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ATTACHMENTS

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1. PURPOSE

The primary purpose of this exercise is to close out a finding identified in the formal assessment, "Review of the Adequacy of Emergency Response to the February 20, 2000 Criticality False Alarm in New Brunswick Laboratory", dated April, 2000. Judgment of Need (JON-SSS-T-1) states: "DOE-CH SSS needs to coordinate a site-wide emergency exercise for a response to a radiological event in coordination with Argonne Area Office, Argonne National Laboratory, and New Brunswick Laboratory (NBL)." The goal of the exercise is to demonstrate the site's ability to accurately communicate event information from the incident scene at NBL to the Department of Energy (DOE) Headquarters Emergency Operations Center (EOC) via the appropriate response channels established in both the Argonne National Laboratory – East (ANL-E) EOC and DOE Chicago Operations Office (CH) EOC.

Prior to the February 20th incident, the DOE CH, DOE Argonne Area Office (AAO), NBL and ANL-E were already involved in discussions, which focused on the need to test and evaluate the integrated response process for a DOE facility located on a contractor site. Due to the decreased level of hazards at the ANL-E site, the Emergency Response Organization (ERO) is not provided with many opportunities for "hands-on" experience in position-specific response roles. To date, there has never been cause to activate the DOE-Chicago Operations Office (DOE-CH) and ANL-E Emergency Operations Centers (EOCs) due to an operational emergency. DOE and ANL-E representatives acknowledged the importance of determining the site's readiness capability through a formal evaluation of their response capabilities. In essence, this exercise will provide dual benefits:

1) Provide a "hands-on" training opportunity for many of the responders by familiarizing them with their response locations/facilities/equipment, individual response actions, procedures, and their team's role in the integrated response.
2) Provide clarity on DOE's and ANL-E's integrated response process through a simulated event at a DOE owned and operated facility (NBL) on a contractor site.

2. SCOPE

The NBL Exercise is limited in scope in that it will focus on the management interfaces versus in depth field participation. "Trusted agents" from the DOE-CH, Argonne Area Office (AAO), ANL-E and NBL serve as members of the Scenario Development Group (SDG) in the planning and development of this exercise. This ensured that the scenario and objectives are credible and appropriate to the NBL mission. Their participation also ensures that the scope of planned exercise events does not create any unnecessary interference or disruption of normal ANL-E/NBL operations.

2.1 Participants

Participation in the exercise will include the following positions/organizations/facilities:

Onsite Participants

- DOE Headquarters (HQ) EOC/Watch Officer
- DOE-CH EOC/Emergency Management Team (EMT) (Building 302)
- DOE-CH Office of Communications (OM-C)
- Argonne Area Office (AAO)
- ANL-E Technical Support Center (TSC)/EOC (Building 201)
- ANL-E Fire Department/Fire Alarm Office (Building 333)
- ANL-E Office of Public Affairs (OPA)
- ANL-E Emergency Press Center (EPC) (Building 224)
- New Brunswick Laboratory (Building 350)
- Central Alarm Station (CAS) (Building 302)
- Security Consultants Group (SCG) – ANL-E Protective Force
- Radiological Assistance Program (RAP) Team, Region 5
- Health Physics support

2.1 Participants (continued)

Offsite Participants

- Illinois Department of Nuclear Safety (IDNS)
- Forest Preserve District of DuPage County, Illinois

Offsite participants to be role-played either from the EPC or from the Control Cell include:

- DuPage County: Emergency Management Agency
- Local/regional media representatives
- Concerned citizens
- Mayor of Argonne Hills (simulated nearby community)

Participation of other organizations that may or may not have a response interface with ANL-E will be limited to exercise notification as noted on the initial Notification Form upon event initiation.

2.2 Extent of Play

The exercise focuses on the ANL-E Emergency Management Organization's (EMO) and the DOE Emergency Management Team's (EMT) integrated response to a postulated emergency event involving a maximum credible fire resulting in injuries in a plutonium laboratory at NBL. The specific objectives are designed to facilitate the demonstration and assessment of:

- Personnel accountability at the facility-level
- Activation and mobilization of key elements of the emergency response organization
- Initial and ongoing emergency notifications
- Communication between key elements of the emergency response organization
- Classification and categorization of the postulated emergency event
- Determination of onsite Protective Actions (PAs) and offsite Protective Action Recommendations (PARs)
- Consequence assessment determinations

2.2 Extent of Play (continued)

- Adequacy of emergency facilities and equipment
- Emergency public information activities

The Incident Command Post (ICP) response activities will be simulated from the Control Cell once the initial Fire Department response activities have been completed. The field response activities are limited to initial emergency assessment and personnel accountability. Extinguishing the fire, medical support, and emergency decontamination will be simulated. Pro Force personnel will lend their assistance to the Incident Commander in controlling access to and from the incident scene. A 10-minute Administrative Hold will be initiated to allow the Incident Commander and key support personnel sufficient time to relocate to the Control Cell.

The ANL-E TSC/EOC and DOE-CH EOC will be activated in order to test the emergency plan implementing procedures, job aids, checklists, communication interfaces, facilities, and equipment as utilized by DOE-CH, AAO, ANL-E, and NBL support personnel.

A RAP Team will be deployed to support monitoring activities at the site boundary as requested by the IDNS, and potentially be deployed to support onsite monitoring conducted by onsite Health Physics personnel as requested by the TSC/EOC.

The EPC will be established at the ANL-E Visitor's Reception Center. Emergency Management representatives, mock media and a local Mayor from the simulated community of Argonne Hills, will report to the EPC in order to challenge the Public Information personnel with questions regarding the details of the incident at NBL. Message injects representing concerned citizens and rumors will <u>not</u> be injected into exercise play.

The EOCs and EPC will continue to play until the Emergency Communications Network (ECN) link is established and operational, and press conferences are completed.

3. OBJECTIVES

The specific objectives for the NBL Exercise are presented by organization and/or function.

New Brunswick Laboratory (NBL)

NBL-01 Given the evacuation of Building 350, complete an accountability for all B350 occupants in accordance with the NBL Emergency Plan, not to exceed thirty (30) minutes.

NBL-02 Given the activation of the CH-EOC and ANL-E EOC, dispatch NBL personnel to provide technical support to each facility in accordance with the NBL Emergency Plan.

NBL-03 Given an operational DOE-CH-EOC, participate in notifying the DOE-HQ EOC in accordance with the NBL Emergency Plan.

NBL-04 Given the activation of the CH-EOC and the ANL-E EOC, demonstrate a two-way communication link between NBL staff in both facilities in accordance with the NBL Emergency Plan.

NBL-05 Given an operational ANL-E Emergency Press Center, designate a lead NBL point of contact to coordinate emergency public affairs activities and serve as the NBL spokesperson in accordance with the NBL Emergency Plan.

ANL-E Technical Support Center (TSC)/EOC

TSC-01 Given an operational TSC/EOC, perform consequence assessment, event classification, and carry out notifications in accordance with the ANL-E Comprehensive Emergency Management Plan (CEMP).

3. OBJECTIVES (continued)

TSC-02 Given the categorization of an operational emergency, verbally notify (within 15 minutes) the AAO Manager and notify DOE-HQ EOC in accordance with the ANL-E CEMP and DOE Order 151.1A.

TSC-03 Given an operational TSC/EOC, make protective action recommendations in accordance with the ANL-E CEMP.

TSC-04 Given an operational TSC/EOC, collect and disseminate appropriate technical information obtained from the NBL liaison in accordance with the ANL-E Comprehensive Emergency Management Plan.

TSC-05 Given an operational EOC, provide management oversight of decisions made by the technical support center manager and incident commander in accordance with the ANL-E Comprehensive Emergency Management Plan.

Argonne Area Office (AAO)

AAO-01 Given an operational emergency at NBL, staff the position of DOE On-Scene Commander in accordance with the AAO Standard Operating Procedure 6: Emergency Management for Argonne National Laboratory-East.

AAO-02 Given an operational CH-EOC, establish communications with the CH EMT and provide periodic status reports concerning the emergency in accordance with the AAO Standard Operating Procedure 6: Emergency Management for Argonne National Laboratory-East.

AAO-03 Given a draft media release, approve the release of the initial information to news media and provide copies for the CH EMT and DOE-HQ EOC in accordance with the AAO Standard Operating Procedure 6: Emergency Management for Argonne National Laboratory-East.

3. OBJECTIVES (continued)

DOE-CH Emergency Management Team (EMT)

CH-01 Given the decision to activate the Chicago Operations Office (CH) EOC, activate and staff the CH-EOC in accordance with DOE-CH Emergency Plan activation criteria; not to exceed 30 minutes during work hours and 2 hours during off hours.

CH-02 Given a staffed EOC, operate the CH-EOC in accordance with DOE-CH Emergency Plan and Procedure #1 "CH-EOC Activation and Operation."

CH-03 Given an operational EOC, establish and maintain communication links between the CH-EOC and the ANL-E EOC in accordance with Procedure #1, "CH-EOC Activation and Operation of the CH-EOC."

CH-04 Given an operational EOC, establish and maintain communication links between the CH-EOC and the DOE-HQ EOC via telephone link and the Emergency Communications Network (ECN).

CH-05 Given an established communication link between CH-EOC and DOE-HQ EOC, disseminate accurate event information (maps and digital photos of the response) via videoconference, videotape transmission and computer data transmission.

Radiological Assistance Program (RAP)

RAP-01 Given the request for technical assistance from the ANL-TSC/EOC, provide onsite-monitoring support to ANL-E health physics personnel in accordance with onsite health physics procedures, after approval from DOE-CH.

RAP-02 Given the request for technical assistance from the Illinois Department of Nuclear Safety (IDNS), provide offsite-monitoring support to IDNS personnel in accordance with RAP procedures.

3. OBJECTIVES (continued)

Public Information (DOE-CH and ANL-E)

PI-01 Given notification of an operational emergency at NBL, staff the PIO function in the CH-EOC in accordance with the DOE-CH Emergency Public Affairs Plan.

PI-02 Given notification of an operational emergency at NBL, staff the PIO function in the ANL-E TSC/EOC in accordance with the ANL-E Emergency Public Affairs Plan.

PI-03 Given operational EOCs, establish and maintain communication links between the DOE-CH Public Information Officers (PIOs) and the ANL-E PIOs in accordance with the DOE-CH Emergency Public Affairs Plan and the ANL-E Emergency Public Affairs Plan.

PI-04 Given the declaration of an operational emergency, keep the public informed of emergency response actions in accordance with the ANL-E CEMP, the ANL-E Emergency Public Affairs Plan, and the DOE-CH Emergency Public Affairs Plan.

PI-05 Given the declaration of an operational emergency, determine the adequacy of the ANL-E Emergency Press Center or the need to activate a DOE-CH Joint Information Center (JIC) in the Army Reserve Center in accordance with the DOE-CH Emergency Public Affairs Plan and the ANL-E Emergency Public Affairs Plan.

PI-06 Given an operational ANL-E Emergency Press Center, establish and maintain communication links between the DOE-CH/ANL-E PIOs and the PIOs from IDNS and DuPage County in accordance with the DOE-CH Emergency Public Affairs Plan and the ANL-E Emergency Public Affairs Plan.

PI-07 Given the declaration of an operational emergency, ensure that facilities are made available to accommodate the needs of the media in accordance with the ANL-E Emergency Public Affairs Plan and the DOE-CH Emergency Public Affairs Plan.

PI-08 Given an operational ANL-E Emergency Press Center, conduct a Press Conference in accordance with the DOE-CH Emergency Public Affairs Plan and the ANL-E Emergency Public Affairs Plan.

4. SCENARIO NARRATIVE SUMMARY

On June 5, 2001, at approximately 8:30 a.m., an NBL employee (Employee #1) is conducting a sample analysis in a closed glovebox in Room 143 of Building 350. A portion of the electrical equipment within the glovebox has become somewhat eroded due to the acid evaporations and fuming that have taken place over time. The employee is unaware of the electrical hazard and has initiated the use of a propane torch to flame several electrodes. A spark ensues from the eroded wiring in the glovebox, which in turn startles the employee causing him to drop the propane torch. The torch knocks over a 25-ml beaker of acetone that was left open in the glovebox. The spilled material ignites and quickly engulfs other material inside the glovebox. Employee #1 grabs a fire extinguisher and attempts to put out the fire (simulated). A second employee (Employee #2) is walking down the corridor outside of Room 143 and observes smoke coming out from under the doorway. Employee #2 observes Employee #1 trying to put out the fire. The heat has built up inside the glovebox activating the heat detector, which sets off the building fire alarm. When the glass on the face of the glovebox is sprayed with the extinguisher, it shatters and "explodes". The Building 350 occupants hear the alarm and begin evacuating the facility. Employee #2 yells at Employee #1 to leave the fire and evacuate. The flying debris and subsequent flames and smoke overcome both employees. Employee #2 tries to assist Employee #1 in evacuating the facility, but both are overcome and unable to exit.

The Area Emergency Supervisor (AES) conducts accountability of facility personnel outside of Building 350. (Relocation to Building 316 may be simulated.)

The fire quickly consumes the combustibles in Room 143. The fire continues up the stack inside the glovebox, enters the attic and destroys the High-Efficiency Particulate Air (HEPA) filtration system. By the time the ANL-E Fire Department arrives, the fire has consumed Room 143 and potentially some of the plutonium inside the adjoining labs. A request for mutual aid assistance is initiated. Health Physics support is dispatched to survey facility personnel for potential contamination.

Medical assistance and gross decontamination is provided to Workers #1 and #2 (simulated) and they are subsequently transported to LaGrange Hospital (simulated) for further evaluation, including radiological decontamination and treatment of respiratory distress.

4. SCENARIO NARRATIVE SUMMARY (continued)

Based on the initial witness reports and the availability of resources, the Incident Commander requests activation of the ANL-E Technical Support Center/EOC.

The TSC Manager assists the Incident Commander by declaring an operational emergency and reviews the Emergency Action Levels in the NBL Emergency Plan/ANL-E Comprehensive Emergency Management Plan (CEMP) for a fire. He/she determines that the incident scene justifies the classification of the emergency as an ALERT. The TSC Manager initiates the required onsite and offsite verbal notifications and activates the ANL-E EOC. The ANL-E TSC Manager keeps the Crisis Manager informed, while the ANL-E Incident Commander continues to direct on-scene activities.

The NBL Director and the AAO Manager notify the DOE-CH Manager. The DOE-CH Manager decides to activate the CH-EOC in accordance with the DOE Chicago Operations Office Emergency Plan. The CH EMT is notified and told to report to the CH-EOC. The AAO Manager acts as the DOE On-Scene Commander (OSC) in the ANL-E EOC. The CH Manager establishes and maintains communication with the AAO Manager and the DOE-HQ EOC. The CH-EOC provides current information regarding the incident to the HQ EOC through telephone communications, faxes, and the transmission of video and digitized photographs. The Radiological Assistance Program (RAP) team is dispatched to support monitoring of the site boundary in support of the Illinois Department of Nuclear Safety (IDNS) to ensure that no offsite radiological contamination has occurred.

The site becomes inundated by phone calls from the local media who have heard about the incident while monitoring off-site fire department radio frequencies during the ANL-E call for mutual aid. The ANL-E Emergency Press Center (EPC) is staffed and a discussion ensues among the Public Information Officers for DOE-CH and ANL-E as to whether or not the EPC in the Army Reserve Center should be activated. Media interest is of such a heightened level that a Press Conference is scheduled and conducted. The Mayor of Argonne Hills expresses concern for his constituents at the Press Conference. The exercise will be terminated when all objectives have been met and upon completion of the Press Conference.

5. EVENT CONDITIONS AND SIMULATIONS

- Canned weather will be used that is based on the average meteorological conditions for a similar day in early June.
- Digitized photographs will be used to simulate the spread of the fire and smoke in Room 143, the adjacent corridor, and the exterior of Building 350.
- Worker #1 will simulate putting out the fire with fire extinguisher, but will not activate it.
- Building 350 personnel will evacuate the facility but will simulate relocating to Building 316.
- Workers #1 and #2 will be moulaged in order to simulate injuries from flying debris and/or smoke inhalation.
- Due to the limited scope of play at the Incident Scene, a command vehicle will be used in place of an engine.
- The isolation of ventilation systems will be simulated.
- Medical treatment and transportation of injured personnel to LaGrange Hospital will be simulated.
- Coleman lantern mantles will be used to simulate offsite contamination unrelated to the incident.
- A control cell will be used to simulate non-participating agencies/organizations.
- Emergency decontamination of injured personnel will be simulated.
- Role players will serve as Mock Media to challenge Public Information personnel.

NOTE: Actual fire alarms will be used and NOT simulated.
Actual PPE may be simulated.

6. TIMELINE AND MASTER SCENARIO EVENT LIST

Time	Message#	Exercise Event/Activity
-2400		Issue a reminder email message to B350 personnel regarding the fire drill scheduled for 6/4/01.
0700	0	Set up Control Cell. Conduct system checks. Provide canned met data.
0730		Moulage Workers #1 and #2 at B350.
0800		Controllers and Evaluators take up their assigned positions. Conduct radio/phone check and time hack.
0830	Photo package 1 Room 143 #1	Initiate the Exercise: Worker #1 identifies the glovebox fire and tries to put it out with a fire extinguisher.
0830	Photo package 2 Corridor #2	Worker #2 identifies the smoke in the corridor and helps Worker #1 exit the building.
0835	#3	Facility Manager engages fire alarm (Point 126) from his office. **Fire Alarm Office (B333)/Central Alarm Station (B302) Controllers Note**: Ensure that the descriptor on the alarm panel is "HD MAIN FL S. PU LAB 143 G-BOX". Graphic Central Descriptor is "BLDG 350 MAIN FL S. PLUTONIUM LAB 143 G-BOX HEAT DET (1-126)." Shortly after point 126 alarms, alarm point 30 should alarm (the smoke detector in lab 143), followed by point 25 (Pu corridor detector). Any other alarms should be considered actual and unrelated to the exercise. If any other alarms activate other than those noted, immediately notify the Control Cell of a CODE OCTOBER.
0835		The Fire Alarm operator announces the emergency on the Group Alert System and dispatches assistance vehicles as necessary.
0836		Building 350 personnel hear the fire alarm and evacuate the building. **B350 Controller Note 1:** If any personnel evacuate through the corridor past Room 143, provide description of individuals to Assembly Area Controller OR Onsite Monitoring Team Controller. **B350 Controller Note 2:** Building 350 personnel will simulate going to the relocation point in B316. They should evacuate to the field south of the facility. **Assembly Area Controller/Onsite Monitoring Team Controller Note:** Use Data Package 1 to provide contamination data to health physics personnel assigned to monitor B350 occupants who may be potentially contaminated.

