office had not provided full-time oversight. We believe the resolution of the longstanding dispute was not a high priority for the Field Office.

The Field Office acknowledged that the Fire Department did not have pre-planned strategies in the pre-incident plans. In November 2016, the Field Office issued a letter to the Fire Department and Los Alamos that introduced an initiative for both parties to evaluate the pre-incident plan process. A Field Office official stated that the objective of the letter was to clarify and resolve the disagreements over the pre-incident plan content. Further, in June 2017, the official stated that the parties had met and were actively trying to improve the pre-incident plan review process, in part by resolving what it means to include strategies in pre-incident plans. The official also stated that the Field Office hired a consultant to provide guidance on pre-incident plans and strategies. However, the matter remains unresolved.

We also found that Los Alamos had not effectively implemented plans to incorporate subject matter expert review of pre-incident plans. In response to the 2014 Baseline Needs Assessment findings, Los Alamos issued a June 2015 letter to the Fire Department. The letter introduced an agreed-upon process between Los Alamos and the Fire Department for Los Alamos subject matter experts to review and comment on 78 Fire Department pre-incident plans for 33 key facilities designated as high priority or important. In a second action, Los Alamos' Fire Protection Division Office (Fire Protection Division Office) developed an internal eight-step administrative procedure in July 2015 that implemented the process noted in the June 2015 letter.

However, we found that the actions to ensure that Los Alamos subject matter expert review of pre-incident plans initiated in 2015 were not fully implemented. Specifically, the Fire Protection Division Office and the Fire Department did not complete the eight-step procedure that implemented the process outlined in the June 2015 letter. As of August 2017, the procedure had not been completed on any of the 78 pre-incident plans prioritized in the June 2015 letter. Because Los Alamos subject matter experts' participation was minimal, the Fire Protection Division Office discontinued implementation of the process and the supporting eight-step administrative procedure, but it did not rescind the pre-incident plan review process or institute an alternative process.

This occurred because the Fire Protection Division Office did not seek assistance by notifying upper management at the laboratory about Los Alamos subject matter experts' lack of participation in the process. We believe that pre-incident plan content and accuracy is critical in order for the Fire Department to respond effectively to incidents at the Laboratory. Without determining necessary content and ensuring accuracy within the pre-incident plans, there is a risk that a timely and effective response to Los Alamos could be adversely affected.

During our review, we noted that the Field Office did not ensure that sensitive Government information maintained in the Fire Department's management software and used to develop the pre-incident plans was properly protected, as required by Department Order 205.1B, *Department of Energy Cyber Security Program*. The Field Office's last cybersecurity assessment was conducted in 2009. Without having conducted a more recent cybersecurity assessment, the Field Office must therefore rely on Los Alamos County's cybersecurity assessments, which limits the assurance that sensitive Government information is properly protected.

MANAGEMENT RESPONSE

Management concurred with three recommendations and did not concur with one recommendation. However, since management stated that it has re-implemented subject matter expert participation in the pre-incident plan review process, corrective action on the recommendation it did not concur with has been taken. Therefore, we consider NNSA's actions adequate to meet the intent of our recommendation and consider that recommendation closed. Management's comments and our responses are summarized in the body of the report. Management's formal comments are included in Appendix 3.

Attachments

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

PREPAREDNESS FOR FIREFIGHTING RESPONSE AT LOS ALAMOS NATIONAL LABORATORY

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PREPAREDNESS FOR FIREFIGHTING RESPONSE AT LOS ALAMOS NATIONAL LABORATORY

BACKGROUND

Department of Energy Order 420.1C, *Facility Safety*, requires the establishment of pre-incident plans to enhance the effectiveness of fire suppression activities. Pre-incident plans provide a basis for assuring that firefighting responses to facilities containing radiological material or other hazards are appropriate, effective, and consistent. At Los Alamos National Laboratory (Los Alamos), facilities identified as high priority or important may include nuclear facilities or pose an extreme potential for loss of life, radiation or chemical contamination, health hazards to firefighting personnel, or environmental damage. In addition, the Order requires Los Alamos to provide fire protection response capabilities that include pre-incident plans, as established by the baseline needs assessment. Pre-incident plans are one portion of a comprehensive fire protection program intended to minimize the consequence of fire-related events affecting workers, environment, property, and missions.

