2018 BUTLER COUNTY
FULL-SCALE EXERCISE AFTER ACTION REPORT

Butler County Emergency Management Agency
Executive Summary

On September 20, 2018, over two-hundred (200) individuals from fifty (50) agencies/organizations participated in the 2018 Butler County Full-Scale Exercise held at Camp Campbell Gard and Kaden’s Cove Yacht Club. This exercise had the distinction of being Ohio’s first pipeline exercise recognized by the Ohio State Emergency Response Commission for exercise credit.

The exercise was four (4) hours in duration and simulated a pipeline release which impacted the Great Miami River and resulted in a considerable release of Jet-A kerosene. The exercise focused on five operational areas:

- Incident Command
- HazMat/Water Response
- Emergency Medical Services
- Hospitals
- Mass Care/Sheltering

The 2018 Butler County Full Scale Exercise allowed First Responders and community partners an opportunity to simulate a response to a catastrophic pipeline release which impacted several communities along the Great Miami River. The exercise was co-sponsored by Enterprise Products and included their staff and contractors.

The 2018 Butler County Full-Scale Exercise provided an opportunity to assess the strengths and areas for improvement observed in the simulated response. These strengths and areas for improvement were collected from several sources across all operational areas exercised. The purpose of this report is to provide an assessment of Butler County’s ability to respond to a significant disaster and direct future training and investments in the county’s emergency response system. Key conclusions from the report include:

- Catastrophic incidents with wide-spread involvement will present challenges to and quickly overwhelm local jurisdictions. Local Jurisdictions must coordinate response to the downstream impacts of such an event and share the information necessary to support decision-support.
- Large-scale industrial incidents will require public agencies and private companies to coordinate response efforts. Local Incident Commanders should engage private sector counterparts to develop a Unified Command which can best leverage the assets independently managed by each agency/organization.
- Significant incidents will require large numbers of overhead personnel to assist in the coordination of the incident. Local Incident Commanders should utilize Division/Group Supervisors to ensure that tactical resources have appropriate operational support and oversight.

The 2018 Butler County Full-Scale Exercise demonstrated the value of a robust emergency response system. Notably, the Butler County Hazardous Materials Co-Op and the Butler County Water Rescue Task Force performed well in addressing the hazards presented to them despite the challenges of coordinating a large number of personnel from a variety of departments. The citizens of Butler County have received a significant return on their investment in these capabilities. Additionally, the
coordination of these units through planning and participation in prior exercise opportunities has demonstrated the value of this model.

The 2018 Butler County Full-Scale Exercise presented several challenges for the Butler County Emergency Management Agency and the Butler County Local Emergency Planning Committee, but it also provided a tremendous opportunity to increase Butler County’s ability to respond to natural and human-made disasters. Butler County, as a result of this exercise, is a safer place to live, work and play.
Methodology

The 2018 Butler County Full-Scale Exercise After Action Report was developed to summarize, comments, observations, feedback and recommendations developed during the 2018 Butler County Full-Scale Exercise hosted by the Butler County Local Emergency Planning Committee (LEPC), the Butler County Emergency Management Agency (EMA) and Enterprise Products on September 20, 2018. The purpose of the 2018 Butler County Full-Scale Exercise After Action Report is to provide a synopsis of the exercise and provide guidance on how to improve Butler County’s ability to respond to natural and human-made disasters and emergencies.

The 2018 Butler County Full-Scale Exercise After Action Report is a non-traditional After Action Report. Traditional Local Emergency Planning Committee After Action Reports are focused on two assessments: Comments provided by the exercise evaluators using the Exercise Evaluation Guide included in the Ohio Hazardous Materials Exercise and Evaluation Manual and comments provided by participants, evaluators, controllers, and observers on participant feedback forms. The 2018 Butler County Full-Scale Exercise After Action Report is observationally focused and relies on several sources to provide a comprehensive assessment of the actions taken during the exercise. Representatives from the Butler County Local Emergency Planning Committee and the Butler County Emergency Management Agency consolidated information from these sources to create the 2018 Butler County Full-Scale Exercise After Action Report. The sources used to create this After Action Report are identified in the table below:

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Wash</td>
<td>A Hot Wash, an informal debrief following an incident or exercise, was facilitated by the 2018 Butler County Full-Scale Exercise Control Staff immediately following the exercise. Participants, evaluators, controllers, and observers were provided an opportunity to discuss strengths and areas of improvement identified during exercise play.</td>
<td>(HW)</td>
</tr>
<tr>
<td>Participant Feedback Form</td>
<td>Participant feedback forms were provided to exercise participants, evaluators, controllers, and observers during the Hot Wash conducted following the exercise. These forms were collected by the 2018 Butler County Full-Scale Exercise Control Staff following the Hot Wash.</td>
<td>(FF)</td>
</tr>
<tr>
<td>Evaluator Comments</td>
<td>Evaluator comments were collected using Exercise Evaluation Guides included in <em>the Ohio Hazardous Materials Exercise and Evaluation Manual.</em></td>
<td>(E)</td>
</tr>
</tbody>
</table>
Erie Emergency & Crisis Consulting was retained by Enterprise Products to provide exercise design and conduct support. Erie Emergency & Crisis Consulting provided an After Action Report developed from exercise evaluation guides designed to explicitly evaluate the actions of Enterprise Products staff members and contractors.  

An After Action Conference was held for the Enterprise Products staff on October 23, 2018.

A draft report regarding the 2018 Butler County Full-Scale Exercise was developed by the Ohio Emergency Management Agency Emergency Management Specialist Anita Stechschulte for submission to the Ohio State Emergency Response Commission. This report is used to recommend concurrence in accordance with Ohio Revised Code §3750.04.

An After Action Conference was held for the Butler County Local Emergency Planning Committee Training & Exercise Committee on November 13, 2018.

Staff from the Butler County Emergency Management Agency reviewed the observations collected from the above sources and determined the most critical observations to discuss in this report. The selected observations are presented in the following format:

Table 1.2
2018 Butler County Full-Scale Exercise After Action Report Comment Format

<table>
<thead>
<tr>
<th>Observation Number</th>
<th>Icon Denoting Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Issue</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>Recommendations (Sorted by Discipline)</td>
<td></td>
</tr>
<tr>
<td>Core Capabilities</td>
<td></td>
</tr>
</tbody>
</table>
These observations are mapped to the relevant discipline(s) and organization(s) and are denoted within the report as follows:

<table>
<thead>
<tr>
<th>Table 1.3</th>
<th>Icon Denoting Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Management</td>
<td>▲</td>
</tr>
<tr>
<td>Incident Command</td>
<td>□</td>
</tr>
<tr>
<td>Fire Departments</td>
<td>●</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>★</td>
</tr>
<tr>
<td>Hazardous Materials Units</td>
<td>◆</td>
</tr>
<tr>
<td>Water Rescue Teams</td>
<td>☂</td>
</tr>
<tr>
<td>Law Enforcement Agencies</td>
<td>★</td>
</tr>
<tr>
<td>Hospitals</td>
<td>H</td>
</tr>
<tr>
<td>Non-governmental Organizations</td>
<td>+</td>
</tr>
<tr>
<td>Private/</td>
<td>🏢</td>
</tr>
</tbody>
</table>

The 2018 Butler County Full-Scale After Action Report highlights only the observations identified as critical to improve Butler County’s ability to respond to natural and human-made disasters and emergencies. Additional observations and analysis are available in the various appendices of this report. An analysis of the Participant Feedback Forms can is located in Appendix B – Participant Feedback Form Analysis. The completed Exercise Evaluation Guides and the State Emergency Response Commission Draft Report is found in Appendix C – EEG & SERC Evaluations. A list of all observations collected during this review is found in Appendix D – Feedback Summary.
Background & Timeline

Assets & Capabilities

Butler County Emergency Management Agency
The Butler County Emergency Management Agency is the sole emergency management authority for Butler County, Ohio, and is responsible for coordinating the response to large-scale emergencies. The Butler County Emergency Management Agency serves as the administrative agency for the Butler County Hazardous Materials Cooperative, the Butler County Technical Rescue Team, the Butler County Incident Management Team, and the Butler County Water Rescue Taskforce, and is responsible for serving as the fiscal agent for these resources.

The agency is also contracted by the Butler County Local Emergency Planning Committee to serve as the Information Coordinator and to develop exercises pursuant to the Emergency Planning and Community Right-to-Know Act (Ohio Revised Code §3750).

Butler County Hazardous Materials Cooperative
The Butler County Hazardous Materials Cooperative is a Type-I HazMat Team which provides Hazardous Materials response services to the jurisdictions of Butler County.¹ The Butler County Hazardous Material Cooperative Executive Committee provides the oversight for the Cooperative.

The Cooperative consists of one hundred thirty (130) Hazardous Materials Technicians across three (3) Type-II HazMat Teams within Butler County who come together to form a Type-I HazMat Team. These include:

- City of Hamilton Fire Department
  - HazMat 25
  - Engine 25
  - Medic 21
  - Battalion 20
  - Thirty-four (34) HazMat/WMD Technicians
- City of Middletown Fire Department
  - HazMat 81
  - Medic 81
  - DeCon 81
  - Twenty-five (25) HazMat/WMD Technicians
- West Chester Fire Department
  - HazMat 73
  - Quint 73
  - Type-I HazMat Monitoring Equipment
  - Seventy (70) HazMat/WMD Technicians

¹ Hazardous Materials Response services within the City of Fairfield are provided by the Greater Cincinnati Hazardous Materials Unit
The Hazardous Materials Technicians who serve on the Butler County Hazardous Materials Cooperative are trained in rail car, methamphetamine drug lab and Weapons of Mass Destruction response. The team also has designated HazMat Safety Officers who support downrange operations.

These units are supported by additional equipment and resources from other departments/agencies within Butler County. These include:

- Butler County Emergency Management Agency
  - EMA2
  - EMA3
  - Command 1
  - Command 2
  - Support 1
  - Shelter 1
  - Shelter 2
  - MCI 1
  - MCI 2
  - MCI 3
  - Message Board 1
  - Message Board 2
- Fairfield Township Fire Department
  - Task 2
- Liberty Township Fire Department
  - Additional HazMat Technicians
  - EMA Gator 2
- City of Monroe Fire Department
  - Additional HazMat Technicians
- Oxford Fire Department
  - HazMat 11
  - Engine 11
  - EMA Gator 1
- Ross Township Fire Department
  - Air & Light 1

Butler County Technical Rescue Team

The Butler County Technical Rescue Team provides technical rescue support to the jurisdictions of Butler County. The Butler County Technical Rescue Team Executive Board provides the oversight for the team.

The Butler County Technical Rescue Team consists of sixty (60) Technical Rescue Technicians from throughout Butler County. The team is trained in the following areas:

- Confined Space Rescue
- Trench Rescue
- High Angle Rescue
- Wide-area Search & Rescue
Butler County Technical Rescue Team maintains one piece of apparatus, Tech Rescue 2 located at West Chester Station 74. The team responds at the request of local jurisdictions to assist in confined space, elevated rescue, trench rescue, lost persons, swift/flood water, and structural collapse. Team members consist of fire department personnel from throughout Butler County, and are present on-duty throughout the county ensuring a quick response which can be followed by the needed depth of team members to execute the special operations tasks.

All team members are trained in each of the above disciplines to allow versatility of the team. In addition to the bi-monthly training that members attend for continuing education, many of the member are also members of FEMA’s Ohio Task Force 1, a federal level US&R team that responds to federally declared disasters throughout the United States.

The team maintains its own command structure comprising of 4 team managers and 8 squad officers. The team maintains a Battalion Chief at all times, titled as Battalion 300, which coordinates with the local Incident Commander on the needs and desires of the authority having jurisdiction.

In addition to the standard technical rescue events, the team has made preparations to assist with MCI events, as all members are EMT’s and the majority are Paramedics. This allows the Incident Commander a follow-on force that is often needed during manpower intensive events.

While the team’s typing is still in draft phases nationally, the command personnel utilized the DHS Target Capabilities list to ensure the equipment and personnel depth could meet the needs defined under US&R for a community the size of Butler County.

Butler County Water Rescue Taskforce

The Butler County Water Rescue Taskforce operates as a component of the Butler County Technical Rescue Team. The Butler County Water Rescue Taskforce Workgroup provides guidance and recommendations for the administration of the taskforce to the Butler County Technical Rescue Team Executive Board.

The Butler County Water Rescue Taskforce consists of equipment and trained personnel who are able to respond to swift water emergencies. These include:

- Butler County Emergency Management Agency
- Butler County Sheriff’s Office
- Butler County Technical Rescue Team
- Fairfield Township Fire Department
- City of Hamilton Fire Department
- City of Monroe Fire Department
- Morgan Township Fire Department
- City of Oxford Fire Department
- Ross Township Fire Department
Enterprise Products
Enterprise Products is a midstream natural gas and crude oil pipeline operator headquartered in Houston, Texas. Enterprise Products operates 51,000 miles of pipelines and is responsible for the operation of several terminals.

