INL/EXT-16-39810
Revision 1

Idaho National Laboratory Emergency Readiness Assurance Plan — Fiscal Year 2016

September 2016

The INL is a U.S. Department of Energy National Laboratory
operated by Battelle Energy Alliance

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Idaho National Laboratory
Idaho Falls, Idaho 83415

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ABSTRACT

Battelle Energy Alliance, LLC, the prime contractor for Idaho National Laboratory (INL), provides this Emergency Readiness Assurance Plan (ERAP) for Fiscal Year 2016 in accordance with DOE O 151.1C, "Comprehensive Emergency Management System." The ERAP documents the readiness of the INL Emergency Management Program using emergency response planning and preparedness activities as the basis. It describes emergency response planning and preparedness activities, and where applicable, summarizes and/or provides supporting information in tabular form for easy access to data. The ERAP also provides budget, personnel, and planning forecasts for Fiscal Year 2017.

Specifically, the ERAP assures the Department of Energy Idaho Operations Office that stated emergency capabilities at INL are sufficient to implement PLN-114, "INL Emergency Plan/RCRA Contingency Plan."

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TABLES

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ACRONYMS

ATR	Advanced Test Reactor
BEA	Battelle Energy Alliance, LLC
CFA	Central Facilities Area
COOP	Continuity of Operations
DOE	Department of Energy
EM	emergency management
EPHA	emergency planning hazards assessment
EPHS	emergency planning hazards survey
ERAP	Emergency Readiness Assurance Plan
ERO	emergency response organization
FY	Fiscal Year
GE	general emergency
ICS	Incident Command System
INL	Idaho National Laboratory
IST	Issues Screening Team
MFC	Materials and Fuels Complex
N/A	not applicable
OE	operational emergency
OEI	operating experience information
REC	Research and Education Campus
SAE	site area emergency
SMC	Specific Manufacturing Capability

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Idaho National Laboratory Emergency Readiness Assurance Plan — Fiscal Year 2016

1. PROGRAM DESCRIPTION

Battelle Energy Alliance, LLC (BEA), the prime contractor for Idaho National Laboratory (INL), provides this Emergency Readiness Assurance Plan (ERAP) for Fiscal Year (FY) 2016 in accordance with DOE O 151.1C, "Comprehensive Emergency Management System." The ERAP documents the readiness of the INL Emergency Management Program and assures the Department of Energy (DOE) Idaho Operations Office that stated emergency capabilities at INL are sufficient to implement PLN-114, "INL Emergency Plan/RCRA Contingency Plan." The ERAP was developed following the format and content guidance of DOE G 151.1-3, "Programmatic Elements."

The INL Emergency Management Program is fully matured as a hazardous material program as defined by DOE O 151.1C and continues to be an effective response program. DOE O 151.1C was added to the Prime Contract between the DOE Idaho Operations Office and BEA, Contract No. DE-AC07-05ID14517, "Management and Operation of the Idaho National Laboratory (INL)," in July 2006. All programmatic milestones were met during FY-2016. The National Incident Management System Implementation Plan is fully implemented and being maintained in compliance with DOE O 151.1C.

INL consists of the INL Site, which is an 890-square-mile desert area 45 miles west of Idaho Falls, Idaho, and multiple facilities at the Research and Education Campus (REC) in Idaho Falls. The ERAP covers only those INL facilities operated by BEA. It does not cover facilities operated by Fluor Idaho, LLC; or the Naval Reactors Facility operated by the DOE Pittsburgh Naval Reactors Office.

A. Hazards Surveys/Assessments

Based on the results of INL emergency planning hazards surveys (EPHSs) and emergency planning hazards assessments (EPHAs), INL has established an operational emergency (OE) hazardous material program as defined by DOE O 151.1C.

INL Emergency Management develops and maintains EPHS/EPHA documents for INL facilities operated by BEA. All INL EPHSs and EPHAs are DOE O 151.1C compliant. The review cycles and DOE O 151.1C compliance status for all EPHSs and EPHAs are indicated in Tables 1-1 and 1-2, respectively.

