

**Upper Mississippi River Hazardous Spills Coordination Group Meeting**  
**April 1-2, 2009**  
**Davenport, Iowa**

**Meeting Summary**

**Participants**

Roger Lauder	Illinois EPA
Rodney Tucker	Iowa DNR/USCG
Mike Anderson <sup>3</sup>	Iowa DNR
Dave Morrison <sup>1</sup>	Minnesota PCA
Rick Gann <sup>2</sup>	Missouri DNR
Brad Harris	Missouri DNR
Tom Kendzierski <sup>2</sup>	Wisconsin DNR
Frank Catalano	USACE, St. Louis District
Scott Pettis <sup>3</sup>	USACE, Rock Island District/USCG
John Punkiewicz	USACE, Rock Island District
John Martin <sup>3</sup>	USCG, Quad Cities MSD
Ramon Mendoza	US EPA, Region 5
Ann Whelan	US EPA, Region 5
Joe Davis	US EPA, Region 7
Jim Silver	US EPA, Region 7
Joel Allen	US EPA, ORD
Dana Macke	US EPA, ORD
Mike Coffey	US FWS
Aleshia Kenney	US FWS
Gary Haden	McKinzie Environmental
Doug Schnoebelen	University of Iowa
David Fritz	BP America
Chris Biellier	Seneca Companies/Illinois MABAS 39
Matt Stokes	Pinnacle Engineering
Chad Livingston <sup>1</sup>	Cedar American Rail
Brent Earley <sup>1</sup>	Iowa American Water
Bob Bohannan	City of Moline Water Division
Greg Swanson	City of Moline Water Division
Dave Hokanson	UMRBA
Mark Ellis <sup>2</sup>	UMRBA
Sanhita Chattopadhyay <sup>2</sup>	UMRBA

*1 = First day only.*

*2 = By telephone.*

*3 = Second day only.*

**Call to Order and Introductions**

The meeting of the Upper Mississippi River Hazardous Spills Coordination Group (Group) was called to order at 1:35 p.m. by Chair Rodney Tucker. Introductions of all in attendance followed.

## **UMR Hazardous Spills Coordination Group Chair Transition**

Tucker noted that he had served two years as Chair of the Group, and that the Group had decided in previous meetings to rotate the Chair position between states every two years. He indicated that the Chair position had most recently been held by Wisconsin, Missouri, and Iowa – so that Illinois and Minnesota would be likely candidates for the Chair position. Tucker further asked the Group to consider the benefits of having a Vice Chair to serve if the Chair was unable to be present and to help collaborate with the Chair and UMRBA staff. The Group was in agreement with the establishment of a Vice Chair. Roger Lauder of Illinois EPA indicated that he would be willing to become Chair, and Dave Morrison of Minnesota PCA agreed to become Vice Chair. A motion that Lauder and Morrison fill these roles was made, seconded, and approved by the Group. The Group was in agreement that Lauder's and Morrison's terms would begin with the next meeting of the Group, in October 2009.

## **UMR Case Study: Dresbach, Minnesota Train Derailment**

Morrison provided a case study presentation regarding the train collision and derailment that took place on December 17, 2008 near Dresbach, Minnesota in Pool 7 of the Upper Mississippi River (UMR). He described how the initial incident on the morning of the 17<sup>th</sup> caused a propane release when a rail car hit a stationary propane tank, resulting in the evacuation of the nearby area. Morrison then described a secondary release of urea ammonia nitrate fertilizer and locomotive fuel into the river caused when two of the tanker cars slid into a locomotive, pushing it into the river several hours after the initial incident.

Tucker asked when the secondary release took place. Morrison responded that it was approximately 7 p.m. in the evening. Tucker further asked whether individuals had returned from the evacuation at that point. Morrison replied that this was the case and that individuals had returned by the evening.

Morrison noted that one consideration in this case, and with propane leaks generally, is that the smell of the propane gas persists after the leak has stopped. He added that this is one reason why it is important to have air monitoring in place in these cases.

Morrison explained that the UMR notification protocol was implemented when the cars slid to the river, as the incident then impacted the UMR.

Morrison indicated that the rail company (Canadian Pacific) worked with several contractors on the incident, including Pinnacle Engineering, West Central Environmental, and Baywest, Inc. He also noted that sampling was not initiated on the first day, so that baseline numbers were not established, but that sampling did begin on the second day of the incident.

Morrison next described some of the challenges to response posed by this specific situation, in terms of weather and location. He indicated that skimmers intended to remove product froze up due to extremely cold temperatures and that ice containing

spilled product was eventually cut out, removed, and trucked off site for disposal. Tucker asked whether in-situ burning as considered as an option. Morrison replied that it could not be used because one of the locomotives was still on site. He summarized by stating that the incident tested cold weather capability and pointed out the need to improve cold weather capability.

