

Upper Mississippi River Hazardous Spills Coordination Group

October 8-9, 2013
Moline, Illinois

Meeting Summary

Participants

Roger Lauder	Illinois EPA
Rodney Tucker*	Iowa DNR/USCG
David Morrison	Minnesota PCA
Mark Marcy*	Minnesota HSEM
Rick Gann	Missouri DNR
Tom Kendzierski	Wisconsin DNR
Jason Lowery	Wisconsin DNR
Leo Keller	USACE, Rock Island District
Mike Lewis	USCG, Quad Cities MSD
Tim Ross	USCG, Quad Cities MSD
Allan Beshore*	US DOT, Pipeline and Hazardous Materials Safety Administration
Caleb Tufts	Environmental Restoration
Jim Macaluso	National Response Corporation
Chris Bieller	Seneca Companies
Matt Stokes	STARS Training
Eric Deselich*	TetraTech
Bob Baumgartner	TransCanada
Stuart Eddy	Great Lakes Commission
Frank Cardone	Great Lakes Commission
Dru Buntin	UMRBA
Dave Hokanson	UMRBA
Mark Ellis*	UMRBA

*By telephone

Call to Order and Introductions

Chair Tom Kendzierski called the meeting of the Upper Mississippi River Hazardous Spills Coordination Group (UMR Spills Group) to order at 1:05 p.m. Introductions by all meeting participants followed. Kendzierski gave a special introduction of Jason Lowery, Wisconsin DNR's statewide spill response coordinator. Dave Hokanson noted that many of the federal partners who typically attend are not present due to the ongoing partial federal government shutdown.

Approval of Previous Meeting Summary

Roger Lauder moved to accept the summary of the previous (April 10-11, 2013) meeting. Rick Gann seconded the motion. The summary was approved by voice vote.

Agency and Partner Updates

Iowa

Rodney Tucker said he and Adam Broughton had been transferred to the Iowa DNR Director's staff, where they are now responsible for the department's health and safety programs. He explained that emergency response functions remain in Iowa DNR's Emergency Response section, but that spill

response no longer resides in this section. Instead, a general call number is now utilized for spill reporting, where reports are then transferred to a field office or – after hours – to one of two on-duty employees statewide who are assigned to carry a pager. Dave Morrison asked whether these individuals are the only ones at Iowa DNR who can then access spill funds if needed. Tucker replied that this correct, only these individuals can gain access. In summary, he said Iowa DNR’s Emergency Response Section has changed greatly in terms of staffing and function. Hokanson asked whether these changes affect the 24 hour numbers listed in the UMR Spill Plan and the UMR Emergency Action Field Guide. Tucker responded that the numbers have not changed, that the call simply follows a different internal route at Iowa DNR. He also clarified that he currently remains the UMR Spills Group member for Iowa despite the changes in his position.

Illinois

Lauder noted two recent spills in the Rockford area, including a chemical plant fire and a liquid ammonia release to a private pond and nearby stream. In the case of the ammonia response, he noted that the pond had to be pumped completely dry in order to remove the spilled product. Lauder also described the Hoopeston, Illinois tire fire which occurred in June 2013. He said over 350,000 tires were involved in the fire and over 2 million gallons of water, along with firefighting foam, were used in control efforts. Because of this volume of liquid, as well as rains that occurred during the incident, Lauder said control of runoff had been a major consideration in the response. He added that the Rockford and Hoopeston events had occurred in relatively rapid succession.

Lauder also described a situation in Cook County, Illinois where a number of cold war-vintage canisters were unearthed on a U.S. Army property during an excavation project. Ultimately, he said, the canisters were found to contain only residue, but their presence triggered a major removal project as well as public relations effort due to the proximity of the property to schools and parks.

Lauder noted another recent incident where a rail bridge over the Spoon River in Fulton County, Illinois had collapsed, resulting in the release of corn syrup from a short line train. This spill resulted in the death of over 200 fish. He said the incident had occurred over a week ago and that the aeration process is still ongoing.