6. TIMELINE AND MASTER SCENARIO EVENT LIST (continued)

Time	Message#	Exercise Event/Activity
0838		The Area Emergency Supervisor (AES) meets the Fire Department Chief/Incident Commander (IC) at the command post. The IC confers with the B350 AES and injured personnel as to the details of the incident.
0840	Photo Package 3 B350 Exterior #4-A Data Package 1 #4-B, #4-C, #4-D, #4-E	The IC conducts an initial size-up of the incident.
0845	#5	The IC requests mutual aid assistance. **Lead Controller Note:** Ensure that the call for mutual aid assistance is simulated to the Control Cell.
0845	#6	The IC requests activation of the Technical Support Center (TSC) to ensure appropriate notifications are made to on-site emergency management personnel, to the Argonne Area Office (AAO), DOE-Headquarters, and to offsite agencies. The IC requests health physics support on-scene for the purpose of monitoring B350 personnel.
0900	#7	The TSC Manager assists the IC by declaring an operational emergency and reviews the EALS in the NBL Emergency Plan/ANL-E Emergency Plan and classifies the incident as an ALERT. **[Objective TSC-01]**
0900	#7	The TSC Manager activates the ANL-E EOC. **[Objective TSC-01]**
		Simulate transport of injured personnel to La Grange Hospital. Decontamination to continue there.
0905		The AES confirms accountability for all B350 personnel. **[Objective NBL-01]**
0905		NBL dispatches a representative to the TSC/EOC. **[Objective NBL-02]**
0910		The NBL representative provides technical support in the form of facility-specific information to the TSC/EOC cadre. **[Objective TSC-04]**
0910	#8	The DOE On-Scene Commander (AAO Manager) reports to the TSC/EOC and provides notification of ANL EOC activation to the CH Manager. **[Objective AAO-01]** **AAO Controller Note:** Ensure notification of the IDNS by the TSC/EOC.
0910		An ANL-E Public Information representative is dispatched to the ANL-E TSC/EOC. **[Objective PI-02]**
0915	#9	The CH Manager activates the CH EOC.
0915		All offsite notifications should be complete. **[Objective TSC-02]**
0915	#10	The EPC is activated. **[Objective PI-07]**

6. TIMELINE AND MASTER SCENARIO EVENT LIST (continued)

Time	Message#	Exercise Event/Activity
0915		An NBL representative is dispatched to the CH EOC and maintains a communication link with the NBL representative in the TSC/EOC. **[Objectives NBL-02, NBL-04]**
0915		An NBL representative is dispatched to the CH EOC and maintains a communication link with the NBL representative in the TSC/EOC. **[Objectives NBL-02, NBL-04]**
0915		A Public Information representative is dispatched to the CH EOC and establishes communication with the ANL-E PIO. **[Objective PI-01, PI-03]**
0920	#11	ANL-EOC notifies DuPage County Forest Preserve District to evacuate and monitor any persons who may have been near the site boundary.
0920	#12	The Illinois Department of Nuclear Safety (IDNS) requests RAP team assistance with monitoring the site boundary.
0920		The TSC Manager validates Protective Actions. **[Objective TSC-03]**
0920		Health Physics personnel in the TSC initiate consequence assessment activities. **[Objective TSC-01]**
0920		The Emergency Coordinator ensures equipment is activated in the CH EOC. **[Objective CH-02]**
0930		The TSC/EOC is declared operational. **[Objective TSC-01]**
0935		The ANL-E EOC establishes communications with a fully activated CH EOC. **[Objective CH-01, AAO-02, CH-03]**
0945		Communications are established between the EPC and the offsite PIOs from DuPage County and IDNS. **[Objective PI-06]**
0945		The CH EOC establishes communications with DOE-HQ EOC. **[Objective NBL-03, CH-04]**
0945	Data Package 2 #13	Health Physics/RAP Team completes monitoring of B350 personnel. **[Objective RAP-01]** **On-Scene Controller Note:** B350 personnel are to be released to their facility upon successful completion of the monitoring of at least 10 individuals.
0950		Mock Media arrive at the Visitor's Center. - Question regarding fatality. - Question regarding protective actions for children at the Day Care Center
1000		First media release is approved by the AAO OSC. **[Objective AAO-03]**
1000	#14	Medical information on injured personnel provided to the TSC. **Lead Controller Note**: Communicate information to the TSC as if it is coming from LaGrange Hospital.

6. TIMELINE AND MASTER SCENARIO EVENT LIST (continued)

Time	Message#	Exercise Event/Activity
1000	#15	The RAP team deploys to meet IDNS monitoring teams for the purpose of monitoring the site boundary. **[Objective RAP-02]** **RAP Controller Note:** Monitoring teams will find contamination unrelated to the incident. Drop several Coleman lantern mantles to simulate realism and generate activity for the EOCs to deal with.
1000	**#16**	**10-Minute ADMINISTRATIVE HOLD while Incident Commander relocates to Control Cell.** **Note to ALL CONTROLLERS:** Ensure response personnel stop all exercise activities for approximately 10 minutes to allow enough time for the Incident Commander to terminate activities at the scene and relocate to the Control Cell.
1010	**#17**	**Exercise Restart**
1010		An NBL representative is designated to support public affairs activities at the EPC. **[Objective NBL-05]**
1015	#18	The CH EOC transmits a map of the incident scene to the DOE-HQ EOC. **[Objective CH-05]**
1015	Photo Package 4 #19	The CH EOC transmits digital photos of the incident scene to the DOE-HQ EOC. **[Objective CH-05]**
1015	#20	The CH EOC transmits video of the incident scene to the DOE-HQ EOC. **[Objective CH-05]**
1100		First Press Conference is conducted at the EPC. **[Objective PI-08**]
1100	PI Injects #22-A through #22-G #23-A through #23D	The ANL-E Operator and DOE Public Information hotline (630-252-2010) receive phone calls from concerned citizens and mock media.
1115		Public Information representatives discuss the adequacy of the EPC and determine whether or not to activate a DOE CH Joint Information Center in the Army Reserve Center. **[Objective PI-05]**
1120		The Mayor of Argonne Hills expresses concern for political constituents.
1200		Second Press Conference is conducted at the EPC. **[Objective PI-08]**
1215	#21	Exercise is Terminated
1230		In Place Responder Hotwash
0200		Participant Critique (Building 201, Room 3A)

7. EXERCISE DATA

7.1 Facility Description

The NBL is a Government-owned, Government-operated facility originally located in New Brunswick, New Jersey. It was moved, in two phases, to its current site located at ANL-E. The Plutonium section of NBL was moved in 1975, while the Uranium section move was completed in 1977. NBL serves as the U.S. Government's Nuclear Material Measurements and Standards Laboratory and is the USA's Certifying Authority for nuclear reference materials. NBL provides a federal technical staff and laboratory resource performing nuclear material measurements, safeguards, and non-proliferation functions for DOE's Office of Security and Emergency Operations (SO). Figure 7-1 depicts the Argonne Site and Surrounding Area.

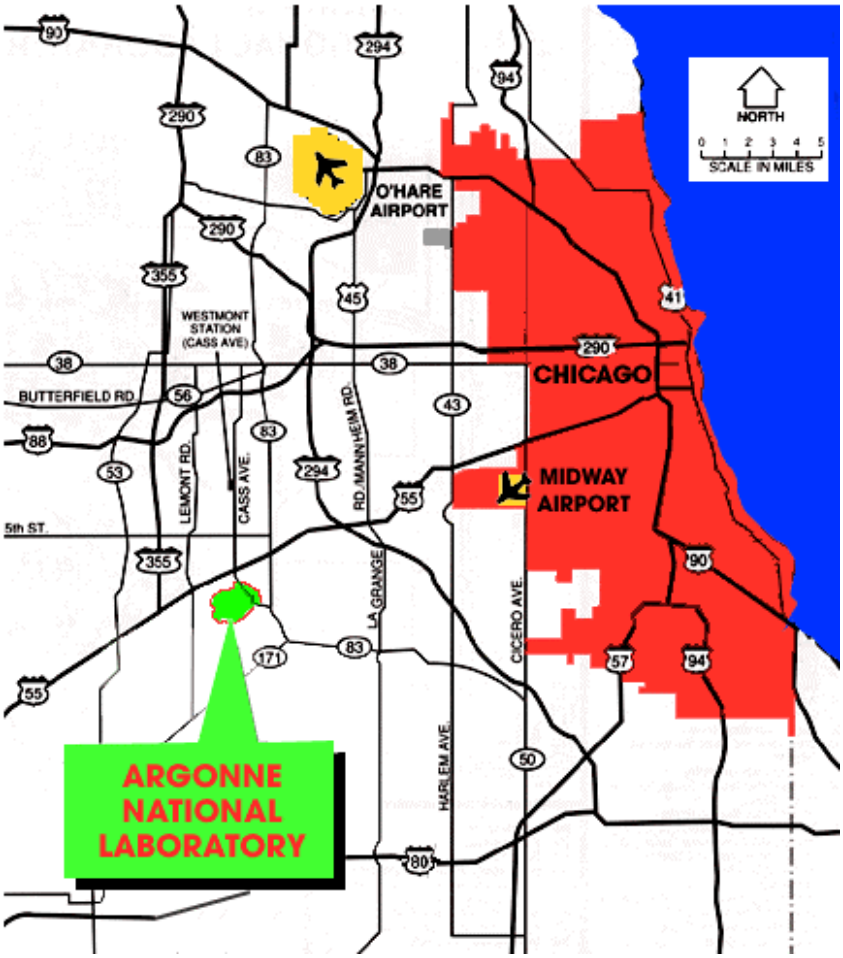


Figure 7-1. Argonne Site and Surrounding Area.

7.1 Facility Description (continued)

Facility Structure

The NBL Building 350 facility complex consists of a previously existing building, modified in 1975 to accommodate NBL's activities, and a building addition completed in 1977. Plutonium operations are housed in the modified area, on the south side of the facility, in the original Building 350. Nine plutonium laboratory rooms are contained within the northern half of the original Plutonium Fabrication (Fab) Area and are separated from the rest of the Fab Area by a wall forming the south side of a corridor, which runs the east-west length of the Fab Area. The basement (Service Floor) of the original building is divided into two sections. Basement A contains the plutonium facility wastewater retention tanks, the acid fume scrubber exhaust system, and storage space for equipment. Basement B contains the Emergency Relocation/Tornado Shelter Area and mechanical equipment. The second floor of the original building contains ventilation equipment, exhaust stack monitoring equipment, and a small distilled water generator with storage tank.

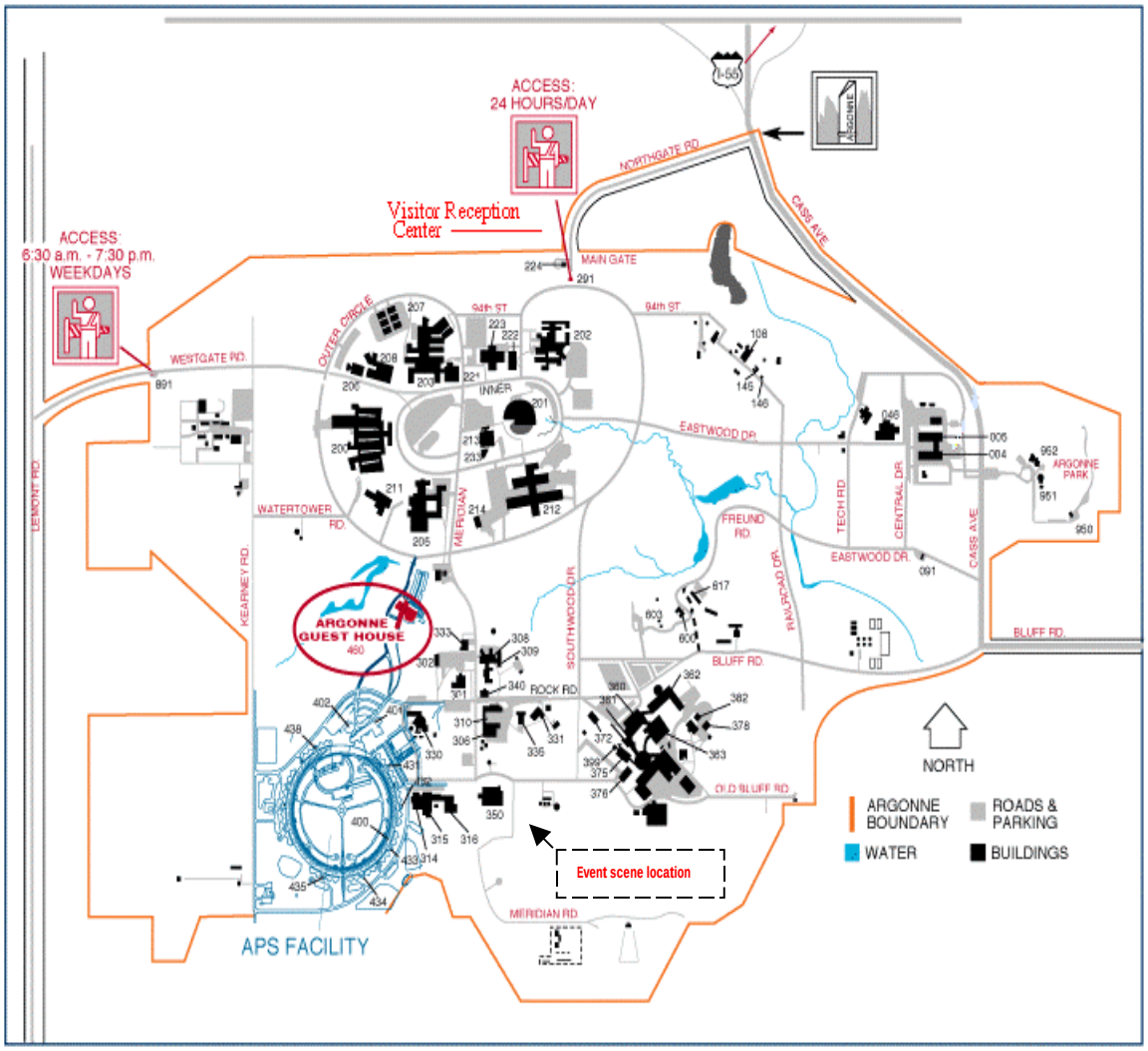
Uranium operations are housed in the new Building 350 addition, on the north side of the facility. The Building 350 addition is a three-story structure. The walls of the B, C, and D wings and the north wall of the original building form an interior courtyard which is accessible from the B-wing vestibule, and D wing.

The plutonium and uranium sides of the facility are isolated from each other by the north exterior wall of the original Building 350 structure as well as a fire door in the vestibule area of the first floor. The floor plan of the addition depicts a double-loaded corridor system: offices on the north side, laboratories on the south side of the first and second floors. The third floor contains the electronics laboratory and a fan loft that houses air-handling equipment separate from the plutonium facility. The fan loft also contains a water still and storage tank for uranium laboratory operations. The basement contains a sample storage room and vault, the uranium facility waste water retention tanks, and mechanical and electrical equipment rooms.

7.1 Facility Description (continued)

Personnel access to Building 350 is allowed only through the first floor west entrance at the B wing vestibule. Vehicular service access is allowed on the first floor level at the loading docks on the south and east sides of the building. Figure 7-2 identifies the location of Building 350 on the ANL-E campus.

Figure 7-2. Map of Argonne National Lab-East Site and Vicinity



7.1 Facility Description (continued)

Plutonium Laboratories

There are nine plutonium laboratory rooms [(Rooms 143, 151, 159, 171, 177, 185, 193, 199, and 165 (cold laboratory)] which are located in the northern half of the former fabrication area of Building 350. The laboratory and corridor partitions are constructed of 20-cm (8") concrete blocks 3 m (10') high with steel roof decking. The prefinished smooth surface of the steel roof decking forms the ceilings of the laboratories and the corridor from which the fluorescent light fixtures are hung. The steel roof decking is supported by and welded to steel plate anchors embedded in the masonry, steel purlins, and steel clip angles. The doors and frames are hollow metal. All floors are covered with vinyl tile and the walls have a 10-cm (4") rubber base cove. The walls are covered with an epoxy coating while doors, frames and other metal surfaces are painted. The interior surfaces of the exterior walls of the laboratories are covered by 1.3-cm (0.5") gypsum board underneath which lie 5-cm by 5-cm (2" by 2") furring strips, vinyl sheet vapor barrier and 5 cm (2") of insulation. Figure 7-3 identifies the event scene location within Building 350.

Process Description

NBL is a chemistry laboratory whose operations are dedicated to the analytical chemistry and measurement science of materials essential to the USA defense and energy programs. These materials primarily include, but are not limited to, uranium and plutonium. NBL's activities involve:

- Measuring the elemental and isotopic compositions of nuclear materials either to characterize and certify reference materials (used by the international nuclear community to calibrate nuclear materials measurements) or to define the fissile material contents of material samples taken by government inspectors for safeguards inventory verification purposes;
- Developing or improving methods for the measurement of elemental and isotopic compositions of nuclear materials; and

7.1 Facility Description (continued)

- Evaluating the performance of laboratories measuring nuclear materials by means of inter-laboratory comparison programs and on-site evaluations.

Chemical and instrumental analyses of nuclear materials, ranging from high-purity metals, compounds or alloys to low-purity scrap, are performed by methods that have been developed and demonstrated to provide highly accurate and precise results. These measurement methods include, but are not limited to, reduction-oxidation (Redox) titrimetry, controlled-potential and constant-current coulometry, mass spectrometry (including thermal-ionization, inductively-coupled plasma and electron-bombardment), isotope dilution mass spectrometry, and x-ray and gamma-ray spectrometry. These measurements are used to characterize and certify a material to be used nationally and internationally as a chemical or mass spectrometric reference. The methods are also used in the verification of the quantities of materials in a safeguards inventory.

Nuclear materials are received in approved shipping containers, surveyed, unpacked, and stored in an approved vault/storeroom configuration until analysis can begin.

Unused sample materials and other recoverable materials are packaged for ultimate shipment to designated recovery sites. Non-recoverable material is packaged as required for authorized waste disposal.