Enterprise Products operates two petroleum pipelines within Butler County, the TEPPCO Mainline and the TEPPCO Northern Region Pipeline. Additionally, Enterprise Products operates the Todhunter Terminal in the City of Monroe. The Enterprise Products Hart Road Terminal is located in Turtlecreek Township and Clearcreek Township within Warren County.

Preparedness Investments
Butler County Emergency Management Agency
The Butler County Emergency Management Agency has developed a robust emergency management program to serve the citizens of Butler County. The Butler County Emergency Management Agency is responsible for preparing for, responding to, recovering from and mitigating disasters.

Preparedness
The Butler County Emergency Management Agency prepares for emergencies through training, exercises, grants management and planning.

The Butler County Emergency Management Agency routinely hosts training in a variety of topics related to emergency response. These trainings are provided through the Butler County Emergency Management Agency general fund, the Hazardous Materials Emergency Preparedness Grant and the Ohio Emergency Management Agency. Additionally, the Butler County Emergency Management Agency has leveraged relationships with local industry partners, such as CSX Railroad, to bring additional training into Butler County.

To coordinate these trainings, the Butler County Emergency Management Agency develops a yearly Training & Exercise Work Plan (TEWP) which details the training needs for the county as determined by After Action Reports from exercises and real-world events both within Butler County and the nation, input from stakeholders and guidance from the Ohio Emergency Management Agency. This TEWP is then shared with regional partners to coordinate training requests amongst partners.

The Butler County Emergency Management Agency, pursuant to an agreement with the Butler County Local Emergency Planning Committee, is responsible for satisfying the requirements outlined in chapter 3750-20-70 of the Ohio Administrative Code of hosting one (1) emergency response exercise per year. Additionally, chapter 3750-20-70 of the Ohio Administrative Code requires LEPCs in the State of Ohio to host at least one (1) EOC Functional Exercise and one (1) Full-scale Exercise within a four-year cycle established by the Ohio State Emergency Response Commission.

The Butler County Emergency Management Agency is the grantee for select preparedness grant programs. The Butler County Emergency Management Agency is responsible for developing projects, applying for funds and maintaining fiscal accountability for these grants. These grant programs provide equipment and funding for special operations teams within Butler County and are used subsidize the cost of maintaining these capabilities.
The Butler County Emergency Management Agency is also responsible for developing, collaborating and maintaining several plans within the county. These plans include the Butler County Emergency Operations Plan, The Butler County Natural Hazards Mitigation Plan and the Butler County Mass Casualty Plan. These plans are updated and maintained on a routine basis and after any incident or exercise.

Response
The Butler County Emergency Management responds to disasters and emergencies in a multitude of ways. Butler County EMA staff can, at the request of the Authority Having Jurisdiction (AHJ), respond to the scene of geographically isolated incidents and provide technical assistance and support. Additionally, Butler County EMA staff can activate the Butler County Emergency Operations Center and provide logistical support to first responders within the county. The Butler County Incident Management Team, which is administered through the Butler County Emergency Management Agency, may also be utilized to assist in the agency’s response to a disaster.

Butler County Incident Management Team
The Butler County Incident Management Team (BCIMT) is a Type-III IMT which includes personnel from several different emergency management agencies, fire departments, law enforcement agencies, and hospital personnel who are trained to manage large-scale disasters. The team has been deployed to several regional and national-level disasters and has fulfilled several emergency roles, including managing Base Camps, Logistical Staging Areas, and Emergency Operations Centers. The BCIMT can be utilized to manage an emergency within the county or to supplement the Butler County EMA staff in the Butler County Emergency Operations Center.

Recovery
The Butler County Emergency Management Agency is responsible for leading Butler County’s recovery effort following a disaster. BCEMA has worked with the Tri-State COAD (Community Organizations Active in Disasters). The Tri-State COAD provides case management and resources for those affected by a disaster. Additionally, BCEMA staff has worked with the State of Ohio EMA to assist in the recovery of disasters within other counties in southwest Ohio.

Mitigation
The Butler County Emergency Management Agency is the primary agency responsible for mitigation within Butler County. BCEMA is responsible for engaging community stakeholders and providing information on potential mitigation projects and grant opportunities.

Funding
The Butler County Emergency Management Agency is funded through four (4) funding streams. The first stream is per capita funding provided from each political subdivision within Butler County. Each political subdivision pays a fee of $0.39 for each resident of their community.

The second funding stream is through various grant programs. The FEMA Emergency Management Performance Grant (EMPG) is a 50% reimbursement grant for administrative costs, subsidizing emergency management programs within the United States. Additionally, other grant programs, such as the State Homeland Security Grant Program, provide funding for special operations capabilities.
The third funding stream is through the SERC grant. The Butler County EMA, under an agreement with the Butler County LEPC, receives a portion of the SERC SARA Title III grant provided by the Ohio EPA for the administration of Butler County’s SARA Title III EPCRA program.

The final funding stream is through the Butler County General Fund. The Butler County Commissioners have provided the Butler County Emergency Management Agency with funding for special operations capabilities. This funding supports four (4) special operations components within Butler County: the Butler County Hazardous Materials Cooperative, the Butler County Technical Rescue Team, the Butler County Incident Management Team, and Command Support. These contributions are reflected by year in the chart below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Butler County Hazardous Materials Cooperative</th>
<th>Butler County Sheriff’s Office EOD</th>
<th>Butler County Technical Rescue Team</th>
<th>Butler County Water Rescue Taskforce</th>
<th>Butler County Incident Management Team</th>
<th>Butler County Emergency Management Agency</th>
<th>Hospitals &amp; MCI Support</th>
<th>Regional Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2018</td>
<td>$116,100</td>
<td>$25,000</td>
<td>-</td>
<td>$20,500</td>
<td>-</td>
<td>$116,056</td>
<td>-</td>
<td>$677,000</td>
</tr>
<tr>
<td>2017</td>
<td>$130,000</td>
<td>$105,000</td>
<td>-</td>
<td>$25,965</td>
<td>$15,000</td>
<td>$84,000</td>
<td>$700,000</td>
<td>-</td>
</tr>
<tr>
<td>2016</td>
<td>$14,400</td>
<td>$98,000</td>
<td>-</td>
<td>$17,900</td>
<td>$24,565</td>
<td>$14,000</td>
<td>$535,032</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$26,570</td>
<td>$86,700</td>
<td>$14,500</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$19,648</td>
<td>$450,000</td>
</tr>
</tbody>
</table>

Butler County Hazardous Materials Cooperative and Butler County Technical Rescue Team

The Butler County Hazardous Materials Cooperative and Butler County Technical Rescue Team receive funding through three (3) distinct mechanisms. The first funding mechanism is through the contributions from the Butler County Commissioners’ Special Operations Contributions discussed above. The second funding mechanism is through the State Homeland Security Grant Program. The State Homeland Security Grant Program funding provided to these assets is reflected in the chart below:

The final contribution is through in-kind matches made by the host departments. These in-kind matches represent a significant contributions to these teams and ensure that Butler County is able to maintain these capabilities in a fiscally prudent manner.

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At the time of publication, the 2019 SHSP Award has been announced but no projects have been approved for funding.
Enterprise Products

Enterprise Products has invested in several preparedness initiatives to ensure that their company is prepared to respond to any emergency which may impact their pipelines, equipment or terminals. Enterprise Products maintains routinely inspects their right-of-ways and easements and engages in a pipeline integrity management program.

According to the Enterprise Products website:\(^3\):

>The Enterprise Pipeline Integrity Management Program maintains the ongoing integrity of operated pipelines and pipeline related facilities as defined in 49CFR Part 192 Subpart O and 49CFR Part 195.452 by:

- Identifying threats to pipeline safety and establishing the scope and frequency of integrity assessments.
- Performing integrity assessments, analyzing the results, and determining remediation requirements.
- Performing remediation.
- Updating processes and procedures for High Consequence Area Impact Analysis, Risk Assessment, and integrity management program evaluation.

Furthermore, Enterprise Products participates in several trainings, drills, and exercises in accordance with government and industry standards. Three (3) such trainings and exercises are of note for our purposes here: the 2015 Warren County Full-Scale Exercise, the 2017 Butler County/City of Monroe/Enterprise Products Tabletop Exercise and the 2018 Butler County Full-Scale Exercise.

The 2015 Warren County Full-Scale Exercise was held on September 30, 2015, at the Enterprise Products Hart Road Terminal and was co-hosted by the Warren County LEPC and Enterprise Products. The 2015 Warren County Full-Scale Exercise simulated an above-ground petroleum tank storage fire. Enterprise products provided Incident Command System training for Enterprise Products employees and contractors prior to the full-scale exercise.

The 2017 Enterprise Products Tabletop Exercise was held on November 28, 2017, at the Enterprise Products Todhunter Terminal and was co-hosted by the Butler County Emergency Management Agency, the City of Monroe Fire Department and Enterprise Products. The 2017 Enterprise Products Tabletop Exercise simulated a pipeline release which impacted the Great Miami River and served as a predecessor for the 2018 Butler County Full-Scale Exercise.

Enterprise Products participated extensively in the development of the 2018 Butler County Full-Scale Exercise and retained the services of Erie Emergency & Crisis Consulting to serve as their liaison to the exercise development process. Additionally, Erie Emergency & Crisis Consulting provided training for Enterprise Products personnel and contractors on September 19, 2018.

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\(^3\) https://www.enterpriseproducts.com/pipeline-safety/pipeline-integrity
Exercise Design Timeline

The 2018 Butler County Full-Scale Exercise developed, designed and conducted under the authority of the Butler County Local Emergency Planning Committee, the Butler County Local Emergency Planning Committee Training & Exercise Committee and the Butler County Emergency Management Agency. Several meetings were held to develop and coordinate logistics for the 2018 Butler County Full-Scale Exercise. These meetings are listed in the table below:

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest Ohio EPCRA Working Group Work Session</td>
<td>1/11/2018</td>
<td>Members of the Southwest Ohio EPCRA Working Group met with local pipeline operators and staff from the Ohio Emergency Management Agency to discuss the process of identifying a pipeline as a fixed facility for the purposes of exercise credit under Ohio State Emergency Response Commission guidelines</td>
</tr>
<tr>
<td>Pipeline Designation Request Submitted</td>
<td>1/17/2018</td>
<td>Application to identify the Enterprise Products TEPPCO Mainline as a fixed facility for the purposes of exercise credit received by the Ohio State Emergency Response Commission</td>
</tr>
<tr>
<td>State Emergency Response Committee Quarterly Meeting</td>
<td>2/14/2018</td>
<td>Staff from the Butler County Emergency Management Agency and the Ohio Emergency Management Agency Southwest Field Office were asked to testify at the Executive Committee Meeting and the Quarterly Meeting State Emergency Response Committee to discuss the designation of the TEPPCO Mainline as a fixed facility for the purposes of exercise credit</td>
</tr>
<tr>
<td>Exercise Discussion with Enterprise Products / Drill Expectations Meeting</td>
<td>2/15/2018</td>
<td>Staff from Enterprise Products and Butler County Emergency Management Agency met to discuss the possibility and expectations of conducting a joint exercise</td>
</tr>
<tr>
<td>Initial Planning Meeting</td>
<td>3/13/2018</td>
<td>The Butler County Local Emergency Planning Committee Training &amp; Exercise Committee discussed the purpose, intent, and goals of the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Exercise Location Tour</td>
<td>4/19/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with staff from Enterprise Products to tour locations for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Exercise Scenario Meeting</td>
<td>4/30/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with staff from Enterprise Products and Erie Emergency &amp; Crisis Consulting to discuss the scenario for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Event Type</td>
<td>Date</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Full-Scale Exercise Update</td>
<td>5/8/2018</td>
<td>Staff from the Butler County Emergency Management Agency updated the Butler County Local Emergency Planning Committee Training &amp; Exercise Committee of the status of the planning process for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Butler County Hospital Summit</td>
<td>5/25/2018</td>
<td>Staff from the Butler County Emergency Management Agency discussed the 2018 Butler County Full-Scale Exercise with the members of the Butler County Hospital Summit</td>
</tr>
<tr>
<td>Exercise Planning Conference Call</td>
<td>6/7/2018</td>
<td>Staff from the Butler County Emergency Management Agency joined staff from Enterprise Products and Erie Emergency &amp; Crisis Consulting to discuss Master Task List for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>State Emergency Response Committee Quarterly Meeting</td>
<td>6/13/2018</td>
<td>Staff from the Butler County Emergency Management Agency were asked to testify at the Executive Committee Meeting and the Quarterly Meeting State Emergency Response Committee to discuss the final approval of the State Emergency Response Commission motion to designate the TEPPCO Mainline as a fixed facility for the purposes of exercise credit</td>
</tr>
<tr>
<td>Exercise Planning Meeting</td>
<td>6/19/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with staff from Enterprise Products to discuss Enterprise Products’ Emergency Notification procedures, exercise logistics, and the emergency contractor’s participation.</td>
</tr>
<tr>
<td>Full-Scale Exercise Update</td>
<td>6/20/2018</td>
<td>Staff from the Butler County Emergency Management Agency updated the Butler County Local Emergency Planning Committee of the status of the planning process for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>HazMat and Water Rescue Planning Meeting</td>
<td>7/1/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with representatives from the Butler County Hazardous Materials Cooperative and the Butler County Water Rescue Taskforce to discuss exercise design, play, and safety</td>
</tr>
<tr>
<td>Midterm Planning Meeting</td>
<td>7/10/2018</td>
<td>Staff from the Butler County Emergency Management Agency updated the Butler County Local Emergency Planning Committee Training &amp; Exercise Committee on the planning process for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Butler County Hospital Summit</td>
<td>7/27/2018</td>
<td>Staff from the Butler County Emergency Management Agency discussed the 2018 Butler County Full-Scale Exercise with the members of the Butler County Hospital Summit</td>
</tr>
<tr>
<td>Event Title</td>
<td>Date</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MSEL Conference</td>
<td>7/31/2018</td>
<td>Staff from the Butler County Emergency Management Agency joined staff from Erie Emergency &amp; Crisis Consulting and the members of the Butler County Local Emergency Planning Committee Training &amp; Exercise Committee to discuss the Master Scenario of Events List for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Exercise Site Meeting</td>
<td>8/9/2018</td>
<td>Staff from the Butler County Emergency Management Agency and Enterprise Products met with representatives from the Butler County Water Rescue Taskforce to tour the exercise play locations</td>
</tr>
<tr>
<td>Exercise Planning Meeting</td>
<td>8/14/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with the Butler County Local Emergency Planning Committee Training &amp; Exercise Committee to discuss the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>MSEL Development Meeting</td>
<td>8/21/2018</td>
<td>Staff from the Butler County Emergency Management Agency joined staff from Erie Emergency &amp; Crisis Consulting finalize the Master Scenario of Events List for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>HazMat and Water Rescue Planning Meeting</td>
<td>8/29/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with representatives from the Butler County Hazardous Materials Cooperative and the Butler County Water Rescue Taskforce to discuss exercise design, play, and safety</td>
</tr>
<tr>
<td>McCullough-Hyde Memorial Hospital Exercise Meeting</td>
<td>9/5/2018</td>
<td>Staff from the Butler County Emergency Management Agency met with staff from McCullough-Hyde Memorial Hospital to discuss exercise play occurring at the facility</td>
</tr>
<tr>
<td>Final Planning Meeting</td>
<td>9/12/2018</td>
<td>Staff from the Butler County Emergency Management Agency joined staff from Erie Emergency &amp; Crisis Consulting and the members of the Butler County Local Emergency Planning Committee Training &amp; Exercise Committee to discuss the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>Full-Scale Exercise Update</td>
<td>9/19/2018</td>
<td>Staff from the Butler County Emergency Management Agency updated the Butler County Local Emergency Planning Committee of the status of the planning process for the 2018 Butler County Full-Scale Exercise</td>
</tr>
<tr>
<td>2018 Butler County Full-Scale Exercise</td>
<td>9/20/2018</td>
<td>The 2018 Butler County Full-Scale Exercise was conducted on 9/20/2018</td>
</tr>
</tbody>
</table>
Enterprise Products After Action Conference 10/23/2018
Staff from the Butler County Emergency Management Agency participated in an After Action Conference held for the Enterprise Products staff.

