

# Southwest Florida Hazardous Materials Full-Scale Exercise



## After-Action Report (AAR)



**June 28, 2018**

**Prepared By:**



Advanced Planning  
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## EXERCISE OVERVIEW

Exercise Name	2018 Southwest Florida Hazardous Materials Exercise	
Exercise Date	Thursday, June 28, 2018	
Scope	Execute a Full-Scale Exercise for Southwest Florida Local Emergency Planning Committee based on current Hazardous Materials plans, protocols and procedures.	
Mission Area(s)	<ul style="list-style-type: none"><li>• Protection</li><li>• Response</li><li>• Recovery</li></ul>	
Scenario	A point-release of anhydrous ammonia from a pipe on the roof of the Cheney Brothers warehouse, which causes a medical emergency of 1 Cheney Brothers employee exposed to the chemical. The initial response to that incident causes on-lookers from adjacent roadway to collide with a fuel tanker, causing a roll-over and subsequent fire.	
Sponsor	Southwest Florida Local Emergency Planning Committee	
Participating Organizations	Cape Coral Fire Charlotte County Fire Sarasota County Fire Charlotte County EMS Charlotte County Sheriff's Office Charlotte County Communications	Charlotte County EM Florida Highway Patrol Charlotte County Airport Authority Charlotte County Public Information Cheney Brothers SWF LEPC
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## ANALYSIS OF CORE CAPABILITIES AND OBJECTIVES

### Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s).

Core Capability	Objectives	Performed w/o Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Interdiction and Disruption	Each Hazmat team shall demonstrate the ability to neutralize the hazardous material threats in accordance with plans, procedures and best practices		S		
Environmental Health and Safety Response	First responders shall demonstrate the ability to protect their own health and safety as well as that of the general public in accordance with plans, procedures and best practices.		S		
Public Information and Warning	Response agencies shall demonstrate the ability to deliver coordinated, prompt, reliable and actionable information to the whole community in accordance with plans, procedures and best practices.	P			
Operational Coordination	Response agencies shall demonstrate the ability to establish and maintain a unified, coordinated operation structure in accordance with plans, procedures and best practices.	P			
Operational Communications	Response agencies shall demonstrate interoperable communication methods in support of security, situational awareness, and operations in accordance with plans, procedures and best practices.	P			

**Table 1: Exercise Objectives and Associated Core Capabilities**

## Ratings Definitions:

- Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.
- Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

## SUMMARY OF CORE CAPABILITY PERFORMANCE

The following represents an overview of exercise capabilities, strengths, and areas for improvement observed during the exercise. The individual agencies maintain more specific details regarding improvement activities (items may not be applicable for all agencies).

### CORE CAPABILITY 1: INTERDICTION AND DISRUPTION

#### Objective

Each Hazmat team shall demonstrate the ability to neutralize the hazardous material threats in accordance with plans, procedures and best practices.

#### Strengths

**Strength 1:** Participants successfully anticipated and identified emerging/imminent threats in a timely fashion.

- Participants at both sites identified the hazardous materials incident, spoke with onsite representatives, performed all necessary research, and gathered information from victims/witnesses.
- Participants deployed appropriate air and weather monitoring equipment.
- Participants quickly identified the need to request mutual-aid to ensure the appropriate personnel were on scene to manage the incident.
- Participants appropriately established hot/control zones based on ERG Initial Isolation Zones and Protective action distances. This included the shut down of I-75, Jones Loop Road, and Airport Road.

**Strength 2:** Participants properly shared relevant, timely, and actionable information and analysis with Federal, state, local, and private sector entities.

- All necessary agencies were contacted and incorporated in command.
- Additional relevant agencies were communicated with including the private the sector for cleanup.
- Information on the specifics of the incident were shared to all relevant parties in an efficient and timely manner.
- Incident Commanders at each site did well in making assignments, briefing all crews on scene, and coordinating efforts with special operations teams.

**Strength 3:** Participants detected, neutralized, and protected against the hazardous material threats in accordance with plans, procedures, and best practices.

- All agencies involved at both sites did an excellent job working together towards a common goal.

- Participants successfully coordinated response activities based on existing hazardous materials procedures.
- Charlotte County and Cape Coral teams established quickly that a Level A entry was needed and the objectives to accomplish reconnaissance, any further rescues, and mitigation of the leak.
- Charlotte County and Sarasota teams rapidly identified that chemical leaking from the tanker and determined appropriate mitigation activities to include foam, damming/diking, and diverting.

## Areas for Improvement

The following areas require improvement to achieve the full capability level:

### **Area for Improvement 1:** Equipment familiarization, operation and readiness.

**Analysis:** Participants successfully managed the incident, however there were issues with agencies deploying and getting equipment operational. Cape Coral had an incident with their awning along with apparatus placement. Personnel quickly changed course and established a portable tent, and the unit was positioned at a better location to be directly located with the Charlotte County entry teams. These items provided for some delays in getting entry teams ready in a timely fashion.

Charlotte County encountered some issues with setting up the WeatherPak, which was effectively mitigated. They also had an issue with selection of appropriate pipe wrap for the leak. This was also mitigated early on and a selection of various sizes was chosen to take on entry.