Since September 2008, the Los Alamos Fire Department (Fire Department) has provided fire protection services to Los Alamos as part of Cooperative Agreements between the National Nuclear Security Administration (NNSA) and the County of Los Alamos. According to the Cooperative Agreements, one of the services that the Fire Department was required to provide was the development and maintenance of the pre-incident plans for Los Alamos buildings, consistent with the Order and National Fire Protection Association standards. The Los Alamos Field Office has oversight responsibility for both the Fire Department and Los Alamos. Finally, the Los Alamos National Laboratory's Fire Protection Division Office (Fire Protection Division Office) managed the pre-incident plans' input process for subject matter experts.

DETAILS OF FINDINGS

We found that some pre-incident plans may not have complied with requirements of Department Order 420.1C. Specifically, pre-incident plans did not include adequate information to support a timely and effective emergency response at Los Alamos due to an unresolved disagreement over pre-incident plan content. In addition, Los Alamos' actions to incorporate subject matter expert review to ensure accuracy for specified pre-incident plans were not effectively implemented.

Disagreement Regarding Necessity of Information in Pre-incident Plans

An unresolved disagreement existed between Los Alamos and the Fire Department regarding content needed in pre-incident plans to support a timely and effective response to the Laboratory. The dispute revolved around inclusion of site-specific firefighting strategies. A Los Alamos official stated that Los Alamos believed that alternative strategies needed to be included in the pre-incident plans, which could include simple "go/no go" decisions. An official from the Fire Department stated that the Fire Department wanted the pre-incident plans to include only what was absolutely needed. The Fire Department official also stated that pre-incident plans could not include every scenario because the plans needed to be clear and concise. If the plans were too large, it would not be feasible in an emergency situation for firefighters to read through the entire

plan. The Fire Department official stated that for a few specific buildings, specific strategies would be appropriate, but the pre-incident plan could not identify specific strategies for every possible situation.

Department Order 420.1C requires provision of emergency response capabilities to meet site needs, as established by the baseline needs assessment. Performed in 2014, the *Los Alamos National Laboratory Baseline Needs Assessment – Fire Protection and Suppression Services and Resources* (Baseline Needs Assessment) found that pre-incident plans did not provide information necessary to support a timely and effective response to Los Alamos as required by the Order. Numerous reports and assessments from 2009 to 2014 by the Office of Inspector General, the Field Office, and Los Alamos affirmed this finding. The Baseline Needs Assessment stated that the large number of nuclear facilities and the diversity of scientific activities and operations conducted at Los Alamos required that pre-incident plans be tailored to the specific hazards of each Los Alamos facility. For example, the Baseline Needs Assessment stated that the pre-incident plan for Technical Area 55 did not mention that “MET-L-X” fire extinguishers may be necessary for glovebox fires. The Baseline Needs Assessment also stated that critical facility information was not included in the pre-incident plans, including floor plans showing the location of fire walls, fire alarm panels, fire detection systems, and flammable liquid storage cabinets.

The disagreement regarding pre-incident plan content has existed since 2009. Department Order 420.1C required the Field Office Manager to ensure that facilities, activities, and programs under the Field Office’s purview operate in compliance with the requirements of the Order. However, the Field Office did not provide sufficient oversight in order to resolve the longstanding dispute. The Field Office official who was responsible for day-to-day oversight of the Fire Department acknowledged that the Field Office had not provided full-time oversight.