Lauder gave an overview of recent and upcoming training events and conferences in Illinois. This included radiological response drills in the Chicago area and statewide, a New Madrid fault earthquake exercise on October 17, the Illinois Emergency Management Agency conference, and the Illinois Public Works Mutual Aid Network conference. He also noted the ongoing decline in staffing in Illinois EPA’s Office of Emergency Response (OER), which has dropped from 21 FTE to 7 FTE in the past ten years, despite increasing demand for the OER to respond to incidents.

Missouri

Rick Gann commented that progress is being made on a new Enbridge pipeline running from Flanagan, Illinois to Cushing, Oklahoma. (Note: This pipeline crosses the UMR near Quincy, Illinois and is “twinned” with Enbridge’s existing Spearhead Pipeline.) He also noted recent training involving Enbridge in Missouri.

Gann said there have not been any recent spills to the UMR in Missouri, but that the Missouri DNR is currently working with one facility in the Bootheel area which has had three crude oil releases in its first year of operation. He explained that this installation is unique as it includes gravity-feeding of crude oil from unit trains into the facility. Due to the method of transfer, the facility does not fall under PHMSA’s jurisdiction. In addition, loaded trains may stay on site for some time, increasing the overall volume of oil “stored” at the site. Gann said Missouri DNR, US EPA, PHMSA, and USGC have all had staff on site recently and that there is concern regarding potential ground water vulnerability.

Wisconsin

As had been done during the introductions, Kendzierski noted that Jason Lowery is now Wisconsin DNR's statewide spill coordinator. He also explained that Minnesota and Wisconsin had recently reached an agreement allowing the sharing of response contractors between the states, saying this is particularly advantageous for Wisconsin as many contractors are based in the Twin Cities. Kendzierski added that Wisconsin's move to a single emergency contact number seems to be working successfully. He explained that Wisconsin DNR keeps one spill coordinator on call to accept reports referred by the central duty officer and to assist that duty officer as needed.

In terms of Mississippi River incidents, Kendzierski described a July 2013 incident involving a houseboat going over Dam 7 near La Crosse. He also noted ongoing bridge construction at Stillwater, Minnesota (on the St. Croix River) and in La Crosse (Mississippi River), commenting that the contractors at these two locations have been very diligent about reporting small hydraulic oil spills.

Kendzierski said frac sand mining continues to be a high-profile issue in Wisconsin. He noted that public concern regarding this industry arises not just from potential spills, but also due to potential air, noise, and traffic impacts. In terms of spills, there have been a few cases where dikes holding back sediment-laden water have failed and that these incidents have drawn significant attention due to the controversial nature of the industry.

Lowery noted that Wisconsin DNR's emergency response contract is now structured so that a spill coordinator can choose from a list of approved contractors in each region, rather than having a primary and secondary contractor. He explained that the approved contractors fall into three categories: 1) all hazards, 2) petroleum, and 3) manure. Lauder asked to be sent a copy of the Minnesota-Wisconsin agreement allowing for contractor sharing. Morrison noted that this not an emergency management assistance compact (EMAC) issue *per se*, but rather an administrative change. Bieller sought clarification on the use of state-approved or contracted OSROs, asking whether they are only employed in situations where a responsible party has not been identified or the responsible party cannot afford to pay. Morrison replied this is typically the case, though Kendzierski added there can be instances where the state simply chooses to proceed with cleanup with the intent of subsequently recovering costs.

Minnesota

Morrison provided additional information on the incident at Dam 7 previously mentioned by Kendzierski, noting that the final removal of the houseboat has been delayed due to financial issues with the vessel's owner, but that all oil products have been pumped out of the boat. He said a tow had also gone over Dam 7 approximately one month earlier, explaining that the towboat had also been pumped out and recovered. Morrison additionally noted that the Red Wing spill response cooperative had assisted in booming a sunken boat on the UMR in the Red Wing area.

Morrison said a full scale exercise had recently been completed in Duluth on Lake Superior, led by USCG and involving Minnesota PCA, Wisconsin DNR, and the USFWS, among others. He said the exercise contained a wildlife component similar to that of the UMR spill training at Montrose, Iowa and also involved booming off a ship in the harbor. Morrison also noted that MPCA emergency response staff have also focused recently on documenting standard operating procedures for response and are now in the process of educating others in the agency regarding these procedures.