During foam operations at the tanker incident a hose line broke causing a minor delay in dispersing the foam blanket on the leaking chemical. This was quickly fixed and crews continued operations.

Hazardous materials incidents have a low frequency and high risk. They are complicated and require large amounts of personnel, research, and equipment. The challenges the teams faced with this event happen quite often with a variety of teams. What is important to note was the ability of these teams to quickly mitigate the issues they had.

### **Area for Improvement 2:** Initial recon/rescue team operations.

**Analysis:** Participants effectively managed recon/rescue operations, although there was an opportunity/need for additional actions to support these activities. Supplementary recon could be utilized to provide a quick visual and relay of roof observations of possible leak source. Added rescue teams could provide for the search for additional victims. A quick and comprehensive visual observation would have afforded good intel/information to Command.

This could potentially be attributed as an exercise artificiality as personnel were provided with exercise locations and accurate victim numbers, although these activities would need to be accomplished during a real-world incident.

### **Area for Improvement 3:** Ground and bonding operations.

**Analysis:** Participants appropriately accomplished hazardous materials objectives, although grounding and bonding operations were slow and multiple mitigation tactics were implemented. To prevent ignition during transfer operations from the damaged tanker requires the principles and tactics of bonding and grounding. Static electricity from flow operations could form the potential of an exterior spark which may have the potential to ignite close by flammables. Crews successfully completed these tactics but the need for increased training exists.



## **CORE CAPABILITY 2: ENVIRONMENTAL HEALTH AND SAFETY RESPONSE**

### **Objective**

First responders shall demonstrate the ability to protect their own health and safety as well as that of the general public in accordance with plans, procedures and best practices.

### **Strengths**

**Strength 1:** Participants successfully Identified the medical, environmental exposure, and mental/behavioral health risks of staff responding to incident.

- Personnel did an excellent job in getting rehabilitation areas set up for the responding crews, hazardous materials entry teams, and victims. Participants were faced with challenging scenarios in tough conditions. There were high heat indexes and heavy workloads providing for the need of additional personnel early on and gave ample time for crews to hydrate and rehabilitate after an assignment.
- Pre and post medical evaluations were also completed and a medical area established for crews.

**Strength 2:** Participants appropriately implemented a safety officer and formulated recommendations to the Incident Commander regarding responder-specific risks to be addressed in incident action plans.

- Each incident assigned a safety officer that oversaw operations along with the allocated safety officer for hazmat teams.
- All possible safety risks were communicated and understood clearly by personnel.

**Strength 3:** Participants successfully worked with subject matter experts to identify responder safety and health resource requirements (e.g., equipment needs).

- For the Cheney Brothers incident, information on the facility was pulled from e-plan and diagrams of the building layout were obtained and shared with the HazMat Group. The IC and HazMat Group Supervisor also met with representatives from the facility to obtain additional information.
- For the tanker site IC and HazMat personnel met with truck driver and appropriate SMEs to obtain accurate information on the commodity being transported. The appropriate mitigation and response equipment was identified and assigned as appropriate.

**Strength 4:** Participants appropriately formulated recommendations to public health and public safety responders regarding personal protective equipment that are consistent with federal and state guidelines.

- Personnel at the Cheney Brothers site followed all policies and procedures for rapid rescue of victims by initial responding units utilizing full turn out gear with SCBA;

- Personnel also conducted thorough research in formulating a plan for an entry team based on the information from e-plan, onsite representatives, signs and symptoms of victims, and visual clues. The appropriate selection of making a Level A entry was made and in a timely manner.
- Participants at the tanker site appropriately identified the appropriate PPE to manage the leaking chemical.
- Personnel at both sites effectively established hot, warm, and cold zones were established according to recommended guidelines followed in the DOT NAERG and per policy.
- Media was also kept at a safe distance and communication to central dispatch was made in regards to sheltering in place for the area.

**Strength 5:** Participants effectively coordinated with partner agencies to provide personal protective equipment to public health and public safety responders.

- Personnel were able to provide the necessary equipment for each team from available resources.
- Medical and rehabilitative services were provided to assisting agencies by Charlotte County representing good coordination and partnership between agencies in order to accomplish all on scene objectives.

**Strength 6:** Participants successfully conducted exposure, mental/behavioral health, and medical surveillance of public health/public safety incident responders throughout the incident.

- Pre and post vital signs were conducted in accordance with department policy and NFPA regulations.

**Strength 7:** Participants appropriately provided guidance to partner organizations to help conduct monitoring of responder staff for medical/mental/behavioral incident related health outcomes.

- Health monitoring was conducted by Charlotte County and was completed without incident. Coordination between safety, rehab, and medical was done to ensure that all were knowledgeable of the signs and symptoms of potential chemical exposure along with heat stress.

**Strength 8:** Participants conducted health and safety hazard assessments and disseminated guidance and resources, to include deploying hazardous materials teams, to support environmental health and safety actions for response personnel and the affected population.

- Communication to the outside agencies could have been affected by the incident to shelter in place. This shows the early recognition of the need for additional teams and team members through team member call backs and mutual aid agreements. Procedures were followed that are in line with the department's policies and procedures.