In November 2016, the Field Office issued a letter to the Fire Department and Los Alamos that introduced an initiative for both parties to address necessary content in pre-incident plans. A Field Office official stated that the objective of the letter was to clarify and resolve the disagreements over pre-incident plan content. Further, in June 2017, the official stated that the parties had met and were actively trying to improve the pre-incident plan review process, with one of the priorities being the resolution of what it meant to include strategies. The official also stated that the Field Office hired a consultant to provide guidance on pre-incident plans and strategies. However, the matter remained unresolved.

Actions for Subject Matter Expert Review for Accuracy of Pre-Incident Plans

Los Alamos’ actions to incorporate subject matter expert review to ensure accuracy for specified pre-incident plans were not effectively implemented. Specifically, Los Alamos did not fully implement actions to follow an agreed-upon process and a supporting administrative procedure designed to address subject matter expert review of pre-incident plans.

Los Alamos took action in response to the 2014 Baseline Needs Assessment finding by first issuing a letter to the Fire Department on June 22, 2015, that required Los Alamos subject matter experts to review and comment on 78 pre-incident plans for 33 key facilities on Los

Alamos designated as high priority or important. This included Los Alamos subject matter expert review, submission of comments to the Fire Department, resolution of comments, and documentation that all parties were satisfied that information provided was accurate.

In July 2015, Los Alamos again took action by issuing the *Los Alamos Fire Department Pre Incident Plan Review Process*, an internal eight-step administrative procedure that implemented the process outlined in the June 2015 letter. The procedure provided desktop instruction for review of pre-incident plans and a form for submission of comments to the Fire Department.

We found that the actions initiated in 2015 to improve 78 pre-incident plans for facilities designated as high priority or important at Los Alamos were not fully implemented. Specifically, the Fire Protection Division Office was responsible for managing the pre-incident plans input process; however, as of August 2017, it had not completed all eight steps of the supporting implementation procedure for any of the 78 pre-incident plans for the 33 facilities prioritized in the June 2015 letter. The Fire Department submitted 59 of the 78 pre-incident plans to Los Alamos, and Los Alamos forwarded 37 of the 59 to subject matter experts for review and comment. The Fire Protection Division Office received minimal participation from Los Alamos subject matter experts. In fact, of the 37 pre-incident plans that the Fire Protection Division Office forwarded to subject matter experts for review, it received comments for only two. When the Fire Protection Division Office received limited subject matter expert input on pre-incident plans, it did not request input on the remaining pre-incident plans. The Fire Protection Division Office then discontinued implementation of the process and supporting administrative procedure, but it did not rescind the pre-incident plan review process or institute an alternative process. Further, Fire Department and Field Office officials stated that the Fire Protection Division Office did not advise them that it discontinued the process.

The Fire Protection Division Office did not seek assistance by notifying upper management at the Laboratory about Los Alamos subject matter experts' lack of participation in the process. Specifically, a Fire Protection Division Office official stated that the Fire Protection Division Office did not have enough "muscle" to compel the Los Alamos subject matter experts, who do not work for their office, to comply. The official also stated that Los Alamos management had not been notified that implementation of the process and supporting eight-step administrative procedure were discontinued. An occurrence report from 2014 related to an electric magnet fire in Technical Area 53 identified opportunities to improve information accuracy in pre-incident plans.

Impact

Pre-incident plans provide guidance for emergency responders about facilities that are vital to Los Alamos' mission. Los Alamos facilities designated as high priority or important in the pre-incident plan program may be nuclear facilities and may have extreme potential for loss of life, radiation or chemical contamination, health hazards to firefighting personnel, or environmental damage. As a result, without determining what content was necessary within the pre-incident plans, there was a risk that a timely and effective response to the laboratory could be adversely affected.

Other Matter

Los Alamos provided sensitive Government information, including Unclassified Controlled Nuclear Information (UCNI), to the Fire Department in order to develop its pre-incident plans, which are maintained in the Fire Department's management software. The Department of Energy's Order 205.1B, *Department of Energy Cyber Security Program*, requires that the Field Office protect information and information systems.