Matt Stokes of Pinnacle Engineering added a few more details regarding the response, noting that plywood barriers and sorbents had been placed to contain spills along the rail bed. He reported that, in order to remove the locomotive, access to the area had to be built up and that this was an area already identified on navigation charts as an eroded rail bed. Therefore, Stokes indicated, consideration was being given to leaving the added rock in place and restoring the habitat in the area with the new material left in place.

John Punkiewicz asked how close the incident had been to Lock and Dam #7. Morrison replied that it was about  $\frac{3}{4}$  miles upstream from the lock and dam.

Morrison indicated that, as of March, there was still oil entrained in the ice and that sorbent boom was still in place to capture oil.

In regard to water quality monitoring, Morrison mentioned that testing had been done for petroleum and fertilizer, but that it was difficult to distinguish results from background levels, adding that oil and grease were found at low levels in sediment samples from a number of nearby areas.

Morrison noted the following as issues still to be resolved regarding this incident:

- 1) Natural Resource Damage Assessment (NRDA) and mussel survey
- 2) a sediment/substrate survey, and
- 3) reshaping of the rock embankment to improve habitat.

Joe Davis asked how much fuel had been lost in the incident. Morrison replied that an estimated volume of 3,200 gallons had been lost, though he added that it was difficult to estimate this total.

Morrison highlighted the fact that, for fertilizer spills, the Minnesota Department of Agriculture (MDA) is the lead agency and that this agency has not been directly informed of the protocols in the UMR Plan. Therefore, he noted that it may be important to reach out to MDA to improve their familiarity with the UMR Plan. Morrison further explained that, in this incident, MPCA participated because of the fuel component of the spill, but that if it had only been fertilizer, there would not have been MPCA participation. He indicated that Minnesota is redoing its guidelines to improve coordination between MPCA and MDA. Morrison asked whether other states had this issue, but responses from the group indicated that this was an issue specific to Minnesota.

Aleshia Kenney asked if the extent of the impact on mussel beds from the rock build-out had yet been assessed. Morrison indicated that this had not yet been done.

Doug Schnoebelen asked if the laboratory had run blanks on the water samples to check on lab contamination. Morrison replied that blanks had been run.

Ramon Mendoza noted that this event highlights the need for protocols to address booming on ice. Rick Gann noted that a facility with an oil-water separator might have been an option for disposing of contaminated ice.

All Group members expressed an interest in obtaining a copy of Morrison's presentation. Morrison indicated he would provide a copy to Dave Hokanson for further distribution to the Group.

### **Agency and Other Updates**

#### *BP America*

Dave Fritz reported that BP is planning to conduct a major drill in the UMR area in the near future, although a specific date has not yet been determined.

#### *Minnesota PCA*

Morrison noted that Red River flooding, along with budget shortfalls, are dominant issues for the Minnesota PCA at this time.

#### *USFWS*

Kenney commented on an upcoming effort to enhance Refuge spill contingency planning, and noted that this would be discussed in greater detail later in the meeting.

#### *US EPA Region 7*

Jim Silver noted the upcoming 2009 Freshwater Spills Symposium, to be held in St. Louis April 28-30, 2009. He also mentioned upcoming TRANSCAER tour in Missouri and responder preparation for the baseball All-Star Game to be held in St. Louis on July 14, 2009.

Davis commented that Region 7 continues to work on its Google Earth-based mapping application and that this will be presented at the Freshwater Spills Symposium. He also reported that Region 7 has been working with USCG personnel (Pete Vasquez) in preparation for a USCG "industry day" to take place in the Quad Cities the first week of June. In regard to training, Davis commented that he will be leading an upcoming training in Baton Rouge that will be similar to the training conducted in 2008 in the Quad Cities. He also expressed an interest in working with Wakota CAER on training in the Minnesota/Wisconsin area.

#### *USACE-Rock Island District*

Punkiewicz mentioned the "Cold Water Boot Camp" DVD that had been produced by the Corps and previously made available to the Group. Tucker commented that the DVD is very effective and clearly demonstrates the effects of cold water on ability to swim and survive. Gann thanked Punkiewicz for making this DVD available to the Group, indicating that Missouri DNR was sharing it with water suppliers who have surface water intakes and that it has value for fire departments, as well.

*USACE-St. Louis District*

Frank Catalano reported on a release of waste oil at Mel Price Lock & Dam (Lock & Dam # 26) on December 17, 2008. He indicated that a small amount of waste oil had been released from two barrels at that time.

*University of Iowa*

Schnoebelen noted that the University of Iowa has done work on time of travel that may be of interest to the Group. He also gave a brief description of the capacities at the LACMRERS research station.

