

Upper Mississippi River Hazardous Spills Coordination Group

April 12, 2022
Virtual Meeting Summary

Call to Order and Introductions

The meeting was called to order at 8:05 a.m. by Mike Rose. Rose described the group to new attendees and provided the context of strategic planning and our activities moving forward. Introductions of participants followed.

UMR Spill Response Plan and Resource Manual Update

Mark Ellis shared that the UMR Spill Response Plan (“Plan”) was last updated in 2014. Before conducting an update of the Plan, the group decided to undergo strategic planning. Over the winter, Ellis requested feedback from members to review and update Plan sections. Most feedback has been returned. Once all edits have been submitted, UMRBA will create a final draft and request signatures of endorsement.

Ellis then discussed the Plan review sections in more depth. Major changes suggested in the plan review include Table 1 agency roles and responsibilities, the spill notification roster, and key response planning tools.

Resource Manual updates include contact information for Lock & Dam and USACE Hydraulics staff. Tribal contacts have been added to the cultural resource section. Previously, the Manual had only state contacts. In Section B, the list of spill response, clean-up, and related resources was updated with leads from members. Boat accesses have been updated and will be added soon. In Section C, water intakes were updated based on Inland Sensitivity Atlas data. Also in this section are USFWS contacts, which now include non-refuge contact information. In Section D, terminals were updated. The commodity volume table has been updated to graphically represent shipping volume based on 2021 data. Pipeline crossings changed, UMRBA will update the pipeline crossing map accordingly. In Section E, the list of public Hazmat Teams was updated. Section F, In-situ Burn and COSTA policies, was reviewed without any suggested edits. *(Note: subsequent to the meeting, Wisconsin DNR expressed some concern over this section. The group will be engaged to discuss this topic and consider modification to address the concerns)*

Remaining sections to update include the National Pollution Discharge Elimination System (NPDES) facilities along the river. Ellis noted that the long list could be replaced by a series of hyperlinks pointing users toward data that is maintained online. He asked the group to consider their preference of a static list or hyperlinks to the various sources. Group members supported using hyperlinks. Mike Rose noted that Minnesota had trouble with different types of hyperlinks when editing the state Emergency Operations Plan. Choosing one type of hyperlink created a problem, he suggests asking an IT expert to verify the

best form of link to use. Ellis will follow up with Rose for more information. Once all edits are received, UMRBA will compile and copy edit the Plan document and update the table of contents. Sections containing sensitive information will be redacted to create the public version of the plan.

Ellis reiterated that the signatory process was a stumbling block in the last iteration and suggested coming up with an approach to streamline the process. In response to a question from Ellis about whether a physical or digital copy could be shared for signatures, the majority of participants preferred circulating a digital copy. Davis noted that in a previous signature process, UMRBA created an executive-level summary of the Plan that was helpful to brief the Administrator about the nature of the Plan and why it is being updated. He suggested that such a presentation would be helpful for everyone to move this up their chain of command. Ellis will prepare a brief executive-level presentation summary for members to use.

Mike Rose asked Ellis to talk about the process to update the plan if changes are to be made after it is complete. Ellis answered that any changes to suggest should be routed to him with the correction and update form provided in the Plan. Any changes submitted while the document is still in the signatory process would wait until after the Plan is complete and submitted to RRT5. Ellis emphasized routine updates to ensure the plan is a readily utilized document.

Answering a question from Sarah Bowman, Ellis said that UMRBA will conduct the final formatting of the Plan. He will route the final draft document for group members to review before the signatory process. In response to Ellis' question about the time needed to review the final draft document, Rose suggested one month. Other members concurred with this timeline.