Assurance that electronically held sensitive information, including UCNI, is being properly protected by the Fire Department was weakened. Specifically, prior to 2010, the Field Office provided computers to the Fire Department and ensured that UCNI and other sensitive documents obtained by the Fire Department were properly protected. According to a Los Alamos County official, in 2010, the County, which manages the Fire Department, began purchasing computers on behalf of the Fire Department. However, the Field Office did not address the County's transition away from federally-owned computers until 2012, when it modified the Cooperative Agreement with the County. This modification included a requirement that the County protect sensitive Department/NNSA information from unauthorized access and a table that listed numerous physical and cybersecurity criteria.

Modifying the Cooperative Agreement, without taking any further action, did not ensure that the Department/NNSA information was protected in compliance with Department of Energy Order 205.1B. Specifically, the 2012 modification to the Cooperative Agreement allowed the Field Office to periodically visit the Fire Department facilities and assess the security of the computer systems. However, the Field Office has not completed a cybersecurity assessment since 2009, prior to the transition from federally-owned to County-owned computers. Without having conducted a more recent cybersecurity assessment, the Field Office must rely on Los Alamos County's cybersecurity assessments, which limits the assurance that sensitive Government information is properly protected.

NNSA security officials have expressed concerns over how the Fire Department was protecting the information. The Field Office official in charge of cybersecurity told us that the Fire Department has not fully cooperated with Field Office attempts to conduct a cybersecurity assessment. Despite this reported lack of cooperation, the Field Office is still responsible for ensuring that information and information systems are protected.

RECOMMENDATIONS

To address the issues identified in this report, we recommend that the Manager, Los Alamos Field Office:

1. Establish pre-incident plans at Los Alamos National Laboratory that support a timely and effective firefighting response by:
 - a. Ensuring that pre-incident plans properly address the 2009 and 2014 Los Alamos National Laboratory Baseline Needs Assessments as required by Department Order 420.1C., *Facility Safety*;
 - b. Resolving the longstanding dispute between Los Alamos and the Fire Department regarding how much information is necessary within pre-incident plans and then formally documenting the resolution; and
 - c. Effectively implementing subject matter expert participation in the pre-incident plan review process, as appropriate.
2. Conduct a cybersecurity assessment of the Los Alamos County Fire Department network and computers to assure that electronically held information, including Unclassified Controlled Nuclear Information, is being properly protected by the Fire Department.

MANAGEMENT RESPONSE

Management concurred with three of the report's recommendations and did not concur with the report recommendation to implement subject matter expert participation in the pre-incident plan review process. Specifically, management indicated that it had already taken corrective action and, therefore, did not concur with that recommendation.

In addition, management disagreed with aspects of the reported findings and conclusions. Specifically, management felt that the report was incorrect, as written, because it incorrectly implied that the previously unresolved policy question created a significant risk to fire response because pre-incident plans did not include pre-planned strategies. Management felt that the report also did not consider that effective pre-incident planning includes training, facility walkthroughs, and other methods to familiarize fire response personnel with facilities and infrastructure and that we should have considered all elements of the comprehensive response planning process before drawing a conclusion regarding the risks associated with the fire response.

Management's comments are included in Appendix 3.

INSPECTOR COMMENTS

We consider management's comments and corrective actions to be responsive to our recommendations. In addition, since management stated that it already took corrective action on the recommendation to implement subject matter expert participation in the pre-incident plan review process, we consider NNSA's actions adequate to meet the intent of our recommendation and consider that recommendation closed. We commend NNSA for taking action without waiting for the issuance of the final report.

We disagreed with management's assertion that our report incorrectly implied that the policy question created a significant risk to fire response. While we focused our inspection on whether pre-incident plans complied with applicable policies and did not review other elements of a comprehensive response planning process for firefighter preparedness, we believe this provides a reasonable basis for our conclusions. We held meetings with NNSA officials and, based on those discussions, we updated the report to address technical comments related to their concerns where appropriate. However, we stand by our conclusion that pre-incident plan accuracy and resolution of the plan content issue is critical to support an effective fire response.