7.1 Facility Description (continued)

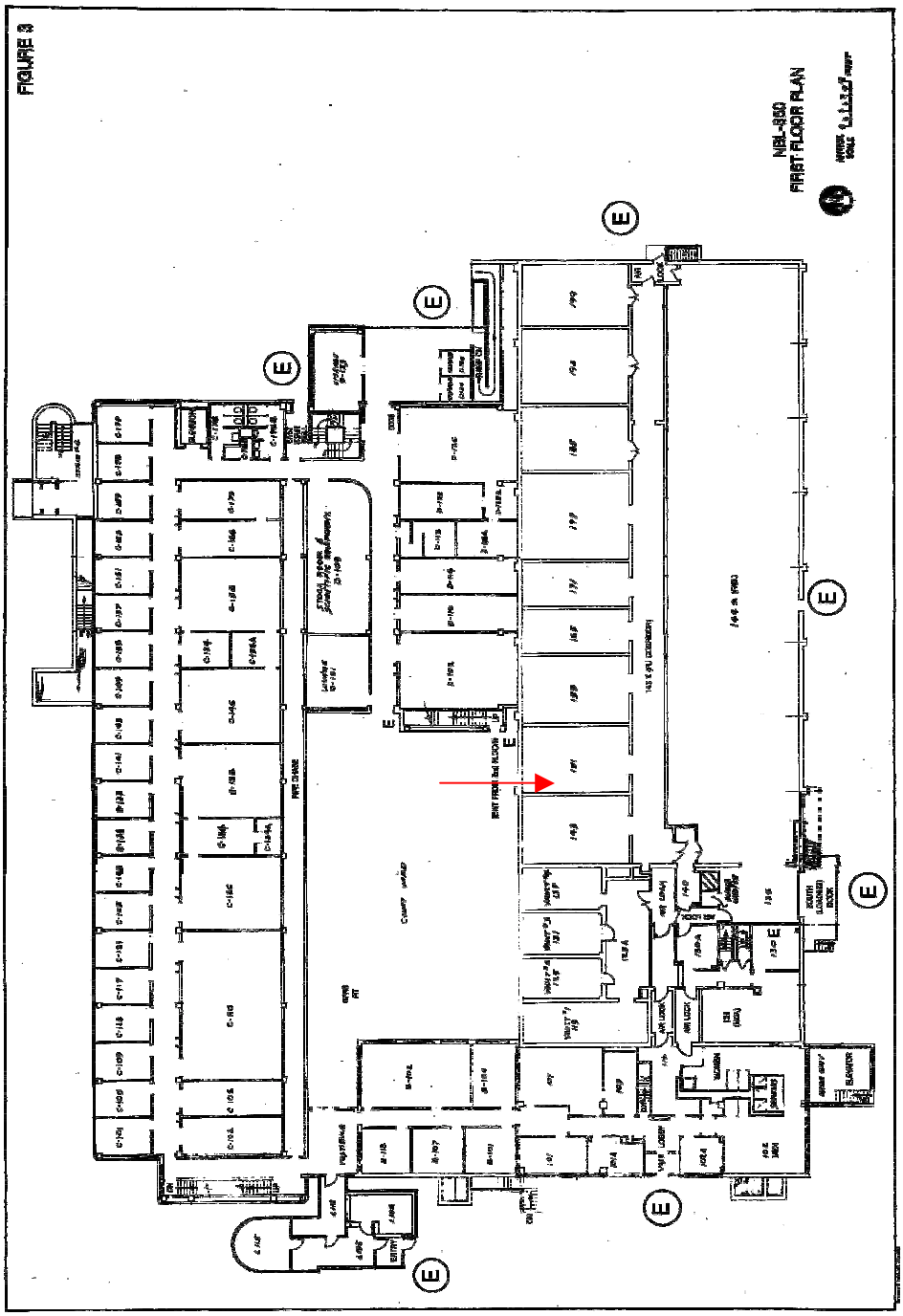


Figure 7-3. Exercise Event Scene

7.2 Scenario Event Technical Basis

The following radiological data was based on the postulated scenario from the NBL Hazards Assessment - Scenario NBL-1, Maximum Fire Scenario A fire of unknown origin is assumed to occur in the plutonium side of the facility and spread throughout the entire plutonium side (with the exception of the plutonium vaults) such that plutonium side of Building 350 is postulated to receive 40% fire damage and the contents within are postulated to suffer a 100% loss.

The initiator of the scenario could be from an electrical equipment fire in the plutonium side of the facility. The fire is assumed to spread via the ventilation system and through inadequate fire separation by flame contact and hot gases, such that all of the plutonium laboratories and plutonium operations areas are affected. The plutonium vaults were not included in the scenario because of the passively engineered concrete/stainless steel liner construction would likely provide fire separation from adjacent areas of the facility.

It should be noted that the vaults have a separate ventilation system from other parts of the facility. Thus, the spread of fire to the vaults via the ventilation system is not credible. Other penetrations to the vaults (i.e. accident dosimetry, electrical, etc.) would melt and tend to seal the vaults during a design basis fire rather than provide a means of dispersion.

With respect to fire protection, it is conservatively assumed that the sprinkler and fire alarm systems do not work and the fire department does not respond. Regarding the release of radionuclides, the building confinement is postulated to fail (i.e. ventilation/HEPA filters fail) with the exception of the Plutonium Vaults that have a strong box liner with a concrete envelope. All packaging containers outside the vault are assumed to fail due to heat and falling debris. It is also assumed that the quantities stored in the laboratories and vaults are at their administrative limits (taken directly from the NBL Safety Analysis Report).

7.2 Scenario Event Technical Basis (continued)

Event:	Fire
Release Duration:	10 minutes
Total Material at Risk:	See Table 5-2
Damage Ratio:	1.0
Release from Primary Barrier:	_____
Respirable Fraction:	0.5
Airborne Release Fraction	1E-03
Respirable Release Fraction	2.5×10^{4}
Initial Source Term:	_____
Leak Path Factor:	0.5
Building Source Term:	5.88E-02 g

MAR x DR X ARF X RF X LPF = BST

235 g x 1.0 x 1E-03 x 0.5 x 0.5 = 5.88E-02 g

Total Typical Inventory

Actual Pu Isotope	Quantity	Activity (Ci/g)	(Ci/g)
238	0.036	1.71E + 01	0.616
239	224.72	6.19E-02	13.910
240	2.56	2.27E-01	0.581
241	6.29	1.03E+02	647.870
242	1.67	3.93E-03	0.007

Material At Risk (Table 5-2 from the NBL Emergency Preparedness Hazards Assessment)

Nuclide	Actual 2000 Inventory (g)	Max Fire Inventory (g)	Molecular Wt.	Half-life (y)	Half-life (s)	Specific Activity (Ci/g)	Actual 2000 Activity (Ci)	Max Fire Activity (Ci)
U-235	19655.9	128000	235.044	7.038E+08	2.22E+16	2.16E-06	0.04	0.28
U-238	1691862	13638000	238.051	4.470E+09	1.41E+17	3.36E-07	0.57	4.58
U-233	6.5	0.079	233.040	1.592E+05	5.02E+12	9.63E-03	0.06	0.00
Pu-238	2.5	5	238.050	8.775E+01	2.77E+09	1.71E+01	42.76	85.52
Pu-239	1451.88	1396	239.052	2.413E+04	7.61E+11	6.19E-02	89.93	86.47
Pu-240	176.05	339	240.054	6.569E+03	2.07E+11	2.27E-01	39.89	76.81
Pu-241	40.59	39	241.057	1.440E+01	4.54E+08	1.03E+02	4177.93	4014.27
Pu-242	11.48	22	242.059	3.758E+05	1.19E+13	3.93E-03	0.05	0.09
Am-241	2.23	0	241.057	4.322E+02	1.36E+10	3.43E+00	7.65	0.00

7.3 Meteorological Data

Date:	Tuesday, June 5, 2001	
Time:	8:30 a.m.	
Meteorological Conditions:	Wind Direction:	From NNE to SSW
	Wind Speed:	8 mph (3 m/s)
	Gusting To:	12 mph (5 m/s)
	Temperature:	80° F
	Stability Class:	D
	Relative Hum:	70%
	Dew Point:	65° F
	Precip. (last 15 min.)	0.00 in.

7.4 Radiological Data

Conservative Meteorology (Stability Class F)

20 dpm/100 square cm at site boundary (334 meters)

0 dpm/100 square cm - 50 meters
1 dpm/100 square cm - 100 meters
4 dpm/100 square cm - 150 meters
8.302 dpm/100 square cm - 200 meters
20.78 dpm/100 square cm - 400 meters
9.904 dpm/100 square cm - 1000 meters
6.31 dpm/100 square cm - 1400 meters (Waterfall Glen outermost point)
4.466 dpm/100 square cm - 1805 meters (Cass Avenue)
2.282 dpm/100 square cm - 3000 meters
1.166 dpm/100 square cm - 5000 meters

Typical Meteorology (Stability Class D)

20 dpm/100 square cm at site boundary (334 meters)

0 dpm/100 square cm - 50 meters
10 dpm/100 square cm - 100 meters
20 dpm/100 square cm - 150 meters
33.2 dpm/100 square cm - 200 meters
15.734 dpm/100 square cm - 400 meters
4 dpm/100 square cm - 1000 meters
2.4 dpm/100 square cm - 1400 meters (Waterfall Glen outermost point)
1.6 dpm/100 square cm - 1805 meters (Cass Avenue)
0 dpm/100 square cm - 3000 meters
0 dpm/100 square cm - 5000 meters

7.4 Radiological Data (continued)

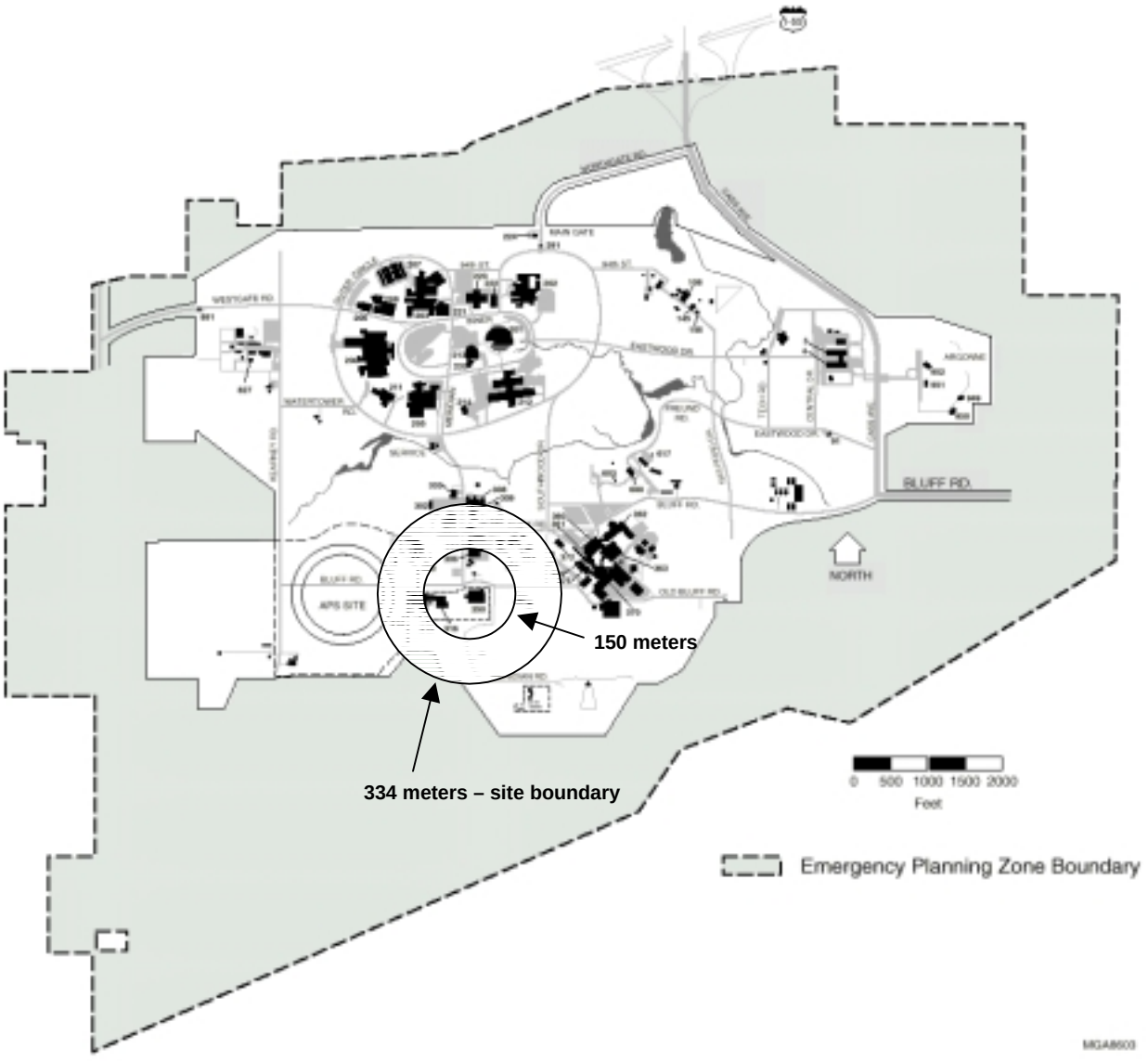
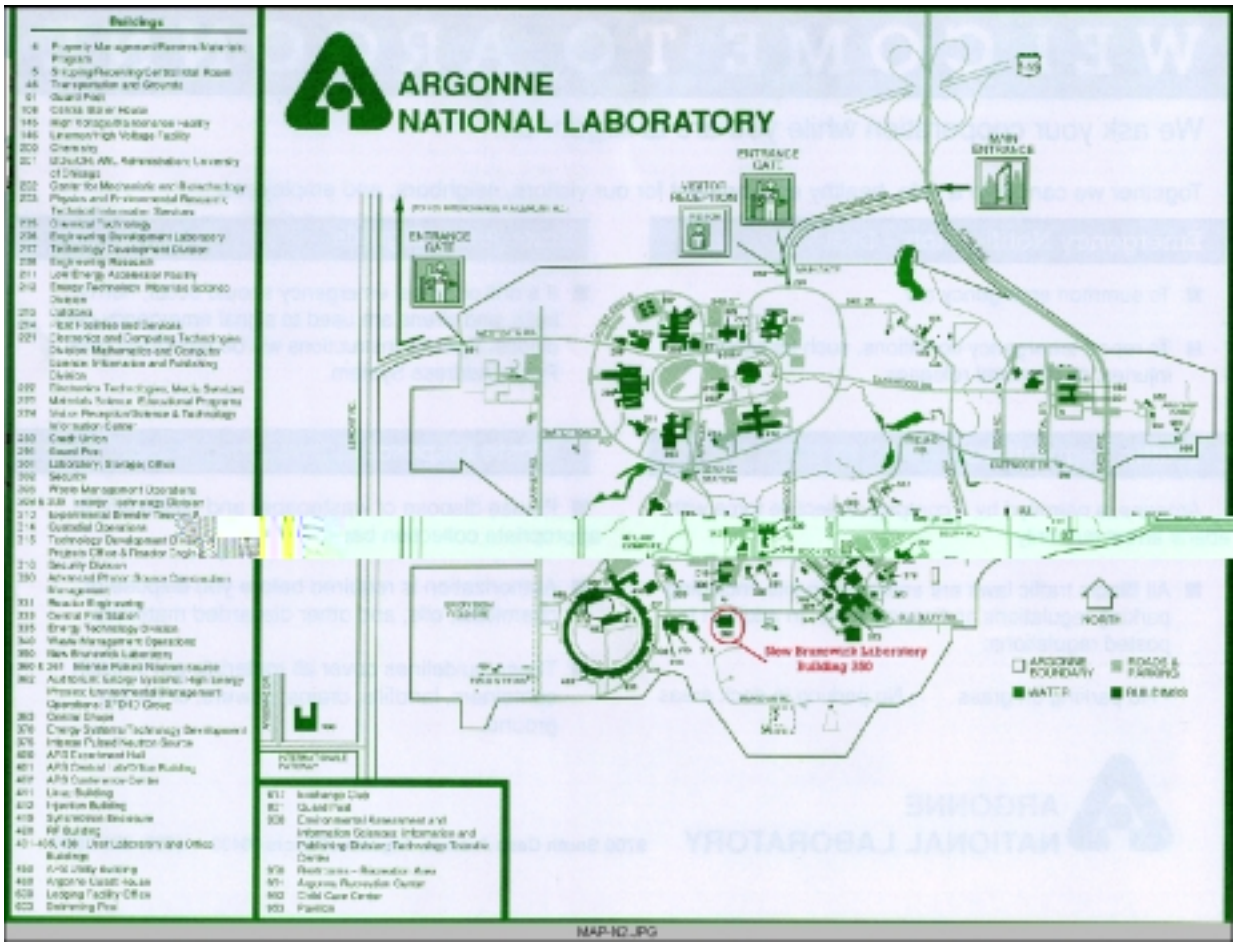


Figure 7-4. Event Scene Survey Data Map

7.4 Radiological Data (continued)



The route to the offsite sampling locations will be from Lemont Road to Bluff Road. The Illinois Department of Nuclear Safety (IDNS) and Radiological Assistance Program (RAP) teams will enter through the access gate and drive to the end of the road, which is marked by a cemetery. The IDNS RAP will select specific sampling locations.

Figure 7-5. Sitewide Survey Data Map

7.5 Role Player Medical and Contamination Data

Two personnel were assigned to perform the necessary work in Building 350, Room 143. Worker 1 and Worker 2 suffer from smoke inhalation and significant levels of internal and external radioactive contamination while attempting to exit the building.

Initial Assessment by Fire Department

Worker 1:
Male, age approximately 35 years old
Lacerations and possible foreign objects to face and neck
No apparent eye injury
Conscious, but speaking incoherently
Possible right shoulder or arm fracture
Blood pressure 100/70 and falling
Heart rate - irregular
Breathing – rapid
Patient is NOT ambulatory and unable to talk
Respiratory distress resulting from smoke inhalation, gasping for air, shortness of breath

Worker 2:
Female, age approximately 30 years old
Lacerations and possible foreign objects to face and neck
No apparent eye injury
Conscious, but dizzy
Blood pressure 110/80 and falling
Heart rate - irregular
Breathing – rapid
Patient is able to talk and is semi-ambulatory
Respiratory distress resulting from smoke inhalation, gasping for air, shortness of breath

Information From Hospital (after simulated transport and examination)

Workers 1 & 2:
Vitals stabilized
Lacerations and possible burns to face, neck, and arms
Decontaminated to No Contamination Detected (NCD), alpha, beta, gamma
Nasal smears positive for both– 500 dpm alpha, NCD – beta, gamma
X-rays show right upper arm fracture for Worker #1
X-rays are negative for Worker #2.

Vital Signs	On-scene	+ 15 minutes with Oxygen	At Hospital
Heart Rate	100	100	80
Breathing	26	22	16
Blood Pressure	110/70	90/60	110/72

7.5 Role Player Medical and Contamination Data (continued)

Levels of Contamination for Worker #1

AREA	CONTAMINATION LEVELS
Face	5×10^4 dpm/100 cm^2 alpha 5×10^3 dpm/100 cm^2 beta and gamma
Neck	5×10^4 dpm/100 cm^2 alpha 5×10^3 dpm/100 cm^2 beta and gamma
Chest (shirt)	5×10^4 dpm/100 cm^2 alpha 5×10^3 dpm/100 cm^2 beta and gamma
Arms	5×10^3 dpm/100 cm^2 alpha 5×10^2 dpm/100 cm^2 beta and gamma
Bottom of Shoes	5×10^3 dpm/100 cm^2 alpha 5×10^2 dpm/100 cm^2 beta and gamma

Levels of Contamination for Worker #1 After Decontamination and Clothing Removal by Fire Department

AREA	CONTAMINATION LEVELS
Face	$< 5 \times 10^3$ dpm/100 cm^2 alpha $< 5 \times 10^2$ dpm/100 cm^2 beta and gamma
Neck	$< 5 \times 10^3$ dpm/100 cm^2 alpha $< 5 \times 10^2$ dpm/100 cm^2 beta and gamma
Chest (shirt removed)	$< 5 \times 10^3$ dpm/100 cm^2 alpha $< 5 \times 10^2$ dpm/100 cm^2 beta and gamma
Arms	$< 5 \times 10^3$ dpm/100 cm^2 alpha $< 5 \times 10^2$ dpm/100 cm^2 beta and gamma
Shoes (removed)	Contamination Removed

7.5 Role Player Medical and Contamination Data (continued)

Levels of Contamination for Worker #2

AREA	CONTAMINATION LEVELS
Face	2.5×10^4 dpm/100 cm^2 alpha 2.5×10^3 dpm/100 cm^2 beta and gamma
Neck	2.5×10^4 dpm/100 cm^2 alpha 2.5×10^3 dpm/100 cm^2 beta and gamma
Chest (shirt)	2.5×10^4 dpm/100 cm^2 alpha 2.5×10^3 dpm/100 cm^2 beta and gamma
Arms	10^4 dpm/100 cm^2 alpha 10^3 dpm/100 cm^2 beta and gamma
Bottom of Shoes	10^4 dpm/100 cm^2 alpha 10^3 dpm/100 cm^2 beta and gamma

Levels of Contamination for Worker #2 After Decontamination and Clothing Removal by Fire Department

AREA	CONTAMINATION LEVELS
Face	$< 10^3$ dpm/100 cm^2 alpha NCD beta and gamma
Neck	$< 10^3$ dpm/100 cm^2 alpha NCD beta and gamma
Chest (shirt removed)	NCD
Arms	$< 10^3$ dpm/100 cm^2 alpha < NCD beta and gamma
Shoes (removed)	Contamination removed

8. EXERCISE CONTROL AND EVALUATION

8.1 Controller/Evaluator Organization

Controller/Evaluator functions were combined for some of the functional areas due to the limited scope of the exercise. Figure 8-1 depicts the venues to be controlled/evaluated.