Table 1-1. Emergency planning hazards survey status.

Building/ Facility[1]	Last Review Date	Next Review Date	EPHA Required	DOE O 151.1C Compliance Schedule (Updated When Hazards Change or Every Three Years)
ATR Complex	October 2014	October 2017	Yes	Issue October 2017
CFA	July 2015	July 2018	Yes	Issue July 2018
MFC	July 2014	July 2017	Yes	Issue July 2017
REC	May 2015	May 2018	Yes	Issue May 2018
SMC	October 2015	October 2018	Yes	Issue October 2018

[1] ATR = Advanced Test Reactor MFC = Materials and Fuels Complex
CFA = Central Facilities Area SMC = Specific Manufacturing Capability

Table 1-2. Emergency planning hazards assessment status.

Building/ Facility	Last Review Date	Next Review Date	Hazardous Material Program Required	DOE O 151.1C Compliance Schedule (Updated When Hazards Change or Every Three Years)
ATR Complex	March 2016	March 2019	Yes	Issue March 2019
CFA (includes transportation)	July 2015	August 2018	Yes	Issue August 2018
MFC	July 2015	September 2018	Yes	Issue September 2018
REC	September 2012	September 2018	Yes	Issue September 2018
SMC	October 2015	October 2018	Yes	Issue October 2018

As indicated in the EPHSs, the OEs that could affect INL facilities are the result of radiological and hazardous material releases. The dominant hazards at INL in terms of the most severe consequences (i.e., general emergency [GE], site area emergency [SAE], or alert; biological release OEs) from potential OEs are indicated in Table 1-3.

Table 1-3. Dominant potential operational emergencies at Idaho National Laboratory.

	Emergency Classification				Radioactive/Chemical/Biological Material		
Facility	GE	SAE	Alert	OE Unclassified	Radioactive	Chemical	Biological
ATR Complex	X	X	X	X	GE, SAE, alert	SAE, OE	Not applicable (N/A)
CFA (includes transportation)	X	X	X	X	GE, SAE, alert	Alert, OE	N/A
MFC	X	X	X		GE, SAE, alert	SAE, alert	N/A
SMC		X	X	X	OE	SAE, alert, OE	N/A
REC				X	OE	OE	N/A

B. Emergency Plan and Implementing Procedures

PLN-114 and numerous emergency plan implementing procedures are fully mature and in a maintenance mode of operation. Annual review of PLN-114 was completed on schedule. Emergency plan implementing procedures are on schedule for completion of an annual review.

C. Exemptions

As specified in Table 1-4, BEA has no exemptions with DOE O 151.1C, Attachment 2, Contractor Requirements Document.

Table 1-4. Exemptions with DOE O 151.1C, Attachment 2.

Exemption	Reason	Date of Submission	Approval Date	Duration
No exemptions requested	N/A	N/A	N/A	N/A

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2. PROGRAM APPLICATION

A. Program Weaknesses

Table 2-1 identifies the INL Emergency Management Program weaknesses that are indicated through observations, actual events, self-assessments, independent assessments, and drills that can be grouped generally as follows:

- Emergency response organization (ERO) proficiency
- Training program
- Technology
- Incident Command System (ICS).

In the long term, BEA has initiated three major initiatives to address long-term fixes for identified issues/opportunities for improvement from the above-mentioned sources. The three initiatives are the Emergency Management training program, Emergency Management technology, and ICS.