*USEPA-Office of Research and Development*

Joel Allen provided a brief update on the status of UMR early warning monitoring stations, indicating that three stations were currently up and running, and that two more will be added in the near future. He noted that further details would be provided during his presentation the following day.

*Illinois MABAS 39/Seneca Companies*

Chris Biellier described two MABAS groups in Illinois relevant for the UMR in the Quad Cities area. He indicated that MABAS 39 covers the area from Galena to the northern Quad Cities, as well as the area south of the Quad Cities in southern Rock Island County and Mercer County riverfront areas across from Muscatine. Biellier added that MABAS 43 incorporates the southern Quad Cities area, as well as areas further south. He further explained that MABAS is a mutual aid organization whose members include fire departments and other agencies, and that there is a strong MABAS presence on UMR tributaries. Biellier also noted that MABAS would be hosting a boom deployment exercise on the Hennepin Canal in Illinois on April 19, 2009.

Biellier reported that Seneca Companies had been involved last year with the response to the Parkersburg, Iowa tornado and Midwest flooding. He added that Seneca may be seeking OSRO certification and that MABAS groups are interested in obtaining response resources, such as boom deployment trailers.

In further comments, Biellier described a release of corn oil that had occurred on February 10, 2009 at Muscatine, Iowa. He described the release as traveling from the surface through a storm drain, but that the product was not observed at the outfall or in the River. Biellier added that some boom was deployed in this incident and that USCG was involved.

Additionally, in regard to ethanol, Biellier noted that public service agencies were not well equipped to deal with the hazards presented by ethanol production facilities.

Tucker asked whether the boom deployment on the Hennepin Canal would be open to all interested. Biellier responded that attendance by interested parties was possible and that a discussion of ethanol issues would precede the field deployment, adding that popcorn would be placed into the canal to represent a product release. Tucker asked whether

Biellier was working with the Bettendorf spill cooperative. Bieller replied that, in general, he was working with industry to try and pre-position response equipment. He added that the Quad Cities has been fortunate to avoid many spills, but that the spill risk is very much present.

#### *Pinnacle Engineering*

Stokes reported that he had just been promoted to Manager of Emergency Services with Pinnacle Engineering and that he was interested in picking up ideas and information as part of his participation the Group.

#### *DM&E Railroad*

Chad Livingston reported that Canadian Pacific had purchased ICE/DM&E rail, which is now known as DM&E Railroad. He indicated that he is working to become more involved in groups such as the UMR Hazardous Spills Coordination Group.

#### *Illinois EPA*

Lauder noted Biellier's earlier description of MABAS groups and he emphasized the role of MABAS in mutual aid. Lauder reported that Illinois DNR had recently purchased SONAR that can be used in search and rescue efforts, and was employed during a recent event on the Ohio River.

Lauder alerted the group to the situation of the MV Hartford Beaver, which sank in the UMR north of St. Louis (river mile 197) on March 11, 2009. He reported that the vessel owner (National Maintenance) is waiting for the river stage to drop to a level where recovery is possible. (Note: Lauder later provided to the group, via email, a detailed summary of the situation, as provided by National Maintenance.)

Lauder also reported on a temporary, and unexplained, drop in the Kaskaskia River that caused the short-term loss of water supply at a water intake on the river.

#### *USEPA-Region 5*

Mendoza reported that Kathy Clayton is the newly assigned US EPA OSC in Green Bay and that Jeff Crowley is a new OSC for Indianapolis. He added that US EPA has been working on information related to vapor intrusion and that a new emergency reference guide for air monitoring is available. Mendoza indicated that he would share the air monitoring guide with the Group. He also commented on upcoming exercises including a Level A exercise in Toledo and a drill in Milwaukee involving the vessel Lake Guardian.

Mendoza noted that US EPA Region 5 is also providing support to the Minnesota PCA in their response to Red River flooding. In regard to this effort, Morrison commented that the Red River had been sandbagged to a level of 42 feet, with a river peak so far of 40 feet. He noted that, if the sandbags were topped, an estimated 3,000-3,500 houses would be impacted.

#### *American Water Company*

Brent Earley reported that he now holds the position at Iowa America Water previously held by Dave Kull, adding that Kull remains with American Water in a different capacity.

#### *Missouri DNR*

Gann noted the upcoming, seven-stop TRANSCAER tour taking place in Missouri, indicating that this will include a stop on the Illinois side of the UMR, at East St. Louis. Lauder asked what date this event was taking place. Gann indicated that the East St. Louis event was scheduled for May 2, 2009 and that dates for all events are available at [www.transcaer.com](http://www.transcaer.com).