National Weather Service North Central River Forecast Center Riverine Spill Response

Mike Welvaert presented on National Weather Service (NWS) support capabilities in the event of a spill or other hazmat incident. NWS is the constitutionally authorized entity responsible for providing flood forecast services. The agency creates forecasts, disseminates them, and supports them as necessary. Incident-based Decision Support Services (IDSS) is set up to help make decisions, making public safety a top priority. NWS has 122 Weather Forecast Offices and thirteen River Forecast Centers (RFC) in the US. Welvaert's office in Chanhassen, MN is responsible to support parts of nine states in the Midwest. NWS can help responders by providing weather conditions and river conditions. Weather information support responder safety, recovery efforts, and informs the further spread of spill materials. The RFC can provide an estimate of the speed of flow in a river, transport time, and any water level forecasts that could hinder cleanup or monitoring of the situation.

Benefits of involving the NWS early on in an incident include quick dissemination of information to the public through the media, including television and radio outlets. NWS can provide the weather information responders need to make decisions and keep people safe. The RFC can provide info about past and current flow conditions to help determine how quickly a spill can spread downstream. RFC also maintain calibrated hydrology models for many creeks and rivers in the area.

Stream velocity estimates can be made on the USGS National Water Information System (NWIS) website, the largest stream gauge network in the US. USGS takes routine flow measurements all year to maintain a stage-discharge relationship that is integral to forecasts. Channel velocity measurements can be found by selecting a gauge in the NWIS web map. Estimates can also be made using HEC-RAS, a computer program that models the hydraulics of water flow through a river. NWS has one such model set up for the mainstem UMR from Lock & Dam 10 at Guttenberg, IA, to Chester, IL. A HEC-RAS model

also exists for the Illinois River. Staff analyze model runs and determine a stream velocity for every cross section. Another travel time technique for hazardous spills is to use operational modeling to track where a river crest might be and the time lag between points. The RFC typically gets one or two calls per year regarding hazardous spills into waterways. Most are small spills, but some major releases have been supported by the RFC, including the July 26, 2010 pipeline release into Talmadge Creek and the Kalamazoo River in Michigan; and the February 4, 2015 spill of ethanol into the Mississippi River near Dubuque, Iowa. The 2010 release required NWS to support response and cleanup for several months.

NWS can also run HYSPLIT models to predict airborne transport by wind. NWS or local incident command can also contact NOAA Office of Response and Restoration to support response. For the UMR, contact Adam Davis of NOAA for support. Responding to a question about developing HEC-RAS models upstream of Dam 10, Welvaert said there is some modeling has been developed for the St. Croix River, but not between its confluence with the Mississippi River and Dam 10. There are rudimentary models for the reach upstream of the dam.

Adam Davis offered some additional information about NOAA support. Under the National Contingency Plan, NOAA is a special designated team mandated to support the On-Scene Commander with scientific coordination of spills. He shared his mobile number and email with the group (206-549-7759, email adam.davis@noaa.gov). As for supporting spill modeling, NOAA has oceanographic models based on coastal observations. River forecasts can be complex to observe because of understanding fate and behavior, and chemistry of oil or chemicals. For any large spill on the river, you want that type of support. NOAA is happy to work with the RFC and help responders understand not only time of travel, but fate and behavior as well. NOAA also offers CAMEO chemical support, ALOHA modeling support, and other functions. For a Scientific Support Coordinator (SSC), the coordination role is important to provide value to responders. NOAA and NWS rely on each other to support the full range of response environments. Andy Maguire offered an example; at a recent crude oil pipeline spill near Edwardsville, Illinois, and Cahokia Creek, just seven and a half miles from the Mississippi River, NWS helped with a several days forecast of a possible incoming rain event that could have caused the creek to rise ten feet. This helped Incident Command prepare for the rain event by bolstering equipment and staff.

Agency and Partner Updates

Illinois

Mark Ellis reminded the group that Illinois EPA has gone through a staff transition. He will reach out to invite the new director to take part in future activities. The Interim Director agreed to have staff review and update their sections of the UMR Spill Response Plan.

Minnesota

Mike Rose reported that Minnesota PCA has authorized staff to work in the office again, effective April 21, 2022. The agency estimate that half of staff will work from home or in a hybrid format. Half are expected to work in the office on a regular schedule. MPCA is going to develop a data management plan and a training plan for Emergency Response Branch staff. The Branch hydrologist recently moved to another position, and the vacancy is expected to be filled soon.