Morrison described heavy rains that hit Minnesota in June, causing \$17 million in transportation infrastructure damage. He said no spills resulted from this event, but that many wastewater treatment plants were affected and in some cases these were only able to complete partial treatment.

US Coast Guard

Mike Lewis said there has been little spill activity on the Mississippi River in recent months. One incident of note was the sinking of a caustic soda barge at Muscatine, Iowa. He said the barge was carrying 215,000 gallons of caustic soda, but very little product was actually lost.

Lewis said District 8 Coast Guard staff continue to look into the mechanism by which response trailers can be transferred to local entities, such as spill response cooperatives, on the UMR.

Industry Partners

On behalf of CP Rail, Matt Stokes reported that the company is looking at inventorying readily available response equipment and positioning equipment such as response trailers in more deployment-friendly locations. He said he continues his work to organize CAER groups and cooperatives on the UMR, and is bringing training to a number of these groups. In particular, the Winona Fire Department has completed all three levels of boom training. Stokes said he is also currently working to organize a CAER group in the Dubuque area.

Kendzierski asked whether Stokes has had any success in organizing a cooperative/CAER group in the La Crosse area. Stokes replied that La Crosse is a bit unique as there is a strong reliance on the La Crosse fire department to address response and that industry has been hesitant to provide staff to coordination efforts – though they have been willing to make equipment available. He did note that the presence of both CP and BNSF rail in the area may help foster collaboration, but as yet there has not been a catalyst to bring industry to the table. Kendzierski expressed interest in working with Stokes, along with La Crosse County Emergency Manager Keith Butler, to encourage cooperative formation in La Crosse.

Jim Macaluso said the National Response Corporation (NRC) will be providing a presentation at the upcoming Region 5 RRT meeting in Cleveland on November 5-6, 2013.

Chris Bieller noted that Seneca Companies has been working with biodiesel and ethanol plants on their response capabilities, emphasizing the need to contain spills in smaller streams before they reach larger waterbodies. He noted a similarity to Stokes' efforts, wherein he is encouraging facilities to store a small amount of boom on site and training local fire departments in the use of this equipment. Bieller said the goal is to be able to contain a spill until a contractor with greater resources arrives on site. Additionally, he noted Seneca's participation in a recent exercise in the Siouxland Sub-area, which will be described by TetraTech's Eric Deslich in a subsequent presentation.

UMR Spill Plan Update

Hokanson reminded the Group that the update of the UMR Spill Plan is ongoing, noting that the goals of the update include the following:

- Modernize and tie to planning products
- Remove obsolete sections/information
- Add new sections as needed
- Clean up and clarify language as needed
- Keep information UMR-specific
- Enhance value and usefulness for planners and responders

He also pointed out that, originally, the Plan update was to be completed by September 30, 2013, but that this goal will need to be revisited as the update is still currently in process. Hokanson reviewed the contents of the Plan and in particular noted new items that have been added as part of the update.

Gann noted that Missouri DNR had incorrectly been referred to as MN DNR in certain part of the plan. Hokanson said this would be corrected. Stokes suggested that state departments of agriculture should be added to the list of agencies in those states such as Minnesota where they have a role in response.

Bieller asked that there be more detailed description of the role of local entities in response. Morrison said the pool-specific geographic response plans allow for this, while the UMR plan does not attempt to address local considerations or roles in any detailed fashion. Lauder noted that the role of local, as well as state and federal, entities can vary according to the characteristics of an individual incident. Bieller suggested that the role of dispatch teams be described in the Plan. Lauder proposed that one way to integrate local elements in to the plan may be to list local emergency management agencies (EMAs) along the UMR in the Plan's Resource Manual.

Kendzierski asked whether, from the Group's perspective the Plan's notification protocol is working, noting that the National Response Center (NRC) is often referenced as the single point of notification for an incident. Hokanson concurred that this is an important point for the Group to consider, as the role of the UMR notification protocol has historically been as a way to speed and target communication among the states and other entities along the river and *not* as alternative to required NRC notification. He added that there has not been a UMR notification drill of late and as such the protocol has not been tested recently. Gann noted that electronic notification has in many cases superseded phone or fax notification, adding that fax notification can probably be dropped from the protocol.