2018 Butler County Full-Scale Exercise After Action Conference 11/13/2018
Staff from the Butler County Emergency Management Agency presented the results of the 2018 Butler County Full-Scale Exercise to the Butler County Local Emergency Planning Committee Training & Exercise Committee.

Butler County Local Emergency Planning Committee Training & Exercise Committee 2/12/2018
Staff from the Butler County Emergency Management Agency presented the 2018 Butler County Full-Scale Exercise After Action Report to the members of the Butler County Local Emergency Planning Committee Training & Exercise Committee.

Exercise Play Timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730 hrs</td>
<td>Exercise participants arrive</td>
<td>All</td>
</tr>
<tr>
<td>0745 hrs</td>
<td>Exercise Sign-in</td>
<td>All</td>
</tr>
<tr>
<td>0800 hrs</td>
<td>Global StartEx; Exercise Briefing provided to players</td>
<td>All</td>
</tr>
<tr>
<td>0930 hrs</td>
<td>Victim #1 enters the water</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>0955 hrs</td>
<td>Patient transport simulation #1 begins</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1000 hrs</td>
<td>ARC simulated medical emergency</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1025 hrs</td>
<td>Patient transport simulation #1 ends</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1030 hrs</td>
<td>Hospital HotWash</td>
<td>McCullough-Hyde Memorial Hospital</td>
</tr>
<tr>
<td>1035 hrs</td>
<td>Patient transport simulation #1 HotWash ends</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1040 hrs</td>
<td>Victim #2 enters the water</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1100 hrs</td>
<td>Hospital Exercise Conclusion</td>
<td>McCullough-Hyde Memorial Hospital</td>
</tr>
<tr>
<td>1110 hrs</td>
<td>Patient transport simulation #2 begins</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1120 hrs</td>
<td>Simulated product analog (popcorn) released</td>
<td>Various</td>
</tr>
<tr>
<td>1140 hrs</td>
<td>Patient transport simulation #2 ends</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1150 hrs</td>
<td>Patient transport simulation #2 HotWash ends</td>
<td>Camp Campbell Gard</td>
</tr>
<tr>
<td>1200 hrs</td>
<td>EndEx; Lunch</td>
<td>Kaden’s Cove Yacht Club</td>
</tr>
<tr>
<td>1230 hrs</td>
<td>HotWash</td>
<td>Kaden’s Cove Yacht Club</td>
</tr>
<tr>
<td>1330 hrs</td>
<td>Exercise Conclusion</td>
<td>All</td>
</tr>
</tbody>
</table>
Overview of Response

The 2018 Butler County Full-Scale Exercise consisted of five (5) distinct, but interconnected, exercise streams. An overview of each exercise stream is discussed below.

Incident Command

The Incident Command exercise stream included first responders, private industry representatives, governmental officials and representatives of Non-Governmental Organizations. The Incident Command stream required exercise participants to accomplish several tasks and objectives, including:

- Assume Command of a complex, multi-jurisdictional incident
- Develop incident objectives to mitigate the release
- Assess an expanding incident and identify outstanding resource needs
- Command and control tactical resources assigned to the incident
- Coordinate response efforts with private industry representatives
- Coordinate response efforts with simulated Incident Command Posts downstream of the release
- Coordinate the release of population protective actions for those located within the affected area
- Develop and disseminate public information
- Maintain resource accountability and ensure responder safety needs are met
- Track and forecast financial impact of the incident

HazMat/Water Response

The HazMat/Water Response exercise stream included members of the Butler County Hazardous Materials Cooperative, Butler County Technical Rescue Team, Butler County Water Rescue Taskforce, St. Clair Township Fire Department, the Ohio Department of Natural Resources Division of Watercraft and Private Industry Contractors. The participants in the HazMat/Water Response exercise streams required exercise participants to accomplish several tasks and objectives:

- Coordinate and deploy resources into the exercise play area
- Deploy containment booms across the Great Miami River to collect simulated product (popcorn)
- Conduct air monitoring in the exercise play area
- Effect two (2) simulated water rescues
- Provide decontamination of victims who were contaminated
- Control civilian access to the Great Miami River
- Establish and maintain water rescue resources and safety boats
- Research released hazardous materials and provide guidance on mitigation efforts
- Maintain resource accountability and ensure responder safety needs are met
- Provide a safety boat for real-world emergencies
Emergency Medical Services
The Emergency Medical Services exercise stream included members of the St. Clair Township/New Miami Life Squad. The personnel participating in this exercise stream were required to accomplish the following tasks and objectives:

- Develop a rehabilitation area for personnel participating in the HazMat/Water Response exercise stream
- Provide real-world Emergency Medical Services for exercise participants
- Assist in the decontamination of simulated victims
- Provide simulated medical care to victims
- Participate in high-fidelity medical simulations which simulated transporting a patient to a receiving facility
- Simulate communication of patient condition via phone to the receiving facility

Hospitals
The Hospital exercise stream consisted of a number of various departments within McCullough-Hyde Memorial Hospital. The personnel participating in this exercise stream were required to accomplish the following tasks and objectives:

- Receive a simulated notification of an incoming contaminated patient
- Notify members of the McCullough-Hyde Memorial Hospital internal emergency response team
- Establish the decontamination process within the facility
- Receive contaminated patient
- Provide decontamination services for contaminated patient
- Provide decontamination services for two (2) contaminated Emergency Medical Technicians
- Demobilize decontamination process within the facility

Mass Care/Shelter
The Mass Care/Shelter exercise stream consisted of employees and volunteers of the American Red Cross. The personnel participating in this exercise stream were required to accomplish the following tasks and objectives:

- Receive a request to establish a shelter for displaced civilians within the simulated emergency area
- Identify a location for the requested shelter
- Deploy personnel and resources to the shelter location to begin the process of establishing a shelter
- Open a shelter and begin receiving shelter residents
- Coordinate with the Incident Command Post
- Respond to a simulated medical emergency within the shelter
- Demobilize the shelter
Observations & Recommendations

Observation 1

Statement of Issue
Teams performed well and were able to communicate well with multiple resources from several jurisdictions.

Analysis
The response simulated in the 2018 Butler County Full-Scale Exercise utilized several jurisdictions and multi-jurisdictional teams. These units integrated well and were able to coordinate their response efforts through the use of the Incident Command System, Unified Command, and interoperable communications.

Recommendations
- All Disciplines
  - Continue to train and exercise the use of the Incident Command System
  - Continue to train and exercise the use of Unified Command

Core Capabilities
- Planning
- Operational Coordination
- Operational Communications
- Situational Assessment

Observation 2

Statement of Issue
Civil Air Patrol resources provided aerial reconnaissance of the incident but were unable to communicate directly with the Incident Command Post.

Analysis
Civil Air Patrol resources were utilized to provide aerial pictometry of the impacted area. This exercise represents the first time that the Civil Air Patrol has been utilized to provide this service and interoperable communications were not established prior to the aerial reconnaissance mission. The Civil Air Patrol should be written into the Butler County Emergency Operations Plan as a resource available during a disaster and should also include a method of communications to ensure that the Civil Air Patrol is capable of communicating with Incident Command Post.

Recommendations
- Emergency Management
  - Revise and update the Butler County Emergency Operations Plan to include the Civil Air Patrol
  - Identify and develop additional aerial reconnaissance capabilities, including small Unmanned Aerial Systems (sUAS)
Core Capabilities

- Planning
- Operational Coordination
- Operational Communications

Observation 3

Statement of Issue

Exercise participants did well to respond to a new and unfamiliar hazard.

Analysis

The 2018 Butler County Full-Scale Exercise is the first LEPC exercise in the State of Ohio to utilize a pipeline as the source of a hazardous materials release. The exercise participants adapted well to this new hazard and developed an actionable plan to respond to this hazard despite their unfamiliarity with this hazard.

Recommendations

- All Disciplines
  - Continue to train for pipeline emergencies within our community
  - Identify and address response gaps related to emergency response to pipeline emergencies
- Private Industry
  - Continue to offer pipeline awareness training for first responders and contractors
  - Continue awareness programs related to 811, “Call Before You Dig,” and other pipeline safety initiatives

Core Capabilities

- Planning
- Public Information and Warning
- Operational Coordination
- Environmental Response/Health and Safety
- Mass Care Services
- Operational Communication
- Situational Assessment

Observation 4

Statement of Issue

Private sector players initially freelanced and did not coordinate with the Authority Having Jurisdiction.
Analysis

Emergency personnel initially reported that private sector players were not coordinating their response with the response efforts led by the Authority Having Jurisdiction. This caused issues relating to the duplication of efforts and resulted in a disconnect between public and private resources. While freelancing by any resource assigned to the incident area can lead to serious safety concerns, including lack of resource accountability, inability to coordinate resources during dangerous operations, and potential exposure to unsafe conditions, feedback from the private sector participants indicated that the emergency response contractors were operating under the direction of the plan developed by the command structure of the private sector participants. This feedback indicates that the coordinating elements of the private and public sector participants failed to coordinate their response efforts early on during the response. This failure to coordinate in the Incident Command Post ultimately led to confusion in the area of operations.

Recommendations

- Incident Command Post
  - Identify the need for Liaison Officers early on in the response and utilize them to assist in the coordination of public and private resources
  - Invite representatives from private industry to participate in the Unified Command as soon as reasonably possible
- Private Industry
  - Ensure resources under the command of private industry understand the importance of coordinating response efforts with public resources
  - Engage public sector resources prior to disasters and conduct joint training and exercises to ensure a clear delineation of responsibilities

Core Capabilities

- Planning
- Operational Coordination
- Environmental Response/Health and Safety
- Operational Communication
- Situational Assessment

Observation 5

Statement of Issue

All players utilized proper Personal Protective Equipment for the exercise.