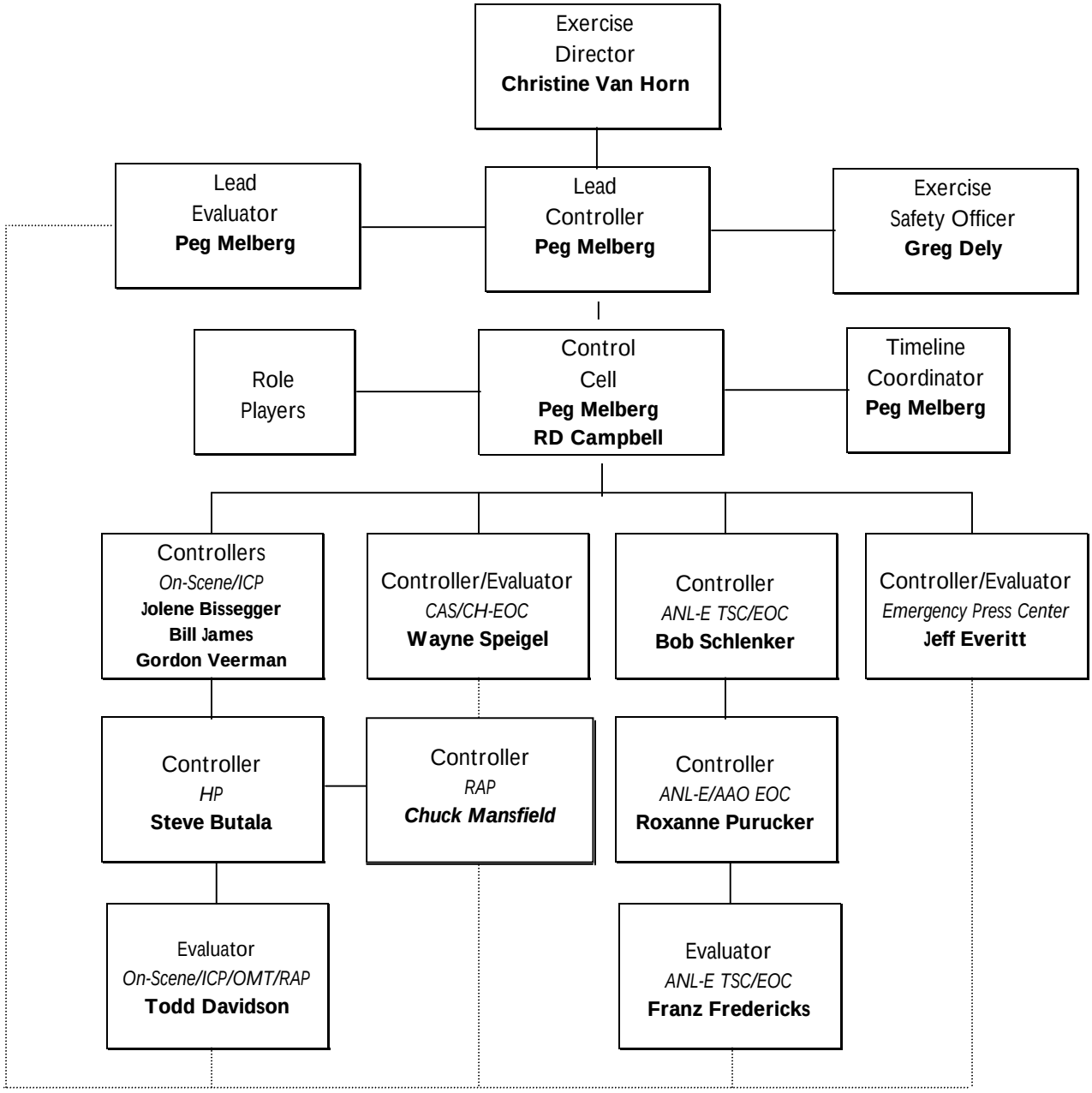


Figure 8-1. Controller/Evaluator Organization

8.2 Controller Guidelines

1. Review the exercise objectives and controller package for your area of responsibility.

2. Using the Master Scenario Event List, highlight the specific messages for which you are responsible.

3. Report to your designated area at least 30 minutes prior to the start of the exercise.

4. Obtain the necessary communications equipment and test it to ensure satisfactory communication between controllers, the lead controller, the timeline coordinator, and/or the Control Cell.

5. Wear controller identification, such as the required badge, armband, or vest. (Note: badges alone may be worn inside the TSC/EOC, CH EOC and EPC. Outdoor activities require vests and hats in addition to badges.)

6. Synchronize your watch with the Control Cell to ensure that the exercise timeline and the controller logs are consistent.

7. Do not enter into personal conversations with any drill/exercise responders.

8. Deliver the messages you have been assigned at the time indicated. Caution: If the information depends on some action to be taken by the responder, do not deliver the message until the responder has earned the information by successfully accomplishing the required action.

9. When you deliver a message, notify the Control Cell with the message number and the time delivered.

10. Begin and end all communication over the radio or telephone with the phrase: "This is an Exercise."

11. If you are to deliver specific data, deliver it as directed on the message instructions. (Example: Do not deliver vital signs of an accident victim until the first responder attempts the appropriate actions for obtaining these; do not volunteer radiation readings until the technician has turned on and read the detection instrument.)

12. Record all activities and the time on your Chronology of Key Events and Observations. Do not write opinions; rather, write about specific actions.

13. If responders do not perform as expected and a contingency message is not provided, notify the Control Cell immediately and ask for direction. No unplanned simulations should be allowed without the Control Cell's approval. This differs from free play, which is action taken by a responder that is appropriate in solving the problem in a unique way.

14. Do not prompt a responder as to what a specific response should be unless a contingency message directs you to do so. Clarify information as long as it does not provide coaching.

8.2 Controller Guidelines (continued)

15. Ensure that all observers stay out of the exercise activity. If you need assistance, notify the Control Cell or security.

16. Do not provide information to the responders regarding scenario event progress or resolution of problems encountered by others. Responders are expected to obtain information through their own resources. Note: In some cases, a limited degree of prompting is acceptable.)

17. All simulations must be pre-approved in the drill/exercise design package. If other simulations become necessary through the course of the drill/exercise, the simulation must be approved by the Exercise Director/Control Cell.

18. Under certain conditions, such as actual alarms or real incidents, exercise activities will be placed on "hold" until these conditions or situations can be resolved. Participants and/or players will be instructed by controllers to observe these holds, and resume activities only when authorized to do so by a controller.

19. All standing facility/site safety and health related rules, policies and procedures shall be followed during the conduct of the drill/exercise. Controllers are not exempt from these requirements.

20. Controllers may provide photographs (in page protectors) to responders. Controller packets contain two sets of inject messages (one for the controller and one for the responder in page protectors), as appropriate.

21. Controllers will continue their roles until they receive notification from the Exercise Director/Control Cell that the exercise has been "terminated." The exercise will be terminated when the Exercise Director, in conjunction with the Control Cell, determines that all objectives have been met, or enough time has elapsed for the objectives to be demonstrated. At this time, controllers shall pass this information on to the responders and terminate further exercise play.

22. Conduct an in-place responder hotwash. Document the observations of the responders,

23. Pick up copies of responder logs and pertinent documentation prior to the post-exercise Controller/Evaluator critique. This information should be given to the Lead Evaluator.

24. At exercise termination, summarize your notes and prepare for the Controller/Evaluator critique. Have the summary ready to turn over to the Lead Evaluator.

8.3 Responder Guidelines

1. Actual incidents take precedent over exercise activities.

2. The exercise scenario shall not include any actions or situations which degrade the conditions of systems, equipment or affect the detection and assessment of actual emergencies, or of the capability for response to actual emergencies.

3. Emergency response facilities will not be pre-activated, but the ANL-TSC will be pre-staged. Other players will follow their normal work routines until exercise events cause them to initiate emergency response actions.

4. Site personnel will respond to and implement all protective actions as directed by the TSC Manager/Incident Commander/AAO Manager/CH Manager.

5. Except for the actions identified in the list of actions to be simulated, or as otherwise directed by exercise controllers, players are to respond to exercise events and information as if the emergency were real. Donning and doffing of Personal Protective Equipment (PPE) may be simulated, except for initial Health Physics support.

6. Players shall act as if simulated hazardous conditions were real. All normal industrial/health protection controls shall be adhered to for the simulated hazard(s) presented by the exercise scenario.

7. Exercise controllers and evaluators are exempt from simulated security and industrial/health protection controls (only) which would be required by exercise conditions.

8. Exercise participants shall take no action that reduces the safety of the public.

9. Exercise participants shall adhere to public laws including traffic regulations and follow any orders given by law enforcement personnel.

10. Controllers will only provide players with the information which they are specifically designated to disseminate in their assigned functional area. Players are expected to obtain other necessary information through existing emergency information channels.

11. In the event that players do not initiate actions critical to the successful completion of the exercise scenario, controllers will issue contingency messages which direct players to initiate specific actions.

12. All exercise messages and communications shall be preceded and followed by the phrase, “THIS IS AN EXERCISE.”

13. In some cases, it may be necessary for a controller to countermand player actions to preserve the continuity and objectives of this exercise. Players must accept the controller’s word as final and proceed.

8.3 Responder Guidelines (continued)

14. Responders shall operate under the principles of good drillsmanship, including, but not limited to the following:

    a. Understand the scope of the exercise. If you're not sure about a certain organization's or agency's participation in the exercise, ask a controller.

    b. If the scenario seems to be incredible, don't complain. Recognize that the exercise has objectives that must be satisfied and may required doing things that may not be as realistic as hoped for.

    c. Speak out loud when taking action. Recognize that a controller or evaluator cannot give credit for a "thought process." Talk and act out actions as much as possible.

    d. Act on all controller instructions, with the exception of safety issues, even if you don't agree with what the controller is telling you. Complete the required actions and make a note to discuss your disagreement at the end of the exercise during the critique. Remember, the controller has the final word.

    e. Don't engage in casual conversations with the controllers. If you are asked a question, give a short concise answer. If you are busy and cannot immediately respond, indicate that, but report back with an answer at the earliest possible time.

    f. Do not engage in any conversations with observers or evaluators. If an observer or evaluator persists in talking with you, ask a controller for assistance.

    g. Maintain a log of your activities. Many times this will be the only documentation of activities that may have been missed by a controller or evaluator.

15. No SCBAs will be worn except for initial Fire Department responders entering Building 350.

16. There will be limited ANL Fire Department (FD) on-scene activities, per agreement and extent of play, as the FD is not exercising to meet the objectives. A large portion of FD activities will be simulated. The Incident Commander is also an Exercise Controller.

17. The Illinois Department of Nuclear Safety (DNS) will be notified from the TSC/EOC. They will call the RAP emergency phone number (630-252-4800) to request offsite RAP assistance with radiological assistance.

8.4 Evaluator Guidelines

1. Review appropriate emergency response plans, procedures, and documents prior to the exercise.

2. Prior to the exercise, review appropriate exercise package materials including the objectives, narrative summary, Master Scenario Event List (MSEL), messages, Safety and Security Plans, and evaluation criteria.

3. Attend required training and briefing sessions at the designated times as stipulated by the exercise package.

4. All standing site health and safety related rules, policies, and procedures shall be followed during the exercise. Evaluators are not exempt from these requirements.

5. Obtain appropriate Evaluator identification (badge, hat, vest, armband, or combination thereof) and don just prior to the start of the exercise.

6. Observe the performance of the responders during the exercise and document their actions using the Chronology of Key Events and Observations.

7. Evaluate responder performance and the adequacy of procedures, facilities, and equipment based on specific evaluation criteria.

8. Refrain from interfacing with responders to prevent interrupting or prompting their decisions or actions. Evaluators may ask Controllers for clarification. Responders should not ask Evaluators for information or clarification of scenario information. Direct them to a Controller for this information.

9. Evaluators will continue their roles until they receive notification that the exercise has been "terminated."

10. Document observations of key events, any errors or problem areas in the scenario or conduct of the exercise on the Observation Form.

11. Attend all post-exercise hotwash and critiques.

12. Present observations, evaluation and recommendations in the Controller/Evaluator critique.

8.5 Observer Guidelines

1. Observers are not allowed to participate in, control, or evaluate the exercise.

2. All official observers will be identified with a badge, hat, vest, armband, or combination thereof.

3. Observers shall refrain from interfacing with responders to prevent interrupting or prompting their decisions or actions. Observers may ask a controller for clarification.

4. Observers shall remain clear of response activities and not get in the way of the responders.

5. Observers may attend the Participant Hotwash and Critique; however, they shall refrain from participation in the critique.

8.6 Exercise Suspension or Termination

The exercise may be terminated under the following circumstances:

A. If all emergency response actions have been completed in accordance with the exercise objectives.
B. If an actual on-site emergency condition develops coincident with the exercise.
C. If an actual off-site emergency impacts the response actions of exercise participants.

If an actual on-site emergency develops, the following actions will be taken:

1. The individual identifying the need to stop play will request a "CODE REAL EVENT "through the nearest controller. Individuals who are authorized to approve a "CODE REAL EVENT" are the:
    - Incident Commander
    - Exercise Safety Officer (on-scene)
    - Exercise Director
    - Lead Controller
    - AAO Manager
    - CH Manager

2. The Fire Alarm Office, in coordination with the Incident Commander, will contact the Technical Support Center/Emergency Operations Center Crisis Manager and inform him/her of the status of the emergency.

3. The AAO Manager will contact the DOE-CH EOC, who in turn will immediately inform the offsite participants regarding the nature of the emergency.

4. The Exercise Director will be responsible for directing the actions of the controllers, evaluators, and observers.

5. The emergency plan/procedures applicable to the event would be implemented in accordance with the nature of the emergency.

For normal exercise termination, the following actions will be taken:

1. An agreement will be secured by the Exercise Director and the Control Cell/Controllers that there is sufficient demonstration of objectives to terminate the drill/exercise.

2. The Exercise Director, Controllers, and the Control Cell will agree on the time of termination.

3. If the Emergency Press Center desires to continue to play for training purposes, support from the Control Cell will be coordinated and appropriate contingency messages will be issued.

8.6 Exercise Suspension or Termination (continued)

4. The Exercise Director will ensure a coordinated termination of the exercise and confirm a message is provided to responders.

5. The Exercise Director will ensure all participants, onsite and offsite, are notified by the most expeditious means possible (fax, radio, telephone, pager, etc.)

8.7 Exercise Documentation

Exercise documentation will be collected and maintained in accordance with the Chicago Operations Office records management requirements. Documentation includes, but is not limited to:

- Exercise Package Design and Development history file
  - Draft objectives
  - SDG meeting minutes
  - Meeting attendance rosters
  - Review comments and disposition
  - 30% package
  - 90% package
  - Final package
- Participant Handouts, Briefing Materials, and Attendance Rosters
- Controller/Evaluator Handouts, Briefing Materials, and Attendance Rosters
- Copies of announcements to onsite personnel
- Copies of Public Service Announcements
- Exercise attendance rosters
- Post-Critique attendance rosters
- Notification Forms
- Digitized photographs and video footage
- Public Information documentation including media advisories, press releases, and video footage
- Emergency Response Job Aids and Checklists
- Control Cell Documentation
- Controller/Evaluator notes and observations
- Completed evaluation checklists
- Alarm Station/Dispatch logs and/or audio tapes
- Plume plots, projections, and consequence assessment documentation

8.8 Exercise Evaluation Criteria

Due to the fact that there has never been an operational emergency at the Argonne site, there has never been an opportunity to assess the actual performance of the integrated Emergency Response Organization during a real event. The Chicago Operations Office requested that Excalibur Associates, Inc. conduct an independent evaluation of the integrated response process between the Chicago Operations Office, Argonne Area Office, Argonne National Laboratory – East, and the New Brunswick Laboratory. Functional areas were selected that best coincided with the exercise objectives, which focused on the response interface between the primary organizations. The final exercise report will address the following functional areas:

- Emergency Response Organization
- Categorization/Classification
- Notifications and Communications
- Consequence Assessment
- Protective Actions
- Public Information

The selected performance goals and associated evaluation criteria were taken from the DOE Emergency Management Guide (DOE G 151.1-1) Volume VI – Draft, dated June 10, 1999. The criteria selected will be used as guidelines in conducting a performance-based assessment rather than a compliance-based assessment. The assigned numbering system was retained in order to facilitate the tracking and trending of results. Evaluation criteria that were not selected from DOE G 151.1-1 can be incorporated into future exercise evaluations in order to ensure a comprehensive evaluation is conducted on a periodic basis.

G.6 Emergency Response Organization

Objectives:
NBL-02, NBL-04, AAI-01, AAO-02, TSC-04, TSC-05, CH-01, CH-02, CH-03, CH-04, CH-05, RAP-01, RAP-02

Performance Goal:

A structured organization is established and maintained for each site/facility with overall responsibility for initial and ongoing response to and mitigation of an emergency. An adequate number of experienced and trained personnel, including designated alternates, are available on demand, for timely and effective performance of ERO functions.