Stokes observed that his experience has been that use of the online NRC notification mechanism has provided for prompt notification. He asked whether there is any difference in the process between online submission and phone notification via the NRC. Lewis replied that the processes are the same. He added that currently the online system is not used as much as phone notification, but is equally effective. Morrison suggested that the online NRC reporting link be added to the text of the plan, but not to the Emergency Action Field Guide as this is more typically used in settings where a phone call is the most likely mechanism of notification.

Morrison noted that one value of the Resource Manual component is that it provides water intake contact information, something that has been of great value during actual incidents.

Kendzierski asked whether the daily update protocol was realistic and effective, noting that it very prescriptive regarding the timing of updates. Morrison said that daily updates, such as those described in the protocol, can be very valuable in multi-day incidents. Gann suggested that perhaps the step of providing a daily update should be preserved in the protocol, but that the specific timing could be dropped.

Hokanson noted that an oiled wildlife section is one of the new additions to the plan and thanked USFWS and USDA-APHIS for their work on this section. Morrison said one important part of this section should be to help draw out the distinction between natural resources damage assessment (NRDA) and the response process itself. Lauder concurred, observing that in large incidents such as the Deepwater Horizon spill this can be a major consideration. Morrison suggested that USFWS and USDA-APHIS be asked to review the oiled wildlife section to ensure that this distinction is clearly made.

The volunteers section was also highlighted by Hokanson as a new addition to the Plan. Morrison said he has some reservations about adding a volunteers section as he and his state counterparts typically do not have volunteer management training. He said his is comfortable with a brief volunteers section, as long as it is made clear that other entities, such as local government bodies or US EPA would handle volunteer management. Mark Marcy suggested that the management of volunteers is something where deference to the county emergency operations plan is likely appropriate. Kendzierski said he prefers to see a volunteers section in the Plan, as long as it is clear on accountability and safety elements.

Hokanson noted that one section of the Resource Manual which has not been updated in the response equipment inventory list, largely due to challenges in standardizing data as well as the amount of effort involved in updating and maintaining the list. Lauder suggested that local EMAs could potentially help in the compilation of this information.

Regarding the “Exercises, Drills, and Training” section, Morrison suggested simply adding a brief discussion expressing the Group’s support for collaboration and coordination in the execution of drills and training. Bieller emphasized the importance of training to address the “weakest link” in spill response.

Hokanson distributed a draft revision of the Plan’s companion “Emergency Action Field Guide,” asking Group members to review this document as well, sending any corrections needed to him.

Training and Exercises

Siouxland Sub-area Exercise

Eric Deselich described a June 2013 functional exercise held in the Siouxland Sub-area (western Iowa) and focused on a major release of ethanol. He described the goals of this exercise as follows:

- To reinforce public/private partnerships to build a viable response capacity,
- To enhance preparedness for a major ethanol release/discharge, and
- To enhance preparedness for a chemical-biological-radiological-nuclear-explosive (CBRNE) event.

Deselich explained that the exercise was developed in order to try and maximize/leverage the use of available resources, while satisfying the requirements and interests of multiple entities. For example, he noted that the CBRNE element was critical for Homeland Security, while US EPA wanted OPA components to be exercised. Deselich also said efforts were made to include all levels of government, from local to state to federal. He added that industry was also engaged and thanked Seneca Companies for their work in making connections to ethanol companies.

Deselich said US EPA had sponsored pre-exercise trainings to address perceived capability gaps. These trainings included:

- Incident Action Planning (IAP) Workshop
- Siouxland Sub-area Contingency Plan (SACP) Seminar
- Siouxland Atlas GIS Seminar/Workshop
- Iowa CBRNE Protocol Model Seminars

He described how these pre-exercise trainings had been initiated in January 2013, with the last of the training sessions being held two days before the exercise itself. Deselich emphasized that exercise planners felt it was critical for participants to build familiarity these tools before testing them in an exercise setting.