**Strength 9:** Participants successfully assessed, monitored, performed cleanup actions, and provided resources to meet requirements.

- Each incident site had an appropriate amount of personnel to mitigate identified hazards. The proper equipment was available to mitigate each incident.

### Areas for Improvement

The following areas require improvement to achieve the full capability level:

**Area for Improvement 1:** Identify health and safety risks and maintain appropriate Personal Protective Equipment (PPE).

**Analysis:** Participants appropriately identified health and safety risks as well as successfully managed the incident with the proper PPE, however there were some instances where additional actions could be implemented to ensure added safety of personnel. When addressing a chemical such as ammonia, personnel should always be on air and in full protective gear. Initial personnel utilizing the aerial platform arrived on the roof without SCBA and protective hoods, potentially exposing them to the hazardous chemical.

Additionally, there were some instances at the tanker site where personnel walked through the product and one attempt to stop the leak without proper assessment causing full contamination. These examples were quickly mitigated and personnel were decontaminated.

**Area for Improvement 2:** Quickly identify hazardous materials emergency procedures.

**Analysis:** Participants effectively managed the hazardous materials incident, although first arriving units at the tanker incident did not utilize the Emergency Response Guide (ERG). The ERG provides first responders with a go-to manual to help deal with hazmat transportation accidents during the critical first 30 minutes. Dealing with hazardous materials it is essential that first responders utilize all tools available to them to identify the hazards and assess the situation.

**Area for Improvement 3:** Tag lines/search lines and vapor protection.

**Analysis:** Participants successfully maintained safe operations, although tag lines/search lines should always be deployed if there is a possibility conditions could deteriorate or become hazardous due to unforeseen reasons.

Additionally, when dealing with a chemical such as Ammonia a protective 1 ¾" hose-line should always be deployed should the crew find themselves confronted with a vapor cloud that needs to be knocked down for rescue or safety reasons.

**Area for Improvement 4:** Continuous monitoring of the environment.

**Analysis:** Participants effectively monitored air and environmental conditions, but it is essential to maintain these conditions throughout the incident. With ever changing conditions frequently a possibility, all available monitoring methods should be utilized during the incident.

**Area for Improvement 5: Decontamination.**

**Analysis:** Participants appropriately conducted decontamination operations, but it was identified that there are some needs for improvement. There was a slight breeze during the incident and a couple of the tarps over the decon pools were not staying in place. There was also a large amount of overspray from the wand being used and there was no catch for any of the overspray. It was not observed that testing was completed on the decontamination pools after the first entry team had completed going through decon.

Decon team members had been established later on after the entry team was almost ready to go on air. Although agency policies and procedures only require a gross decon, at the minimum, to be established prior to entry, a technical decon was in place and team members should have been assigned to this early on. Additionally, these team members were not on air when the entry team announced they would be exiting the building.

Agency specific decontamination policies were not observed but NFPA and basic IAFF 160 hazardous materials technician standard practices do dictate that some of the areas for improvement be completed in an improved manner following those standards.

## **CORE CAPABILITY 3: PUBLIC INFORMATION AND WARNING**

### **Objective**

Response agencies shall demonstrate the ability to deliver coordinated, prompt, reliable, and actionable information to the whole community in accordance with plans, procedures, and best practices.

### **Strengths**

**Strength 1:** Participants successfully identified Public Information Officer(s), support staff, and potential spokesperson(s) to convey information to the public.

- Each incident site communicated with the appropriate PIOs and discussed the process of conveying information to the public.

**Strength 2:** Participants appropriately discussed dissemination of information to the public using pre-established messages in languages and formats that take into account jurisdiction demographics and at-risk populations.

- Participants discussed the use of appropriate pre-established messages as well as the proper communications platforms.

**Strength 3:** Participants successfully transmitted related messaging information to responder organizations through secure messaging platforms.

- Participants discussed the use of appropriate secure messaging platforms for relaying vital information.

**Strength 4:** Participants successfully managed media outlets at each scene and established appropriate staging areas.

- Each incident site successfully established the appropriate staging areas and managed media requests and interviews.

### **Areas for Improvement**

The following areas require improvement to achieve the full capability level:

**Area for Improvement 1:** Joint Information Center (JIC) and Joint Information System (JIS).

**Analysis:** During the exercise public information personnel successfully managed assigned activities, although it was identified that additional training/exercise be conducted to address these types of scenarios. It is essential that a central location be established to facilitate public information responsibilities, perform critical emergency information functions, crisis communications, and public affairs functions.

## **CORE CAPABILITY 4: OPERATIONAL COORDINATION**

### **Objective 4**

Response agencies shall demonstrate the ability to establish and maintain a unified, coordinated operation structure in accordance with plans, procedures, and best practices.

### **Strengths**

**Strength 1:** Participants successfully established appropriate command post and structure.

- Upon arrival at each incident, a Charlotte County Battalion Chief took Command, established Command Post and requested all appropriate assisting and cooperating agencies to the ICP.

**Strength 2:** Participants appropriately identified the unified commanders representing jurisdictions and agencies involved.