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

We conducted this inspection to determine whether pre-incident plans complied with applicable policies.

Scope

We conducted our inspection from November 2014 through March 2019 at the National Nuclear Security Administration's (NNSA) Los Alamos National Laboratory (Los Alamos), Los Alamos Field Office, and Los Alamos County Fire Department in Los Alamos, New Mexico. The inspection did not include a review of preparedness for firefighting response to incidents such as wildfires that did not involve facilities located at Los Alamos National Laboratory. This inspection was conducted under Office of Inspector General project number S15IS004.

Methodology

To accomplish our objective, we:

- Researched and evaluated Department of Energy policies, procedures, and guidance for Fire Protection;
- Reviewed the Cooperative Agreement between the NNSA and the County of Los Alamos to provide fire protection services to Los Alamos National Laboratory;
- Researched and reviewed prior Office of Inspector General Reports;
- Examined Los Alamos, NNSA, and Office of Inspector General reports and assessments of Los Alamos fire protection and associated actions; and
- Interviewed and conducted meetings with Federal, Contractor, and Los Alamos County Fire Department officials.

We conducted this inspection in accordance with the Council of the Inspectors General on Integrity and Efficiency's Quality Standards for Inspection and Evaluation. Those standards require that we plan and perform the inspection to obtain sufficient, appropriate evidence to provide a reasonable basis for our conclusions and observations based on our inspection objective. We believe that the evidence obtained provided a reasonable basis for our conclusions and observations based on our inspection objective. Accordingly, the inspection included tests of controls and compliance with laws and regulations to the extent necessary to satisfy the inspection objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our inspection. Finally, we relied on computer-processed data to satisfy our objective. We verified the accuracy of the data and determined it was sufficiently reliable for the purposes of the assessment.

Management waived a formal exit conference on February 13, 2019.

PRIOR REPORTS

- Audit Report on [*Management of Los Alamos National Laboratory's Cyber Security Program*](#) (DOE/IG-0880, February 2013). The Los Alamos National Laboratory is one of the world's largest multidisciplinary laboratories and is primarily responsible for helping to ensure the safety and reliability of the Nation's nuclear stockpile as part of the Department of Energy's Stockpile Stewardship Program. To accomplish program goals and objectives, the Los Alamos National Laboratory operates and manages numerous information systems and networks to support the research, business, and communication needs of its users. Although Los Alamos National Laboratory spends a significant amount of funds on information technology activities, we were unable to obtain an accurate amount due to the Laboratory's limited ability to track its information technology spending. The audit found that while additional action is needed, the Los Alamos National Laboratory had taken steps to address the concerns regarding its cybersecurity program that were raised in prior evaluations. However, our audit identified continuing concerns related to the Laboratory's implementation of risk management, system security testing, and vulnerability management practices. For instance, Los Alamos National Laboratory had not always developed and implemented an effective risk management process consistent with Federal requirements; had not always ensured that it had developed, tested, and implemented adequate controls over its information systems; and had not always properly addressed critical and high-risk vulnerabilities. The issues identified occurred, in part, because of a lack of effective monitoring and oversight of the Laboratory's cybersecurity program by the Los Alamos Field Office (formerly known as the Los Alamos Site Office), including approval of practices that were less rigorous than those required by Federal directives. In response, National Nuclear Security Administration (NNSA) management concurred with the findings and recommendations and agreed to take necessary corrective actions.
- Inspection Report on [*Property Accountability and Protection of Federal Sensitive Unclassified Information Under the Cooperative Agreement with the Incorporated County of Los Alamos*](#) (DOE/IG-0859, February 2012). In December 2010, the Office of Inspector General received a complaint alleging that Federal Government property, including computers, was missing from the Los Alamos County Fire Department. During our initial evaluation of this complaint, we also became aware that Sensitive Unclassified Information provided to the Fire Department by Los Alamos National Laboratory may have not been adequately protected. We substantiated the allegation that property, including computers, was missing. Despite Department of Energy requirements, effective processes and procedures were not in place to ensure the proper control and accountability of federally-owned personal property in possession of the Fire Department. These problems occurred, in part, because the Los Alamos Field Office (formerly known as the Los Alamos Site Office) did not ensure that the property management provisions, which were part of the Cooperative Agreement, had been effectively implemented. In addition, Los Alamos County did not manage its federally-owned personal property in a manner consistent with the requirements of the Cooperative Agreement. As a consequence of this environment, federally-owned personal property was not adequately safeguarded against misuse, theft, or misappropriation.

