Mid-Michigan Floods

EPA Response Overview R5 RRT Meeting 10/21/20





Primary EPA Tasks

- Mobilized (V)IMT
- Completed threat assessments
- Conducted facility outreach
- Coordinated with Dow
- Completed pre-deployment planning
- Coordinated with Stakeholder Agencies
- Completed orderly stand down, while maintaining readiness
- Conducted After Action Review



Photo : Debris staged post-flood in Southeast Michigan (Source: <u>https://www.ourmidland.com/news/article/Midland-</u> monitoring-potential-for-more-rainfall-15290534.php)



R5 Virtual Incident Management Team Mobilized

- Activated Region 5's Incident Management Team
- Filled all Command and General Staff positions and many Unit Leader positions
- Initiated Response Planning



Photo. Debris Collection – Midland (Midland Daily News).





Established Incident Objectives

- 1. Maintain and share situational awareness with R5 management
- 2. Coordinate w/ State, local, and tribal and other Federal entities
- 3. Assess/monitor potential impact on EPA-regulated facilities and cleanup sites
- 4. Provide technical assistance to State and local agencies as requested
- 5. Initiate preservation and control of all response related documentation
- 6. Initiate incident-specific data management/GIS for common operating picture
- 7. Continue pre-planning response in anticipation of potential mission assignment, across all KLPs, ensuring safety of citizens and responders and prioritize control of Covid-19 exposure
- 8. Establish and implement EPA/EGLE coordination protocol for Dow chemical



Implemented ICS Process for Response Planning

- While IMT was activated for approx. 2 weeks, EPA:
 - Completed 4 virtual planning cycles
 - Published 4 incident action plans
 - Issued 10 situation reports







7 hidden channels





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General

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EPA Geospatial Commun...

3.2 Situation Unit Leader KLP

3.2.1 Data Management

3.2.2 GIS

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- 3.3 Environmental Unit Leader KLP
- 3.4 Documentation Unit

4.0 Logistics Section Chief KLP

5.0 Finance Section Chief KLP



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10/20/2020



Completed Threat Assessments

- Evaluated impacts to vulnerable areas downstream including water intakes, superfund sites, and nuclear, chemical and oil storage facilities
- Assessed where flooding may have inundated regulated facilities / infrastructure
- Compiled a list of facilities, contact numbers
- Set up:
 - Viewer
 - Survey
- Contacted facilities and completed survey with them
- Continued to monitor new areas of potential inundation and newly identified facilities

Survey123 for ArcGIS



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Facility Information

\bigtriangledown Facility Assessment Information

Facility Status *

- Facility Unassessed
- Facility Assessed (No Further Action)
- Facility Assessed (Issues Identified)

Has there been a hazardous material/oil release? *

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Is follow-up at this facility needed due to this event? *
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Is follow-up at this facility needed due to other reasons unrelated to the event? * If yes, please provide an explanation in the assessment comments portion of this form.

Assessment Comments

OSCs completed facility surveys and determined whether follow up needed, no follow up needed, no contact made þ

5/27/2020

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Unknown

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No

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Coordinated with Dow

- Flooded area included Dow Chemical and Nuclear Facilities and 46 mi Long Superfund Site
- Multi- agency follow up team established, and met daily to evaluate impacts and plan next steps



Photo : Drone footage from MSP of flooding in Dow Facility Area





<u>Completed Pre-deployment Planning for Field</u> <u>Deployment</u>

- In initial discussions, State and local agencies indicated that they would like assistance with HHW and orphan container collection, debris management, and public outreach.
- The IMT developed a field vs. virtual deployment strategy, and completed initial operations planning to support the field based personnel
- For orphan container and HHW collection mission, EPA proposed field deployment of:
 - OPS
 - SO
 - LOGS
- Field deployment subject to Covid-19 analysis



Established Field Deployment Objectives

- A) Ensure safety of citizens and responders and prioritize control of Covid-19 exposure
- B) Assess river and floodplain areas to evaluate and map impact of oil/hazardous substances
- C) Initiate containment and recovery of discharges of oil and hazardous substances
- D) Collect, stage and properly dispose of HHW and orphan drums/containers
- E) Conduct air and water monitoring/sampling as needed
- F) Consult with NRDA Trustees as appropriate
- G) Provide information to public, media and governmental officials in operational areas
- H) Evaluate potential for impact to historical or archaeological sensitive sites











Coordinated with Stakeholder Agencies

- Met regularly with stakeholder agencies to coordinate actions and update the team
 - MI EGLE
 - Michigan State Police
 - USCG
 - US FWS
 - FEMA
 - Environment Canada
- State was lead in coordination with local agencies
- Established external partner MS Teams Site



USCG Overflight Photo.