- Each Incident Command Post was transitioned into a Unified Command Post with proper representation from the appropriate stakeholders to include: Fire, LE, FHP, facility reps, etc.

**Strength 3:** Participants effectively developed a collective set of incident objectives based on established priorities and identified the appropriate strategies and tactics.

- Incident objectives were discussed and established at each incident site. Objectives were clear and concise and included specific tactical objectives for managing the response.
- Objectives, Strategies, and Tactics that were based on SMART objectives.
- All objectives that the hazmat group identified were conducted through the group supervisor, checked by the safety officer, and given to the IC as well.

**Strength 4:** Participants properly assessed the incident and determined the needed resources/assets to begin strategic and tactical operations.

- Equipment and resources at each site were quickly requested for response and mitigation activities.

**Strength 5:** Participants successfully coordinated resource requests throughout incident response.

- All resource requests were made according to policies and procedures and was ordered via the appropriate channels.

**Strength 6:** Participants appropriately documented organization structure, assignments and personnel, and determined operational periods.

- Personnel did an outstanding job making assignments and coordinating the hazardous materials teams. Coordination and integration was excellent across the various agencies.

**Strength 7:** Participants successfully conducted Tactics and Planning meetings to ensure a coordinated planned response.

- These meetings were conducted with the coordination efforts of the Incident Commanders and HazMat Group Supervisors. There were multiple meeting and good communication between identified personnel.

### Areas for Improvement

The following areas require improvement to achieve the full capability level:

**Area for Improvement 1:** Assignment of IC positions and tracking of objectives.

**Analysis:** Participants appropriately established command posts and set objectives, although at the tanker incident there were some delays with assigning positions and tracking objectives. Establishing positions slowed operations and delayed the process for initial recon.

Objectives were successfully developed but once completed the information was not relayed back to the appropriate personnel. This could potentially cause issues ensuring objectives are being completed efficiently.

**Area for Improvement 2:** Advanced Incident Command System for multiple incidents.

**Analysis:** Participants successfully managed each incident, but it was identified that handling both incidents provided for the opportunity of an Area Command or Incident Complex assigning an Operations Section Chief to each incident.

The decision was made to keep the incident separate but for this type of complex incident there are opportunities for advanced incident management.

## **CORE CAPABILITY 5: OPERATIONAL COMMUNICATIONS**

### **Objective**

Response agencies shall demonstrate interoperable communication methods in support of security, situational awareness, and operations in accordance with plans, procedures, and best practices.

### **Strengths**

**Strength 1:** Participants successfully established a communication plan that allowed seamless communication between fire, law enforcement, and other support organizations.

- A communications plan was established in which appropriate channels were assigned and patches were made to ensure consistent and reliable communications.

**Strength 2:** Participants effectively made contact with State and Local agencies concerning resource and asset needs.

- The Incident Commander at each site made appropriate contact with all necessary stakeholders.

**Strength 3:** Participants successfully ensured that the objectives were being addressed through the appropriate communication channels.

- Proper communication channels and platforms were utilized throughout the exercise to communicate objectives with applicable agencies.

**Strength 4:** All formal communications followed a “unity of command” principle.

- The basic principal of following “unity of command” was established through each site.

**Strength 5:** Participants appropriately ensured that only informal communications, such as status reports and general information, were used across sections.

- All information was clearly given to appropriate parties and when applicable. For example, there was communication between the incident commander and hazmat group supervisor only when necessary.

**Strength 6:** Participants successfully made periodic progress reports through command and staff meetings.

- Throughout the exercise personnel completed the appropriate updates/progress reports to ensure that all objectives were accomplished and issues were resolved.



## Areas for Improvement

The following areas require improvement to achieve the full capability level:

### **Area for Improvement 1:** Facility alarm system automatic contact of 9-11.

**Analysis:** Cheney Brothers successfully alerted, communicated, and monitored the ammonia leak, although there were some issues with the system alerts. With the first sign of increased ammonia levels the system is programmed to automatically contact 9-11. This test was unsuccessful, but Cheney Brothers has redundancy built into the system to follow-up with 9-11 and ensure the appropriate authorities and critical stakeholders are notified.

### **Area for Improvement 2:** Multi-Agency communication.

**Analysis:** Participants effectively communicated throughout the incident, although there were some initial issues with radio communications through the various agencies when making entry. There are different radios and different tac. systems that agencies may work on. These agencies had some issues with communicating on scene, but this was quickly mitigated.

Knowing that these agencies do not regularly work together, this may be one of the root causes for the communication issues, although channels and patches were pre-determined. This could also be attributed to equipment familiarization.

## APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the Southwest Florida Local Emergency Planning Committee as a result of the 2018 SWF LEPC HazMat Full-Scale Exercise, held on June 28, 2018.