Evaluation Criteria:

P/E6.1	The ERO configuration and activation is based on actual or potential emergency conditions.
P/E6.2	Management of the emergency response facility provides for the collection and dissemination of accurate data, setting priorities, assigning work to functional groups, and keeping key emergency response staff abreast of emergency response status.
P/E6.3	A single individual is in charge of the overall response and has the authority to use necessary resources to mitigate the emergency. a. An "Emergency Director," Emergency Coordinator, or equivalently titled individual, is available, and possesses and exercises the authority and responsibility to perform required functions, including initial activation of onsite response assets and requests for offsite assistance. b. The division of authority and responsibility between the Incident Commander (IC) and the ERO Emergency Director (ED) position is clearly and effectively maintained.
P/E6.4	Control of operations, monitoring, and repair teams is clearly vested in a single emergency facility or clearly defined between multiple emergency facilities.
P/E6.5	Transfer of a command and control function to another emergency facility, within an emergency facility, or to a command external to the ERO or ICS (e.g., another Federal agency, such as DOJ/FBI) is completed in an orderly and formal manner and ERO personnel are informed of the transfer. A formal methodology is established for orderly transfer of command and control.
P/E6.7	The emergency facilities and teams are staffed with adequate and qualified response personnel. a) The ERO is staffed with management contractor personnel in all key positions, unless site arrangements involve DOE or subcontractor personnel being assigned key positions. b) Sufficient experienced and trained personnel for initial and ongoing response, including designated alternates, have been assigned to each functional area.
P/E6.9	The order of succession of management personnel responsible for managing the emergency in the absence of the primarily designated emergency manager is implemented.
P/E6.11	The ERO is functionally staffed and activated in a timely manner. Key emergency response facilities are operational within an hour after declaration of an Operational Emergency.
P/E6.12	Procedures and/or checklists which describe the major activation and response activities of key members of the emergency response organization are used.

G.6 Emergency Response Organization (continued)

P/E6.13	Staffing of ERO positions following the declaration of an Operational Emergency is orderly, controlled, and verifiable. a) Personnel assigned to ERO positions gain access to their response stations without impediment. b) Non-ERO personnel are excluded from emergency response work areas. c) Individuals who assume key response positions/functions are readily identified by other ERO staff (e.g., through use of status board(s) or badging).
P/E6.14	Members of the ERO perform in their roles, functions and interfaces, and use of emergency equipment, facilities, and resources in a timely, effective and efficient manner. a) Functional areas are staffed to mitigate and respond to emergencies. (The emergency plan and procedures define functional areas that must be staffed to mitigate and respond to emergencies.) b) Functional area authorities and responsibilities are known and clearly understood. (The emergency plan and procedures clearly define functional area authorities and responsibilities.) c) Key ERO functional activities include initial activation and continuing activities. d) ERO staff identify and access available response resources (e.g., personnel, equipment, consumables, and replacement parts), and, as appropriate, take account of resource limitations and specific capabilities.
P/E6.15	Information is accurately and efficiently transmitted in an orderly and documented manner throughout the chain of command and between/within emergency facilities. a) Communications are maintained with and information is provided regularly to the DOE Headquarters Emergency Management Team. b) The ERO management effectively coordinates state and DOE site requests for use of assets such as the Radiological Assistance Program (RAP).
P/E6.16	The use of acronyms, code words, convention and/or technical terminology causes no misunderstandings related to the response and associated data.
P/E6.18	Period briefings are provided on the status of the emergency and current significant response priorities and activities.
P/E6.19	When priority actions are identified, tasking is clearly made to emergency response staff, and actions are followed through to completion.
P/E6.20	Specialty groups supporting the emergency response staff provide timely information to the decision-making process.
P/E6.21	Adequate data are obtained and analyzed to support the operations staff in assessing and mitigating the emergency events.
P/E6.22	Based on current knowledge of the situation, the responsible ERO operations and technical support staff determine and implement a reasonable, well-planned course of actions.
P/E6.32	Teams implement survey and sampling procedures in a timely manner.
P/E6.34	Teams make effective use of maps or general arrangement drawings showing pre-determined and potential monitoring points.
P/E6.35	Teams are briefed on facility and meteorological conditions and exposure control procedures before deployment and when changes occur.
P/E6.37	Field teams are well-directed and effectively controlled by emergency response management, who provide directions and crucial information, including: a) Directions to survey specific areas; b) Directions to minimize hazardous material exposure by exiting high airborne and whole body dose areas, when not actively engaged in sample and survey activities; c) Setting exposure limits for survey teams; d) Tracking teams exposures; and e) Soliciting and recording survey results.
P/E6.41	Analysis results are promptly and accurately communicated to other emergency response facilities.

G.9 Categorization and Classification

Objectives:
TSC-01

Performance Goal:
Abnormal events/conditions are promptly recognized, categorized, and declared as Operational Emergencies if an unplanned, non-routine, significant event or condition caused by, involving, or affecting DOE facilities, sites, or activities, requires: (1) local on-scene response by resources beyond those immediately available at or those normally responding to the affected site/facility or area of the incident; and/or, (2) time-urgent notifications to initiate response activities beyond the local event scene. Operational Emergency events involving the actual or potential airborne release of hazardous materials from a site/facility also require prompt and accurate classification based on health effect thresholds (for initiating protective actions) measured or estimated at specific receptor locations (i.e., facility and site boundaries). Associated with the classification of these Operational Emergencies are default conservative onsite Protective Actions (PAs) and offsite Protective Action Recommendations (PARs).

Evaluation Criteria:

P/E9.1	Authority and responsibility for categorizing an event/condition, and if necessary, determining the emergency classification, is clearly defined, recognized, and understood by emergency response personnel.
P/E9.2	The designated (authorized) individual with the responsibility for categorization and classification makes the determination(s).
P/E9.3	The recognition/categorization/classification process of Operational Emergencies is effectively integrated with existing operations, management, emergency response, and reporting activities.
P/E9.5	If the event or condition is categorized as an Operational Emergency involving an airborne release of hazardous materials (i.e., from a site/facility, the authorized individual recognizes the requirement to promptly classify the event.
P/E9.6	An Operational Emergency remains in effect until the emergency response is terminated.
P/E9.7	If applicable, a site- /facility-specific set of current Emergency Action Levels (EALs) is used to appropriately classify the actual or potential emergency conditions as Alert, Site Area Emergency, or General Emergency, based on the severity of health effects.
P/E9.8	The decision-maker has efficient access to the appropriate EALs, since they are integrated with normal and off-normal operations procedures, indicators (i.e., control panels or instrument read-out stations), checklists, safety precautions, and other operational practices.
P/E9.9	If a suspected hazardous material release fails to satisfy or trigger an EAL, then a common sense, conservative assessment of the event/response observable leads to an initial default estimate of the classification of the emergency event/condition using the discretionary EALs.
P/E9.10	Associated with a specific event classification, the decision-maker obtains default conservative Protective Actions (PAs) and Protective Action Recommendations (PARs), for immediate implementation onsite or recommendation for offsite.
P/E9.11	The available technique for classifying events is used directly by the decision-maker to determine the classification based on health effect thresholds (i.e., for initiating protective actions) measured or estimated at specific receptor locations (i.e., facility and site boundaries).
P/E9.12	The current classification is modified based on continuous monitoring for changes in event/response conditions that require or might support a change in the emergency classification.

G.10 Notifications and Communications

Objectives:
TSC-01, TSC-02, NBL-03

Performance Goal:
For Operational Emergencies, prompt initial emergency notifications are accurately and efficiently made to workers and emergency response personnel/organizations, including appropriate DOE Elements and other Federal, state, tribal, and local organizations. Proper, accurate, and timely follow-up notifications are made when conditions change or when the emergency classification is upgraded or terminated. Continuous, effective, and accurate communications, among response components and/or organizations, is reliably maintained throughout an Operational Emergency.

Evaluation Criteria:

P/E10.1	For Operational Emergencies, prompt initial emergency notifications are accurately and efficiently made to workers and emergency response personnel/organizations, including appropriate DOE Elements and other Federal, state, Tribal, and local organizations. a) Points of contact for emergency notifications are accurate and readily available to response personnel. b) State and local officials and the DOE Field and Headquarters Operations Center are notified promptly, but no later than 15 minutes after classification of an Operational Emergency involving the airborne release of hazardous materials from a site/facility; all other organizations are notified of the Operational Emergency within 30 minutes.
P/E10.2	Initial oral notification messages are not delayed by the inclusion of event information beyond a minimum set, that includes: a) Location of the event, and the name, organization, location, and telephone number of the caller. b) Brief description, date and time of the event. c) Categorization/classification and time of declaration. d) Release in progress (yes/no). e) Recommended protective actions.
P/E10.3	Follow-up notifications use a pre-arranged and standardized content and format that supports the inclusion of critical information concerning the nature of the event, description and status, key times, classification and release status (as required), meteorology, protective actions, affected facility, notification authority.
P/E10.4	The emergency manager or designee personally approves the release of notification information.
P/E10.5	A rapid notification and recall system is used to make initial and follow-up notifications to primary and alternate response staff. The system provides for feedback indicating unsuccessful contact.
P/E10.6	Accurate and timely follow-up notifications are made when conditions change or when the emergency classification is upgraded or terminated.
P/E10.7	Emergency status reports are forwarded to the next-higher Emergency Management Team (EMT) on a continuing basis throughout the Operational Emergency.
P/E10.9	A formally established communication chain for reporting and notification within the facility, site-wide, and to offsite organizations is properly followed. a) Procedures provide for correct prioritization of notifications. b) Systems and procedures provide for notifications of workers, ERO, and offsite responders.

G.10 Notifications and Communications (continued)

P/E10.10	Installed communications systems adequately accomplish the notification and information exchange processes. a) Reliable equipment exists for communications with emergency organizations and response personnel. b) Building and area alarms or public address (PA) systems are installed to alert facility personnel to emergency conditions. c) Systems are in place for notification of onsite workers and public present onsite but outside the immediate vicinity of the affected facility. d) Where agreements with offsite agencies dictate, systems alert the public outside the site boundary. e) Dedicated primary and backup voice communications links are provided between key emergency response facilities and sufficient non-dedicated voice communication links are provided to access offsite organizations. f) Mobile and commercial phone lines are available.
P/E10.11	Continuous, effective, and accurate communications among response components and/or organizations (e.g., event scene responders, emergency managers, and response facilities) is reliably maintained throughout an Operational Emergency. a) Communications systems are in place to support management and tracking of evacuation of facility personnel, personnel accountability and assembly.

G.11 Consequence Assessment

Objectives:
TSC-01, RAP-01, RAP-02

Performance Goal:
Estimates of the onsite and offsite consequences of actual or potential releases of hazardous materials are correctly computed and assessed in a timely manner throughout the emergency. Consequence assessments are integrated with classification and protective action decisions, incorporate facility and field indications and measurements, and are coordinated with offsite agencies.

Evaluation Criteria:

P/E11.1	Consequence estimates, performed by hand and/or computer-based calculations, are accomplished in a timely and efficient manner throughout the emergency to adequately assess the actual or potential onsite and offsite consequences.
P/E11.2	The consequence assessment process is integrated with processes for categorizing an event as an emergency, determining the appropriate emergency class, protection action decision-making, and locating and recovering materials.
P/E11.4	Provisions are made for requesting support form the DOE radiological emergency response assets (e.g., Aerial Measuring System or the Atmospheric Release Advisory Capability) to assist in accident and consequence assessments as well as to estimate the integrated impact of a hazardous materials release to onsite and offsite populations within the Emergency Planning Zone.
P/E11.5	Natural phenomena (e.g., tornados, floods, severe wind, ice, or snow), which may result in or exacerbate an emergency condition at the facility, operation, and/or activity, are monitored.
P/E11.6	A formal document control system is implemented during an emergency to record, sequence, validate, and track the flow and chronology of information.
P/E11.7	An initial, conservative assessment (Timely Initial Assessment) of the consequences of an emergency is made in a timely and effective manner, which results in a more event-specific description of the consequences than was provided by the initial default estimate.
P/E11.8	In-depth assessment of event consequences is made continuously throughout an emergency. a) Assessments are updated when there are actual and projected changes in facility status, release condition, or meteorology. b) Different models, assumptions, and input data are used to add to the understanding of the event and its consequences. The indicators (e.g., system pressures, flow rates, radiation levels, release rates, etc.), necessary to continually assess the consequences of the emergency events/conditions, are identified and monitored.
P/E11.9	The type of hazard and source term for the release of a hazardous material is successfully determined based on either available and reliable facility system parameters or effluent monitors or without normally monitored and measured data. a) Data for source term estimates is available from reliable sources (e.g., stack or process flow rates, concentrations, tank volumes, and containment or process building leak rates). b) Indicators that are not continually monitored (e.g., chemical analyses of fluids, contamination levels, etc.,) are sampled to identify the particular indicators to be continually monitored to assess the consequences of potential events, in addition to occurring events, by identifying trends, relationships, etc., that would indicate degrading conditions.

G.11 Consequence Assessment (continued)

P/E11.10	Adequate meteorological information is obtained for use in transport and dispersion calculations to project the consequences of the hazardous material release to the environment onsite and offsite, to the population within the Emergency Planning Zone (EPZ).
P/E11.11	Onsite and offsite receptors of interest are identified quickly and are readily available to emergency managers (e.g., receptor locations at the facility and site boundaries, to or beyond the EPZ boundary, and populations with special needs.)
P/E11.12	The consequence estimates (i.e., transport/dispersion) for actual or potential releases of hazardous materials are made in a timely manner, efficiently, and accurately (i.e., consistent with the accuracy of the input data), reflecting appropriate receptors, exposure pathways, and release characteristics.
P/E11.13	Field sampling and monitoring activities are used to verify, update, and refine the source term and projected consequences through coordination with those responsible for consequence estimates a. The field teams (i.e., radiological and non-radiological field teams) successfully accomplishes field monitoring and plume tracking within and beyond the EPZ, and, similarly, verifies the absence of consequences in specific areas. b. As available, data from environmental monitoring programs is used to support consequence assessment, including data from area and radiation monitors and in-plant surveys for assessment under accident conditions.
P/E11.14	Effective coordination is established with Federal, state, tribal, and local organizations to estimate the impact of the release on the public and the environment, locate and track hazardous materials released, and locate and recover materials, especially those with national security implications. a) Field monitoring and data collection by facility and site teams, state and local teams, and Federal teams are coordinated to facilitate exchanges and correlation of information.
P/E11.15	Assessments and analyses are clearly communicated to offsite emergency management decision-makers.

G.12 Protective Actions

Objectives:
NBL-01, TSC-03

Performance Goal:
Protective actions are promptly and effectively implemented or recommended for implementation, as needed, to minimize the consequences of emergencies and to protect the health and safety of workers and the public. Protective actions are reassessed throughout an emergency and modified as conditions change. Reentry activities are properly planned, coordinated, and safely accomplished.

Evaluation Criteria:

P/E12.1	Protective Action Guides (PAGs) and Emergency Response Planning Guidelines (ERPGs), prepared in conformance within DOE-approved guidance applicable to the actual or potential release of hazardous materials to the environment, are used in protective action (e.g., sheltering, evacuation) decision-making.
P/E12.2	Protective actions reflect a conservative assessment of level of health effect and extent of potentially affected/impacted area and populations.
P/E12.3	The notification and implementation of onsite PAs and notification of offsite PARs is made in a timely, efficient, and unambiguous manner, confirmed and monitored by the ERO. a) Initial default onsite Protective Actions (PAs) and offsite Protective Action Recommendations (PARs) are linked to emergency event classification criteria (i.e., Emergency Action Levels (EALs)) and/or the Timely Initial Assessment process associated with consequence assessment for response. b) Modifications to initial protective actions are developed and implemented based on updated and refined data generated from the continuous consequence assessment process.
P/E12.5	Accountability of all facility personnel is completed within 45 minutes of emergency determination, with all personnel positively identified by name and either (1) their locations established or (2) those not located identified as missing for purposes of search and rescue. a) Following initial accountability, continued tracking of personnel is maintained.
P/E12.9	Access to and egress from actual or potentially contaminated areas, or the site, is effectively monitored and controlled.
P/E12.11	Timely recommendations are made to appropriate State, Tribal, or local authorities of protective actions, such as sheltering, evacuation, relocation, and food control.
P/E12.12	Candidate PARs are coordinated with offsite authorities and well-defined geographic areas for sheltering and evacuation, special needs areas or special populations, and evacuation routes are readily available.
P/E12.13	Ingestion pathway PARs are formulated when appropriate and communicated to offsite authorities.

G.14 Public Information

Objectives:
NBL-05, AAO-03, PI-01, PI-02, PI-03, PI-04, PI-05, PI-06, PI-07, PI-08

Performance Goal:
Accurate, candid, and timely information is provided to workers, the news media, and the public during an emergency, to establish facts and avoid speculation. Emergency public information efforts are coordinated with state, local, and tribal governments, and Federal emergency response plans, as appropriate.

Evaluation Criteria:

P/E14.1	Accurate, candid, and timely information is provided to workers and the public (through the news media) during an emergency, to establish facts and avoid speculation.
P/E14.2	Emergency public information functions are staffed, consistent with the nature, severity, duration, and public and media perception of the event or condition. a) Key emergency public information positions, and the respective responsibilities and locations, are specified and individuals to fill these positions are identified. b) The emergency-related activities and the number of staff required to respond effectively are specified in plans/procedures, based on the nature, severity, duration, and public and media perception of the event.
P/E14.3	The management team and outside agency representatives effectively, openly, and readily share and coordinate information.
P/E14.4	The functions of information collection, coordination, production, dissemination, and monitoring and analysis of media coverage and public concerns and information needs are represented in the organization.
P/E14.5	Emergency public information staff is proactive in obtaining emergency information from the command center.
P/E14.6	The designated Emergency Press Center (EPC) provides adequate space, equipment, communications lines, and information resources to accommodate personnel and to accomplish required functions. a) The EPC is available, equipped, maintained and controlled to accommodate members of the news media, DOE, contractor, and offsite agency representatives, and to facilitate the preparation and coordination of emergency information release to the public through the news media. b) Provisions are in place to support response to public inquiries in a timely manner. c) Provisions are in place to detect, correct, and control rumors and misinformation. d) The EPC location and layout is documented in plans/procedures. e) The EPC includes adequate services and equipment (e.g., telephone service, television and radio broadcast equipment, copying/telefax equipment, audio-visual equipment) maps and displays, security provisions and working space for both the media and staff. f) Provisions are in place for an alternate EPC in the event, based on HA results, that the primary EPC may become uninhabitable.
P/E14.7	JIC access control is adequate and there is a means to readily identify media representatives and staff.
P/E14.8	Pre-prepared relevant information concerning affected facilities, emergency plans, hazards, and logistics is provided to news media in the JIC.
P/E14.9	Appropriate visual aids are available and utilized for briefing news media regarding events, impacted areas, consequences and protective actions.

G.14 Public Information (continued)

P/E14.10	Information released to the public through the news media regarding the emergency is accurate, timely, and relevant. a) Provisions are in place for press briefings to be held with regular freque3ncy and whenever new or breaking information is available concerning emergency conditions, protective actions, or response. b) Persons with technical expertise about the emergency and with spokesperson training are assigned to support the emergency public information staff. c) A list of 24-hour media points of contact is available and maintained current.
P/E14.11	Rumors and misinformation are detected, controlled, and corrected; accurate information disclaiming rumors and correcting misinformation is incorporated in media briefings and press releases as necessary.
P/E14.12	Emergency response and protective actions required for the health and safety of workers and the public is adequately explained with unclassified information.
P/E14.13	Authority for approving release of emergency information to the media and public is vested in a single individual, or designee, and the appropriate DOE official.
P/E14.14	Technical briefers are utilized and are knowledgeable and effective in communicating with the news media.
P/E14.15	Communications with the media and public are timely and responsive to public concerns. a) The frequency and content of news conferences are consistent with information needs of the public and the media. b) Press briefings are held with regular frequency and whenever new or breaking information is available concerning emergency conditions, protective actions, or response.
P/E14.16	Information distributed to workers and site personnel regarding the emergency is candid, current, and understandable.