Deselich next described the exercise scenario, noting that it involved an attack on ethanol facilities and a railway, creating the following situations for responders to address:

- Improvised explosive devices
- Hazmat and ethanol releases
- Ethanol discharges to waterways

He said the exercise itself was three hours in duration, involving four local emergency operations centers (EOCs), one regional EOC, and three ethanol plants. Among its objectives, this scenario was designed to evaluate: 1) use of the sub-area contingency plan (SACP), 2) use of Iowa's CBRNE protocol model, 3) EOC management, and 4) field operation center (FOC) management. Further, the exercise was designed to test the following core capabilities:

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

Deselich stressed the importance of aligning the exercise objectives with core capabilities and showed a crosswalk illustrating the linkages between these. He also said the exercise was intended to test cross-border interactions, noting that each EOC had an ethanol plant in its jurisdiction.

Deselich said injects were developed from a variety of sources, were pre-scripted, and vetted to make sure that players could indeed act in response to the inject. He noted that over 200 injects were developed for use in the exercise, and spread out in their use across the participating EOCs and ethanol facilities. Deselich also described the process by which exercise evaluation guides (EEG) were developed for use by exercise evaluators. These evaluations were then used in the development of after action reports (AARs), with a total of 119 recommendations emerging from the AARs.

Tabletop Exercise Development

Deselich next addressed the process by which a tabletop exercise may be developed, noting that he is providing these recommendations in light of the UMR Spills Group's interest in holding a tabletop exercise. He began by describing the distinctions between a functional exercise – which includes real time operations and assumes capabilities are in place – and a tabletop exercise – which is higher level discussion and more like a training activity. Deselich commented that a tabletop exercise can often be a precursor to a more elaborate functional exercise.

Deselich next gave a list of “indicators” that a tabletop exercise may be needed and beneficial:

- A primary plan is unfamiliar to end users
- Multiple types of supporting plans exist
- High level of diversity among organizations
- Complex policy issues involved
- Concept of operations (CONOPS) is untested
- Clarity needed in agencies' roles/responsibilities
- Target threat/hazard is not well understood
- Real-world events or exercises indicate gaps

In considering exercise development, Deselich suggested that it is important to focus on the mission area(s) to be tested, such as response or recovery, and limit the number of mission areas addressed in a single exercise. In carrying out the exercise, he emphasized that it is important to have both the right individuals and agencies/entities engaged. Deselich also stressed the importance of crosswalking the exercise design to core capabilities to be tested. He also emphasized the importance of an AAR in communicating exercise outcomes and recommendations, even if the AAR is not particularly long or detailed.

Deselich next walked through an example tabletop exercise involving a release of heavy crude oil from a pipeline into the Missouri River. He noted that this particular exercise example divides discussion into three temporal phases as follows: 1) moments after the initial event, 2) 4 hours after the event, and 3) 72 hours after the event.

Hokanson thanked Deselich for his presentation, commenting that, from his perspective many of the indicators for a tabletop identified by Deselich are present on the UMR. Kendzierski commented that the structure presented by Deselich may be very helpful in putting together a UMR tabletop. Jim Macaluso said this approach is particularly valuable as includes consideration of events at time periods beyond the initial response. Deselich responded that another option in designing a tabletop exercise would be to add time periods even beyond the 72 hour timeline presented in his example, noting that this could be done to incorporate issues such as oiled wildlife recovery and rehabilitation.

Response Equipment Inventories/Resources

Environmental Response Resource Registry (ER3) Project

Hokanson introduced the equipment inventory discussion, saying that the current UMR Spill Plan equipment inventory is quite outdated and that, in considering how to update the inventory, the Group had expressed interest in approaches being taken by others. As such, he explained, Stuart Eddy and Frank Cardone of the Great Lake Commission (GLC) had been invited to present GLC's ongoing work on the ER3 project.

At the beginning of his presentation, Eddy noted that maintenance of an equipment inventory is an OPA-required area planning function. He added that data and information management systems have evolved very significantly since the enactment of OPA, so that these inventories can be much better supported in a technical sense.

Eddy next described the inventory project specifically, noting that the ER3 inventory has been set up using US EPA's Data Exchange Network. He noted that among the advantages of the Exchange Network are online availability and the ability to extract information from other, existing databases. Eddy explained that part of the approach is to provide users – at the local level, in industry, etc. – with an ability to both access and update information, as some of the challenges in maintaining an equipment inventory include keeping the information current and engaging local users. He noted that the information can be accessed both through a graphical interface and via more data-focused approach, including via a selecting a specific radius and finding all resources in that search area.