Missouri

Rick Gann shared updates on retirements. Brian Allen, a program director for OSCs retired on January 1, 2022. Response Section Chief Brad Harris, who had previously taken part in this group, will retire on May 1, 2022.

Missouri DNR has been working well with USEPA Region 7 on incidents that have impacted the Mississippi River. On January 5, 2022 there was a fire at a marina on the river. There was very cold weather, which presented challenging response conditions. The state OSC from Saint Louis was on-site and supported by OSC Jessica Evans of USEPA Region 7. Seven boats caught fire, but fortunately the marina is in an inlet that prevented any material from migrating to the river. The marina deployed absorbent boom soon after the fire started. Insurance companies for owners and the facility were involved. Responders were unable to get all the boats lifted out of the water until early March 2022. Gann was not sure if the cause of the fire has been determined yet. Ellis asked if this was in the same area as a large marina fire several years ago. Gann noted that the earlier incident was along the Missouri River and involved a large dry stack operation

Another incident that threatened the river occurred near Cape Girardeau, a mile up a tributary. Used oils and asphalt emulsions were able to be contained within the tributary. In the Edwardsville pipeline spill, Gann appreciated working with the USEPA Region 5 OSCs, who included Missouri staff on Polreps. The St. Louis public water supply intakes are just downstream of the mouth of Cahokia Creek, Gann appreciated the updates from USEPA Region 5 on the status of the pipeline release.

Wisconsin

Jayson Schrank of Wisconsin DNR said staff are now permitted to attend in-person meetings with the lifting of pandemic restrictions. Schrank said the DNR's zone contract funding and the state's ability to hire a response contractor is gone. Staff focus on finding the responsible party and holding them accountable for cleanup. With the approval of in-person meetings, there are tabletop exercises being planned. Schrank will attend an exercise in Pepin County in June, 2022.

USEPA, Region 5

Andy Maguire said Covid-19 restrictions are lifted. Managers have returned to the office, and bargaining unit employees will return to the office on May 2, 2022. With the change in USEPA Region 5 management, there has been more allowance for telework. Staff will be allowed up to four days per week of telework. Region 5 has a new Regional Administrator, Deborah Shore. There have been some OSC retirements and three new hires based in Chicago. There will soon be an opening in the Green Bay OSC position.

Maguire said the Edwardsville spill, caused by a break in a Marathon Pipeline, released nearly 4,000 barrels of crude oil. The spill occurred adjacent to Cahokia Creek, around seven miles from the Mississippi River. The leading edge of oil did not get past Illinois Route 111. Sheen was not observed below Illinois Route 3, around one mile from the river. Overall, there was an effective response, which consisted of full 24-hour cycles for about eight days. Maguire said that Marathon was cooperative in the response and cleanup effort. The National Transportation Safety Board did a full investigation of the incident. Maguire said each agency in Unified Command had to designate a person to support the investigation.

USEPA, Region 7

Joe Davis shared that the agency is experiencing management changes. There is a new Response & Removal Section Chief, Danny O'Connor. Former OSC Heath Smith has taken the role of Emergency Planning Section Chief. Scott Hayes is now the Acting Director of the Superfund Division. Hayes used to participate in this group as an OSC. The agency has selected Megan McCollister as the next Regional Administrator. USEPA Region 7 has also hired new OSCs, who are currently in training. USEPA Region 7 has lifted most Covid-19 restrictions. Staff have been doing field work throughout the pandemic, but the COVID-19 restrictions had the most impact on outreach and training activities.

Davis recently shared a report on a spill near Clarksville, Missouri over the listserv, but did not receive any replies. Other group members confirmed that the message did get to them. Ellis reminded participants about the purpose of the listserv and to contact him to be added.

Davis said he will notify the group when there is a date set for an inland SCAT training class in the Greater Saint Louis Sub-area this summer.