Analysis

The 2018 Butler County Full-Scale Exercise presented first responders and private sector personnel with significant challenges, including simulated hazardous materials and a water-based response. The personnel responding to these hazards assessed the hazards involved in the response successfully and selected the appropriate Personal Protective Equipment to ensure the safety of those involved in the response.
Recommendations

- None

Core Capabilities

- Environmental Response/Health and Safety
- Situational Assessment

Observation 6

Statement of Issue

Private and public sector resources within the Incident Command Post initially worked independently of each other. A true Unified Command was eventually established.

Analysis

Establishing a Unified Command is essential to the efficient management of any large-scale disaster and facilitates the effective command and control of the resources assigned to the incident. It is critical that the Unified Command is established early during an incident to ensure that the response efforts are coordinated across the private and public sectors, disciplines and jurisdictional lines.

Recommendations

- Incident Command Post
  - Continue to train and exercise the use of the Incident Command System and Unified Command
  - Engage private sector partners during the beginning phases of an incident to ensure a coordinated response
- Private Sector
  - Engage public sector resources prior to incidents to ensure that public sector resources are aware of the capabilities and resources available
- Fire Department
  - Continue to train and exercise the use of the Incident Command System and Unified Command
- Law Enforcement
  - Continue to train and exercise the use of the Incident Command System and Unified Command

Core Capabilities

- Planning
- Operational Coordination
- Logistics and Supply Chain Management
- Situational Assessment
Observation 7

Statement of Issue
The Operations Section was unaware of what boats were on the water and supporting the incident.

Analysis
Large-scale incidents require a significant number of resources to mitigate the incident effectively; this large number of resources can lead to confusion regarding the resources assigned to the incident. Additionally, freelancing and self-dispatching further obfuscate the Incident Command Post’s situational awareness.

Recommendations

- Incident Command Post
  - Consider the need to rename/renumber resources in theater to better understand the resources available
  - Consider the use of Forward Observers to share information with the Incident Command Post
- HazMat Units/Water Rescue Units
  - Maintain accountability of resources assigned to the incident and share this information with the Incident Command Post

Core Capabilities

- Planning
- Operational Coordination
- Operational Communications
- Situational Assessment

Observation 8

Statement of Issue
Social media posts and press releases were coordinated within the Incident Command Post and distributed via existing channels, including the Butler County Emergency Management Agency’s social media accounts, press release listservs, and mass communication systems.

Analysis
Sharing information with the public is a critical component of any disaster and should be managed effectively to ensure that the correct individuals receive the correct message at the correct time. The Incident Command Post utilized existing methods of communications to ensure that these messages were received in a timely manner.

Recommendations

- None
Core Capabilities

- Public Information and Warning

Observation 9

Statement of Issue

Logistics did an excellent job planning to ensure that the incident received the resources necessary to respond to the incident adequately.

Analysis

Large-scale emergency responses will require numerous resources to mitigate the emergency adequately. The Logistics Section Chief is responsible for obtaining these resources and must understand that the incident may need to request resources outside traditional mutual aid partners to ensure that the unaffected areas of the community retain a baseline number of emergency resources. The Logistics Section Chief should rely on the Butler County Emergency Management Agency to assist in the procurement of resources and resource tracking.

Recommendations

- Butler County Emergency Management Agency
  - Continue to develop and amend resource ordering and accountability processes within the Butler County Emergency Management Agency

Core Capabilities

- Planning
- Operational Coordination
- Logistics and Supply Chain Management
- Situational Assessment

Observation 10

Statement of Issue

Different standards for night operations surfaced between first responders and private industry personnel. The group worked well to come to a consensus and formulate an acceptable plan.

Analysis

Public and private sector personnel are governed by different standards and regulations; these different regulations can lead to issues when determining the appropriate course of action. The Unified Command can assist in identifying these issues and assist in developing a plan which amenable to all agencies and organizations involved.

Recommendations

- None
Core Capabilities

- Planning
- Operational Coordination
- Environmental Response/Health and Safety
- Situational Assessment

Observation 11

Statement of Issue

The Incident Command Post did not monitor weather adequately.

Analysis

Monitoring weather conditions is crucial during an emergency response to a hazardous materials incident. Weather conditions should be monitored and forecasted to ensure that the Incident Command Post and the emergency responders are aware of any potential changes in conditions. Additionally, the Incident Command Post can quickly become overwhelmed during a large-scale disaster causing some critical functions to be delayed.

Recommendations

- Incident Command Post
  - Appoint a Situation Unit Leader to monitor changing weather conditions
  - Engage partners at the National Weather Service Wilmington Forecast Office to ensure real-time forecasts are accurately developed
  - Consider requesting an Incident Meteorologist for large-scale incidents

Core Capabilities

- Planning
- Operational Coordination
- Situational Awareness

Observation 12

Statement of Issue

There was some confusion regarding the roles individuals were playing within the Incident Command Post.

Analysis

The Incident Command Post and individuals assigned to it will grow exponentially as an incident devolves and grows to include more departments and agencies. Personnel assigned to the Incident Command Post may be unfamiliar to those within the Incident Command Post.
Recommendations

- Incident Command Post
  - Personnel assigned to the Incident Command Post should wear vests identifying their position within the Incident Command Post as soon positions are assigned

Core Capabilities

- Operational Coordination

Observation 13

Statement of Issue

Middletown HazMat personnel were able to research the product, identify river flow rate and predict the arrival of the product analog (popcorn).

Analysis

HazMat personnel from Middletown Fire Department were assigned to the shoreline to assist water-based resources in the mitigation of the incident. This included product research, equipment staging, and human resources. Middletown Fire Department Personnel were able to share this information with water-based resources to inform their mitigation actions.

Recommendations

- None

Core Capabilities

- Operational Coordination
- Intelligence and Information Sharing
- Situational Assessment

Observation 14

Statement of Issue

The differences between standards relating to private and public sector resources presented challenges in collaboration.

Analysis

The public and private sector players are governed under different statutes, rules, and regulations. These differences resulted in challenges during the early stages of the incident. These challenges were ultimately resolved. However they did delay the public and private sector resources’ ability to coordinate their response efforts.
Recommendations

- Incident Command Post
  - Consider assigning Liaison Officers to the HazMat/Water Rescue Branch to assist in bridging the gap between private and public resources
  - Unified Command should anticipate issues relating to the different statutes, rules, and regulations between private and public sector responders and develop workarounds

- HazMat Units
  - Continue to engage private sector partners in joint training and exercises to increase operational coordination

- Private Sector
  - Continue to engage public sector partners in joint trainings and exercises to increase operational coordination

Core Capabilities

- Planning
- Operational Coordination
- Environmental Response/Safety and Health
- Situational Assessment

Observation 15

Statement of Issue

Boom deployment by contractors was delayed due to issues with boom placement.

Analysis

Units placing containment and deflection booms on the Great Miami River struggled to place the booms according to the plan identified by the Incident Command Post. Resources assigned to boom placement attempted to utilize vehicles on the far side of the shore to pull the boom into place but failed when the rope attached to the boom was disabled. Ultimately, the resources assigned to boom placement were able to reattach a rope to the boom and use a combination of boats and shore-based vehicles to manipulate the boom into position.

Recommendations

- Private Sector
  - Contractors should host additional training regarding the placement of hard boom on rivers

- HazMat Units/Water Rescue Units
  - HazMat and water rescue units should develop training regarding the placement of hard boom on rivers

Core Capabilities

- Operational Coordination
Observation 16

Statement of Issue

Over four hundred (400) feet of hard boom was used to develop a deflection and containment boom to contain the simulated product.

Analysis

The Butler County Hazardous Materials Cooperative currently has one hundred (100) feet of hard boom available to units responding to the release of a hazardous material that impacts a waterway.

Recommendations

- HazMat Units
  - Assess the need for additional sections of hard boom for a response to a hazardous materials release that impacts a waterway
- Butler County Emergency Management Agency
  - Identify additional sources of hard boom which could be requested in the event of a hazardous material release that impacts a waterway

Core Capabilities

- Planning
- Operational Coordination
- Environmental Response/Health and Safety
- Logistics and Supply Chain Management
- Situational Assessment

Observation 17

Statement of Issue

Resources placing boom on the Great Miami River were, at one point, blocking access to the boat ramp which delayed response to a simulated river rescue and blocked access to the ramp as a means of egress for a contaminated victim.

Analysis

Private sector resources assigned to boom placement encountered issues when deploying hard boom across the Great Miami River. These issues resulted in the boat ramp used for egress being blocked. First responders were able to navigate over the boom. However, their response to a simulated water rescue was delayed as a result of the ramp being blocked. The ability to remove a patient from the rescue boat to the shore was also impacted and resulted in a delay in transferring the patient to the shore.
Recommendations

- **Private Sector**
  - Resources assigned to boom placement should be aware of the impact the boom may have on the ability to exit the river

- **HazMat Unit/Water Rescue Units**
  - Safety Officers assigned to the HazMat Unit/Water Rescue Units should monitor the boat ramps to ensure that egress is not blocked by equipment or personnel
  - Safety Officers should designate a secondary means of egress as a component of their Safety Plan

Core Capabilities

- Planning
- Operational Coordination
- Situational Awareness

Observation 18

Statement of Issue

The Ohio River Incident Action Plan establishes the first twenty-four (24) hours of a water-based response to a hazardous materials incident.

Analysis

The Ohio River Incident Action Plan is an Incident Action Plan developed by the United States Environmental Protection Agency. This plan serves as a pre-developed plan to assist in the management of a hazardous materials release which will result in the contamination of the Ohio River.

Recommendations

- **Butler County Emergency Management Agency**
  - Conduct training on the contents of the Ohio River Incident Action Plan

- **HazMat Units/Water Rescue Units**
  - Attend training on the contents of the Ohio River Incident Action Plan
  - Utilize information obtained from the Ohio River Incident Action Plan in the development of local response efforts

Core Capabilities

- Planning
- Operational Coordination

Observation 19

Statement of Issue

The Incident Command Post needs to coordinate with opened American Red Cross shelters and share information regarding the incident.
Analysis

The Incident Command Post did not additionally share information with the American Red Cross Shelter. This information is vital to the operation of the shelter and the safety and wellbeing of its residents. An American Red Cross Liaison was ultimately established at the Incident Command Post to ensure information was shared between the two facilities.

Recommendations

- Incident Command Post
  - Establish a Mass Care Liaison to ensure that information is shared between the Incident Command Post and any opened shelter
- American Red Cross Shelter
  - Identify or establish a Liaison Officer to assist with information sharing between the Incident Command Post and an opened shelter
  - Update shelter locations list for Butler County on a regular basis, to include inspections and evaluations

Core Capabilities

- Operational Coordination
- Mass Care Services
- Operational Communications

Observation 20 [H]

Statement of Issue

There was some confusion regarding what Personal Protective Equipment was required for which members of the “Tent Team.”

Analysis

Choosing the appropriate Personal Protective Equipment is dependent upon several factors, including role, location and chemical involved.

Recommendations

- Hospitals
  - “Tent Team” Personal Protective Equipment should be established via local policy

Core Capabilities

- Planning
- Operational Coordination
- Environmental Response/Health and Safety

Observation 21 [H]

Statement of Issue

Hospital staff had difficulty identifying the Chain-of-Command within the hospital.
Analysis

Identifying personnel while wearing Personal Protective Equipment can be challenging. Clearly identifying personnel and the appropriate Chain-of-Command is imperative in establishing an efficient and effective response.

Recommendations

- Hospital
  - Hospital decontamination staff should utilize Incident Command System vests or other methods to help identify the Chain-of-Command

Core Capabilities

- Planning
- Operational Coordination

Observation 22

Statement of Issue

Staff from outside the Emergency Department responded to the incident and assisted in decontamination operations.

Analysis

Incidents such as the simulated emergency presented in the 2018 Butler County Full-Scale Exercise requires a coordinated response; it is extremely likely that a response similar to the scenario presented in the exercise will overwhelm the impacted facility. Facilities must rely on internal partners to assist in the management of these incidents.

Recommendations

- None

Core Capabilities

- Planning
- Operational Coordination

Observation 23

Statement of Issue

Communications between EMS personnel and other resources were strained.

Analysis

EMS personnel struggled to adequately communicate with other resources due to the large number of resources assigned to the incident. The 2018 Butler County Full Scale Exercise presented players with an extremely large scenario and required these players to develop the overarching overhead structure. Without this structure, communications were not coordinated effectively.
Recommendations

- Incident Command Post
  - Consider assigning a Task Force Leader and/or Division/Group Supervisors to supervise large numbers of personnel

Core Capabilities

- Planning
- Operational Coordination
- Operational Communications

Observation 24  

Statement of Issue

EMS providers were competent and professional.

Analysis

The EMS providers who participated in the 2018 Butler County Full-Scale Exercise were able to manage a contaminated patient successfully. EMS personnel on-site actively participated in medical monitoring and decontamination procedures.

Recommendations

- None

Core Capabilities

- Operational Coordination

Observation 25  

Statement of Issue

Miscommunication regarding the death of a simulated EMS patient caused issues within the Incident Command Post.

Analysis

The exercise design team failed to anticipate that the simulated EMS patient’s disposition would be relayed to the Incident Command Post. When this occurred, the Incident Command Post immediately suspended all operations.