Eddy explained that the project is currently focused on gathering data in Michigan and is not yet “live,” with the hope of having it up and running for external use by the end of 2013. He added that once the system is up and running, outreach would be conducted to encourage use of the system. Eddy listed project partners as including US EPA, the Michigan Department of Environmental Quality, and the Wisconsin Department of Natural Resources.

Bieller asked whether the effort is limited to the Great Lakes or whether it might be expanded to other areas, such as the UMR. Eddy replied that the initial scope of the project is just the Great Lakes, but once the system is up and running the intent is to expand to other areas, with the UMR being one place for potential expansion. Kendzierski asked who the contact point for the project has been in Wisconsin. Eddy said he has been working with David Woodbury at Wisconsin DNR.

UMR Spills Group Discussion of Equipment Inventory

Hokanson reminded the Group that the inventory contained within the UMR Spills Plan has not been updated since 2003. He said this inventory had been compiled via a combination of partner agency and UMRBA staff work, noting that in recent years there had been attempt to structure a new database and

collect information for the upper portion of the UMR, but neither a complete data set nor final database format had been established. Stokes noted that much more equipment is available than is reflected in the inventory, but that it has been difficult to get responses from facilities possessing equipment. Bieller concurred, saying that there was an increase in equipment inventories following the Deepwater Horizon spill that would not have been captured in the current inventory.

Gann suggested that a level of detail at least equivalent to what is in the current inventory should be maintained, so that if assets are needed responders will have a relatively accurate depiction of what is present. Stokes observed that trying to track sorbents is probably not worth the effort. Morrison observed that one of the challenges in maintaining an equipment inventory is acquiring information from many individual entities, such as local fire departments, and then assuring that the information is kept current. He suggested that one potential approach would be to have UMRBA set up an online database that could be edited by various users to reflect their most current equipment holdings, noting that this would essentially be an “honor system” with each entity responsible for its own information. Further, Morrison proposed that a UMRBA web list could be linked to other, existing inventories, such as the Wakota CAER list of boom caches. Hokanson asked Eddy if this “wiki” type approach is similar to GLC’s project. Eddy replied that it has some similarities in concept, though somewhat different in its function in terms of how users do or do not actually access the central database supporting the inventory. He suggested that the “wiki” approach may be a good place to start in implementing an online inventory.

Stokes said he has recently worked on a project to compile a searchable database of OSROs, which may provide some ideas for a UMR inventory. Macaluso said his company maintains a database of all its contractors, which could potentially feed information into a UMR inventory. Bob Baumgartner observed that, in general, the available excess capacity in equipment will largely reside with the OSROs, while individual facility equipment is more typically dedicated for use at that individual facility. Lauder concurred, adding that industry may not always want to share their equipment information. Morrison observed that responders have a strong need to know where equipment resides, even if there may be limitations on its use.

Hokanson commented that, as GLC has already been charged with developing a database, there may be value in seeking to be compatible with their approach. He suggested that likely next steps in inventory development would include: 1) obtaining known UMR information, such as surveys completed by Stokes in recent data collection efforts, 2) focusing first on equipment housed directly on the river, and 3) populating a database structure for the Group to react to.

Pipelines

Analysis of Vulnerability to Spills Due to Overland Transport of Oil

Frank Cardone next presented on GLC’s work to examine the vulnerabilities associated with a pipeline release in Michigan’s Upper Peninsula. In particular, Cardone said this project is intended to help focus work on the development of geographic response plans by addressing the following questions:

- Where will a spill cause the most damage in the shortest amount of time?
- In what areas will a spill reach a Great Lake in 1 hour, 6 hours, 12 hours, or 24 hours?
- What areas will be most difficult to access or to clean up after a spill?

Cardone explained how the National Hydrography Dataset (NHD) was used to determine intersections with the Enbridge Line 5 pipeline, and to gather stream information including stream length, flow direction, mean annual velocity, and mean annual flow. He also said digital elevation model (DEM) maps were used to identify slope and calculate flow direction/flow length. Utilizing the NHD and DEM

information, the travel time to a Great Lake (Superior or Michigan) was then calculated. Cardone showed several examples of travel time calculations from specific spill locations.