During FY-2016, the following milestones were achieved for the three initiatives:

- Emergency Management continued to build the foundation for an exemplary training program. Job task analyses were completed for 52 duty positions, including Emergency Management professionals and emergency response organizational personnel. Emergency Management is currently in the design and development phases for the training initiative.
- The Emergency Management technology committee focused primarily on the WebEOC update initiative. Throughout the year, the committees held a number of focus meetings to define our expectations of WebEOC and adjust the contents as development progressed. The final developed product has given Emergency Management a substantially improved and easier to use platform for emergency event communication. The Emergency Management technology committee included the Emergency Management training committee throughout the development of WebEOC update to both obtain additional feedback to assist board layouts and to allow Emergency Management training to prepare for the release of the final product. The technology committee completed their phase of deployment and turned over the product to Emergency Management training for the final phase prior to official release for use. Other items in work are the development of a configuration management process and plan intended to ensure Emergency Management program software stability and appropriate future direction.
- Emergency Management worked towards being more compliant with the NIMS/ICS. A white paper was developed, which outlined the current ICS structure at the INL. This white paper identified process improvements needed to make Emergency Management more compliant with the NIMS/ICS structure. Ongoing efforts will include coordination with Emergency Management, INL Fire Department, INL Security, and Facility Operation.

Procedures/processes continue to be reviewed for ease of implementation and effectiveness and are revised when opportunities for improvement continue to be identified.

There are no issues that are reported in the DOE Corrective Action System.

B. Lessons Learned

An integral part of the feedback and improvement process and a key component of the effort to

achieve operational excellence is through the new Operating Experience Information (OEI) that DOE rolled this last year. The INL has adopted and is actively using this process. Through the lessons learned process, internal and external operating experience information is used to capture and share noteworthy practices or innovative approaches to promote repeat application, or adverse work practices or experiences to avoid recurrence. Continuous improvement is a result of systematic evaluation and implementation of OEI.

The INL Lessons Learned Program is described in PDD-171, "Issues Management Program," and the instructions and responsibilities for implementing the program are provided in LWP-13850, "Processing Lessons Learned and Operating Experience Information." The INL Lessons Learned Management System is maintained by the Lessons Learned Office and available to any employee who has access to the BEA intranet. Lessons learned/OEI with applicability to INL Emergency Management is provided by analysis and reporting to the INL Emergency Management lessons learned coordinator for review and distribution to applicable personnel. During FY-2016, numerous lessons learned were either disseminated to INL Emergency Management personnel by e-mail or discussed in staff meeting.

In addition, Emergency Management has created an internal lessons learned process and currently has 17 lessons learned posted on the Emergency Management home page. These internal lessons learned are the result of drills and exercises, management observations, or discussion from the Emergency Management Issues Screening Team (IST). Some of them are targeted at a specific audience with the emergency response organization while others may be distributed to all ERO members. Emergency Management has seen an improvement in their metrics during this last year and some of the credit has been attributed to an active and timely Emergency Management lessons learned process.

C. Program Constraints

INL Emergency Management is committed to conducting self-assessments and supporting external assessments conducted by outside organizations. Funding for corrective actions is determined on a case-by-case basis and is sought where existing scope of work will be impacted. While Emergency Management is considered mature and meeting all expectations, a significant amount of effort is being put into the three initiative areas knowing they will build a much stronger Emergency Management foundation for the future. At this time, Emergency Management is meeting all expectations largely with an expert based approach. While this can sustain short-term success, with the aging and retiring workforce, Emergency Management is building a much stronger programmatic approach to allow continued success in the future.

The exercise was scheduled for September 28 and postponed due to an operations event. The exercise is scheduled to be conducted on October 20.

Table 2-1. Emergency Management Program weaknesses.

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
INL: Drills and Exercises	Emergency Management	CO 2015-1818	*It is insufficiently clear who has the authority to make the determination that the influenza pandemic has reached levels that justify and/or necessitate sending all non-essential personnel home.* *Corrective Action: Identify the person and/or persons who will make the above decision and under what conditions.*	COOP	09/23/15	*This closure follows a phone conversation I had with our legal department on January 20, 2016, where I was counseled on the following:* *From the Equal Employment Opportunity Commission in regards to pandemic guidance and the Americans with Disabilities Act (ADA).* *"The ADA prohibits employee disability-related inquiries or medical examinations unless they are job-related and consistent with business necessity. Generally, a disability-related inquiry or medical examination of an employee is job-related and consistent with business necessity when an employer has a reasonable belief, based on objective evidence, that:* *An employee's ability to perform essential job functions will be impaired by a medical condition; or an employee will pose a direct threat due to a medical condition. (17)"Also, a "direct threat" is a significant risk of substantial harm to the health or safety of the individual or others that cannot be*	In progress