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element	Primary Organization	Completion Date
Interdiction and Disruption	Equipment familiarization, operation and readiness.	Continued familiarization and practice with appropriate equipment for managing hazardous materials incidents.	Planning/ Training/ Exercise	Individual Agencies/ LEPC	August 2019
	Initial recon/rescue team operations.	Train and exercise on supplementary recon activities to support intel/observations. Review processes for managing additional rescue teams in searching for additional victims.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
	Ground and bonding operations.	Additional training/exercises on grounding and bonding operations to increase safety and efficiency.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
Environmental Health and Safety Response	Identify health and safety risks and maintain appropriate Personal Protective Equipment (PPE).	Additional training/exercises on identifying potential risks and selecting the proper PPE.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
	Quickly identify hazardous materials emergency procedures.	Additional training/exercises involving hazardous materials reference guides such as the Emergency Response Guidebook, E-plan, CAMEO, etc.	Planning/ Training/ Exercise	Individual Agencies/ LEPC	August 2019

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Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element	Primary Organization	Completion Date
Environmental Health and Safety Response	Tag lines/search lines and vapor protection.	Review/Establish protocols for managing vapor clouds and train/exercise on the appropriate operation.	Planning/ Training/ Exercise	Individual Agencies/ LEPC	August 2019
	Continuous monitoring of the environment.	Ongoing training/exercising of monitoring activities to ensure changing conditions/environments are effectively addressed.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
	Decontamination.	Additional training/exercises involving hazardous materials decontamination activities to ensure proper health and safety practices.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
Public Information and Warning	Joint Information Center (JIC) and Joint Information System (JIS).	Conduct appropriate training/exercises for JIC/JIS activities.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
Operational Coordination	Assignment of IC positions and tracking of objectives.	Conduct appropriate Incident Command trainings/exercises that effectively address assigning positions and tracking objectives.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
	Advanced Incident Command System for multiple incidents.	Conduct appropriate Advanced Incident Command System trainings/exercises.	Training/ Exercise	Individual Agencies/ LEPC	August 2019
Operational Communications	Facility alarm system automatic contact of 9-11.	Correct automatic system notification with 9-11.	Planning	Cheney Brothers	August 2019
	Multi-Agency communication.	Ongoing training/exercises involving multi-agencies to ensure effective and efficient communication.	Training/ Exercise	Individual Agencies/ LEPC	August 2019

## APPENDIX B: EXERCISE PARTICIPANTS

Participating Agencies	
Cape Coral Fire	Charlotte County EM
Charlotte County Fire	Florida Highway Patrol
Sarasota County Fire	Charlotte County Airport Authority
Charlotte County EMS	Charlotte County Public Information
Charlotte County Sheriff's Office	Cheney Brothers
Charlotte County Communications	SWF LEPC
<i>Total # of Participants</i>	100+

## APPENDIX C: FEEDBACK

Assessment Factor	Rating of Satisfaction (Avg.) 1 = Strongly Disagree 5 = Strongly Agree
The exercise was well structured and organized.	4.74
The exercise scenario was plausible and realistic.	4.79
Participation in the exercise was appropriate for someone in my position.	4.70
The participants included the right people in terms of level and mix of disciplines.	4.74
After this exercise I believe my agency is better prepared to deal successfully with the scenario.	4.72

## APPENDIX D1: EXERCISE MSEL – CHENEY BROTHERS

Scenario
On June 28, 2018, damage to a pipe on the roof of Cheney Brothers warehouse causes a point-release of anhydrous ammonia. The incident causes a medical emergency of 1 Cheney Brothers employee exposed to the chemical. The initial response to that incident causes on-lookers from adjacent roadway to collide with a fuel tanker, causing a roll-over and subsequent leak.

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
	26-Jun	N/A	Send out a Media Advisory regarding the exercise to local media outlets and to the local community/public	Charlotte County PIO	Electronic Means	Media Outlets	Public Information Officer to send a media advisory out to the appropriate news outlets regarding exercise activities
	27-Jun	Charlotte County EOC	Discussion/Overview of Exercise Activities and Evaluation	Exercise and C/E Staff	N/A	N/A	Conduct Controller/Evaluator Meeting to discuss roles/responsibilities, exercise activities and evaluation
	27-Jun	Cheney Brothers - Roof	Setup of anhydrous ammonia exercise site (Cheney Brothers Roof)	Exercise and C/E Staff	N/A	N/A	Setup of anhydrous ammonia exercise site (Cheney Brothers Roof)
	27-Jun	Cheney Brothers - Tanker	Setup of tanker exercise site	Exercise and C/E Staff	N/A	N/A	Setup of tanker exercise site

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
	27-Jun	Charlotte County EOC	Setup of Charlotte County EOC	Exercise and C/E Staff	N/A	N/A	Setup of Charlotte County EOC
	27-Jun	Piper Rd and Jones Loop	Pre-stage exercise in progress signage	CCSO	N/A	N/A	Pre-stage exercise in progress signage
	June 28 - 7:00am	All	Final site setup activities	Exercise and C/E Staff	N/A	N/A	Final site setup activities
	8:30	Pre-Determined Locations	Participants arrive at predetermined staging areas	Participants	N/A	N/A	Participants arrive at predetermined staging areas
	8:45	Pre-Determined Locations	Registration of exercise players	All	N/A	N/A	Registration of exercise players
	9:00	Pre-Determined Locations	Exercise Briefing	All	N/A	N/A	Exercise Briefing
	9:15		Start of Exercise (STARTEX)	All	N/A	N/A	Start of Exercise (STARTEX)
1	9:15	N/A	Cheney Brothers monitoring system notifies 911 of chemical leak at building on 1 Cheney Way, Punta Gorda, FL 33982.	Sim Cell (Mike Jaquette)	Monitoring System/	Comms Center	Exercise kickoff via monitoring system to 911 regarding the initial incident