- Inspection Report on [*Fire Suppression and Related Services at Los Alamos National Laboratory*](#) (DOE/IG-821, September 2009). The Los Alamos National Laboratory is a multidisciplinary research institution engaged in strategic science on behalf of national security. The Laboratory operates in “unique” hazardous environments, which include special nuclear materials, explosives, and hazardous chemicals, that create special fire suppression and emergency management challenges. To address these challenges, the Laboratory must have a comprehensive approach to the protection of personnel, facilities, physical assets, and programmatic activities from fire and related dangers. Information was provided to the Office of Inspector General that problems existed with regard to fire suppression and related services at Los Alamos National Laboratory. As a result, we initiated an inspection to determine if fire suppression and related services at Los Alamos National Laboratory are assured through contractual arrangements with the Incorporated County of Los Alamos. On September 30, 2008, subsequent to the initiation of our inspection, the NNSA entered into a Cooperative Agreement with the County to provide Los Alamos County Fire Department and related services to the Laboratory. We concluded that fire suppression and related services had not been assured through contractual arrangements with the County. Specifically, we found that firefighters had not been properly trained, required pre-incident plans developed by the Fire Department lacked necessary information, firefighters did not have necessary knowledge of the Laboratory’s facilities, and the Fire Department’s firefighting capabilities had not been sufficiently demonstrated through exercises. We concluded that the above conditions were caused by significant problems with the administration of the contracting arrangements by the Department, NNSA, Los Alamos National Laboratory, and the Incorporated County of Los Alamos. We did not find evidence that anyone actively managed the fire suppression services contract for a number of years.

Management Comments




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



January 4, 2019

MEMORANDUM FOR APRIL G. STEPHENSON
ACTING INSPECTOR GENERAL

FROM: LISA E. GORDON-HAGERTY 

SUBJECT: Response to the Office of Inspector General Draft Report
*Preparedness for Firefighting Response at Los Alamos National
Laboratory (LANL) [S15IS004]*

Thank you for the opportunity to review and comment on the subject Office of Inspector General (OIG) draft report. The National Nuclear Security Administration (NNSA) agrees with the three recommendations related to resuming cyber security assessments and resolving Pre-Incident Plan (PIP) policy questions. We non-concur, however, with the fourth recommendation, which is based on outdated information. The Los Alamos National Laboratory took action over a year ago to re-institute PIP reviews, therefore we do not believe a recommendation is warranted.

We are also concerned that the report, as written, implies that the previously unresolved policy question created a significant risk to fire response because PIPs do not include pre-planned strategies. This is incorrect. As noted in our management decision, PIPs are not intended to cover the entire spectrum of possible fire scenarios or strategies. Instead, per NFPA 1620, *Pre-Incident Planning*, PIPs "... provide important data that will **assist the incident commander in developing appropriate strategies** [emphasis added] and tactics for managing [an] incident." The report also does not consider that effective pre-incident planning includes training (materials and exercises), facility walkthroughs, and other methods to familiarize fire response personnel with facilities and infrastructure. Inspectors should consider all elements of the comprehensive response planning process before drawing a conclusion regarding the risks associated with fire response.