Recommendations

- Butler County Emergency Management Agency (Exercise Design Team)
  - Develop feedback loops to prevent this from occurring in future exercises.

Core Capabilities

- Planning
Observation 26

Statement of Issue

The SimCell experienced some issues determining if communications were meant for the SimCell, controllers, or players.

Analysis

The Communications Plan for the exercise was not adequately designed to ensure fluid communications between all players, exercise control staff, and the SimCell. This resulted in confusion among exercise players with regards to how they should contact the SimCell.

Recommendations

- Butler County Emergency Management Agency (Exercise Design Team)
  - A more robust SimCell and SimCell Communications Plan should be developed for exercises, especially full-scale exercises
  - Utilize a Communications Unit Leader to assist in managing exercise radio traffic

Core Capabilities

- Planning
- Operational Communications

Conclusion

The 2018 Butler County Full-Scale Exercise presented many challenges to the Butler County Local Emergency Planning Committee, the Butler County Emergency Management Agency and the 2018 Butler County Full-Scale Exercise Design Team. The exercise was ambitious, unprecedented, and provided numerous learning experiences throughout the exercise design and conduct phases. The observations and recommendations discussed in this after action report detail these lessons through the many reports, discussions and conferences which occurred at the conclusion of the exercise and the months that followed. These observations show that the emergency management program developed and administered by the Butler County Emergency Management Agency and supported by the first responders and communities of Butler County is capable of responding to large-scale emergencies which threaten Butler County. This program would not be possible without the support and collaboration of community partners too numerous to name here. The strength of this program is found through the collaboration and cooperation amongst these partners.
### Appendix A – Exercise Participants

<table>
<thead>
<tr>
<th>Federal</th>
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<tbody>
<tr>
<td>Civil Air Patrol</td>
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<table>
<thead>
<tr>
<th>State</th>
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<tbody>
<tr>
<td>Ohio Bureau of Workers Compensation</td>
<td>Ohio Department of Natural Resources</td>
</tr>
<tr>
<td>Ohio Emergency Management Agency</td>
<td>Ohio Environmental Protection Agency</td>
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<tr>
<td>Ohio State Patrol</td>
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<tr>
<th>County</th>
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<tbody>
<tr>
<td>Brown County Emergency Management Agency</td>
<td>Butler County Community Emergency Response Team</td>
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<td>Butler County Emergency Management Agency</td>
<td>Butler County Incident Management Team</td>
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<tr>
<td>Butler County Local Emergency Planning Committee</td>
<td>Butler County Sheriff’s Office</td>
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<tr>
<td>Butler County Technical Rescue Team</td>
<td>Butler County Water Rescue Taskforce</td>
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<tr>
<td>Clermont County Emergency Management Agency</td>
<td>Hamilton County Educational Services Center</td>
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<td>Hamilton County Emergency Management &amp; Homeland Security</td>
<td>Warren County Emergency Management Agency</td>
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<td>Warren County Emergency Services</td>
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<tr>
<td>City of Oxford Division of Police</td>
<td>Fairfield Township Fire Department</td>
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<tr>
<td>Hamilton Fire Department</td>
<td>Liberty Township Fire Department</td>
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<td>MetroParks of Butler County</td>
<td>Middletown Fire Department</td>
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<tr>
<td>Monroe Fire Department</td>
<td>Monroe Police Department</td>
</tr>
<tr>
<td>Morgan Township Fire Department</td>
<td>Oxford Fire Department</td>
</tr>
<tr>
<td>St. Clair Township Fire Department</td>
<td>St. Clair Township/New Miami Life Squad</td>
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<td>West Chester Fire Department</td>
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<thead>
<tr>
<th>Local</th>
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</thead>
<tbody>
<tr>
<td>American Red Cross</td>
<td>Butler County United Way</td>
</tr>
<tr>
<td>The Christ Hospital Medical Center – Liberty Township</td>
<td>Clean Harbors</td>
</tr>
<tr>
<td>Enterprise Products</td>
<td>Greater Hamilton Safety Council</td>
</tr>
<tr>
<td>Kaden’s Cove Yacht Club</td>
<td>Kettering Health Network</td>
</tr>
<tr>
<td>Koenig Equipment</td>
<td>McCullough-Hyde Memorial Hospital</td>
</tr>
<tr>
<td>Mercy Fairfield</td>
<td>Ohio Christian University</td>
</tr>
<tr>
<td>UC Health</td>
<td>University of Cincinnati</td>
</tr>
<tr>
<td>WCPO</td>
<td>WLWT</td>
</tr>
<tr>
<td>WXIX</td>
<td>YMCA Camp Campbell Gard</td>
</tr>
</tbody>
</table>

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**Note:** The table above lists the participants involved in the 2018 Butler County Full-Scale Emergency Exercise. Each category includes federal, state, county, and local organizations, as well as private and non-profit entities, all contributing to the comprehensive planning and response efforts.
Appendix B – Participant Feedback Form Analysis

General Comments
Participant Feedback Forms were provided to all exercise participants, evaluators, controllers and observers at the conclusion of the exercise. Of the two-hundred (200) attendees at the exercise, thirty-eight (38) forms were captured for a 19% participation rate. The questions covered multiple areas, including:

- Exercise Design
- Exercise Strengths
- Areas for Improvement
- Recommended Training
- Recommendations for Exercise Improvement

Those completing the Participant Feedback Forms were asked to rate their agreement with each question on a scale of “1” (Strongly Disagree) to “5” (Strongly Agree).

Question 1
- “Pre-exercise briefings were informative and provided the necessary information for my role in the exercise”
- 3.8 Average
- n = 38

![Question 1 Chart]

Question 2
- “The exercise scenario was plausible and realistic.”
- 4.4 Average
- n = 35
Question 3

- “Exercise participants included the right people in terms of level and mix of disciplines.”
- 4.2 Average
- n = 35

Question 4

- “Participants were actively involved in the exercise.”
- 4.5 Average
- n = 35
Question 5
- “Exercise participation was appropriate for someone in my field with my level of experience/training.”
  - 4.4 Average
  - n = 36

Question 6
- “The exercise increased my understanding about and familiarity with the capabilities and resources of other participating organizations.”
  - 4.4 Average
  - n = 36
Question 7

- “Exercise participation was appropriate for someone in my field with my level of experience/training.”
- 4.4 Average
- n = 36

Question 8

- “After this exercise, I am better prepared to deal with the capabilities and hazards addressed.”
- 4.4 Average
- n = 36
Requested Training

- G108 – Community Mass Care and Emergency Assistance
- ICS 300 & 400 – Intermediate & Advanced Incident Command System
- G191 – ICS – EOC Interface
- Annual PPE Donning & Doffing training (Hospital)
- MGT314 – Enhanced All-Hazards Incident Management / Unified Command
- MGT 346 – EOC Operations and Planning for All-Hazards
- MGT 341 – Disaster Preparedness for Hospitals and Healthcare Organizations within the Community Infrastructure
- G358 – Evacuation and Re-entry Planning
- HazMat IQ – Above the Line / Below the Line
- HazMat IQ ToxMedic
- All Hazards Position Specific Courses
Appendix C – SERC & EEG Evaluations
State Emergency Response Commission Report

October 12, 2018

State Emergency Response Commission
Ohio Environmental Protection Agency
Lazear Government Center, 122 S. Front Street
Columbus, Ohio 43216-1049

Dear SERC:

According to Section 5755.04(C) of the Ohio Revised Code, Local Emergency Planning Committees (LEPC) must conduct an exercise of their plan annually. The exercise shall be observed with a formal review to be submitted by a State Emergency Response Commission (SERC) Facilitator.

The Butler County LEPC conducted a Full-Scale Exercise of their plan on September 26, 2018.

The Facilitator’s report, based on the Ohio Hazardous Materials Exercise Evaluation Methodology (OHM-REM) and the Evaluators’ findings, is enclosed. The Facilitator recommends that the SRCC, by issuance of an Order, Concur with the conduct of this Full-Scale Exercise.

The SRCC should review this material, as it will be presented for a final vote at the upcoming SRCC meeting. The County’s LEPC representatives have been invited to attend this meeting.

Sincerely,

Tammey R. Feehan
Northwest Region Supervisor

TR/ans

Enclosure: as stac
Matt Haverkos  
LEPC Information Coordinator  
Butler County LEPC  
315 High St.  
Hamilton, OH 45011

Deer Mr. Haverkos,

According to Section 3750.04(C) of the Ohio Revised Code, Local Emergency Planning Committees (LEPC) must conduct an exercise of their plan annually. The exercise shall be observed with a formal review to be submitted by a State Emergency Response Commission (SERC) Facilitator.

The Butler County LEPC conducted a Full-Scale Exercise of their plan on September 20, 2018. The Facilitator's report, based on the Ohio Hazardous Materials Exercise Evaluation Methodology (OHM-ERM) and the Evaluators' findings, is enclosed. The Facilitator recommends that the SERC, by issuance of an Order, Concur with the conduct of the Full-Scale Exercise.

This completes the exercise requirements for the LEPC's second year of the current exercise cycle. Within the remaining two years of the current exercise cycle, the LEPC must demonstrate the remaining exercise in accordance with OAC 3750-29-78 (C).

You are asked to share this information with the entire LEPC. The exercise report will be presented to the SERC for a final vote at their next meeting. The LEPC's representatives are invited to attend that meeting, if they so wish. The next SERC meeting will be held Wednesday, December 12, 2018, at 1:00 PM at the Ohio EMA's Columbus office, 2855 W. Dublin-Granville Road.

Sincerely,

Anita M. Stechschulte  
SERC Exercise Facilitator

Endlosures: as stated
Butler County's Exercise Report
September 20, 2018

This report is written based on the exercise requirements outlined in Section 3755.041(C) of the Ohio Revised Code and the rules adopted under it.

* If the exercise complies with the criteria established, the commission shall issue an Order of Concurrence with the conduct of the exercise.

* If the exercise does not comply with the established criteria, the commission shall issue an Order Refusing to Concur with the conduct of the exercise.

Executive Summary:
On Thursday, September 20, 2018, at 8:00 a.m., the Butler County Local Emergency Planning Committee conducted a full-scale exercise of their Hazardous Material Plan. The scenario was based on a release of Jet A Kerosene from an Enterprise Products transmission pipeline impacting the Great Miami River. Incident Commander, St Clair Fire Chief Arrington, assumed command and established the command post at Kaden's Cove Yacht Club. Operational coordination, along with technical data and information sharing, transferred between first responders and Enterprise Products emergency management teams. Fantastic environmental response and containment procedures were demonstrated on the river by Clean Harbors and first responders. Mississinewa Services from EMA and Red Cross were established at Camp Campbell. Players for the multi-constituent event included: Butler County EMA and LEPC, Butler County Sheriff's Office, Butler Incident Management Team, Butler County Haz Mat Team, St. Clair Fire, Liberty Township Fire, Fairfield Township Fire, Hamilton Fire, Ohio State Highway Patrol, Ohio Department of Natural Resources, Ohio Environmental Protection Agency, Ohio Emergency Management Agency, Civil Air Patrol, Associated Red Cross, McCullough Hyde Memorial Hospital, Enterprise Products, and Clean Harbors. Overall, the exercise successfully demonstrated the ability of each agency to integrate their resources into the multi-jurisdictional incident. The exercise established a good learning environment that familiarized the response agencies with protocols and procedures, and allowed for education opportunities during the hot wash.

The exercise was evaluated by the following evaluators:
Nate Crossley, Director, Hamilton County EMA
Doug Baumgartner, EMA Planner, Clermont County EMA
Jessica Madden, Operations Manager, Warren County Department of Emergency Services
Shawn Rixey, School Safety Coordinator, Hamilton County Educational Services Center
Ryan McGowan, Assistant Director Planning Specialist, Hamilton County EMA
Tom Peterson, Deputy Director, Adams/Brown County EMA
David Ward, LEPC Coordinator, Warren County Department of Emergency Services
Deb Walker, EMA Coordinator, TriHealth Bethesda Butler

The Exercise Facilitator was Antje Stedshelfe, NW Ohio Emergency Management Specialist, Ohio EMA.

In order to receive a concurrence for an exercise, the LEPC must successfully demonstrate a majority of the Points of Review for each chosen Objective. The LEPC chose to evaluate the following Objectives: 2, 3, 6, 7, 8, 11, 12, and 13. The Facilitator and Evaluators feel that the activities within the exercise did demonstrate all chosen Objectives.
Objective #2: Incident Assessment. Demonstrate the ability to identify the hazardous material(s) involved in the incident and to assess the associated health and physical hazards.

Points of Review Available: 10
Needed to Meet Objective: 6
Number Met: 9
Number Not Met: 1 (#0)
Number Not Applicable: 0

Initial units approached the scene using weather conditions received. Once established, the Scene Safety Officers directed arriving mutual aid units on how to approach based on this information and the observations of river conditions. Representative of Enterprise Products integrated into IC and their technical guidance was relayed from the command post to scene operations. WISFR, DOT and NIOSH emergency response guidebooks were utilized on scene to identify appropriate safety gear, isolation distances and health hazards.