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
2	9:15	N/A	Cheney Brothers employee notifies 911 advising that there is a "man down" and chemical leak on the roof of building at 1 Cheney Way, Punta Gorda, FL 33982. There is no structural damage but there are multiple "lines" on the roof.	Sim Cell (Mike Jaquette)	Monitoring System/ Cell Phone	Comms Center	Phone message to 911 regarding the initial incident (Note: there is another "man down"; his location is unknown)
3	9:15	N/A	Comms Center receives the 911 call from Cheney Brothers, collects the appropriate information and dispatches identified personnel	Comms Center	Cell Phone	1st Arriving Units	Dispatch initial response resources (i.e. fire, police, emergency medical services,
4	9:25	Cheney Brothers Site	Emergency response units arrive on scene and establish command. They are met by employees who state that an employee is injured on the rooftop and some "type of chemical" is leaking from a damaged pipe.	Cheney Brothers Players	Face to Face	1st Lieutenant (IC)	Meet employee, gather information. Ask about the location of the injured person. Ask about evacuation of the complex.

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
5	9:25	Cheney Brothers Site	1st arriving units contact comms center regarding additional information of the injured employee on the roof along with a chemical leak. Comms dispatches HazMat Team	Comms Center	Radio	HM Team	Comms Center dispatches hazmat team.
6	9:30	Cheney Brothers Site	Additional employees exit the building complaining of burning eyes, nose, and throat.	Cheney Brothers Players	Face to Face	1st Arriving Unit	Conduct initial triage/assessment of patient symptoms
7	9:35	Cheney Brothers Site	Units are provided with a document that includes all chemicals found in the building as well as the appropriate Tier II reports.	Cheney Brothers Players	Face to Face	1st Arriving Unit	Cheney Brothers employee works with units to identify possible source
8	9:40	Cheney Brothers Site	Charlotte County's initial HM arrives on the scene and requests a report.	1st Lt.	Face to Face	1st Arriving HazMat Unit	1st Lt (currently command) gives a report to the arriving HM team.
9	9:45	Cheney Brothers Site	First Due Engine and Battalion Chief arrive on scene. BC assumes command, establishes command post and develops command structure.	1st arriving Lt (Overseen by IC Controller)	Face to Face	Arriving Battalion Chief	BC assumes command, establishes the command post location and takes a report from the 1st arriving Lt.



Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
10	9:50	Cheney Brothers Site	Law enforcement (LE Controller) joins command post (Unified Command). Determines evacuation area and arranges the closure of streets.	LE Controller	Face to Face	Command	LE along with the FD work together to determine the area of protection around the scene.
11	10:00	N/A	Controller (Tim) calls 911 advising that on-lookers from I-75 have collided with a fuel tanker causing a roll-over - Jones Loop Rest Area	Controller	Cell Phone	Comms Center	Controller (Tim) reports the new incident to the comms center
12	10:00	N/A	Comms Center receives the 911 call from the driver, collects the appropriate information and dispatches identified personnel	Comms Center	Radio	Command/Response Units	Request mutual-aid, dispatch response resources (i.e. fire, police, emergency medical services)
13	10:05	Cheney Brothers Site	Channel 13 (IC Controller) arrives on the scene and want a story on the chemical leak and the danger to the surrounding community.	IC Controller	Face to Face	Incident Commander with HM Team Leader	PIO contacted to respond. Media area is set up.

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
14	10:05	Cheney Brothers Site	Decontamination is established and determination is conducted on those who needs to be decontaminated.	HazMat Controller(s) Oversee	N/A	N/A	HM Team establishes an area for emergency decontamination and determines where the decontamination corridor will be established.
15	10:20	Cheney Brothers Site	Cheney Brothers employees are decontaminated and simulated transport to the hospital.	HazMat Controller(s) Oversee	N/A	N/A	Patients decontaminated; Simulate transport to hospital
16	10:30	Cheney Brothers Site	Technical Decon is set up for entry team.	HazMat Controller(s) Oversee	N/A	N/A	More detailed decontamination corridor is set up for entry team members.
17	10:35	Cheney Brothers Site	HM team makes an assessment on chemical leaking from the rooftop. Appropriate PPE is determined.	HazMat Controller(s) Oversee	N/A	N/A	HM Team leader give a report to IC about the properties and dangers of the spilled chemicals; Appropriate PPE is determined

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
18	10:35	Cheney Brothers Site	A recon team is identified to make the initial entry and all preparation for entry is made.	HazMat Controller(s) Oversee	N/A	N/A	Pre-entry physicals provided, PPE selected and entry team dressed out. Follow 2 in 2 out protocol
19	10:45	Cheney Brothers Site	Incident Action Plan is requested by the EOC (IC Controller)	IC Controller	Face to Face	Command	IC with input from the HM Team Leader will develop a IAP and provide to the on scene responder and EOC
20	10:50	Cheney Brothers Site	The Policy Group is requesting a timeline for a press conference	IC Controller	Face to Face	Command	IC will determine appropriate timeline for press conferences to update the media/public
21	10:55	Cheney Brothers Exercise Site	Recon team returns and determines that anhydrous ammonia is leaking from the pipe. Photos/Samples are taken and returned to HM unit.	HazMat Controller(s) Oversee	N/A	N/A	Reference (science)Section takes the information and researches the chemical/physical properties.