9. PUBLIC INFORMATION/MEDIA PLAN

Scope

This plan provides a sample planning tool for the types of public information activities that should be considered in a full participation exercise. The plan addresses the methods, techniques and assignments/ responsibilities for ensuring:

- Broadened public/media understanding and acceptance.
- Increased ANL-E employee support/participation.
- Reduced uncertainty.
- Minimized liabilities.
- Enhanced coordination and operating relationships.

The success of this plan will result in the realization that the Department of Energy interests are the same as those of its various audiences in the area of emergency management.

Objectives

- ✓ Provide the public and media with an understanding of the site's/facility's commitment to ensuring public health and safety through development of a comprehensive emergency management system.

- ✓ Provide the local media an opportunity to observe and report on the activities leading up to and during conduct of site/facility emergency management exercises.

Audiences

- ❑ General public located in the geographic area of the exercise.

- ❑ Site/facility employees.

- ❑ Print and broadcast media in local area including newspapers, local TV and cable stations, and local radio stations.

- ❑ Nonparticipating offsite response groups.

Messages

- ❑ Facility employees will be informed of exercise activities through broadcast messages via email and staff meetings.

- ❑ Site employees will be informed through the CH Bulletin Board and the weekly newspaper, Argonne News.

9. PUBLIC INFORMATION/MEDIA PLAN (continued)

- ❑ Print and broadcast media in local area including newspapers, local TV and cable stations, and local radio stations will be provided with a written media advisory approximately one week prior to the exercise.

- ❑ General public located in the geographic area of the exercise will be kept informed through postings on the site perimeter stating that an exercise is taking place.

Strategic Actions

- ❑ Reach target audiences, with above message.

- ❑ Identify a team to disseminate information by:
  - developing a fact sheet for public dissemination;
  - providing media opportunities for reports; and
  - providing information to other Federal and state agencies for widest dissemination.

- ❑ Arrange for a photographer to take digital photos and live video during the exercise.

- ❑ Obtain a volunteer to serve as a role player for the position of Mayor of Argonne Hills (simulated community)

- ❑ Obtain volunteers to serve as mock media at the Emergency Press Center.

Products and Scheduling

- ❑ Identify audiences and interested parties. (Completed)

- ❑ Identify a team of site/facility, state, local officials and spokespersons to participate in the exercise development process. (Completed)

- ❑ Schedule meetings, presentations, and briefings. (Completed)

- ❑ Make the following information available at the Visitor's Information Center/Emergency Press Center:
  - Press releases.
  - Background material/information and acronym list.
  - Hazardous materials background materials.
  - Still photographs.
  - Maps.
  - News/informational articles on emergency preparedness at the site.
  - Write articles to appear in site employee newsletters.

10. HEALTH AND SAFETY PLAN

Scope

This Exercise Health and Safety Plan has been included in the exercise package so that exercise controllers and evaluators will be able to anticipate and recognize unplanned events that could result in personal injury or unforeseen property damage. It enables exercise participants to be governed by the safety guidelines established for the exercise.

No attempt has been made to duplicate safety issues detailed in other portions of the exercise package. Applicable sections of the exercise package are referenced, and specific issues are detailed there. Protocol for termination of the exercise is included in the Control section of the exercise package.

Pre-exercise Safety Requirements

- Pre-exercise notifications will be made to site personnel via the CH Bulletin Board and the Argonne News (weekly paper).
- The pre-exercise controller/evaluator training will address the content of this plan to assure adequate understanding of safety by all controllers and evaluators.
- Controllers will be staged before the exercise is scheduled to begin and will ensure that there are no pre-existing safety concerns which would affect the start of the exercise. Controller assignments and locations are identified in the Control section of the exercise package. The Exercise Director will obtain a safety check from all controllers prior to starting the exercise.
- An on-scene Exercise Safety Officer will be assigned as a Controller and will be provided an advance copy of the Exercise Health and Safety Plan.
- The Exercise Safety Officer has the authority to recommend an “Administrative Hold” on exercise activities to the Lead Controller or Exercise Director for safety concerns that arise.

Exercise Activity Boundaries and Off-Limit Areas

The exercise boundaries are defined by the boundaries of the site and facilities involved in the exercise. (See Section 2.2, Extent of Play.) Specific exercise boundaries are discussed and depicted on maps in the exercise package. Safety concerns that arise during the exercise will be dealt with immediately by exercise controllers in the affected area. As exercise objectives are accomplished certain areas may be allowed to return to normal activities.

10. HEALTH AND SAFETY PLAN (continued)

Safety Equipment - *This section identifies exercise-specific safety equipment.*

Exercise participants are required to follow all existing safety guidelines for the use of protective equipment in designated areas. The following equipment, marked with an X, is applicable to this exercise.

☒ Controller communications: radios, cell phones, and land lines - for controllers' use.

☒ Exercise identification badges/vests/caps

☒ First aid will be available through the ANL-E Fire Department.

☒ Field teams may simulate donning personal protective equipment during sampling activities.

Outside Hazards

Exercise participants are required to follow all hazard postings in exercise areas.

Exercise participants must obey all traffic laws during the exercise. Response personnel will use emergency lights and sirens on site but lights and sirens will be turned off once they leave the boundaries of the facility being exercised.

Field teams will travel on designated roads and trails. Field team vehicles will be equipped with fire extinguishers. No vehicles will go off road.

In the event of electrical storms, high winds, or other severe weather, participants will follow controller's instructions.

Controllers and responders will watch all participants for symptoms of heat stress. Controllers will ensure that all emergency response personnel are allowed the opportunity to rehab whenever necessary. Controllers are to halt exercise play anytime a responder appears to be in distress.

The following outside hazards, marked with an X, are applicable.

☒ Traffic. Field teams need to be aware of road condition hazards and traffic, especially when stopping to survey.

☒ Heat stress

☒ Weather conditions as they relate to actual conditions, will be discussed with participants before the exercise begins or when they arrive at their assigned location. Participants will be instructed to follow Controllers' directions.

10. HEALTH AND SAFETY PLAN (continued)

Inside Hazards

Activities inside the ANL-E EOC, CH-EOC, and Emergency Press Center, and Control Cell do not present any inside hazards beyond the normal office hazards.

One to two Fire Department personnel will enter Building 350 to assess the situation. They will be provided scripted information regarding the incident.

Building 350 personnel will exit the Building via normal evacuation procedures. They will be allowed to re-enter the building upon termination of on-site response activities by the Fire Department, which will take place once ten personnel have been monitored.

An actual fire alarm (alarm point 126) in Building 350 will be utilized for this exercise.

Radiation Safety Provisions

All radiation alarms will treated as real alarms. No radiation alarms will be initiated as part of the exercise. All personnel will follow existing radiation control procedures and must have received the training necessary to allow them to enter any control area(s) included as part of the exercise.

All personnel will wear appropriate dosimetry at all times. Radiation control procedures will be followed and personnel will be required to monitor for radiation whenever they leave a controlled area.

The immediate event scene in the laboratory is located in a radiation controlled area. Minimal personnel will enter this location. The hallway may be entered, but not the actual room.

The following items, marked with an X, are necessary to prevent a potential hazard to radiation safety during this exercise.

☒ Personnel participating in the exercise have been briefed or trained as required on any radiological hazards.

☒ Participants have had the appropriate Radiation Worker Training.

☒ Personnel entering radiation or radiological controlled areas possess the appropriate protective equipment and dosimetry.

Personnel Assignments

All safety concerns will be brought to the attention of the Exercise Safety Officer through the exercise control organization. Personnel specifically exempted from exercise play will follow their normal facility procedures.

10. HEALTH AND SAFETY PLAN (continued)

The Controller Organization section of the exercise package identifies personnel assignments.

No changes will be made to controller assignments without prior assurance that any replacements have equal or greater understanding of safety concerns that could be encountered at the location to which they are assigned.

Participation by Offsite Agencies

Offsite agencies participating in this exercise have been identified in the Scope section of the exercise package. Since the safety of personnel from offsite agencies is primarily the individuals' responsibility shared by the controller for the participating agency, offsite personnel responding to the onsite exercise will follow the instructions and requirements of this exercise safety plan. Safety concerns offsite are to be communicated immediately to the Exercise Safety Officer or the Lead Controller.

Offsite agencies that are not participating will be notified that an exercise is taking place, which will not require their participation.

Personnel Safety Provisions

Specific incidents and materials that may have adverse physical effects on personnel have been addressed in specific sections of the exercise package. Medical data, environmental applications, and hazardous activities of the exercise are also addressed in pertinent sections of the exercise package. Every effort has been made to anticipate and minimize hazardous situations inherent in this exercise.

The following provisions, marked with an X, apply to this exercise.

☒ Individual exercise participants are personally responsible for their individual safety.

☒ Each participant must monitor his/her own physical condition for signs of overexertion or distress.

☒ Any participant who observes another person injured or otherwise in need of assistance will immediately notify a controller to cease exercise activities and render aid/call for assistance.

☒ All injuries, no matter how slight, must be immediately reported to the nearest controller.

☒ All visitors and observers must remain in their designated locations throughout the exercise.

☒ Controller personnel are familiar with the hazards of the equipment involved and the required safety measures.

10. HEALTH AND SAFETY PLAN (continued)

Will environmental conditions (extreme heat, cold, ice/snow, confined space, oxygen deficiency, etc.) potentially affect the safety of participants?

☒ Yes ☐ No

- ✓ In the event of warm weather, Fire Department personnel will be allowed to remove Self-Contained Breathing Apparatus (SCBA) once they have entered the building to assess the situation.
- ✓ SCBAs and turnout gear will be worn for entry into the building.
- ✓ Field teams may simulate the use of personal protective clothing.

If there is a concern that prevailing environmental conditions may impact personnel safety, an assessment will be made immediately preceding the exercise and safety concurrence obtained to conduct of the exercise?

☐ Yes ☒ No

Will controller personnel operate or handle any equipment other than radios, pagers, or tape recorders?

☐ Yes ☒ No

If yes, specify (e.g., smoke-generating machine, lifting drums) and identify special safety provisions.

Vehicle Safety Provisions

The following vehicle safety precautions apply:

- ❑ No vehicle will be driven in such a manner that posted speed limits are exceeded or safe driving rules are violated.
- ❑ Only those vehicles involved in the exercise will be used for movement.
- ❑ Vehicles may not be mounted or dismounted until they come to a full stop.
- ❑ Care should be taken when operating a vehicle in reverse.
- ❑ There will be no attempt to use a vehicle to crash, block, or in any way endanger another vehicle or individual.

10. HEALTH AND SAFETY PLAN (continued)

- Any roadblock(s) will be simulated by placing a blocking vehicle(s) on the shoulder of the road and notifying a controller that a roadblock has been established.

- All accelerations, decelerations, cruising, turns, etc., will be accomplished in a safe manner.

- All personnel in moving vehicles will wear seat belts if the vehicle is equipped with them.

Exercise Safety and Control Organization

The Exercise Director is the senior safety officer for the exercise. The Exercise Safety Officer answers directly to the Exercise Director or Lead Controller and will ensure that all activities are conducted in accordance with this safety plan.

- The Exercise Safety Officer is responsible for ensuring that a risk assessment has been prepared and approved for the exercise or scenario.

- The Exercise Director is responsible for ensuring that site- and facility-specific safety briefings are conducted for all participants.

- Verifying that a safety survey of the exercise areas is/are conducted immediately before the exercise to verify that:

  - ✓ all hazard and off-limit areas are clearly marked and
  - ✓ the area(s) is/are ready to commence exercise play safely.

- Ensuring that exercise activities are halted in the event of a real emergency.

The ANL-E Fire Chief is responsible for identifying manpower requirements for the exercise to ensure that site fire safety is not degraded.

All controllers are designated as assistant exercise safety officers. Any controller who observes any unsafe act or condition will immediately correct the situation or notify the Lead Controller or Exercise Director to halt the exercise until it is corrected. Controllers are responsible for the following.

- Attending exercise safety briefings.

- Conducting a safety survey of the exercise area and clearly marking hazardous and off-limits areas before the exercise.

- Performing safety checks of their areas and of the exercise participants to whom they are assigned, and report the results to their lead controllers prior to the start of the exercise.

10. HEALTH AND SAFETY PLAN (continued)

- Ensuring that all personnel comply with the provisions of this safety plan and with common-sense safety precautions.
- Halting exercise play any time that an uncorrectable safety hazard becomes evident.
- Ensuring that communications during the exercise are preceded with the announcement "THIS IS AN EXERCISE."
- Notifying emergency medical services and fire protection if they are needed for an actual emergency in the exercise area.
- Notifying facility personnel if there is a real emergency in the exercise area.
- Notifying fire and/or protective force dispatchers if an alarm is to be activated.
- The Control Cell will ensure than an in-progress exercise message is broadcasted over radio nets every 15 minutes during the exercise.

Special Environmental Concerns

Will any exercise activities cause environmental concerns?

☐ Yes ☒ No

11. SECURITY PLAN

Scope

This security plan is prepared for the purpose of providing a "same message" approach to security issues concerning this exercise. It is included in the exercise package so that participants are better able to anticipate and recognize unplanned events, which may result in degradation of site security. It enables personnel to respond appropriately to and understand the security guidelines of the exercise.

No attempt has been made to duplicate security issues detailed in other portions of the exercise package. Applicable sections of the exercise package are referenced and specific issues are detailed there.

Pre-exercise Security Requirements

☒ The pre-exercise participant briefing will address security parameters to ensure adequate understanding by all other participants.

☒ A pre-exercise participant briefing will include security personnel, and address the scope and limitations of this exercise. Security personnel will be provided a briefing by the appropriate Command Officer and the CH Emergency Management Program Manager.

☒ The pre-exercise controller/evaluator training will address security parameters to ensure adequate understanding by all controllers.

☒ A controller will be located at the Central Alarm Station/CH EOC prior to the start of the exercise. He will be escorted by a member of the DOE-CH/SSS.

Exercise Activity Boundaries and Off-Limit Areas

☒ The ANL-E protective force shall adhere to activity boundaries and off -limit areas as listed in the Exercise Safety Plan.

☒ Event scene security boundaries - Protective force will staff two event scene access control points as they normally would during an actual event.

Personnel Assignments

☒ The Controller Organization section of the exercise package identifies personnel assignments. No changes shall be made without assurances that personnel qualifications and notifications are equal to circumstances prior to the changes.

Participation by Offsite Law Enforcement Agencies

☒ Law enforcement agencies will NOT participate in the exercise.

11. SECURITY PLAN (continued)

☒ Any interface and coordination with law enforcement activities will be limited to simulation in the ANL-E TSC/EOC, DOE-CH EOC, via the Control Cell.

Security Provisions

☒ An Exercise Health and Safety Plan has been developed detailing required safety provisions related to security for the exercise.

☒ The Exercise Director has the authority to place the exercise into an administrative hold or exercise freeze for any security reason.

☒ Use of actual 911 *or* an administrative number in lieu of 911 is specified and included in briefings.

☒ Vaults and doors will not be left open/unattended during evacuation of the facility.

☒ Classified Material/Documents potentially impacted – Classified materials/documents shall not be left unattended. All material is to be properly stored and classified vaults/storage cabinets secured prior to the start of the exercise.

12. ADMINISTRATION AND LOGISTICS PLAN

Scope

This plan is prepared for the purpose of ensuring the requisite administrative and logistics activities associated with the exercise planning, preparations, conduct, and followup are accomplished. It consists of a series of checklists for use by the exercise planning organization.

Exercise Package Development, Production, and Distribution

Development

- ❑ Purpose
- ❑ Scope
- ❑ Objectives
- ❑ Scenario Narrative Summary
- ❑ Event Conditions and Simulations
- ❑ MSEL
- ❑ Exercise data
- ❑ Event Scene Maps
- ❑ Exercise control
- ❑ Exercise evaluation
- ❑ Public Information/Media Plan
- ❑ Safety Plan
- ❑ Security Plan
- ❑ Administration and Logistics Plan
- ❑ Message injects
- ❑ Schedule of key exercise events

Production and Distribution

- ❑ Authorized Derivative Classifier
- ❑ Technical writing review
- ❑ Produce final draft
- ❑ Develop concurrence distribution list
- ❑ Distribution of draft
- ❑ Concurrence by participating organizations (list each for check-off purposes)
- ❑ Insert final comments
- ❑ Develop distribution list
- ❑ Produce exercise package
- ❑ Controlled distribution

12. ADMINISTRATION AND LOGISTICS PLAN (continued)

Safety Admin/Logistics Checklist

This list should correlate with the Safety Plan.

- ❑ Safety Officer and organization assigned (from Safety Plan)
- ❑ Safety equipment and materials identified (from Safety Plan)
- ❑ Safety equipment and materials procured

Security Administration/Logistics Checklist

This list should correlate with the Security Plan.

- ❑ Escorts identified, contacted, and briefed

Media Checklist

This checklist is required if the exercise will generate off-site interest. The administrative and logistics requirements should correlate with the Public Information/Media Plan.

- ❑ Video/audio
- ❑ Press badges
- ❑ Validate phone numbers for media calls
- ❑ Coordinate actual media attendance
- ❑ Press release announcing exercise
- ❑ Develop and publish viewing itinerary

Meeting Checklist

This checklist should be used for each pre- and post exercise planning and evaluation meeting.

- ❑ Participant Brief/Training
- ❑ Controller/Evaluator Brief/Training
- ❑ Participant Critique
- ❑ Controller/Evaluator Critique
- ❑ Scheduled date and time:
- ❑ Number of attendees:
- ❑ Meeting purpose or function:
- ❑ Schedule facility
- ❑ Schedule audio/visual equipment
- ❑ Develop agenda
- ❑ Publish and distribute announcement

12. ADMINISTRATION AND LOGISTICS PLAN (continued)

- ❑ Produce handouts or other support materials
- ❑ Arrange for recorder for taking minutes
- ❑ Ensure facility setup
- ❑ Produce sign-in sheet
- ❑ Produce draft of minutes
- ❑ Finalize and distribute minutes

Training Session Checklist

The pre-exercise training sessions normally include responder briefings, generic and exercise specific evaluator and controller training, and observer briefings.