Cardone emphasized that in doing these calculations it becomes clear that more than just distance is important in determining travel time. In particular, he pointed out that flow velocity is also an important consideration.

Baumgartner asked what assumptions were included in the calculation of travel time. Cardone responded that the calculation utilizes mean annual velocity in its flow estimate. Eddy emphasized that the model is not particularly sophisticated, and provides just a good starting point of flow condition. In an actual incident, NOAA would need to be consulted for more specific information and projections. He added that the model is very useful in comparing two separate points and determining if a spill from one or the other is more likely to reach the lake first. Eddy said the same technique could be used for different spills sources, such as rail or oil storage facilities.

Eddy explained that next steps for the analysis including bringing in rail and highway crossings as well as hazardous material and oil storage facilities, in order to create a broader multi-hazard model. Hokanson asked how this approach might be utilized in other geographic areas. Eddy suggested focusing on smaller areas, such as sub-areas, in building the model due to the amount of data and manual input needed, explaining that automation of the approach has not yet been feasible. He added that performing the analysis in other areas may also help target the development of geographic response plans (GRPs).

Bieller pointed out that the transport of particular product may vary due to its particular properties. Eddy agreed that this is a valid point, but noted at this time that GLC did not have the tools available to do product-specific calculations. Allan Beshore asked whether GLC has been in contact with Enbridge on this effort, as it is likely that Enbridge has done similar calculations. Eddy replied that GLC has not yet been in communication with Enbridge.

Pipeline and Hazardous Materials Safety Administration (PHMSA) Update

Beshore said there is a new contact for pipeline response plans at PHMSA. The new contact person is Dave Lehman and he can be reached at 202-366-4439. Beshore added that PHMSA is in the process of developing publicly-available versions of response plans, but until then Lehman should be contacted if response plan information is needed.

Beshore next commented on the recent National Research Council (NRC) report entitled *Effects of Diluted Bitumen on Crude Oil Transmission Pipelines*. He explained that the report did not focus on response-related considerations but rather on whether the composition of diluted bitumen was likely to increase degradation of pipeline integrity. The report did not find any chemical or physical properties of diluted bitumen that are more likely to cause pipeline failure, as compared to other crude oils.

Beshore also pointed out the website www.crudemonitor.ca as a source of information regarding the composition of various products being shipped via pipeline. Morrison asked whether this website includes information on products being shipped via rail. Beshore said he is not sure as he is not familiar with the specifics of how the site was constructed. Baumgartner said he is not familiar with any regulatory driver that would compel rail reporting nor any industry-led effort to do so.

Industry Update

Baumgartner provided a brief update from the pipeline industry perspective. He said the findings of the NRC report discussed by Beshore are consistent with TransCanada's findings regarding the effects of diluted bitumen on transmission lines. While the report does not address response considerations, he noted that industry plans deal with this on a component-by-component basis, meaning that if a spilled product contains both heavy and volatile components, industry's plans will address each element

independently. Baumgartner emphasized that heavy crude components have historically been a response consideration. However, he pointed out that the Marshall, Michigan spill had highlighted the potential presence of multiple petroleum product components within a single release.

Baumgartner said TransCanada is developing flow-based tactical plans, an approach similar to that described in the earlier presentation by GLC staff. He said TransCanada is also working on the development of specific response tools, such as those to address sunken oil products. Additionally, lessons learned from the Marshall, Michigan spill are being incorporated, including the importance of:

- 1) Looking at flow paths in targeting response.
- 2) Intercepting a spill before it gets to major waterbody/flow path.
- 3) Developing tactics in advance to address a release.

He said the geographic/watershed-based approach to spill response planning is growing in its use in the pipeline industry. Baumgartner added that TransCanada has recently held several exercises, including both tabletop exercises and full deployment exercises. He noted that local responders have been engaged in these training events.

Mapping, Planning, and Related Updates

Inland Sensitivity Atlas Update

Mark Ellis reported that the Wisconsin statewide update of the Inland Sensitivity Atlas (ISA) had been completed and is now available from US EPA. He said UMRBA staff will now begin work on updating the Minnesota ISA.