NOAA

Adam Davis shared information about upcoming virtual training developed by NOAA in May and June 2022. The training covers the science of chemical releases and is open to anyone involved in response. See <https://response.restoration.noaa.gov/training-and-education/training/workshops/science-chemical-releases-classes.html>.

NRC Reports

Mark Ellis shared a table listing spills on or near the Mississippi River in 2021. The National Response Center website posts spreadsheets of spill reports for past years, but no longer posts partial-year data. Ellis made a FOIA request for 2022 reports to date, but data was not delivered in time for the meeting.

UMR Strategic Plan: 2022 Activities

Mark Ellis recapped the 2021 strategic planning process. The plan was completed at the November 30, 2021 meeting. UMRBA met with USEPA Region 5 Environmental Justice (EJ) staff, who reviewed the strategic plan and process. USEPA Region 5 staff encouraged UMRBA to integrate equity into our processes, including use of the EJ Screening Tool, an online resource made available by USEPA. This is already a step taken by federal responders in emergency situations, but can also be applied during planning-level events. For example, the EJ Screening Tool can be useful for identifying communities to engage in SCAT training. Region 5 staff emphasized that it is important to build relationships.

The Strategic Plan highlights the group's priorities, prompted by the need to update the UMR Spill Response Plan. This update was agreed to be the top priority. Over the winter, members were asked to review and update relevant plan sections. Ellis will reach out to remaining reviewers to gather the last input. Upon completion, UMRBA will submit the final draft Plan to RRT5 so it is available for use during the signatory process.

The next priority the group chose was to maintain existing UMR Pool Spill Response Plans (SRP). The plans include local information, priorities, contacts, and response strategy sites. Most of the SRPs need to be updated. There are items to complete for Pools 24 and 25. Draft response strategies and a draft IAP were developed, but field work was postponed due to flooding and then the pandemic. Staff verified response strategies in Pool 24 in October 2021. Ellis will share these with USFWS staff to verify proper consideration of sensitive resources. Sites in Pool 25 must yet be verified. Ellis had been working with Jessica Evans of USEPA Region 7 to combine these pools with updates for the Greater Saint Louis Sub-area. He will contact her to see if this is still an option this year or next. Ellis developed draft response strategies for Pool 26 to close the gap between the two planning areas.

Ellis asked the group to consider which plans could be updated in 2022. This would entail reviewing response strategies, conducting field work, and updating contact information in the IAP. Barbi Lee suggested updating the Quad Cities Sub-area strategies. Ellis explained that the UMR Pool Response

Plans were developed for the areas outside planning sub-areas, but agreed with Lee that the strategies should be updated.

Brenda Kelly suggested engaging the River Teams for input on which plans to update including how to prioritize updates and the timeline needed for them to make recommendations. She noted that there is a lot of habitat restoration activity going on in Pool 9, which makes it worth consideration due to changes to the river. Pool 10 has had similar projects underway since the SRP was developed. Ellis encouraged the completion of Pools 25 and 26, pending Illinois and Missouri staff availability to verify response strategies. Kevin Turner cautioned the workload for the Quad Cities update may be too much for state agency staff. Are the people who would update the strategies the same people who would do the rest of the SRP updates? Ellis answered that the state people would typically be the same across multiple pools. USFWS staff vary more because of refuge district and staff distribution. Answering a question from Andy Maguire, Ellis said that UMRBA can support the work within or outside the sub-areas. In light of this, Maguire suggested including the sub-areas in the priority considerations. Kurt Levetzow echoed Turner's concern about time and resource limitations. Iowa DNR would rely on Fisheries support. Ellis suggested that the next step be to request input from the River Teams. Kelly emphasized giving time for collaborating agencies to provide input before making a decision. Turner believes the Quad Cities sub-area can make the decision at an upcoming planning meeting and update the response strategies independently of this group. Joe Davis agreed and would like to include local Quad Cities partners. Ellis summarized the discussion:

- the Quad Cities Sub-area will look to update strategies independently;
- Brenda Kelly will take this topic to the River Teams for input and ability to participate;
- Ellis will contact Jessica Evans to find out if cooperation with the Greater Saint Louis Sub-area will still be an option;
- The group will then bring these inputs together to select update priorities.