Points Not Met: The evaluator felt that sufficient actions or communications were not completed to satisfy notifying response personnel and support agencies of changes in incident assessment.

Points Not Applicable: The evaluator listed all points of review as applicable.

Corrective Action Recommendations: There are no corrective action recommendations for this objective.

Objective #3: Incident Command. Demonstrate the ability to implement an Incident Command System and effectively direct, coordinate, and manage emergency response activities.

Points of Review Available: 10
Needed to Meet Objective: 6
Number Met: 10
Number Not Met: 0
Number Not Applicable: 0

Members of the St. Clair Fire Department recognized the need to establish incident command. Chief Anglin took charge and clearly alerted those on-scene that he was the acting IC and utilizing an off-site command post at Camden’s Cove Yacht Club. The IC integrated arriving assets into the response system, slowly expanding into Unified Command with the following positions filled: D.O. Operations Section, Logistics Section, Planning Section, Water Operations Branch, Shelter Branch, Haz Mat Branch, EMS Branch, Law Enforcement Branch, Communications Branch and a Resource Unit. Due to staffing challenges, some positions were not filled until an hour into the event. As the arrival of other assets occurred, Butler County EMA, Ohio EPA and a safety team member from Enterprise Products were also present at the ICP. The Emergency Operations Center was activated to assist in sheltering, emergency public information and resource procurement, allocation and tracking. IC used the white boards, paper and dispatch logs for incident record keeping.

Points Not Met: The evaluator noted all points met.

Points Not Applicable: The evaluator listed all points of review as applicable.
Corrective Action Recommendations: There are no corrective action recommendations for this objective.

Objective #6: Communications. Demonstrate the ability to effectively establish and maintain communications amongst all appropriate response locations, organizations, and personnel.

Points of Review Available: 6
Needed to Meet Objective: 4
Number Met: 5
Number Not Met: 1 (#5)
Number Not Applicable: 0

Initially, haz mat operations and water rescue operations were operating on the same channel causing radio traffic congestion. Upon the establishment of unified command and the fulfillment of various leadership positions, the congestion was addressed. All established links and equipment could handle the amount of radio traffic being created.

Points Not Met: The evaluator did not see anyone taking notes within unified command nor a position specific to communication management filled, therefore point #5 was deemed unmet as there was minimal to no record keeping taking place.

Points Not Applicable: The evaluator listed all points of review as applicable.

Corrective Action Recommendations: There are no corrective action recommendations for this objective.

Objective #7: Response Personnel Safety. Demonstrate the ability to protect emergency responder health and safety.

Points of Review Available: 14
Needed to Meet Objective: 8
Number Met: 14
Number Not Met: 0
Number Not Applicable: 0

The responding agencies entered the scene safety approaching the spill location upwind via watercraft. The chemical was made known to all responders over the radio. Three Safety officers were assigned to water operations and two safety officers were identified within unified command— one from first response and the other from Enterprise’s management team. An Accountability Officer and Rehabilitation Officer were assigned within the water operations branch. Response personnel implemented the correct actions to limit exposure to themselves, through the use of PPE and distance. Additionally, water safety gear was worn by anyone within 10’ of the river bank. An initial safety brief was held prior to any teams entering the water and then held periodically via radio. Booms were laid across the river to minimize environmental impact. Hazard zones were clearly identified by cones. Rescued victims were promptly decontaminated on a dock mat to collect wastes and prevent runoff.

Points Not Met: The evaluator noted all points met.

Points Not Applicable: The evaluator listed all points of review as applicable.
Corrective Action Recommendations: There are no corrective action recommendations for this objective.

Objective #8: Population Protective Actions. Demonstrate the ability to identify and implement appropriate protective actions based upon the projected risks posed to the public.

- Points of Review Available: 9
- Needed to Meet Objective: 5
- Number Met: 6
- Number Not Met: 2 (#2, #5)
- Number Not Applicable: 1 (#7)

Because this was a facility release, the identification of the product and protective actions were quickly known, as facility representatives and subject matter experts were readily available. A 5-mile shelter-in-place radius was determined. Evacuation of those within 1,000’ of the release triggered the activation of the American Red Cross to manage sheltering needs. By creating the PIO early on, there were good and timely notifications to the public of the situation. Protective action instructions were shared via mass notification systems and through press releases. Additionally, a hot line was established and law enforcement were tasked with going door-to-door to ensure notifications were made. Air monitors and river observations were utilized to reassess the situation. The shelter-in-place recommendation was lifted as soon as the threat was no longer eminent.

- Points Not Met: IC and Enterprise Products determined a 5-mile radius shelter-in-place area. When directly asked, no one took responsibility for not could justify the action. Due to these actions point of review #2 was deemed unmet. Due to the large radius, many schools, long-term care facilities, and functional and access needs citizens were impacted but not planned for making point of review #3 unmet.

- Points Not Applicable: Due to the planned termination of exercise play occurring before residents were returned home, the return of evacuees and opening of closed roads were not discussed within the incident Command Post (point of review #7).

Corrective Action Recommendations: Consider a refresher course on haz mat assessments.

Objective #11: Shelter Management. Demonstrate the adequacy of procedures, facilities, equipment, and services to provide for the anticipated protective action and sheltering needs of evacuees.

- Points of Review Available: 11
- Needed to Meet Objective: 6
- Number Met: 11
- Number Not Met: 0
- Number Not Applicable: 0

A single shelter was opened by the American Red Cross (ARC) after an evaluation was recommended by unified command. A back up location was also identified. ARC staff were plentiful and handling security in and around the shelter. There was a plan in place to notify the Butler County Sheriff’s office for assistance when staff was overwhelmed or if a threat was present. Potentially contaminated evacuees were screened and held for possible decontamination based on the recommendation of unified command. Should decontamination need to be initiated, shelter staff would rely on a trained team to perform these tasks. Communication was free-flowing between the command post and shelter.
Points Not Met: The evaluator noted all points met.

Points Not Applicable: The evaluator listed all points of review as applicable.

Corrective Action Recommendations: There are no corrective action recommendations for this objective.

**Objective #12: Emergency Medical Services.** Demonstrate the adequacy of procedures, facilities, and equipment to handle, treat, and transport victims involved in a hazardous materials incident.

<table>
<thead>
<tr>
<th>Points of Review Available:</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needed to Meet Objective:</td>
<td>6</td>
</tr>
<tr>
<td>Number Met:</td>
<td>9</td>
</tr>
<tr>
<td>Number Not Met:</td>
<td>0</td>
</tr>
<tr>
<td>Number Not Applicable:</td>
<td>1 (10%)</td>
</tr>
</tbody>
</table>

Arriving EMS units staged themselves away from the boat ramp and decon area awaiting patient retrieval from the water. A Medical Officer was stationed within the Unified Command Post who coordinated with on-site EMS. The Medical Officer conducted documentation of key information and shared them with the command post during briefings. Water rescued patients were quickly decontaminated with soap and water prior to simulated transport to McCullough Hyde Memorial Hospital. Transport was simulated and a second squad was staged in close proximity to the hospital due to the time constraints of transportation in regard to exercise plan. Due to this artificiality, a discussion was held regarding the actions EMS personnel would take to ensure their rig and equipment were free of contamination prior to returning to service.

Points Not Met: The evaluator noted triage was not completed nor discussed.

Points Not Applicable: Due to the staggered retrieval of patients, triage was not necessary, therefore point of review #3 did not apply to this scenario.

Corrective Action Recommendations: There are no corrective action recommendations for this objective.

**Objective #13: Hospital Services.** Demonstrate the adequacy of procedures, facilities, and equipment to receive and treat victims involved in a hazardous materials incident.

<table>
<thead>
<tr>
<th>Points of Review Available:</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needed to Meet Objective:</td>
<td>5</td>
</tr>
<tr>
<td>Number Met:</td>
<td>8</td>
</tr>
<tr>
<td>Number Not Met:</td>
<td>0</td>
</tr>
<tr>
<td>Number Not Applicable:</td>
<td>0</td>
</tr>
</tbody>
</table>

Hospital exercise players received a call at 8:33 am and were due to prepare for victims from a haz mat incident on the river near Hamilton. Oxford Fire notified McCullough Hyde Memorial Hospital of the incident and chemical involved on 09 TAC 13. At this point the hospital staff implemented its emergency action plan in a chemical incident, made the appropriate overhead announcement and deployed their decon tent. Patients were received and taken to the decon room and CMTs were given self decon kits and directed to use them in the tent. Waste water bladders were deployed to contain all run-off in the tent. All disposable items were held for removal by an approved contractor. Registration clerks were assigned the task of documenting actions taken and resources used. A safety officer recorded vitals and monitored status of staff in decon suites, rotating staff every 20 minutes. The use of the hospital incident hazardous materials checklist and procedure manual were observed.
Points Not Met: The evaluator noted all points met.

Points Not Applicable: The evaluator notes all points to be applicable

Corrective Action Recommendations: There are no corrective actions for this objective.

Additional Recommendations: Many evaluators noted that the 5-mile shelter-in-place radius was excessive and unjustified. It is advised to do a better assessment of possible impacts before ordering a wide-sweeping protective action recommendation. The full ramifications of issuing a significantly larger than needed protective action may not have been entirely realized during exercise play.

Criticite Findings: A formal critique was conducted immediately following the exercise. The participants shared lessons they learned from this exercise and the evaluators reviewed the evaluations sheets with the group. Below is a summary of the exercise after action critique. The SEER Facilitator is available at your convenience to review each comment provided.

- It was observed that Unified Command personnel were doing the tasks of the Operations Section Chief. Command should think more strategically to allow for the tactics to be handled by the Ops Chief.
- Unified command made a great decision to make the second command post a branch under the Operations Chief.
- Establish a cost documentation unit early in the response.
- Consider incorporating the communications center into play. They will be your backbone to the operation.
- All involved did a really nice job responding to a new hazard.
- The hospital needs a policy or procedure to incorporate oxygen monitoring into the pre-decontamination assessment of patients.
- The use of command vests would be beneficial in the hospital response system—minimally identify who is in charge.
- The private/public split observed early on in exercise play came together through the ICS system
- Water Operations had no idea the number of boats on the river. Consider adding a division supervisor or task unit leader to the command structure.
- Enterprise Products resources took a lead off the first responders.
- A lot of law enforcement jurisdictions came together and it went well.
- Different standards for high operations surfaced between responders and industry. The group worked well to come to a consensus and formulate a plan.
- Moving into unified command helped response tremendously.

This report is respectfully submitted by,

[Signature]

Amita M. Steinbach
SEER Exercise Facilitator
(614) 753-7585
Objective 2 – Incident Assessment

**POINTS OF REVIEW (Incident Assessment)**

1. Did rescue personnel actively approach the incident scene?
   - Yes ☑
   - No ☐
   - N/A ☐
   
2. Were proper procedures taken to safely gather information about the material involved before proceeding to control and begin response operations?
   - Yes ☑
   - No ☐
   - N/A ☐

   Explain: [MSDS] after they deployed resources.

3. Did personnel check proper location for public notification to share incident information about the hazards involved?
   - Yes ☑
   - No ☐
   - N/A ☐
   
   Explain: [MSDS] sheet.

4. Did personnel identify potential movements and actions posed by the incident material on site and off site?
   - Yes ☑
   - No ☐
   - N/A ☐

5. Did personnel use the correct standard operating procedures to be taken?
   - Yes ☑
   - No ☐
   - N/A ☐

   Explain: [Map Area at release].

6. Did personnel use the appropriate protective clothing for the public and rescue personnel?
   - Yes ☑
   - No ☐
   - N/A ☐
   
   Explain: [Clothing].

7. During decontamination, were decontaminants used properly?
   - Yes ☑
   - No ☐
   - N/A ☐
   
   Explain: [Decontaminants].

8. Was there any significant information that was not conveyed to the response personnel, and support groups?
   - Yes ☑
   - No ☐
   - N/A ☐

   Explain: [Unknown].

Date: 9-22-18

Explained by: [Signature]

[Date]
### POINTS OF REVIEW (Incident Assessment)

1. **Were proper warning systems used to continuously assess and monitor the incident?**
   - Yes [ ]
   - No [ ]
   - N/A [ ]

   

2. **Were emergency transportation plans reviewed and updated in a timely manner to other response personnel and support groups?**
   - Yes [ ]
   - No [ ]
   - N/A [ ]

   

3. **Were the actions taken based on existing plans and new open data processes?**
   - Yes [ ]
   - No [ ]
   - N/A [ ]

   

---

**Recommends**

- Establish earlier, site-specific assessment of possible impacts before ordering wildlife.

- Enhance communication between incident command team and incident control center during clearing.