We appreciate the inspectors' prior efforts to review our comments and modify the report. I am, however, requesting a meeting between OIG senior management, the NNSA Audit Office, and fire response experts to discuss and resolve the remaining issues prior to issuance of the final report. The attachment to this memorandum provides my management decision on the proposed recommendations, including specific corrective actions taken and planned where appropriate. If you have any questions regarding this response, please contact Mr. Dean Childs, Director, Audits and Internal Affairs, at (301) 903-1341.

Attachment



Attachment

National Nuclear Security Administration Management Decision
Preparedness for Firefighting Response at LANL (S15IS004)

We recommend that the Manager, Los Alamos Field Office (NA-LA):

Recommendation 1: Conduct a cyber security assessment of the Los Alamos County Fire Department network and computers to assure that electronically held information, including Unclassified Controlled Nuclear Information, is being properly protected by the Fire Department.

Management Response: Concur – Los Alamos Field Office, in coordination with LANL, will resume periodic cyber security assessments, consistent with provisions in the Cooperative Agreement. The estimated completion date for the next assessment is April 2019.

Recommendation 2: Ensure pre-incident plans properly address the 2009 and 2014 Los Alamos National Laboratory Baseline Needs Assessments as required by Department of Energy Order (DOE O) 420.1C., *Facility Safety*.

Management Response: Concur - The 2018 Baseline Needs Assessment (BNA) has been completed by LANL and approved by NA-LA. The assessment incorporates unresolved carryover issues from prior BNAs to ensure they are effectively addressed. Any resulting issues will be addressed through established processes and/or the actions described in response to recommendation 3.

Recommendation 3: Resolve the longstanding dispute between Los Alamos and the Fire Department regarding how much information is necessary within pre-incident plans and then formally documenting the resolution.

Management Response: Concur – Internal assessment identified the root cause of the differing professional opinion to be interpretation of Departmental policy and National Fire Protection Association (NFPA) consensus standards. Since the receipt of the draft report, NA-LA and the NNSA safety office have reviewed the applicable requirements. The NNSA position is that PIPs are not intended to cover all possible fire scenarios and strategies for a fire response. Per NFPA Standards, PIPs “...provide important data that will assist the incident commander in developing appropriate strategies and tactics for managing the incident.”

Through the BNA approval and corrective action process, NA-LA and LANL will make a final determination on how relevant information not included in the written pre-incident plans will be addressed through other fire response planning activities, including training (materials and exercises), facility walkthroughs, and other methods. NA-LA, working with the NNSA Office of Worker Safety and Health Services (NA-513), will also establish a clear and consistent definition of “strategies” in the context of pre-incident plans, and will clarify the Authority Having Jurisdiction position and delegations of authority. The estimated completion date for these

Attachment

actions is June 2019. The Office of Audits and Internal Affairs (MB-1.1) and NA-513 will conduct an additional assessment to validate the effectiveness of these actions once completed.

Recommendation 4: Effectively implement subject matter expert participation in the pre-incident plan review process, as appropriate.

Management Response: Non-Concur as written – As reported to the inspectors, LANL addressed the reported issues and recommendation over a year ago by reinstating a process for reviewing pre-incident plans. As of October 1, 2018, approximately 50 pre-incident plans have been re-routed through the LANL administrative review process. Additionally, nine other pre-incident plans have been subject to review through facility readiness reviews and/or transition of a project from construction to operations. In the first three months of FY 2019, 10 pre-incident plans will be re-routed through the LANL administrative review process as a continuing review effort. MB-1.1 and NA-513 will conduct an additional assessment to validate the effectiveness of these actions by July 30, 2019.

As the report does not acknowledge this important information communicated during the inspection, the report and recommendation are misleading and NNSA cannot concur as written. At a minimum, the report should acknowledge NNSA's reported actions, while noting the inspectors have not validated that information. The recommendation should then be revised to read "Validate that reported corrective actions related to the review of pre-incident plans have been implemented effectively."

FEEDBACK

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