Master Scenario Events List (MSEL) Cheney Brother Site							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
22	11:00	Cheney Brothers Site	Chemical/physical properties are researched. (Science/Reference/Research report developed)	HazMat Controller(s) Oversee	N/A	N/A	Reference section issues a report.
23	11:15	Cheney Brothers Site	Secondary team is set to make entry and offensive operation is planned	HazMat Controller(s) Oversee	N/A	N/A	IC advised that 2nd entry is planned
24	11:30	Cheney Brothers Site	Secondary team enters	HazMat Controller(s) Oversee	N/A	N/A	IC advised of offensive plan and that 2nd team is making entry
25	1:00pm	Cheney Brothers Site	Scene is stabilized and final cleanup will be done by a vendor/in-house response team.	HazMat Controller(s) Oversee	N/A	N/A	Scene is stabilized. All players advised and exercise is completed.
26	1:00pm	Cheney Brothers Site	First responders and PIO - 1 on 1 with the media	IC Controller Oversee	N/A	Command	PIO and First Responders to have 1 on 1 interview with the media at the conclusion of the exercise
27	1:00pm	All	Exercise End	Controllers/Evaluators	Radio	All	Exercise End
28	1:30pm	Charlotte County EOC	Hotwash/Debrief	Controllers/Evaluators	N/A	All	Hotwash/Debrief

## APPENDIX D2: EXERCISE MSEL – TANKER SITE (JONES LOOP)

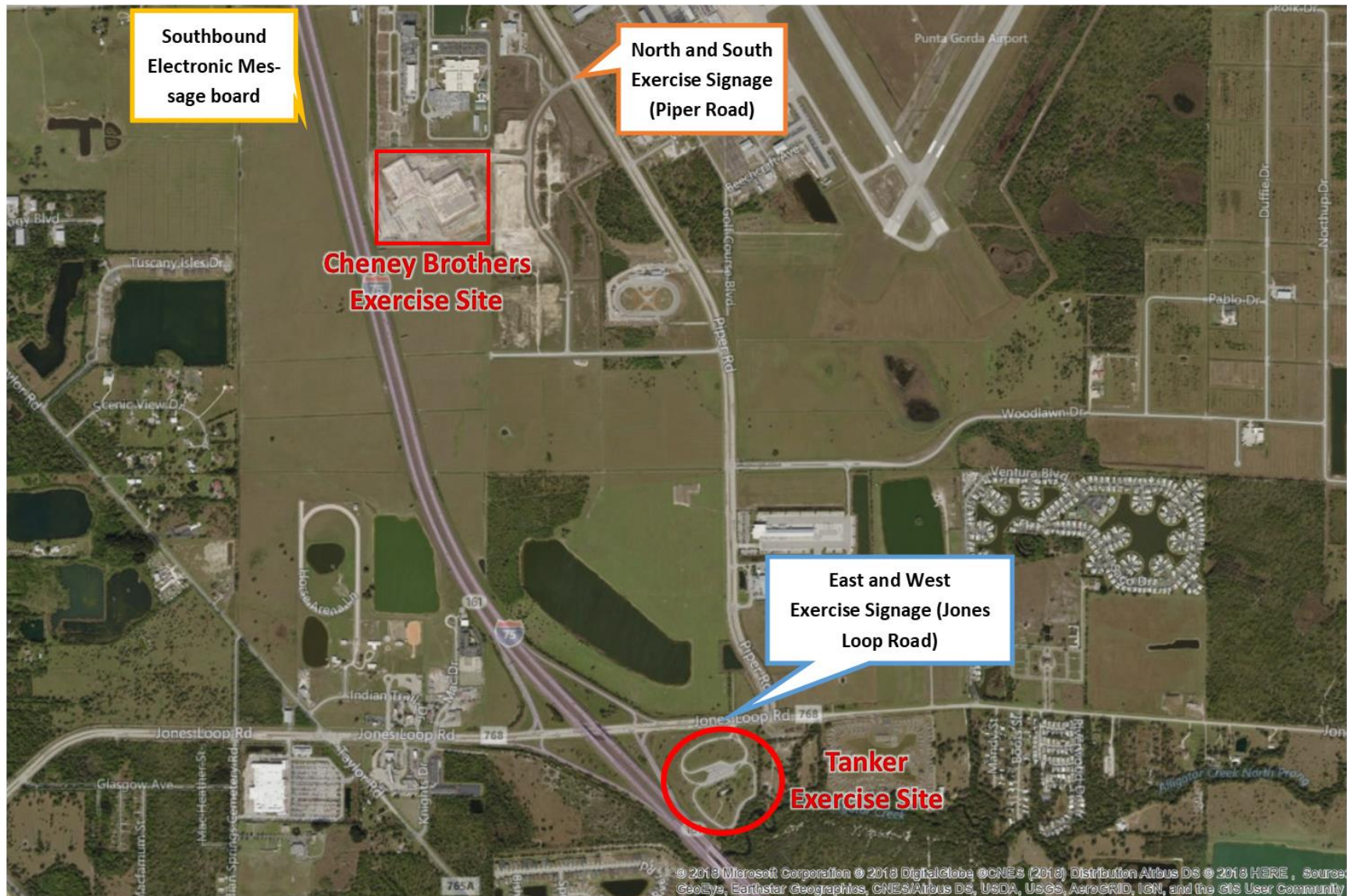
Master Scenario Events List (MSEL) – Tanker Site (Jones Loop)							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
1	10:00	N/A	Controller calls 911 advising that on-lookers from I-75 have collided with a fuel tanker causing a roll-over - Jones Loop Rest Area	Controller	Cell Phone	Comms Center	Controller reports the new incident to the comms center
2	10:00	N/A	Comms Center receives the 911 call from the driver, collects the appropriate information and dispatches identified personnel	Comms Center	Radio	Command/Response Units	Request mutual-aid, dispatch response resources (i.e. fire, police, emergency medical services)
3	10:10	Tanker Exercise Site	The initial unit arrives to find a tanker roll-over leaking a chemical. Personnel establish command and begin an initial scene size up/establish incident priority	1st arriving units	N/A	N/A	Conduct scene size-up and establish command
4	10:15	Tanker Exercise Site	Upon arrival emergency response units are met by the truck driver and provides additional information on the tanker	IC Controller	Face to Face	1st Arriving Unit	Personnel gather more information via the driver, shipping papers and placards on the truck and determine that the truck was carrying gasoline (1203)
5	10:15	Tanker Exercise Site	1st arriving units contact comms center regarding additional information of the tanker leaking gasoline. Comms dispatches mutual-aid/ HazMat Team	Comms Center	Radio	HM Team	Comms Center dispatches hazmat team.