Ellis outlined the goal of developing a new UMR Pool SRP in 2023. The group recognized the need to develop plans for areas without SRPs, but available resources may impact the pace of SRP development. Ellis reviewed the gaps that exist in planning coverage and asked for feedback. Responding to a question from Mike Rose, Ellis provided background of the selection process of the completed pools, noting that USFWS asked USEPA Region 5 for support to develop plans to protect refuge lands. He said we would still be reaching out to USFWS and state staff as resource trustees to drive the process, but the lead role would switch for pools without refuge lands. Andy Maguire suggested that a cursory risk analysis could be done with the mapping projects and ISA data to identify priorities. Barbi Lee contracted with Tetra Tech to run an analysis on the Rock River, and USEPA evaluate resources to do a similar analysis for the Mississippi River. Ellis agreed that this would be a helpful starting point to prioritize pool selection. Brenda Kelly shared that there are two large habitat projects in Pool 4. One is moving into the construction phase in autumn 2022, and the other project is going through an environmental assessment. The Lake Pepin Legacy Alliance would be interested in a partnership for work in Pool 4. Jeff McCrery said that USACE MVR is willing to provide boats and operators for Pools 11 to 22.

Ellis summed the discussion:

- UMRBA or Tetra Tech will run a risk analysis for the gaps and contact resource trustees to find out their availability.
- Ellis will contact Missouri and Illinois staff to look at completing Pools 25 and 26 this year.

Ellis said the last priority from the strategic plan for this year is to support an industry-sponsored exercise. Matt Stokes of Safety Training and Response Strategies (STARS) is offering a SCAT training on October 19, 2022 in the Quad Cities area. The training is one developed by USEPA Region 7.

Mapping and Planning Updates

Regional Response Team 5

Barbi Lee said the RRT5 has a scheduled hybrid meeting April 27-28, 2022 in Lansing, Michigan. The agenda is on the rrt5.org website. (*Note: subsequent to this meeting, the RRT5 meeting was changed to remote-only*). The website sub-area tab has been updated. It has been organized by states and major rivers to increase usability. Lee asked members to visit the page and let her know your feedback.

Mark Ellis said that some browsers do not recognize the site with a standard http:// protocol, and a secure https:// protocol may be needed. Lee said it should also work with only “rrt5.org” as the address.

Inland Sensitivity Atlas (ISA)

Mark Ellis reported that UMRBA is nearing completion of the Wisconsin updates. The remaining work to complete the water intakes is expected to be done in May 2022. Staff have begun Minnesota updates. Ellis anticipates the layers will be complete by the end of 2022. Ellis said the state mapping viewers serve the ISA data as it is updated. All map viewers can be accessed at rrt5.org. The regional geodatabase may also be downloaded.

Upcoming minor changes, suggested by Wisconsin DNR, to the ISA data include additional boat access information about the river stage at which an access ramp is no longer accessible. Lost access could be due to flooding at the ramp or access road, or passing under a railroad trestle is no longer possible. UMRBA is working with USEPA Region 5 to pilot a sample of data and link to the river gauges with live data about river conditions. UMRBA will contact river users for further data about other ramps along the UMR after the pilot.

Greater Saint Louis Sub-area

Barbi Lee said that Tetra Tech developed a UMR-centric data viewer. Tetra Tech held two trainings last week and has more planned for the near future. She suggested having the training for this group. Ellis concurred, adding that USEPA Region 7 has led the work on the viewer, which incorporates data from many sources, including the ISA. The viewer is a one-stop shop of GIS data to analyze and use. It also includes tools, such as a flow trace tool. A user can enter a spill location and return a drainage path it would be expected to follow. One can query by proximity for features such as schools, identify features at risk from an air release, and print reports. Because of its potential value to responders, Ellis will talk to Eric Deselich of Tetra Tech to organize a training for this group. He added that this group can also contribute to the data set used in the viewer.