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
						eliminated or reduced by reasonable accommodation. (20) "If an individual with a disability poses a direct threat despite reasonable accommodation, he or she is not protected by the nondiscrimination provisions of the ADA." *Assessments of whether an employee poses a direct threat in the workplace must be based on objective, factual information, "not on subjective perceptions . . . [or] irrational fears" about a specific disability or disabilities. (21) The EEOC's regulations identify four factors to consider when determining whether an employee poses a direct threat: (1) the duration of the risk; (2) the nature and severity of the potential harm; (3) the likelihood that potential harm will occur; and (4) the imminence of the potential harm.(22)"* *DIRECT THREAT AND PANDEMIC INFLUENZA* *Direct threat is an important ADA concept during an influenza pandemic.*	

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
						Whether pandemic influenza rises to the level of a direct threat depends on the severity of the illness. If the CDC or state or local public health authorities determine that the illness is like seasonal influenza or the 2009 spring/summer H1N1 influenza, it would not pose a direct threat or justify disability-related inquiries and medical examinations. By contrast, if the CDC or state or local health authorities determine that pandemic influenza is significantly more severe, it could pose a direct threat. The assessment by the CDC or public health authorities would provide the objective evidence needed for a disability-related inquiry or medical examination. *During a pandemic, employers should rely on the latest CDC and state or local public health assessments. While the EEOC recognizes that public health recommendations may change during a crisis and differ between states, employers are expected to make their best efforts to obtain public health advice that is contemporaneous and appropriate for their location, and to make*	

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
						reasonable assessments of conditions in their workplace based on this information. *"The CDC states that employees who become ill with symptoms of influenza-like illness at work during a pandemic should leave the workplace. Advising such workers to go home is not a disability-related action if the illness is akin to seasonal influenza or the 2009 spring/ summer H1N1 virus. Additionally, the action would be permitted under the ADA if the illness were serious enough to pose a direct threat."* *Path Forward: As we review and update the INL Epidemic/ Influenza plan (PLN-2420) during FY 2016, we will include that INL supervisors inherently have the authority and responsibility to assess fitness-for-duty for those they supervise, as long as it follows the EEOC guidelines stated above, based on either performance issues or posing a direct threat. Also stating that the INL doctors already have the authority to diagnose, and the managers have the authority to*	

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
						send employees home based on that diagnosis. It is also reasonable, legal, and within INL business practices (but not mandatory) to direct those employees to charge their personal leave accounts for time away from work. However, in past practices for snow days (when non-essential employees were sent home) employees were compensated for time away from work other than charging to their personal leave accounts. *PLN-2420 needs to be updated to include the pandemic review findings that were completed under LP-CO 2015-1818. Specifically PLN-2420 will need to include that INL supervisors inherently have the authority and responsibility to assess fitness-for-duty for those they supervise as long as it follows EEOC.* *PLN-2420 will be updated as outlined in LP GA 2016-0285.*	
INL: Drills and Exercises	Emergency Management	CO 2015-1937	*Activation of the radiation monitoring instrumentation on the NOAA towers is tasked to two personnel in the EOC. This causes confusion among the responders in the EOC.*	REC	11/03/15	*Meeting was held with Scott Lee and Jason Rich to update EOC checklists (Planning Dir., Assessment Spec., Environmental Spec., Site Monitoring Team Coordinator, and NOAA)*	Closed