Master Scenario Events List (MSEL) – Tanker Site (Jones Loop)							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
6	10:25	Tanker Exercise Site	Initial HM arrives on the scene and requests a report	1st Lt. (Overseen by IC Controller)	Face to Face	Arriving HazMat Unit	HazMat team arrives on scene and check in with command and participates in briefing
7	10:40	Tanker Exercise Site	Law Enforcement reports traffic begins backing up in both directions. Drivers have the potential to be exposed to both incidents	IC Controller	Face to Face	Command	Determine the area of protection around the scene.
8	10:55	Tanker Exercise Site	HazMat Team begin containment operations	HazMat Controller(s) Oversee	N/A	N/A	HM Team establishes containment operation priorities
9	10:55	Tanker Exercise Site	HazMat Team determines hazards and the amount of product present, as well as the appropriate PPE recommendations	HazMat Controller(s) Oversee	N/A	N/A	HM Team leader give a report to IC about the properties, dangers and amounts of the spilled chemical; Appropriate PPE is determined
10	11:10	Tanker Exercise Site	Law Enforcement inquires with command about the appropriate perimeters/evacuation zones	IC Controller	Face to Face	Command	Determine the area of protection around the scene.
11	11:10	Tanker Exercise Site	Incident Action Plan is requested by the EOC	IC Controller	Face to Face	Command	IC with input from the HM Team Leader will develop an IAP and provide to the on-scene responder and EOC

Master Scenario Events List (MSEL) – Tanker Site (Jones Loop)							
#	Time	Location	Activity/Description	Personnel	Delivery Method	Recipient Player(s)	Expected Actions
12	11:15	Tanker Exercise Site	HazMat Team works to prevent spilled product from entering sewers and waterways	HazMat Controller(s) Oversee	N/A	N/A	HazMat Team works to prevent spilled product from entering sewers and waterways
13	11:15	Tanker Exercise Site	HazMat Team works mitigate hazards	HazMat Controller(s) Oversee	N/A	N/A	HazMat Team to ensure sufficient hose-lines with appropriate agent (water or foam) are in place prior to making entry for leak control; Personnel begin response
14	11:45	Tanker Exercise Site	HazMat Team to stabilize tank vehicle using cribbing or other means.	HazMat Controller(s) Oversee	N/A	N/A	HazMat Team to stabilize tank vehicle using cribbing or other means.
15	1:00pm	Tanker Exercise Site	Scene is stabilized and final cleanup will be done by a vendor/in-house response team.	HazMat Controller(s) Oversee	N/A	N/A	Scene is stabilized. All players advised and exercise is completed.
16	1:00pm	All	Exercise End	Controllers/Evaluators	Radio	All	Exercise End
17	1:00pm	Charlotte County EOC	Hotwash/Debrief	Controllers/Evaluators		All	Hotwash/Debrief



## APPENDIX E1: EXERCISE OVERVIEW MAP





## APPENDIX E2: CHENEY EXERCISE SITE MAP





### APPENDIX E3: TANKER SITE EXERCISE MAP





## APPENDIX F: PHOTOS