Coordinated with Stakeholder Agencies

- Initially EPA anticipated receiving a FEMA Mission Assignment (Stafford Act – ESF 10) to assist with response, after State and local assistance requests
 - Possibly with US ACE addressing non-haz debris and EPA addressing HHW and orphan containers
- During coordination meetings, FEMA indicated that they were not going to be able to support much of the request for assistance because so much of the debris and waste was either on private land or in waterbodies/remote areas





If Seeking a Mission Assignment in the Future

 Example mission assignment agreements and lists of potential assistance tasks are available



Exa	ample EPA Taskings that have been received through the Mission
Ass	ignment Process
1.	Reconnaissance, collection segregation, staging and disposal of orphan drums, tanks,
	cylinders, and other hazardous containers, including running a pad for collection and
	disposal of materials collected.
2.	Collection, bulking, and disposal of household hazardous waste (HHW), to include white
	goods (removal of Freon), ammunition, and electronic goods ("E-Wastes recycling"), as
	appropriate. This may include curbside collection, as well as running a pad for the
	collection and disposal of materials collected.
3.	Preparation and distribution of public information for dissemination in communities to
	facilitate hazardous debris and HHW collection, as well as general information on
	potential hazards from the event (asbestos, mold, sediment, etc.).
4.	Deploy community involvement coordinators to assist residents and local
	municipalities with collection of household hazardous materials.
5.	Conduct field operations, including assessment, identification, collection, and
	disposal of hazardous wastes in support of FEMA response operations and State
	activities. These necessary actions will mitigate actual and potential threats to public
	health and safety. These response operations may include the following activities: -
	establish and Incident Command Post (ICP) to manage field operations; - if authorized,
	the collection, characterization, consolidation, temporary storage, and transportation, and
	disposal of household hazardous materials, substances, and wastes from private, not-for-
	profit, and public properties; - monitoring of potential threats to public health and safety
	during hazardous waste collection activities; - identification, collection, transport and
	disposal of easily identifiable asbestos containing materials (ACM); - operations of
	temporary storage facilities for the consolidation of orphaned containers, HHW, bulk
	materials, wastes, and ACM; - transport and disposal of HHW, hazardous materials,
	substances, wastes, and ACM to licensed treatment and disposal facilities; provide public
	arrains and community involvement support related to EPA nazardous waste collection
	activities; - data and information management; EPA will coordinate activities involving
	Contaminated materials and waste with the analogous errorts of the State, as appropriate.
	Actions may include support by any special teams and assets requested by the POSC as
	wen as special technical assets of all ESF#10 support agencies.



If Seeking a Mission Assignment in the Future

Activities that EPA will fund:

- Also note Suiter / Makris Policy
 - 2001 agreement between EPA and FEMA about funding of ESF 10 disaster response tasks

- EPA will use CERCLA funds to pay for emergency response activities related to all preexisting Superfund sites, that is, sites that have ongoing CERCLA response actions or are currently listed on the National Priorities List (NPL.)
- EPA will use Oil Spill Liability Trust Fund funds to pay for all response activities related to pre-existing Oil Pollution Act removal actions.

Activities that FEMA will fund through Stafford Act:

Clearly, these activities must be specifically requested by the State and be beyond the State's capability for a Mission Assignment and associated funding to be issued. Decisions will be made in consultation with the ESF #10 representative. Activities listed below are <u>typical</u> response actions that occur following a natural disaster.

- Staffing of pre-deployment teams (i.e., ROC, EST);
- Retrieving and disposing of orphan tanks and drums;
- Household hazardous waste program expenditures;
- Technical assistance to states;
- Pumping of water contaminated with hazardous materials or oil from basements when the problem is a widespread threat to public health;



<u>Conclusion</u>

- By early June, EPA had not received a mission assignment
- IMT stood down on 6/5/2020, but continued to maintain readiness to reactivate
- The Team conducted After Action Review, and incorporated lessons learned into continued (V)IMT development



Photo. Floods receding– Midland (Midland Daily News).



Contact

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Photo. Wixom Lake after Edenville Dam breach on Wednesday, May 20, 2020 (*Detroit Free Press*):