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
			Recommendation 5.5.2.1: Review and revise EOC checklists to resolve this conflict.			*regarding installment of Fixed High Volume Air Monitors. The monitors are currently being calibrated and are scheduled to be installed in the near future. All of the above checklists have been updated. The eCRs are 637822, 637823, 637824, and 637825. NOAA's is being processed by NOAA personnel. No further action required.*	
INL: Drills and Exercises	Emergency Management	CO 2015-2034	*ERO members were able to access required documentation. However, it was identified alternate ways to access to Emergency Operations Center (EOC) checklists would be beneficial.* *Although the bridge numbers are listed in LST-26, "INL Emergency Telephone Numbers," it would be advantageous if there were easy access to these numbers.* *Issue: Although not present at the drill, discussion was held regarding DOE-ID positions, JIC relocation, environmental, and site monitoring team coordinator information were unsure if all needed documentation, etc. was available.* *Recommended Actions: The Research and Education Campus (REC)/EOC planner should contact the additional entities to determine if all documentation and equipment is available in the event the EOC has to relocate.*	REC	12/02/15	*Additional copies of EOC position specific checklists have been placed in the Alternate EOC bin, located in the CFA ECC.*	Closed

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
INL: Drills and Exercises	Emergency Management	CO 2015-2088	*The Advanced Test Reactor (ATR) shift supervisor (SS) identified plant conditions that warranted activation of the ATR Complex Emergency Response Organization (ERO). The ATR SS utilized the ATR-2, "Shift Supervisor/Emergency Action Manager (EAM)" position specific checklist to respond to the event. The simulator drill postulated a blizzard causing a prolonged loss of commercial power (EPI-38 "Sustained Loss of Commercial Power at ATR Complex"). A suggestion was made to revise ATR-2 to provide the names of the procedures listed in step 6.*	ATR	12/18/15	*Revision 4 of ATR-2 (Shift Supervisor/Emergency Action Manager (EAM)) was issued on 02-22-16. This revision incorporated the change recommended to add procedure names to the procedures listed in step 6.*	Closed
INL: Drills and Exercises	Emergency Management	CO 2016-0326	*The incident commander (IC) recommended take shelter be implemented. The EAM asked him to reconsider the action, as at that time there was no indication of a spill or release. After several minutes, the IC again asked the EAM to implement a sitewide take shelter and at that time it was implemented. During the drill review, a discussion was held regarding a request verses a recommendation from the IC for implementing a protective action.*	Sitewide	04/13/16	*On March 31, 2016, a note was sent to all emergency management planners covering implementation of and transferring protective actions and protective action recommendations (PA/PARs). As part of the note, the planners were reminded that when an Incident Commander (IC) directs a PA/PAR be taken, the EAM is to follow the direction and then discuss it with the IC if he or she has questions. The emergency planners were reminded to share and review the information with the EAMs.*	Closed
INL: Drills and Exercises	Emergency Management	CO 2016-0327	*The emergency action manager (EAM) followed controller direction and used the*	Sitewide	04/13/16	*A note was sent to all emergency planners reminding them of the*	Closed

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
			Materials and Fuels Complex (MFC) voice paging system to activate the Emergency Control Center (ECC). The EAM was told that he didn't need to call the Warning Communication Center (WCC) to activate the ECC. The WCC was not made aware of the MFC ECC activation in a timely manner. This was discussed during the drill review. The drill and exercise coordinator will issue a letter to the planners when they are developing drills to emphasize to have activation of ERO reported to the WCC.			*importance of having the WCC notified when an EAM activates an ERO team using a voice paging system and making sure the WCC completes team activation using the Everbridge notifications process.* *Below is a copy of the note:* *There have been a few instances lately where the facility EAM has activated the ERO using the voice paging/ENS system, but then forgot to follow-up with either one or both of two things. First, in some instances, the EAM used the voice paging system and didn't notify the WCC of the activation, and second, a call was made to the WCC letting them know of the activation but a request was not made to have the WCC activate the facility ERO. Hence, WCC did not use Everbridge to activate team members.* *During drills, would you ensure that both things occur? First, the call to the WCC to let them know that the ERO has been activated and why. Second, have the EAM request the WCC activate the team also. This helps ensure that team*	