- ❑ Scheduled date(s) and time(s):
- ❑ Number of students:
- ❑ Training course or class name:
- ❑ Schedule facility
- ❑ Schedule audio/visual equipment
- ❑ Publish and distribute announcement
- ❑ Sign-in sheet/attendance roster
- ❑ Produce handouts or other support materials
- ❑ Ensure setup of facility

Pre-Exercise Logistics/Simulations Checklist

- ❑ Pre-exercise meeting schedule published
- ❑ Pre-exercise meetings (use meeting checklist)
- ❑ Procure transportation to evaluator, controller, and observer locations
- ❑ Special weather equipment pre-staged (if checked, reference Safety Plan)
- ❑ Control cell setup
- ❑ Radio frequencies are confirmed
- ❑ Control communications directory published
- ❑ Control communications equipment pre-staged and tested
- ❑ Spare radio batteries are pre-staged
- ❑ Evaluator, controller, observer, and exempt personnel vests or identification means pre-staged
- ❑ Exercise mementos identified, procured, and pre-staged
- ❑ Simulation aids are setup and tested
- ❑ Barricade signs/tape/rope
- ❑ Injury/medical indicators
- ❑ Moulage
- ❑ Contamination indicators

12. ADMINISTRATION AND LOGISTICS PLAN (continued)

Conduct of Exercise Administration/Logistics Checklist

- ❑ Participant rosters distributed
- ❑ Spare communications equipment distributed, on request
- ❑ Medical services performed, on request
- ❑ Movement of controllers and evaluators, on request
- ❑ Public inquiries handled as needed
- ❑ Media inquiries handled as needed

Post-Exercise Administration/Logistics Checklist

- ❑ Meeting (critique) locations are setup and ready (use meeting checklist)
- ❑ Participant rosters collected
- ❑ Critique sheets distributed and collected
- ❑ Critique minutes collected
- ❑ Evaluator sheets collected
- ❑ Communications equipment returned, checked, and accounted for
- ❑ Vests or other participant identification devices collected
- ❑ Mementos distributed
- ❑ Simulations disassembled, cleaned, operation checked, and returned
- ❑ Support vehicles returned
- ❑ Special support equipment collected and returned
- ❑ Trash collected
- ❑ Letters of participation developed and distributed
- ❑ Training records of all participants updated
- ❑ Letters of appreciation distributed to organizations and/or individuals
- ❑ Post exercise evaluator meetings conducted (use meeting checklist)
- ❑ Financial information requested, totaled, and submitted to management
- ❑ Lessons learned report developed (used for the planning, development and conduct of the exercise - not the same as the evaluation report.)
- ❑ Evaluation report developed, approved, and published
- ❑ Findings added to the tracking system

13. REFERENCES

- Argonne Area Office Standard Operating Procedure 6: Emergency Management for Argonne National Laboratory-East.
- Argonne National Laboratory and New Brunswick Laboratory Memorandum of Understanding, July 24, 2000.
- Argonne National Laboratory – East, Public Affairs Plan, Revision 10, May 14, 2001.
- Chicago Operations Office Emergency Plan, July, 2000.
- Chicago Operations Office Public Affairs Plan, February, 1999.
- Chicago Operations Office Emergency Procedures, Procedure #1, EOC Activation and Operation, September 19, 2000.
- Comprehensive Emergency Management Plan, Argonne National Laboratory-East, September 1, 2000.
- DOE Emergency Management Guide, Volume VII, Exercises, August, 1997.
- Memorandum of Understanding Between the Forest Preserve District of DuPage County, Illinois and the United States Department of Energy
- New Brunswick Laboratory, Emergency Plan, Rev. 5, June 2, 2000.
- New Brunswick Laboratory, Emergency Plan, Rev. 6, DRAFT.
- New Brunswick Laboratory, Emergency Planning Hazards Assessment Report, October 2000.
- Review of the Adequacy of Emergency Response to the February 20, 2000 Criticality False Alarm in New Brunswick Laboratory (NBL)," April, 2000.

14. LIST OF ACRONYMS/ABBREVIATIONS

AAO	Argonne Area Office
AES	Area Emergency Supervisor
Am	Americium
ANL-E	Argonne National Laboratory – East
ARF	Airborne Release Fraction
BP	Blood Pressure
BST	Building Source Term
CAS	Central Alarm Station
CEMP	Comprehensive Emergency Management Plan
CH	Chicago Operations Office
Ci	Curies
cm	Centimeters
DOE	Department of Energy
DOE-HQ	Department of Energy – Headquarters
dpm	Disintegrations per minutes
DR	Damage Ratio
ECN	Emergency Communications Network
EMO	Emergency Management Organization
EMT	Emergency Management Team
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPC	Emergency Press Center
ERO	Emergency Response Organization
Fab	Plutonium Fabrication
g	Grams
HEPA	High Efficiency Particulate Air
IC	Incident Command
ICP	Incident Command Post
IDNS	Illinois Department of Nuclear Safety
IEMA	Illinois Emergency Management Agency
JON	Judgment of Needs
LPF	Leak Path Factor
mph	Miles Per Hour
m/s	Meters Per Second
MABAS	Mutual Aid Box Alarm System Division 10
MAR	Material At Risk
NBL	New Brunswick Laboratory
NCD	No Contamination Detected
NNE	North/Northeast
NRC	National Response Center

14. LIST OF ACRONYMS/ABBREVIATIONS (continued)

OM-C	Office of Communications
OPA	Office of Public Affairs
PA	Protective Action
PAR	Protective Action Recommendation
PSA	Public Service Announcement
Pu	Plutonium
RAP	Radiological Assistance Program
RF	Respirable Fraction
SCBA	Self-Contained Breathing Apparatus
SDG	Scenario Development Group
SO	Office of Security and Emergency Operations
SSS	Safeguards and Security Services
SSW	South/Southwest
TSC	Technical Support Center
U	Uranium

ATTACHMENT 1
Schedule of Exercise Activities

Initial Planning Meeting	10/02/00
Scenario Development Group Meeting	02/13/01
Finalize Exercise Objectives	02/14/01
Submit 30% Package for Review	03/20/01
Submit 90% Package for Review	05/03/01
Finalize Logistics	05/11/01
Finalize Exercise Package	05/22/01
DOE Emergency Management Team Training - 1:00 p.m. – 3:00 p.m., Building 302, CH-EOC	05/30/01
Controller/Evaluator Tour . - 8:00 a.m. – 10:00 a.m. • Building 224 – Visitor's Information Center/Emergency Press Center • Building 201 – ANL-E TSC/EOC • Building 201 – Exercise Control Cell • Building 302 – Central Alarm Station/CH-EOC • Building 333 – ANL-E Fire Department/911 Center • Building 350 – New Brunswick Laboratory • Radiological Assistance Program (RAP) equipment and resources	06/04/01
Participant Brief - 1:00 p.m. – 2:00 p.m., Building 201, Room 3A	06/04/01
Controller/Evaluator Brief - 2:00 p.m.– 4:00 p.m, Building 201, Room 3A	06/04/01
EXERCISE DAY - 8:30 a.m. – 12:30 p.m.	**06/05/01**
Responder Hotwash - Immediately following termination	06/05/01
Participant Critique - 2:00 p.m. – 4:00 p.m., Building 201, Room 3A	06/05/01
Controller/Evaluator Critique - 8:00 a.m. – completion, Building 201, Room 3A	06/06/01
Draft Exercise Report to DOE Chicago Operations Office	06/20/01
Final Exercise Report to DOE Chicago Operations Office	07/23/01

ATTACHMENT 2
Chronology of Key Events and Observations
CH, AAO, NBL & ANL-E Joint Exercise
Operation Urban Forest
June 5, 2001

Evaluators Name: _____ Organization: _____ Phone #: _____

Functional Area Evaluated: _____ Assigned Location/Area: _____

Time	Key Event or Observation

ATTACHMENT 2
Chronology of Key Events and Observations
(continued)

Time	Key Event or Observation

ATTACHMENT 3
Controller/Evaluator/Observer Roster

FUNCTIONAL AREA	ASSIGNED	EVALUATOR	RADIO NET/PHONE #
EXERCISE CONTROL CELL			
• Exercise Director (Float)	C. Van Horn	---	DOE 1 / 708-642-1510
• Lead Controller	P. Melberg	P. Melberg	DOE 2 / 630-252-6380
• Exercise Support - Timeline Coordinator	P. Melberg	---	DOE 2 / 630-252-6383
• Exercise Support – Communications Support	RD Campbell	---	ESH / 630-252-6381
• Exercise Support – DOE HQ EOC	---	B. Hawkins	202-586-8100
• Exercise Support – Incident Command	G. Veerman	---	FD Emergency /630-252-6378
FUNCTIONAL AREA	**ASSIGNED**	**EVALUATOR**	**RADIO NET/PHONE #**
Central Alarm Station/CH-EOC			
• CAS/Emergency Management Team	N. Kostecki	N. Kostecki	630-252-2597
(Alternate)	C. Van Horm	C. Van Horn	DOE 1 / 708-642-1510
• NBL Controller	Jolenne Bissegger	DOE 4	630-252-2597
TECHNICAL SUPPORT CENTER/EOC			
• ANL-E	B. Schlenker	F. Fredericks	2-5289
• AAO	R. Purucker	F. Fredericks	2-5289
INCIDENT COMMAND			
• Building 350	C. Mansfield	T. Davidson	ESH
• Fire Department/On-scene	B. James	T. Davidson	708-205-3676
• Fire Alarm Office	G. Veerman	---	FD Emergency /630-252-6378
• Exercise Safety – On Scene	G. Dely	G. Dely	ESH
• On-site Monitoring Team	S. Butala	T. Davidson	ESH
• Off-site Monitoring – RAP/IDNS	C. Mansfield	T. Davidson	DOE 3
ROLE PLAYERS			
• Worker #1 – NBL Relocation Area	P. Mason	---	---
• Worker #2 – NBL Relocation Area	M. Morales	---	---
• Mayor, Argonne Hills	A. Krisciunas	---	---
• Hiker	Sam Joh	---	---
JOINT PUBLIC INFORMATION			
• Emergency Press Center	J. Everitt	J. Everitt	708-997-4811
• Mock Media	TBD	---	---
• Mock Media	TBD	---	---
• Mock Media	TBD	---	---
PHOTOGRAPHY			
• Roving photographer (video and digital)	Stan Niehoff	---	815-483-3096

ATTACHMENT 4
Participant Feedback Form

Name: _____

Check One:

Participant: _____ Controller: _____ Evaluator: _____

Location / Function Evaluating:

NBL Activities	_____	Emergency Press Center	_____
Scene Response	_____	Offsite Activities	_____
ANL TSC/EOC	_____	Other	_____
CH EOC	_____	_____	

Comments on the Exercise Scenario or General Comments: _____

_____

_____

Noteworthy Participant Activities: _____

_____

_____

Plans/procedures that worked well during this exercise:_____

_____

_____

Plans/procedures that did NOT work well during this exercise: _____

_____

_____

Recommendations for improvement in plans/procedures:

_____

_____

_____

ATTACHMENT 5

Messages/Injects

Pre-Exercise Message to Building 350 Employees

At approximately 8:30 a.m. on Tuesday, June 5, we will be conducting a fire drill. The drill will be conducted as part of the joint NBL/CH/AAO/ANL emergency exercise. We will not have a meeting prior to the alarm, although the drill will be announced prior to sounding the bells. Persons would be in their normal work areas and respond as if there were a real fire (i.e., leave by the nearest exit and assemble at the relocation point). The Fire Department will be responding in a limited capacity, to the alarm, so we will run through the entire accountability process and wait for the Incident Commander to allow us to reenter the building.

Further details will be provided in future messages. Please let me know if you have any questions or concerns.

Eric Dallmann
Emergency Coordinator

MESSAGE/INJECT			
MESSAGE/INJECT #: 0		**TIME: 0700**	**H-Hour: - 00:00**
FROM: Lead Controller		**TO: All Controllers**	
SUBJECT: Meteorological Conditions			

THIS IS AN EXERCISE

Wind Direction: **From NNE to SSW**

Wind Speed: **8 mph (3 m/s)**

Gusting To: **12 mph (5 m/s)**

Temperature: **80° F**

Stability Class: **D**

Relative Hum: **70%**

Dew Point: **65° F**

Precip. (last 15 min.) **0.00 in.**

THIS IS AN EXERCISE

MESSAGE/INJECT			
MESSAGE/INJECT #: 1		**TIME: 0830**	**H-Hour: +/- 00:00**
FROM: NBL Controller		**TO: Worker #1**	
SUBJECT: Photo Package 1, Room 143			

THIS IS AN EXERCISE

Provide the attached photographs to Worker #1 and ask the individual to explain what he/she observes and what would be an appropriate action to take.

Worker #1 will also provide to Fire Department Responder to describe the scene, upon entering the area.

THIS IS AN EXERCISE

MESSAGE/INJECT			
MESSAGE/INJECT #: 2		**TIME: 0830**	**H-Hour: +/- 00:00**
FROM: NBL Controller		**TO: Worker #2**	
SUBJECT: Photo Package 2, Corridor outside Room 143			

THIS IS AN EXERCISE

Provide the attached photographs to Worker #2 and ask the individual to explain what he/she observes and what would be an appropriate action to take.

Also provide to incoming Fire Department Responder to describe the scene, upon entering the area.

THIS IS AN EXERCISE

MESSAGE/INJECT			
MESSAGE/INJECT #: 3		**TIME: 0835**	**H-Hour: +/- 00:05**
FROM: NBL Controller		**TO: Facility Manager**	
SUBJECT: Engage Fire Alarm			

THIS IS AN EXERCISE

Engage fire alarm at point 126.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 4-A		**TIME: 0840**	**H-Hour: +/- 00:10**
FROM: Fire Department Controller		**TO: Fire Department Responder**	
SUBJECT: Photo Package 3, Initial Assessment			

THIS IS AN EXERCISE

Provide the attached photographs to the senior Fire Department responder and ask the individual to explain what he/she observes and what would be an appropriate action to take.

THIS IS AN EXERCISE


350
350
NEW BRUNSWICK
LABORATORY
5/16/2001


5/16/2001

MESSAGE/INJECT #: 4-B		**TIME: 0840**	**H-Hour: +/- 00:10**
FROM: Worker #1		**TO: Fire Department Responder**	
SUBJECT: Data Package 1, Initial Assessment - Worker #1 - Injuries			

THIS IS AN EXERCISE

Worker 1: **Male, age approximately 35 years old**
Lacerations and possible foreign objects to face and neck
No apparent eye injury
Conscious, but speaking incoherently
Possible right shoulder or upper arm fracture
Blood pressure 100/70 and falling
Heart rate - irregular
Breathing – rapid
Patient is NOT ambulatory and unable to talk
Respiratory distress resulting from smoke inhalation, gasping for air, shortness of breath

Vital Signs	On-scene	+ 15 minutes	With oxygen at hospital.
Heart Rate	100	100	80
Breathing	26	22	16
Blood Pressure	110/70	90/60	110/72

THIS IS AN EXERCISE

MESSAGE/INJECT #: 4-C		**TIME: 0900**	**H-Hour: +/- 00:30**
FROM: Worker #1		**TO: Fire Department Responder**	
SUBJECT: Data Package 1, Initial Assessment - Worker #1 - Contamination			

THIS IS AN EXERCISE

Worker 1

AREA	CONTAMINATION LEVELS
Face	5×10^4 dpm/100 cm^2 alpha 5×10^3 dpm/100 cm^2 beta and gamma
Neck	5×10^4 dpm/100 cm^2 alpha 5×10^3 dpm/100 cm^2 beta and gamma
Chest (shirt)	5×10^4 dpm/100 cm^2 alpha 5×10^3 dpm/100 cm^2 beta and gamma
Arms	5×10^3 dpm/100 cm^2 alpha 5×10^2 dpm/100 cm^2 beta and gamma
Bottom of Shoes	5×10^3 dpm/100 cm^2 alpha 5×10^2 dpm/100 cm^2 beta and gamma

THIS IS AN EXERCISE

MESSAGE/INJECT #: 4-C		TIME: 0900	H-Hour: +/- 00:30
FROM: Worker #1		TO: Fire Department Responder	
SUBJECT: Data Package 1, Initial Assessment - Worker #1 - Contamination			

THIS IS AN EXERCISE

Worker 1

Levels of Contamination After Decontamination and Clothing Removal by Fire Department

AREA	CONTAMINATION LEVELS
Face	< 5×10^3 dpm/100 cm^2 alpha < 5×10^2 dpm/100 cm^2 beta and gamma
Neck	< 5×10^3 dpm/100 cm^2 alpha < 5×10^2 dpm/100 cm^2 beta and gamma
Chest (shirt removed)	< 5×10^3 dpm/100 cm^2 alpha < 5×10^2 dpm/100 cm^2 beta and gamma
Arms	< 5×10^3 dpm/100 cm^2 alpha < 5×10^2 dpm/100 cm^2 beta and gamma
Shoes (Removed)	Contamination Removed

THIS IS AN EXERCISE

MESSAGE/INJECT #: 4-D		**TIME: 0840**	**H-Hour: +/- 00:10**
FROM: Worker #2		**TO: Fire Department Responder**	
SUBJECT: Data Package 1, Initial Assessment – Worker #2 - Injuries			

THIS IS AN EXERCISE

Worker 2: **Female, age approximately 30 years old**
Lacerations and possible foreign objects to face and neck
No apparent eye injury
Conscious, but dizzy
Blood pressure 110/80 and falling
Heart rate - irregular
Breathing – rapid
Patient is able to talk and is semi-ambulatory
Respiratory distress resulting from smoke inhalation, gasping for air, shortness of breath

Vital Signs	On-scene	+ 15 minutes	With oxygen at hospital.
Heart Rate	100	100	80
Breathing	26	22	16
Blood Pressure	110/70	90/60	110/72

THIS IS AN EXERCISE

MESSAGE/INJECT #: 4-E		**TIME: 0840**	**H-Hour: +/- 00:10**
FROM: Worker #2		**TO: Fire Department Responder**	
SUBJECT: Data Package 1, Initial Assessment - Worker #2 - Contamination			

THIS IS AN EXERCISE

Worker 2

AREA	CONTAMINATION LEVELS
Face	2.5×10^4 dpm/100 cm^2 alpha 2.5×10^3 dpm/100 cm^2 beta and gamma
Neck	2.5×10^4 dpm/100 cm^2 alpha 2.5×10^3 dpm/100 cm^2 beta and gamma
Chest (shirt)	2.5×10^4 dpm/100 cm^2 alpha 2.5×10^3 dpm/100 cm^2 beta and gamma
Arms	10^4 dpm/100 cm^2 alpha 10^3 dpm/100 cm^2 beta and gamma
Bottom of Shoes	10^4 dpm/100 cm^2 alpha 10^3 dpm/100 cm^2 beta and gamma

THIS IS AN EXERCISE

MESSAGE/INJECT #: 4-E		TIME: 0900	H-Hour: +/- 00:30
FROM: NBL Controller		TO: Fire Department Responder	
SUBJECT: Data Package 1, Initial Assessment - Worker #2 - Contamination			

THIS IS AN EXERCISE

Worker 2

Levels of Contamination After Decontamination and Clothing Removal by Fire Department

AREA	CONTAMINATION LEVELS
Face	< 10^3 dpm/100 cm^2 alpha NCD beta and gamma
Neck	< 10^3 dpm/100 cm^2 alpha NCD beta and gamma
Chest (shirt removed)	NCD
Arms	< 10^3 dpm/100 cm^2 alpha NCD beta and gamma
Shoes (Removed)	Contamination removed

THIS IS AN EXERCISE

MESSAGE/INJECT #: 5		**TIME: 0845**	**H-Hour: +/- 00:15**
FROM: Fire Department Controller		**TO: Incident Commander**	
SUBJECT: Initial Assessment			

THIS IS AN EXERCISE

Reminder to Incident Commander

Initiate a request (simulate) for mutual aid, and later inform the Technical Support Center of the request.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 6		**TIME: 0845**	**H-Hour: +/- 00:15**
FROM: Fire Department Controller		**TO: Incident Commander**	
SUBJECT: Activate the Technical Support Center			

THIS IS AN EXERCISE

Reminder to the Incident Commander

1. **Request activation of the Technical Support Center.**
2. **Request support from health physics to monitor personnel at the scene.**
3. **Simulate transportation of injured personnel to LaGrange Hospital for further treatment.**

THIS IS AN EXERCISE

MESSAGE/INJECT #: 7		**TIME: 0900**	**H-Hour: +/- 00:30**
FROM: TSC Controller		**TO: TSC Manager**	
SUBJECT: Activate the ANL-E Emergency Operations Center			

THIS IS AN EXERCISE

1. **Classify the incident at the ALERT level.**

2. **Activate the ANL-E Emergency Operations Center.**

THIS IS AN EXERCISE

MESSAGE/INJECT #: 8		**TIME: 0910**	**H-Hour: +/- 00:40**
FROM: AAO Controller		**TO: AAO Manager**	
SUBJECT: Ensure the IDNS is Notified			

THIS IS AN EXERCISE

Ensure the notification of the IDNS by the TSC/EOC

Call the Lead Controller upon notification.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 9		**TIME: 0915**	**H-Hour: +/- 00:45**
FROM: AAO Controller		**TO: AAO Manager**	
SUBJECT: Activate the CH Emergency Operations Center			

THIS IS AN EXERCISE

Notify the CH Manager of events to ensure he makes the decision to activate the CH Emergency Operations Center.