Minneapolis/St. Paul Sub-area

David Morrison said the area plan is again expanding the geographic scope of the sub-area. A few years ago, it was expanded to include more of the St. Croix River, and the 2022 update will be expanded to cover watersheds north of the Twin Cities to encompass the source water protection areas of the Minneapolis and Saint Cloud drinking water intakes. This is a large expansion, but Morrison intends to evaluate risk and develop spill response strategies for the upstream reach of the UMR. The National Park Service had developed some response strategies for their Mississippi National River and Recreation Area plan. Morrison noted that many facility response plans tie into the response strategies developed for the

sub-area plans, so it is important to vet our sites. Response on Pool 3 is problematic with bluffs on one side and wetlands on the other, with poor access and high-value natural resources. The area committee intends to develop and test an on-water collection strategy. The next area plan meeting will be held on May 10, 2022 in Saint Paul, Minnesota.

Quad Cities Sub-area

Barbi Lee said the Quad Cities committee will set up a meeting with the local CAER group and STARS to organize a sub-area meeting in autumn 2022. USEPA Region 7 plans to hold more training, which will be shared through this group.

Great Rivers Sub-area

Barbi Lee said that Sharon Kennedy is the new OSC assigned to the sub-area now that Heath Smith has moved to a new position.

Training and Exercises

Andy Maguire said there will be a pair of training events coming up for boat operators. The first will be held on Thursday, April 21, 2022 in Dubuque, Iowa. The second will be held on Friday, April 22, 2022 in Rock Island, Illinois. The course is offered by the National Spill Control School of Texas A&M University. Contact Matt Stokes of STARS for further information.

Action Items

Mark Ellis will facilitate a final review of the UMR Spill Response Plan and circulate a final draft before moving to publication.

Ellis will reach out to UMR Spills Group members about prioritizing the UMR Pool Response Plan updates and doing a risk analysis for selection of next plans to develop.

Ellis will contact USFWS and others to see if we can complete the response strategy field verification for UMR Pools 25 and 26 in 2022.

Brenda Kelly will propose that the River Teams provide input on UMR Pool Response Plan update priorities.

Ellis said we typically hold the second meeting of the year in October or November. He asked the group to think about holding the meeting in-person, but suggested waiting until this summer to wait for any changes to pandemic restrictions at that time.

[With no further business, the meeting adjourned at 11:40 a.m. on April 12, 2022]

Participants

Kurt Levetzow	Iowa Dept. of Natural Resources
Mike Rose	Minnesota Pollution Control Agency
Rick Gann	Missouri Dept. of Natural Resources
Brenda Kelly	Wisconsin Dept. of Natural Resources
Jayson Schrank	Wisconsin Dept. of Natural Resources
Lisa Olson-McDonald	Wisconsin Emergency Management
Adam Davis	NOAA
Mike Welvaert	NWS
Allie Lee	USCG Sector UMR
Anthony Romero	USCG Sector UMR
Daniel Twohy	USCG Sector UMR
Alex Kwolek	USCG MSD St. Paul
Terence LaFollette	USCG MSD St. Paul
Barbi Lee	USEPA, Region 5
Andy Maguire	USEPA, Region 5
David Morrison	USEPA, Region 5
Carol Ropski	USEPA, Region 5
Kevin Turner	USEPA, Region 5
Joe Davis	USEPA, Region 7
Reena Bowman	USFWS
Sarah Bowman	USFWS
Leo Keller	USACE Rock Island District
Jeff McCrery	USACE Rock Island District
Jeremy Bonikowski	Juneau County (WI) EM
Dave Donovan	Scott County (IA) EMA
Cory Teff	Pinnacle Engineering
Katherine Cooper	Tetra Tech
Mark Ellis	UMRBA