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
						members who might not be within hearing distance of the voice paging system are notified of the activation through Everbridge. *To help ensure this happens, I recommend that you include a place in the drill master event sequence list (MSEL) for a verbal inject to remind yourself to watch for this to occur and to provide a place for you to verbally remind the EAM if he forgets.*	
INL: Drills and Exercises	Emergency Management	CO 2016-0576	*The MFC EAM activated the MFC ERO via the facility voice paging system and the MFC support manager notified WCC of the activation. However, the MFC support manager failed to request WCC to activate the team through the INL emergency notification system.* *EM department will provide lessons learned information in quarterly newsletter or in the EM internal lessons learned program.*	MFC	05/24/16	*A lessons learned was prepared to provide instructions activation on ERO teams. The lessons learned was placed on the EM webpage and sent to the EM planners for further distribution.*	Closed
INL: Drills and Exercises	Emergency Management	CO 2016-0583	*Although this objective was not identified for evaluation, there were several opportunities provided regarding the benefit of the MFC EAM to discuss reentry planning. If a discussion had been conducted regarding reentry planning, additional information could have been obtained and shared such as*	MFC	05/24/16	*A lessons learned was prepared to outline the benefit of discussing reentry planning. The lessons learned was placed on the EM webpage and sent to the EM planners for further distribution.*	Closed

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
			status/condition of the cask, surveys, building condition, and potential for additional release of material. This information could have been used to validate PAs and determine whether or not termination criteria were actually met. A good discussion occurred during the hotwash on the reasoning behind reentry. *Action statement: EM department will provide lessons learned information in quarterly newsletter or in the EM internal lessons learned program to remind ERO personnel of the added benefits of reentry planning.*				
INL: Drills and Exercises	Emergency Management	CO 2016-0552	*During the course of discussing performance, a possible error in the EALs was identified. There appears to be three problems:* *1. The disparity in categorization/ classification actions based on two similar events (leaking gasoline tank of greater than 60 gallons).* *2. Having a fixed facility tank of gasoline (TRA-77B) that would fit the criteria for operational emergency (OE) EAL ATR-ALL-2.OE.3 but really would be an SAE with the protective action distance needed if the tank had leaked.* *3. Having an OE (ATR-ALL-2.OE.3) event with a 300-meter evacuation distance.*	ATR	06/14/16	*Under the auspices of DOE O 151.1C, an explosion is an OE. Propane and gasoline are not analyzed for inhalation concerns. The 100 m and 300 m distances were included by request so that the EAM will have direction as to how far personnel should probably be moved based on thermal blast concerns. These distances do not include shrapnel dangers, which could likely exist much further out. Shrapnel analyses cannot be performed by emergency management hazards assessors. Since we are still operating under 151.1C, no changes will be made to the EALs in question. However, it is*	Closed

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
			Emergency Management will review EALs			*relevant to note that DOE O 151.1D requirements are changing things up a bit. Therefore, a thorough review (and analyses, if applicable) of these EALs will be made, based on 151.1D requirements, during the scheduled triennial review periods for each EPHA once BEA's implementation plan for 151.1D is adopted.*	
INL: Drills and Exercises	Emergency Management	CO 2016-0551	*During the course of the response, the ATR SS identified items on ATR-2 as being complete, but did not complete the actions necessary at the time of signing off on the step in the checklist. An example of this was the activation of the ATR Complex ERO. The performance of the ATR SS candidate was found to be substandard. The drill was terminated prior to completing all actions necessary for completion of the qualification drill. The SS failed to use his position specific checklist properly. The ATR SS candidate will receive remedial training prior to attempting another qualification drill.*	ATR	6/14/16	*This issue is being evaluated and will be addressed per LP-CA 2016-0147.*	In progress
INL: Drills and Exercises	Emergency Management	CO 2016-0549	*From the time the EAM headed for the ECC from the incident scene, it was 21 minutes until categorization/classification was made (1311-1332 hours). The order-driven requirement is for categorization/ classification to occur within 15 minutes of being fully aware of the scope and*	SMC	06/14/16	*The attached operator aid will be placed at the EAM's position in the ECC. It will also be proposed to SMC EAMs and SMC document management to be a published operator aid.*	Closed