Activate the CH Emergency Operations Center.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 10		**TIME: 0915**	**H-Hour: +/- 00:45**
FROM: ANL TSC/EOC Controller		**TO: TSC Manager/Crisis Manager**	
SUBJECT: Activate the Emergency Press Center.			

THIS IS AN EXERCISE

Activate the Emergency Press Center.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 11		**TIME: 0920**	**H-Hour: +/- 00:50**
FROM: ANL TSC/EOC Controller		**TO: TSC Manager/Crisis Manager**	
SUBJECT: DuPage County Forest Preserve			

THIS IS AN EXERCISE

Notify DuPage County Forest Preserve District to evacuate and monitor any persons who may have been near the site boundary (simulate call).

THIS IS AN EXERCISE

MESSAGE/INJECT #: 12		**TIME: 0920**	**H-Hour: +/- 00:50**
FROM: AAO Controller		**TO: Lead Controller**	
SUBJECT: Request for offsite assistance.			

THIS IS AN EXERCISE

Ensure that the Illinois Department of Nuclear Safety (IDNS) has requested assistance from the Radiological Assistance Program (RAP) team in monitoring potential contamination at the site boundary (via RAP Emergency Phone Number 630-252-4800).

Notify the Lead Controller when this occurs

THIS IS AN EXERCISE

MESSAGE/INJECT #: 13		TIME: 0945	H-Hour: +/- 01:15
FROM: On-Site Monitoring Controller		**TO: Area Emergency Supervisor and Health Physics Personnel**	
SUBJECT: Data Package #2 - Potential Contamination on B350 Employees			

THIS IS AN EXERCISE

If any B350 employees walk through the corridor past Room 143 or try to assist the injured worker, then provide the monitoring personnel with these contamination levels.

AREA	CONTAMINATION LEVELS
Arms	10^4 dpm/100 cm^2 alpha 10^3 dpm/100 cm^2 beta and gamma
Bottom of Shoes	10^4 dpm/100 cm^2 alpha 10^3 dpm/100 cm^2 beta and gamma

Simulate decontamination by onsite HP to NCD alpha, beta, gamma.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 14		**TIME: 1000**	**H-Hour: +/- 01:30**
FROM: Lead Controller/Control Cell		**TO: TSC**	
SUBJECT: Status of Injured Personnel			

THIS IS AN EXERCISE

Information From Hospital on Status of Workers #1 and #2

Vitals stabilized
Lacerations and possible burns to face, neck, and arms
Decontaminated to No Contamination Detected (NCD), alpha, beta, gamma
Nasal smears positive – 500 dpm alpha, NCD – beta, gamma
X-rays- negative

Vital Signs	On-scene	+ 15 minutes	With oxygen at hospital.
Heart Rate	100	100	80
Breathing	26	22	16
Blood Pressure	110/70	90/60	110/72

THIS IS AN EXERCISE

MESSAGE/INJECT #: 15		**TIME: 1000**	**H-Hour: +/- 01:30**
FROM: IDNS/RAP Controller		**TO: Monitoring Team Lead**	
SUBJECT: Offsite Contamination			

THIS IS AN EXERCISE

See offsite monitoring maps in Controller Handbooks for radiation levels.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 16		**TIME: 1000**	**H-Hour: +/- 01:30**
FROM: Lead Controller		**TO: All Controllers**	
SUBJECT: Administrative Hold			

THIS IS AN EXERCISE

After the B350/IC Controller reports that 10 people have been successfully monitored at the B350 assembly area, place the exercise on Administrative Hold while the Incident Commander relocates to the Control Cell. If the IC is requested to report to the Emergency Press Center, cancel the Administrative Hold and continue to free play.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 17		**TIME: 1010**	**H-Hour: +/- 01:40**
FROM: Lead Controller		**TO: All Controllers**	
SUBJECT: Exercise Restart			

THIS IS AN EXERCISE

After Incident Commander relocates to the Control Cell and is ready to resume play, notify all controllers to restart the exercise.

THIS IS AN EXERCISE

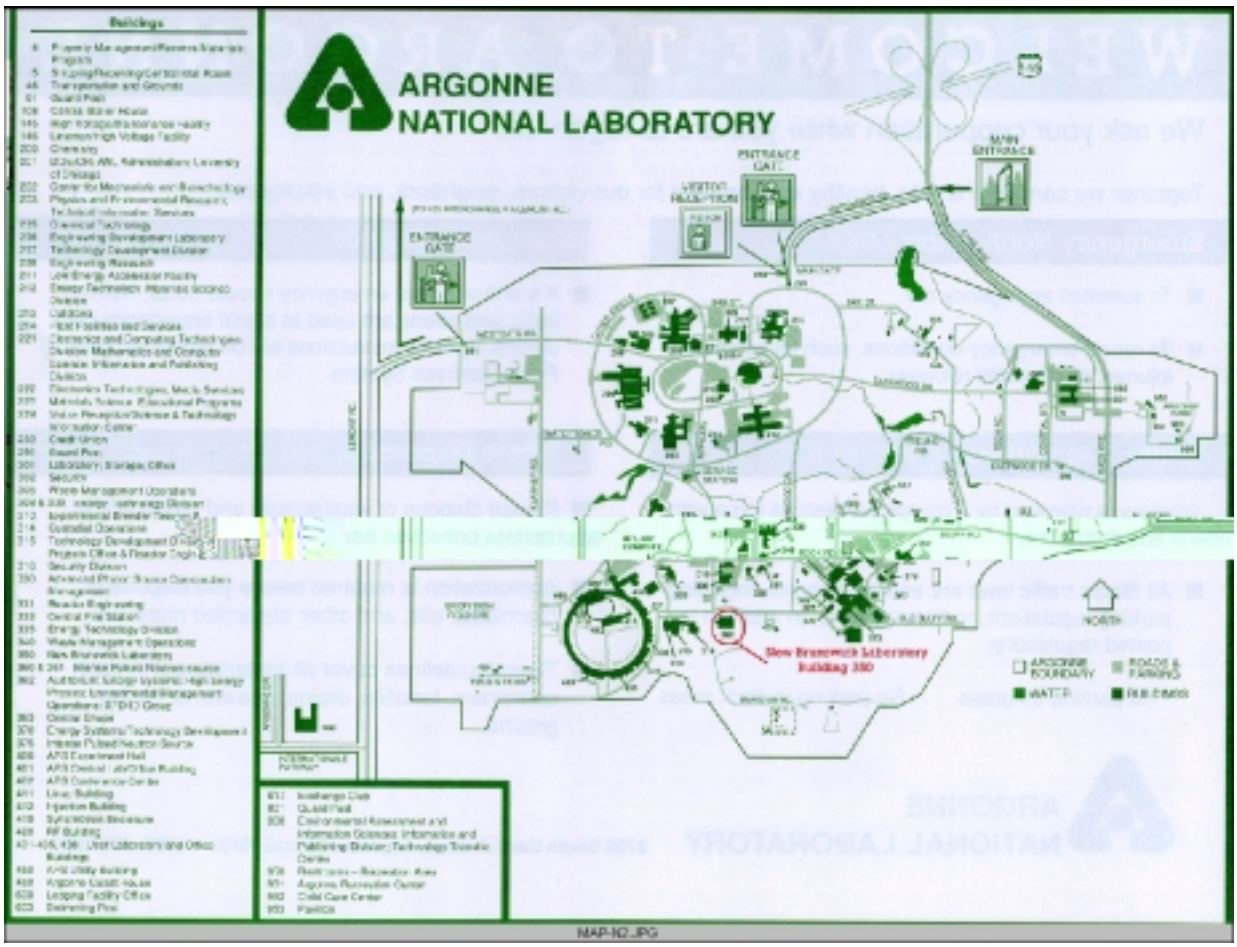
MESSAGE/INJECT #: 18		**TIME: 1015**	**H-Hour: +/- 01:45**
FROM: CH-EOC Controller		**TO: Emergency Coordinator**	
SUBJECT: Communications with DOE-HQ			

THIS IS AN EXERCISE

Transmit a map of the incident scene to DOE-HQ. (See attached)

Must be completed by 10:30 a.m. due to ECN testing

THIS IS AN EXERCISE


ARGONNE
NATIONAL LABORATORY
Buildings
ENTRANCE GATE
MAIN ENTRANCE
VISITOR INFORMATION
New Brunswick Laboratory
Building 350
NORTH
ARGONNE BOUNDARY
ROADS & PARKING
WATER
MAP-N2.JPG

MESSAGE/INJECT #: 19		**TIME: 1015**	**H-Hour: +/- 01:45**
FROM: CH-EOC Controller		**TO: Emergency Coordinator**	
SUBJECT: Communications with DOE-HQ			

THIS IS AN EXERCISE

Transmit digital photos of the incident scene to DOE-HQ. (See attached)

Must be completed by 10:15 a.m. due to ECN testing.

THIS IS AN EXERCISE


350
360
NEW BRUNSWICK
LABORATORY
5/16/2001


5/16/2001

MESSAGE/INJECT #: 20		**TIME: 1015**	**H-Hour: +/- 02:45**
FROM: CH-EOC Controller		**TO: Emergency Coordinator**	
SUBJECT: Communications with DOE-HQ			

THIS IS AN EXERCISE

Transmit video of the incident scene to DOE-HQ.

Must be completed by 1030 .a.m. due to ECN testing.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 21		**TIME: 1230**	**H-Hour: +/- 04:00**
FROM: Lead Controller		**TO: All Controllers**	
SUBJECT: Exercise Termination			

THIS IS AN EXERCISE

All exercise objectives have been met.

The exercise is terminated.

Please take a 5-10 minute break and report back to your position for a brief hotwash.

Reminder: The Participant Critique is scheduled for 2:00 – 4:00 p.m. in Building 201, Conference Room 3A. Please plan on attending.

THIS IS AN EXERCISE

ATTACHMENT 6
Public Information and Media Messages

Pre-Exercise Message to Site Employees and Media

Argonne, DOE and the New Brunswick Laboratory will hold a joint emergency exercise Tuesday, June 5.

Exercise activities will take place at Building 350, the Visitor Reception Center, the Argonne Emergency Operations Center in Building 201, and the DOE-CH Emergency Operations Center in Building 302.

Emergency vehicles and equipment will be involved in the area of Building 350 and radiological monitoring teams may be involved both on and off site.

Normal operations will continue at the Visitor Reception Center.

MESSAGE/INJECT #: 22-A		**TIME: 0950 ff**	**H-Hour: +/- 01:10**
FROM: EPC Controller **Mock Media Representative**		**TO: Mock Media Representative** **Senior PI official**	
SUBJECT: Media Inquiry - Potential Fatality			

THIS IS AN EXERCISE

My name is Phil/Paula Jackson (or role player name) from the Naperville Sun.

Ask the following questions of the person(s) you are referred to:

Is it true that someone was killed at the New Brunswick Laboratory this morning?

What was the nature of the accident?

Was it caused by an explosion?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 22-B		**TIME: 0950 ff**	**H-Hour: +/- 01:10**
FROM: EPC Controller **Hiker**		**TO: Hiker** **Senior PI Official**	
SUBJECT: Public Inquiry - Potential Contamination			

THIS IS AN EXERCISE

My name is John/Joanne Smith (or role player name).

Ask the following questions of the person(s) you are referred to:

I was just out on the model airplane field off of Bluff Road. I think that there was some sort of accident at one of the government buildings near there. I'm afraid that I might be contaminated because I some smoke.

How can I be sure that I'm ok?

Do I have to be worried about radioactive contamination?

Is there somewhere I can go to be evaluated?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 22-C		**TIME: 1120**	**H-Hour: +/- 02:50**
FROM: EPC Controller **Mayor, Argonne Hills**		**TO: Mayor, Argonne Hills** **DOE Site Spokesperson**	
SUBJECT: Public Inquiry – Government Official Interest			

THIS IS AN EXERCISE

Mr./Ms. _____

I am the Mayor of Argonne Hills. I am here on the behalf of the residents of Argonne Hills to ascertain the status of the emergency events at the Department of Energy's New Brunswick Laboratory.

Ask the following questions of the person(s) you are referred to:

What actually happened at NBL?

What actions have the State and Department of Energy taken thus far to protect my constituents and the environment?

Who can I speak with directly concerning this matter?

What is the phone number where they can be reached?

Can you send me report or other information concerning the accident?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 22-D		**TIME: 1120**	**H-Hour: +/- 02:50**
FROM: EPC Controller **Mock Media Representative**		**TO: Mock Media Representative** **DOE Site Spokesperson**	
SUBJECT: Media Inquiry – Day Care Center			

THIS IS AN EXERCISE

My name is Martha/Marvin Johnson (or role player name) from WGN-TV, Channel 9. I was at the day care center doing a follow-on report on employer-sponsored day cares.

Ask the following questions of the person(s) you are referred to:

Can you tell me if the children are in any danger?

Have their parents been informed?

Have you prepared them for this type of incident?

How can parents find out if their children are safe?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 22-E		**TIME: 0950 ff**	**H-Hour: +/- 01:10**
FROM: EPC Controller **Mock Media Representative**		**TO: Mock Media Representative** **DOE Site Spokesperson**	
SUBJECT: Media Inquiry - Explosion			

THIS IS AN EXERCISE

My name is Joan/Joe Smith (or role player name) with WFLD-TV. We have been informed that a nuclear explosion has occurred at the New Brunswick Lab.

Ask the following questions of the person(s) you are referred to:

When did this explosion occur?

Have communities surrounding Argonne been affected?

How many employees have been killed or injured? Our sources have indicated that at least 10 employees have been inured and contaminated.

THIS IS AN EXERCISE

MESSAGE/INJECT #: 22-F		**TIME: 0950 ff**	**H-Hour: +/- 01:10**
FROM: EPC Controller **Mock Media Representative**		**TO: Mock Media Representative** **DOE Site Spokesperson**	
SUBJECT: Media Inquiry – Video Footage			

THIS IS AN EXERCISE

My name is Janet/Jonathan Acres (or role player name) from Channel 9 News. We are seeking permission to do a fly over of Argonne in order to obtain film footage of the accident scene. Who do I need to talk with regarding this matter?

Ask the following questions of the person(s) you are referred to:

Can we obtain permission to get some aerial film footage of the accident scene for news programming today at noon?

How do we make arrangements for an exclusive interview with a spokesperson from the Chicago Operations Office regarding this accident?

Can we get an interview the DOE Manager for the Site?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 22-G		**TIME: 0950 ff**	**H-Hour: +/- 01:10**
FROM: EPC Controller **Mock Media Representative**		**TO: Mock Media Representative** **DOE Site Spokesperson**	
SUBJECT: Media Inquiry – Impact to Community			

THIS IS AN EXERCISE

My name is Barbara/Ben Stein (or role player name) with the Aurora-Beacon News. We are following up on reports that a serious nuclear accident has occurred at Argonne this morning.

Ask the following questions of the person(s) you are referred to:

Can you tell me what the problem is and the impact on residential areas in the vicinity of Argonne?

Are there any plans to evacuate residents from potentially contaminated areas near the Site?

What types of hazardous materials were released to the environment?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 23-A		**TIME: 1100**	**H-Hour: +/- 02:30**
FROM: Control Cell		**TO: 630-252-2010**	
SUBJECT: Media Inquiry – General Information			

THIS IS AN EXERCISE

This is Barbara/Benjamin Carson (or role player name) with WLS-TV, Channel 7. I would like to know if a media release is available yet? If one has been released how do we go about obtaining a copy for our use? I also have some questions for your Site Spokesperson.

Ask the following questions of the person(s) you are referred to:

Have any residents of DuPage County been affected by this accident?

Have any residents in DuPage County been evacuated?

What measures are being taken to protect the public from the effects of this accident?

What can residents do to protect themselves from any adverse effects?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 23-B		**TIME: 1110**	**H-Hour: +/- 02:40**
FROM: Control Cell		**TO: 630-252-2010**	
SUBJECT: Media Inquiry - Terrorism			

THIS IS AN EXERCISE

This is Joan/Joe Smith (or role player name) with WBBM-AM News Radio. We have heard from an informed source that the accident at Argonne this morning was an act of terrorism. Can you confirm this fact?

Ask the following questions of the person(s) you are referred to:

Do you know with any certainty what caused this accident?

Are you certain this was not an act of terrorism?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 23-C		**TIME: 1120**	**H-Hour: +/- 02:50**
FROM: Control Cell		**TO: 630-252-2010**	
SUBJECT: Media Inquiry – Large Cloud/Explosion			

THIS IS AN EXERCISE

Hello this is Steve/Stephanie Bowman (or role player name) from WFLD-TV. One of our reporters near Argonne has indicated that a large light gray cloud has just appeared above one of your buildings, possibly as a result of an explosion. Is that true?

Ask the following questions of the person(s) you are referred to:

Which way is the cloud moving?

Is this cloud radioactive?

How many explosions have there been?

THIS IS AN EXERCISE

MESSAGE/INJECT #: 23-D		**TIME: 1130**	**H-Hour: +/- 03:00**
FROM: Control Cell		**TO: 630-252-2010**	
SUBJECT: Media Inquiry – Disgruntled Employee			

THIS IS AN EXERCISE

This is Barbara/Ben Stein with the Chicago Sun Times. We are following up on reports from an informed source that the nuclear accident at Argonne this morning was caused by a disgruntled employee.

Ask the following questions of the person(s) you are referred to:

Can you confirm the accuracy of this report?

Has the cause of this accident been determined yet?

When do you expect to know what caused this accident?

What agencies or officials will be involved in the investigation of this accident?

THIS IS AN EXERCISE