Kendzierski asked whether archeological and historical information had been included in the Wisconsin ISA update. Hokanson replied that US EPA and UMRBA staff had conversations with the Wisconsin State Historic Preservation Office (SHPO), but that SHPO staff had not been comfortable with releasing this information. He said concerns expressed by the SHPO included giving the false impression that all cultural resources have been found and are therefore reflected in the data, the difficulty in keeping data current, and how data could be best displayed in a mapping context. Ultimately, Hokanson explained, the decision was made to go ahead and complete the ISA without this data, as has been the case in other states. Kendzierski asked whether, at minimum, SHPO points of contact can be listed. Hokanson said that contact numbers are known, but they are not 24-hour phone numbers. Morrison said he had seen some similar issues in Minnesota where there has been a reluctance to share information without a professional archeologist available to interpret it. Kendzierski suggested, at minimum, a face-to-face meeting should be set up with the Wisconsin SHPO.

Geographic Response Plans (GRPs)

Ellis noted that the updated Wisconsin ISA will include recently developed GRPs for the Horicon Marsh and UMR Pool 10, as well as the previously developed Pool 7 GRP. He said the Horicon Marsh planning group will be testing out its GRP soon as part of a tabletop spill response exercise. Ellis said Pool 19 is the next pool of focus for GRP development and he is in the process of identifying key contact persons for this pool.

Minneapolis-St. Paul Sub-area

Ellis said the Sub-area Planning Committee is working on a new oiled wildlife section to be included in an update to the Plan.

Great River Sub-area

Gann said Missouri DNR had sent staff to the recent response training at Lake Wappapello. Macaluso said he had also attended and that the training was excellent.

Habitat-Specific Fact Sheets for Response

Hokanson said ten fact sheets have been completed and are available on the UMRBA website at <http://www.umrba.org/spillplans.htm>. He noted that three of these fact sheets have also been embedded on the RRT 5 website at <http://www.rrt5.org/Tools/HabitatFactSheets.aspx>.

Invasive Species Issues

Hokanson said that, per discussion at the last UMR Spills Group meeting, he had contacted Greg Conover, coordinator for the Mississippi Interstate Cooperative Resource Association (MICRA) regarding potential collaboration/communication between the UMR Spills Group and MICRA. Conover indicated an interest in having a representative of the UMR Spills Group talk with MICRA at one of its future meetings. Hokanson also noted that one of the messages emerging from the Midwestern Governors Association initiative on aquatic invasive species is the need for government staff, and government-contracted entities, follow best practices in preventing the spread of invasive species. He said this appeared to be an area where the UMR Spills Group could provide a venue for communication and education.

UMR Spill Plan (Revisited)

Kendzierski asked whether there are items to follow up on from the preceding day's discussion of the UMR Spill Plan. Hokanson suggested that the text of the Plan is nearing completion and the focus should be turning to the Resource Manual component, as well as the Emergency Action Field Guide. Kendzierski said the document will always be open to further improvement, but at a certain point needs to be considered "done" at least for the purposes of a particular update. Hokanson asked whether any more time is needed for the Group to offer comment on the text of the Plan itself. Kendzierski suggested a short comment period, after which the Plan text would be considered final. He also requested some time for the Group to specifically review the Emergency Action Field Guide. Hokanson noted that, once the Plan is completed, it will be necessary to renew the Memorandum of Agreement (MOA) accompanying the plan. Bieller suggested that efforts be made to communicate with local agencies regarding the Plan once it is completed.

Training and Exercises

Kendzierski suggested that the Group should integrate a tabletop exercise into its next meeting, as a way to exercise the UMR Plan. He emphasized that he did not necessarily envision an elaborate exercise, but rather preferred to "keep it simple" and foster some good discussion. Morrison suggested that the La Crosse area could provide a good geographic location, both due to the presence of rail and heavy product (asphalt) shipping in the area. He further suggested that the exercise be held on the meeting's first day, allowing time for discussion and debrief on the meeting's second day. Gann proposed that the meeting be held in La Crosse, in order to facilitate participation by local entities. Hokanson said he would work with Kendzierski to further scope the next meeting and training component.

Next Meeting

The Group agreed that its next meeting should take place in late April 2014 in La Crosse, Wisconsin. Hokanson said he would follow up with a scheduling email.

With no further business, the meeting adjourned at 11:35 a.m. on October 9, 2013.