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
			reason for the emergency event. *Recommendation to the Emergency Management IST that the SMC emergency planner devise an improved skill refreshment solution for categorization/classification timelines.*			*Refreshment of knowledge will come each quarter: either from 1) a drill report that speaks to this timeline, or 2) an email from the SMC emergency planner to the EAMs with an attachment of the operator aid to remind about the timelines.*	
INL: Drills and Exercises	Emergency Management	CO 2016-0550	*The paramedic controller noted there was no patient vitals in the drill controller cue cards for the paramedics to work with. During the hot wash, the Fire Department Battalion Chief noted that the correct progression of fire events is control, then containment, then overhaul, then that the fire is out.* *Recommendation to the Emergency Management IST that the SMC emergency planner put more definition in drill packages with respect to patient vitals and the correct fire progression sequencing.*	SMC	06/14/16	*First, during weekly conference calls, all planners were reminded to have patient vitals on a cue card when having fire department personnel participate in drills and are expected to simulate treatment of injured.* *Second, each planer was reminded to work with fire department personnel to get the correct terminology to use in drills.* *Cue cards are needed from Fire Department for vitals for drills involving injured personnel. Will work with FD to coordinate this effort. See LP-GA 2016-0172.*	Closed
INL: Self-Assessment	Emergency Management	CO 2016-0687	*COOP is unable to harvest up-to-date vital records to an external hard drive.* *Action- COOP has met with IT personnel to create a program that would allow for an automated process to back up up-to-date vital records to an external hard*	COOP	7/28/16	*This action is being addressed as EM works with IT personnel to create program per LP-CA 2016-0180.*	In progress

Table 2-1. (continued).

Evaluation Method	Conducting Organization	Laboratory Protection LabWay No.	Identified Weakness (Taken Verbatim From LabWay)	Facility Specific or Sitewide	Date of Evaluation	Corrective Action(s)	
						Description (Taken Verbatim From LabWay)	Status
			drive. (COOP is awaiting approval for this project)				

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3. PROGRAM ACHIEVEMENTS

Table 3-1 compares actual INL Emergency Management Program achievements accomplished during FY-2016 to projected goals, milestones, and objectives.

Table 3-1. Emergency Management Program achievements (goals, milestones, objectives, and status) for Fiscal Year 2016.

Goal	Milestones	Objective	Status
Conduct annual FY-2016 sitewide exercise	Exercise final plan approved — at least 30 days prior to exercise Exercise conducted — date undetermined Exercise report submitted — within 45 days following exercise	Successfully accomplish exercise objectives and submit report	Exercise was postponed due to operations event. The exercise is scheduled to be conducted on October 20.
Conduct annual review of EPHSs, and revise, if necessary		Review EPHSs and revise, if necessary, by end of CY-2016	All EPHS reviews completed as scheduled
Conduct annual review of EPHAs, and revise, if necessary		Review EPHAs and revise, if necessary, by end of CY-2016	All EPHA reviews completed as scheduled
Complete annual review of PLN-114 and revise, if necessary		Review PLN-114 and revise, if necessary, by end of FY-2016	Annual review of PLN-114 completed with new revision issued in FY-2016
Conduct initial training for new ERO members	Classes conducted, as needed	Conduct initial training for all new ERO members	Initial training conducted, as needed
Conduct annual ERO requalification training for CY-2016		Complete annual ERO requalification training for CY-2016	ERO requalification training completed for CY-2016
Complete ERAP for FY-2016		Complete FY-2016 ERAP	FY-2016 ERAP scheduled for completion by September 30, 2016
Conduct annual facility evaluated drills		Successfully conduct facility evaluated drills	Drills successfully conducted or are scheduled as per the approved drill schedule
EM Technology improvement initiative			WebEOC update initiative

Table 3-1. (continued).

EM Training program initiative			Job task analyses were completed for 52 duty positions
EM ICS implementation initiative			White paper was developed on ICS structure at the INL

4. PROGRAM GOALS

Table 4-1 describes the INL Emergency Management Program projected goals, milestones, and objectives for FY-2017.