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_Butler County Local Emergency Planning Committee_  

**December 2018**
Objective 3 – Incident Command

Given the objective to review the Incident Command System and effectiveness during large-scale exercises, the following points of review are highlighted:

1. **Was an Incident Command System (ICS) established?**
   - Yes
   - No
   - N/A

2. **Who was in charge of the Incident Command Post?**
   - [Insert Name]

3. **Were all required positions filled within the Incident Command System?**
   - Yes
   - No
   - N/A

4. **How were resources and information managed?**
   - [Insert Description]

5. **Was the Incident Command Post staffed with adequate personnel?**
   - Yes
   - No
   - N/A

6. **Did the Incident Command Post have a clear chain of command?**
   - Yes
   - No
   - N/A

7. **Was the Incident Command Post effective in coordinating resources?**
   - Yes
   - No
   - N/A

8. **Were all required personnel in the Incident Command System?**
   - Yes
   - No
   - N/A

Date: [Insert Date]

December 2018
POINTS OF REVIEW (Incident Command)

9. Were records kept to document the response activity taken?
   - Some records were kept (briefing notes, objectives) but cost documentation was lacking.
   - Yes ☑ No ☐ N/A ☐

10. Were errors made based on existing plans while operating incident?
    - Some errors were made. A 5-mile shelter-in-place order was given to the public and I don't see any justification for such an order.

-- The IC personnel were doing the Operations Section Chief's job. IC should think mostly strategically and Operations Section Chief should deal with operations. IC does all hands under this should speak through Operations Chief.
-- Operations Section should have communicated via ARS, EMS IC & IC regarding shelter status.
-- IC made the "second IC" a branch under the Operations Section - GOOD JOB!!

-- Establish a cost documentation unit early.
-- Communications were really good a few minutes into the incident & ongoing.
Objective 6 – Communications

POINTS OF REVIEW (Communications)

1. Were representative and support organization able to effectively communicate with each other? [ ] Yes [ ] No [ ] N/A

2. Were support organizations able to communicate with media? [ ] Yes [ ] No [ ] N/A

3. Were key personnel (e.g. Mayor, Governor) able to communicate with key officials (e.g. County Commissioners) and others? [ ] Yes [ ] No [ ] N/A

4. Did participants identify the need for the communication response, and was the appropriate action taken to address the need? [ ] Yes [ ] No [ ] N/A

5. Were communications kept up to date to reflect the latest information? [ ] Yes [ ] No [ ] N/A

6. Were the communications based on existing plans and emergency procedures? [ ] Yes [ ] No [ ] N/A

Recommemtations:

December 2018
Objective 7 – Response Personnel Safety

<table>
<thead>
<tr>
<th>Objective 7</th>
<th>RESPONSE PERSONNEL SAFETY: Demonstrate the ability to control emergency response, health and safety.</th>
</tr>
</thead>
</table>

**POINTS OF REVIEW (Response Personnel Safety):**

1. Were proper procedures followed to ensure the workers did not expose or contaminate personnel to the hazardous agent?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: Pet. oil spill and watercraft.

2. Were all workers clearly identified and provided with areas of safety?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: The marked sides at both dock designated by.

3. Were hazardous areas clearly defined and workers compensated to ensure they were wearing appropriate personal protective equipment (PPE)?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: The dock area designated, decontaminate areas, accumulated hazards, and located the true water areas.

4. Was an appropriate level of PPE available to personnel who were properly trained to use the equipment?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: Water safety gear.

5. Were personnel so include patients, who did receive adequate briefing as the hazards, PPE requirements, and expected response actions?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: Briefed and provided with initial safety briefing.

6. Were proper respirators followed a safe system to minimize the released radiates activity?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: Team approach used to bring boats across.

7. Was adequate medical monitoring provided for the exposed workers personnel involved in the operations to minimize any potential impact?
   - Yes [ ] No [ ] N/A [ ]
   - Problem: Medical personnel and decontamination process.

December 2000
<table>
<thead>
<tr>
<th>POINTS OF REVIEW</th>
<th>(Response Personnel Safety)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Were adequate resources identified and readily available to support response personnel?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. Numerous personnel were available to assist.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Are procedures to account for lost and sick response personnel adequate?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. Filing reporting board used to track personnel and an AS for sick personnel.</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Was an effective means of communication available between the TC, Safety Officer, decontamination personnel, and units personnel to safely conduct operations?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. Communication CI site to T/CF was effective.</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Were effective processes used to decontaminate personnel and/or equipment?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. Given hazardous, there was no need for personnel to be decontaminated.</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Was contaminated waste controlled and properly disposed of for safe disposal?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. Waste was not used for water use in personal or operations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Were events key to document the key response operations?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. Procurement, dispatch, and CIC maintained records.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>14. What is unique to the event or unique plan needs during procedure?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain. In the event of a CIC.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Documentation: Really full job responding to a real incident in the field, I think.</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objective 8 – Population Protective Actions

<table>
<thead>
<tr>
<th>County</th>
<th>B.O.M.</th>
<th>Date</th>
<th>11/20/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>B.O.M.</td>
<td>Date</td>
<td>11/20/18</td>
</tr>
<tr>
<td>County</td>
<td>B.O.M.</td>
<td>Date</td>
<td>11/20/18</td>
</tr>
</tbody>
</table>

**OBJECTIVE 8** POPULATION PROTECTIVE ACTIONS: Describes an ability to identify and implement population protective actions based upon threat risks faced by the public.

**POINTS OF REVIEW** (Population Protective Actions)

1. Did a clear, detailed and concise, geographical area could be stated?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

2. Was an appropriate protective action defined and then timely made, based on the risks developed and the threat risks expected?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

3. When protective action decisions were made and communicated to the public and the public provided feedback?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

4. Were effective and efficient methods used to prepare and implement the protective actions?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

5. Did protective actions result in any injuries and were public health needs addressed?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

6. Were protective actions followed a communication plan and were the actions consistent with the emergency management program?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

7. Was the process of identifying outcomes that became effective, and were issues between the command, staff, managers, and the people resolved?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

Dec 2018

2018 BUTLER COUNTY LOCAL EMERGENCY PLANNING COMMITTEE
2018 BUTLER COUNTY FULL-SCALE AFTER ACTION REPORT


date: 1/18

December 2/66

BUTLER COUNTY LOCAL EMERGENCY PLANNING COMMITTEE

C-17
Objective 11 – Shelter Management

<table>
<thead>
<tr>
<th>Points of Review (Shelter Management)</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Were an adequate number of shelter workers on duty in emergency centers in order to care for the number of evacuees involved?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Were procedures in place to use these centers capacity when expanded or in areas not to be damaged?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Were there sufficient staff and support measures at the shelter to support operations?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Did the shelter provide all communications with inside and outside support agencies?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Was security effective in the shelter and enough were sheltered?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Was information about the health and injury and treated by the released materials absorbed, shelter operations and evacuees among the injured?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Were emergency personnel properly equipped and trained, and given medical assistance (if needed)?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

December 2018
POINTS OF REVIEW (Shelter Management)

8. Was information about the incident status updated and shared with shelter operators and evacuees in the shelter?

   Yes  No  N/A

   Explain __________________________

9. Did personnel ensure the shelters were set up to operate before the sites were opened and not in normal operations?

   Yes  No  N/A

   Explain __________________________

10. Were procedures to document responses a highlighted and utilized as?

    Yes  No  N/A

    Explain __________________________

11. Were actions taken in support of entry plans and/or operating procedures?

    Yes  No  N/A

    Explain __________________________

Recommendations __________________________

______________________________

______________________________

______________________________

______________________________

______________________________

______________________________

December 2018
Objective 12 – Emergency Medical Services

**POINTS OF REVIEW (Emergency Medical Services)**

1. Were proper procedures implemented by EMS personnel to safely transport the sick?
   - [ ] Yes
   - [ ] No
   - [x] N/A

   Location: Designed to be in place but not used until...

2. Were strenuous efforts made to contact and shift resources with...
   - [ ] Yes
   - [ ] No
   - [x] N/A

3. Were the local health officials and the emergency operations center made aware of the patient identified by responders?
   - [ ] Yes
   - [x] No
   - [ ] N/A

   Local Health District 

4. Were supplies and equipment identified and delivered to support field operations?
   - [ ] Yes
   - [x] No
   - [ ] N/A

   Supplies delivered to field initially...

5. Were telephones programmed correctly and used as the communications device?
   - [ ] Yes
   - [ ] No
   - [x] N/A

   Field staff, including hospital...

6. Were patient databases shared and patient receiving sites given timely arrival times?
   - [ ] Yes
   - [ ] No
   - [ ] N/A

   Patients' medical history used to direct initial care...

   Local Health District processed the information and directed

   Hospital...

   EMS utilized the information and directed...
<table>
<thead>
<tr>
<th>POINTS OF REVIEW</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were emergency medical personnel and equipment functional for designated role(s) prior to receiving assignment and responding to event?</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Explain what procedures were done during transport.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Were medical staff adequately prepared for the event?</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Explain.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Were medical personnel dessignated lead re unreported cases?</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Were the procedures established during training and/or exercises adhered to?</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Explain</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Recommendation: All EMS should conduct a review of their procedures for preparedness.

December 2008
Objective 13 – Hospital Services

OBJECTIVE 13
HOSPITAL SERVICES: You may substitute procedures, policies, and equipment to receive and treat victims when there is an shortage of materials initially.

POINTS OF REVIEW (Hospital Services)

1. Were adequate personnel allocated to coordinate patient arrival? Yes No N/A

2. Arriving patients and/or injuries were assessed, handled, and treated based on priority and urgency rating level? Yes No N/A

3. Were security measures in place to control access to the medical treatment, and other potentially contaminated areas? Yes No N/A

4. Were procedures followed to supply a non-disposable "sterile" environment? Yes No N/A

5. Was medical care rendered to the incident Command Post and "AD Rescue"? Yes No N/A

6. Were records kept documenting casualties and evaluations? Yes No N/A

December 2018
POINT OF REVIEW (Hospital Services)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were the actions taken based on existing plans and/or operational procedures?</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommendations

Next Steps to Polish: 
- Improve signage and labeling
- Develop a comprehensive drill