Table 4-1. Emergency Management Program projections (goals, milestones, objectives) for Fiscal Year 2017.

Goal	Milestones	Objective
Conduct annual FY-2017 sitewide exercise	Exercise final plan approved — at least 30 days prior to exercise Exercise conducted — date undetermined Exercise report submitted — within 45 days following exercise	Successfully accomplish exercise objectives and submit report
Conduct annual review of EPHSs, and revise, if necessary		Review EPHSs and revise, if necessary, by end of CY-2017
Conduct annual review of EPHAs, and revise, if necessary		Review EPHAs and revise, if necessary, by end of CY-2017
Complete annual review of PLN-114 and revise, if necessary		Review PLN-114 and revise, if necessary, by end of FY-2017
Conduct initial training for new ERO members	Classes conducted, as needed	Conduct initial training for all new ERO members
Conduct annual ERO requalification training for CY-2017		Complete annual ERO requalification training for CY-2017
Complete ERAP for FY-2017		Complete FY-2017 ERAP
Conduct annual facility evaluated drills		Successfully conduct facility evaluated drills
EM Technology improvement initiative		Develop Five-Year Strategic Equipment Plan
EM Training program initiative		Update and issue training procedure
EM ICS implementation initiative		Develop path forward for implementation

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5. OTHER

BEA is responsible for compliance with DOE O 151.1C, Attachment 2, and the flow down of those requirements.

A. Emergency Management Personnel

Table 5-1 provides the total number of full-/part-time Site/facility personnel required for FY-2016 and estimated for FY-2017 for federal and contractor staff.

Table 5-1. Emergency Management personnel — full-time equivalents.

Organization	FY-2016	FY-2017
Federal		
Contractor	18.5	19.5
Justification: N/A		

B. Emergency Management Operational Budget

INL Emergency Management is fully funded. Table 5-2 summarizes the INL Emergency Management Program operational budget.

Table 5-2. Emergency Management Program operational budget.

Organization	FY-2016	FY-2017
Federal		
Contractor	$2,489K	$2,647K

C. Equipment Requirements

Table 5-3 lists equipment requirements that are not included in the operational budget.

Table 5-3. Equipment requirements.

Item	FY-2016	FY-2017
Technical Upgrades	$32,820	$433,600
Justification:	INL Emergency Management key justification is to recognize that a change of one or more generations in Emergency Management hardware and software brings with it the opportunity to make an investment leading to future emergency management benefits. But those benefits cannot be realized unless the justification to upgrade or the replacement also includes taking advantage of doing new or different things than the existing Emergency Management tools such as air dispersion tools, RPIS, iMap, WebEOC, etc. are capable of doing today. Doing a “replacement in kind” provides little or no benefit. In almost every case in Emergency Management of automated systems replaced or upgrades, the installed system is reaching its “end of life” where replacement parts are becoming difficult to find and their cost is increasing. This generally leads to a “shock value” approach to justification where a “risk” is identified for a failure leading to lost response to an emergency event at the INL or other potential economic impacts to emergency management and the INL. In a high percentage of emergency management equipment resources, the requirement is		

Table 5 3. (continued).

	literally to “copy” the existing equipment as best as possible and get the system up and running a fast as possible. This approach is missing the key justification of making an investment for improvement. Equipment requirement opportunities fall into the following general cost areas. 1. Increased asset utilization. For example, more people will use iMap in the future. This is tracked as Return on Net Assets or RONA. 2. Reduced maintenance costs. For example, upgrading WebEOC provides contributions from ease of maintenance and improved practices and procedures that will reduce overall costs. 3. Improved ERO effectiveness leading to better decision making and fewer human performance operational errors. For example, system features that aid in access to emergency information and recommended emergency action levels, adopting new practices, and procedures or workflows that will increases automation and offloads many of the standard actions required of the ERO, will result in opportunities for improved operator training, visibility of the ERO for accurate and timely decision making, and improved cyber security protection over previous generations of systems.