Expiration: This date is invalid
## Appendix D – Feedback Summary

<table>
<thead>
<tr>
<th>Stream</th>
<th>Comment</th>
<th>Recommendations</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC1</td>
<td>Initially, private/public resources were working independently. Eventually, a true Unified Command was established. The Unified Command worked collaboratively and co-located with Enterprise Products</td>
<td></td>
<td>HW</td>
</tr>
<tr>
<td>IC2</td>
<td>A Situational Unit Leader would have been helpful to create maps. Additionally, the Unified Command should consider the activation of a mini IMT.</td>
<td>The Unified Command should consider renumbering/renaming boats to decrease confusion. The Unified Command should also consider the use of a dispatcher/Resources Unit Leader to track resources.</td>
<td>HW</td>
</tr>
<tr>
<td>IC3</td>
<td>The Operations Section was unaware of which boats were on the water and supporting the incident.</td>
<td></td>
<td>HW</td>
</tr>
<tr>
<td>IC4</td>
<td>The organizational structure at the incident scene was outside of the span of control and suffered from ineffective communications.</td>
<td>The Incident Command Post should consider the use of a Division Supervisor or Task Force Leader to provide command &amp; control of tactical resources and provide information back to the Incident Command Post.</td>
<td>HW</td>
</tr>
<tr>
<td>IC5</td>
<td>Planning Section within the Unified Command encouraged the UC to utilize the Planning P to encourage a battle rhythm</td>
<td></td>
<td>HW</td>
</tr>
<tr>
<td>IC6</td>
<td>Planning Section - Mass resources/no organization</td>
<td></td>
<td>HW</td>
</tr>
<tr>
<td>IC7</td>
<td>Planning Section - Establish structure to look ahead - Long-term planning</td>
<td></td>
<td>HW</td>
</tr>
<tr>
<td>IC8</td>
<td>Planning Section - Develop a request process</td>
<td></td>
<td>HW</td>
</tr>
<tr>
<td>IC9</td>
<td>Planning Section - Command Element was not aware of what responsibilities available</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC10</td>
<td>IC – IC was overwhelmed until UC was established</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC11</td>
<td>SOFR – Better documentation was needed to support and justify why/how decisions were made – Shelter-in-place orders</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC12</td>
<td>IC/UC came together during the exercise</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC13</td>
<td>ICP did not monitor weather close enough</td>
<td>Consider assigning a SITL</td>
<td></td>
</tr>
<tr>
<td>IC14</td>
<td>IC needs to stay in lanes, was doing the job of OSC</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC15</td>
<td>IC decided to include 2nd ICP personnel (LOFR) in exercise ICP once it was established</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC16</td>
<td>Utilizing a scribe would be beneficial for ICP; assign scribe sooner</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC17</td>
<td>Multiple SOFRs were utilized</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC18</td>
<td>Good coordination between public and private sector</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC19</td>
<td>Once extraneous population protective actions were identified, the warnings were lifted in a timely manner</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC20</td>
<td>PIO – Social Media and press releases were coordinated within the ICP and distributed via existing channels (BCEMA social media, press releases, reverse 911)</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC21</td>
<td>IC needs to wear vests sooner</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC22</td>
<td>IC – pass off radio/cell phone prior to briefings</td>
<td>HW</td>
<td></td>
</tr>
<tr>
<td>IC23</td>
<td>Civil Air Patrol provided aerial reconnaissance of the incident but was unable to communicate with the incident command post directly.</td>
<td>Civil Air Patrol needs to be written into the EOP and identify methods of communications.</td>
<td></td>
</tr>
<tr>
<td>IC24</td>
<td>Resources in the ICP cooperated well and possessed technical knowledge</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC25</td>
<td>The rapid development of ICS, including developing an initial unified command, would have improved the ICPs ability to manage the incident effectively</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC26</td>
<td>ICP radio communications were calm &amp; relevant</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC27</td>
<td>Incident Commander dealt with many issues which could have been better handled by the Operations Section Chief</td>
<td>IC should delegate all operational activities to the Operations Section Chief and maintain focus on command responsibilities</td>
<td></td>
</tr>
<tr>
<td>IC28</td>
<td>First Responders and facility owner worked well together</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC29</td>
<td>ICP should monitor weather</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC30</td>
<td>Logistics did an excellent job with planning for everything needed to respond to the incident</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC31</td>
<td>Incident Commander engaged private sector resources prior to establishing Unified Command</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC32</td>
<td>Accountability of resources at the ICP was less accurate than accountability on scene</td>
<td>FF</td>
<td></td>
</tr>
<tr>
<td>IC33</td>
<td>IC and Enterprise Products determined a 5-mile radius shelter-in-place area. When directly asked, no one took responsibility for nor could justify the action. Due to these actions point of review #2 was deemed unmet. Due to the large radius, many schools, long-term care facilities, and functional and access needs citizens were impacted but not planned for making a point of review #5 unmet.</td>
<td>Consider a refresher course on HazMat assessments</td>
<td></td>
</tr>
<tr>
<td>IC33</td>
<td>Unified Command made a great decision to make the second command post a branch under the Operations Chief.</td>
<td>SERC</td>
<td></td>
</tr>
<tr>
<td>IC34</td>
<td>Cost Documentation was not established early in the response</td>
<td>Establish a cost documentation unit early in the response</td>
<td>SERC</td>
</tr>
<tr>
<td>IC35</td>
<td>The private/public split observed early on in exercise play came together through the ICS system.</td>
<td>SERC</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>IC36</td>
<td>Different standards for night operations surfaced between responders and industry. The group worked well to come to a consensus and formulate a plan.</td>
<td>SERC</td>
<td></td>
</tr>
<tr>
<td>IC37</td>
<td>Communications went well.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC38</td>
<td>Fire and Clean Harbors Radio were represented with radio and Enterprise utilized cellular phones.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC39</td>
<td>There were no clear guidelines from operations or safety on what they should be reporting on or how often.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC40</td>
<td>There were some issues with the simulated calls on day one of the exercise and the non-simulated ones on day 2.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC41</td>
<td>There was a lot of communications happening with the operations section.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC42</td>
<td>Personnel approached the site on foot to assess the work to be performed.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC43</td>
<td>There was no petroleum hazard considered.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC44</td>
<td>Those near the river were in PFDs.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC45</td>
<td>At one point they were stretching boom on shore with a rope and the concern echoed from all was stay clear in case rope was to break (safety concern first)</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC46</td>
<td>Worksite was inspected prior to activities happening</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC47</td>
<td>Proper signage was in place</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC48</td>
<td>Underflow dam was built adequately to the scale of drill</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>IC49</td>
<td>Some problems with the deployment of the boom, but was eventually accomplished.</td>
<td>ER</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>IC50</td>
<td>Roles were assigned to staff and were executed</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC51</td>
<td>Contractors were available on scene fifty (50) minutes after dispatch</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC52</td>
<td>Communication declined as Enterprise Products staff pushed further into ICS roles</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC53</td>
<td>Point of contact for each site was not established during the drill</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC54</td>
<td>Not all ICS forms were not readily available</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC55</td>
<td>The contractor did not know how to build an underflow dam</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC56</td>
<td>Boom deployment was difficult</td>
<td>EP</td>
<td></td>
</tr>
<tr>
<td>IC57</td>
<td>Aerial reconnaissance operations assisted in developing situational awareness</td>
<td>EP</td>
<td></td>
</tr>
</tbody>
</table>

**HazMat / Water Rescue Observations**

<table>
<thead>
<tr>
<th>HW1</th>
<th>The differences between standards with private and public HazMat units presented challenges in collaboration and patience in working through differences in standards.</th>
<th>HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW2</td>
<td>The Ohio River Incident Action Plan establishes the first 24 hours of response.</td>
<td>HW</td>
</tr>
<tr>
<td>HW3</td>
<td>Contractor boom blocked ramp 2</td>
<td>HW</td>
</tr>
<tr>
<td>HW4</td>
<td>Parking near ramp #2 was crowded and would have prevented effective ingress/egress</td>
<td>HW</td>
</tr>
<tr>
<td>HW5</td>
<td>Middletown HazMat personnel were able to research the product, identify river flow rate and predict the arrival of the product</td>
<td>HW</td>
</tr>
<tr>
<td>HW6</td>
<td>Plenty of boats; plenty of gear</td>
<td>FF</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>HW7</td>
<td>Accountability was performed well by first responders at the ramp</td>
<td>FF</td>
</tr>
<tr>
<td>HW8</td>
<td>Boom deployment by contractors was delayed due to issues with boom placement</td>
<td>Additional training regarding the placement of hard boom on rivers</td>
</tr>
<tr>
<td>HW9</td>
<td>Communications between HazMat Branch and HazMat 81 were very good</td>
<td>FF</td>
</tr>
<tr>
<td>HW10</td>
<td>Teams performed well and were able to communicate well with multiple resources from several jurisdictions</td>
<td>FF</td>
</tr>
<tr>
<td>HW11</td>
<td>Communications between environmental contractors and public safety crews presented challenges</td>
<td>The Butler County HazMat Co-Operative should engage local environmental contractors and develop training opportunities and plans to coordinate response</td>
</tr>
<tr>
<td>HW12</td>
<td>Additional personnel were needed to relay information back to the ICP</td>
<td>Consider adding Forward Observers to any plans relating to large-scale hazardous materials releases</td>
</tr>
<tr>
<td>HW13</td>
<td>Individual group assignments were clear and concise</td>
<td>FF</td>
</tr>
<tr>
<td>HW14</td>
<td>Water operations had did not know the number of vessels on the river.</td>
<td>Consider adding a Task Force Leader or Division/Group Supervisor to supervise large divisions/groups</td>
</tr>
<tr>
<td>HW15</td>
<td>Resources assigned to HazMat/Water operations were operating outside the span of control</td>
<td>Consider adding a Task Force Leader or Division/Group Supervisor to supervise large divisions/groups</td>
</tr>
<tr>
<td>HW16</td>
<td>Clean Harbors was comfortable with their own equipment – did not utilize HazMat trailer/additional resources</td>
<td>Consider encouraging joint training to allow private companies to become familiar with existing resources, including the Ohio River Resource Trailer</td>
</tr>
<tr>
<td>HW17</td>
<td>Water units did not utilize GPS units</td>
<td>AAC</td>
</tr>
<tr>
<td>HW18</td>
<td>Additional air monitors were needed to accommodate water-based air monitoring</td>
<td>Attempt to secure grant funding to provide additional air monitors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>HW19</td>
<td>Additional Water Rescue Techs could be used to assist in the management of the pipeline release</td>
<td></td>
</tr>
<tr>
<td>HW20</td>
<td>Some documentation of how/why decisions were made was not captured</td>
<td>Assign scribes at multiple locations during the early part of the incident to force communication between sections and document decisions</td>
</tr>
<tr>
<td>HW21</td>
<td>HazMat 81 established communications with Clean Harbors during the incident</td>
<td></td>
</tr>
</tbody>
</table>

**Mass Care Observations**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MC1</td>
<td>Command needs to coordinate with opened mass care shelters and share information regarding the incident</td>
<td>ICP needs to utilize Mass Care Liaison to ensure that information is shared between the ICP and any opened shelter</td>
</tr>
<tr>
<td>MC2</td>
<td>Information was not readily shared between the ICP and the ARC Shelter</td>
<td>Send ARC leadership to ICP early to serve as LOFR; Identify integral team members/contacts prior to the incident to help facilitate communication during an incident</td>
</tr>
</tbody>
</table>

**Hospital Observations**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Issue with radio turned down</td>
</tr>
<tr>
<td>H2</td>
<td>Set up HM Decon Tent</td>
</tr>
<tr>
<td>H3</td>
<td>Crews dressed in PAPRS</td>
</tr>
<tr>
<td>H4</td>
<td>Hospital needs to implement protocols for establishing decontamination tent</td>
</tr>
<tr>
<td>H5</td>
<td>Staff donned/doffed ppe well</td>
</tr>
<tr>
<td>H6</td>
<td>Staff from outside the ED responded to the emergency well and called in additional staff for assistance</td>
</tr>
<tr>
<td>H7</td>
<td>New hires need education in policies/procedures</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>H8</td>
<td>Need room checklist for necessary equipment</td>
</tr>
<tr>
<td>H9</td>
<td>Need to add to policy to do oxygen therapy prior to decontamination</td>
</tr>
<tr>
<td></td>
<td>Oxygen therapy policy needs to be written into policy</td>
</tr>
<tr>
<td>H10</td>
<td>New equipment allowed for better response to the simulated incident</td>
</tr>
<tr>
<td>H11</td>
<td>Maintenance staff established the tent</td>
</tr>
<tr>
<td>H12</td>
<td>Room set up well with adequate supplies</td>
</tr>
<tr>
<td></td>
<td>Signs in different languages; keep cold packs frozen</td>
</tr>
<tr>
<td>H13</td>
<td>McCullough-Hyde staff established hot/warm/cold zones effectively</td>
</tr>
<tr>
<td>H14</td>
<td>MHMH staff performed medical checks well</td>
</tr>
<tr>
<td>H15</td>
<td>There was some confusion regarding what PPE was required by which members of the Tent Team</td>
</tr>
<tr>
<td></td>
<td>Tent Team PPE requirements need to be established via policy</td>
</tr>
<tr>
<td>H16</td>
<td>Hospital staff struggled to identify the chain of command in hospital</td>
</tr>
<tr>
<td></td>
<td>Hospital decontamination staff should utilize ICS vests to help identify the chain of command</td>
</tr>
</tbody>
</table>

**EMS Observations**

| EMS1 | Need to communicate medical information during patient transport/transfer        | HW  |
| EMS2 | EMS providers were competent and professional                                    | FF  |
| EMS3 | The patient simulation was very helpful, and feedback was appreciated            | FF  |
| EMS4 | Communications with EMS personnel was not clear between boat crews, shore crews, and command | FF  |
|      | Consider adding a Task Force Leader or Division/Group Supervisor to supervise large divisions/groups |     |

**Exercise Design Observations**

<p>| Ex1  | Exercise plan was well developed                                               | FF  |</p>
<table>
<thead>
<tr>
<th>Ex</th>
<th>Exercise control staff and players dealt with unplanned debris and boat traffic well</th>
<th>FF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex 3</td>
<td>Too many moving parts</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 4</td>
<td>Great idea, several agencies involved</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 5</td>
<td>The vast majority of equipment present to test, evaluate and review</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 6</td>
<td>The SimCell was able to modify the MSEL and exercise timeline effectively as needed.</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 7</td>
<td>Miscommunication regarding the death of EMS patient caused issues with the ICP</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 8</td>
<td>Develop feedback loops to prevent this from happening</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 9</td>
<td>CERT members could have used additional time to identify travel routes prior to exercise start</td>
<td>FF</td>
</tr>
<tr>
<td>Ex 10</td>
<td>Develop a procedure for processing Continuing Education Units prior to exercise conduct</td>
<td>AAC</td>
</tr>
<tr>
<td>Ex 11</td>
<td>The process for issuing Continuing Education Units for participating responders experienced some issues and resulted in delays in processing and delivering certificates</td>
<td>FF</td>
</tr>
</tbody>
</table>

### General Observations

<table>
<thead>
<tr>
<th>G1</th>
<th>Several jurisdictions worked together</th>
<th>HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2</td>
<td>Civil Air Patrol provided aerial reconnaissance of the incident but was unable to communicate with the incident command post directly.</td>
<td>HW</td>
</tr>
<tr>
<td>G3</td>
<td>Resources were well trained.</td>
<td>FF</td>
</tr>
<tr>
<td>G4</td>
<td>Good communications.</td>
<td>FF</td>
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<tr>
<td><strong>G5</strong></td>
<td>All players utilized proper PPE for exercise</td>
<td>FF</td>
</tr>
<tr>
<td><strong>G6</strong></td>
<td>Private sector players initially freelanced and did not coordinate with the authority having jurisdiction</td>
<td>Liaison Officers between private and public resources may alleviate some of the issues related to freelancing</td>
</tr>
<tr>
<td><strong>G7</strong></td>
<td>All involved did a really nice job responding to a new hazard</td>
<td>SERC</td>
</tr>
</tbody>
</table>