Gann also reported on a release of hydrofluoric acid at the Missouri-American water plant on the Missouri River at Chesterfield. He indicated that the spill was contained and that the responsible party did a lot of work in the response effort.

Gann asked Lauder about the status of the MV Hartford Beaver. Lauder replied that recovery efforts were awaiting lower water levels and that exact timing of recover was not yet known. He invited members of the Group to contact him if they had not received news in the future regarding this situation.

#### *Iowa DNR*

Tucker noted that budget constraints are a major concern for the agency at this time, with an approximately 15% reduction in the Agency budget to occur after July 1st.

Tucker mentioned the upcoming Vigilant Guard exercise coming up in June in Iowa. He described this major National Guard-led exercise as involving multiple scenarios (flooding, WMD, hazmat, and others) simultaneously.

Tucker noted that there had not been many incidents affecting the UMR of late, aside from the corn oil spill at Muscatine previously described by Biellier.

Tucker asked whether any members of the group had feedback on the USACE-sponsored UMR Flood Response Workshop which had immediately preceded this meeting of the UMR Spills Group. He added that flood predictions shared at the workshop did not forecast major flooding, but noted that all such predictions are dependent on levels of precipitation. Whelan noted that the workshop was focused on the Corps' statutory mission and not a National Response Framework mission, adding that there was not much discussion of Emergency Support Function missions.

### **Area and Sub Area Planning Updates**

#### *Region 5 Area*

Whelan reported that the Region 5 Integrated Contingency Plan was currently being updated into a database format. She added that a goal of the update was to make the plan amenable to use with multiple products and that various methods of displaying information had been examined, including Google Earth/Google Earth Pro, Response Manager, GeoPDF and the Environmental Response Management Application (ERMA). Whelan commented that the display of data with Google Earth Pro appeared promising

and that EMRA could be valuable, but is expensive to develop. Fritz concurred that ERMA is quite good, but also expensive and intensive to develop. Whelan agreed, noting that it may rely almost too much on the inclusion of data without full consideration of the need for individuals with specialized skills to utilize the information. Davis concurred that a data system should not be so complex that only a limited number of individuals can actually use it.

Fritz commented that he likes the work going on in Toledo where additional data is being added to inland sensitivity atlas information. Whelan agreed, and added that responder feedback is needed on efforts such as this where additional layers are being added on top the atlas information. Silver asked if the information was then relatively easy to use. Whelan responded that while the process of data inclusion is intensive, the product should be relatively easy to use.

Whelan concluded her comments on Region 5 efforts by indicating that the Region has made a commitment to updating sub area plans, and the data structures being explored in the area plan could be potentially integrated into sub area efforts.

#### *Twin Cities Sub Area Plan*

Hokanson reported that a Twin Cities Sub Area Plan Steering Committee has been meeting and is seeking to update the plan by the end of the calendar year 2009. He indicated that participants in the Steering Committee have included Minnesota PCA, Minnesota DNR, Minnesota HSEM, Minnesota Department of Agriculture, US EPA, US FWS, USCG, and the City of Minneapolis. Hokanson added that the planning effort will soon be expanded beyond the Steering Committee to a “full” sub area committee.

Whelan noted that one of the efforts being made in updating the plan is to include information on hazardous materials, and that Steve Lee of Minnesota PCA has been working with Minnesota HSEM to explore this. She added that this vision was to include information related to release, monitoring, and cleanup for hazardous materials, as had already been done for oil in the Plan. Gary Haden asked if this would cause the plan to be restricted any further in its distribution and indicated that in working with Sub Area groups, the sharing of this type of information has been difficult post-9/11. Whelan responded that just a template for facilities’ use would be included and not actual facility plans themselves, and therefore she did not anticipate any additional restriction to the plan would be needed.

#### *Quad Cities and St. Louis Sub Area Plans*

Haden reported that there is not a lot of major activity on these plans at this time, with some recent minor updates having just been completed. He noted that one area of upcoming effort was to make worst case scenarios more realistic and relevant.

Haden noted that the St. Louis area was to have been the site of a major exercise this fall led by the Area Maritime Security Committee, but that due to activities associated with the baseball All-Star Game, it was decided not to proceed with the exercise.



Haden noted that a Greater St. Louis Sub Area Committee meeting will be held in conjunction with the Freshwater Spills Symposium on April 28, 2009 in St. Louis. In the Quad Cities Sub Area, he noted that a meeting would follow this meeting of the UMR Spills Group and would be attended by a new facility manager from Flint Hills Asphalt.

Haden reported that mapping was now taking place in Region 7 sub areas, following on from the Google Earth-based mapping initiated by Joe Davis and others at Region 7. Davis observed that this effort had started as a pilot project, but had quickly been brought into use for response events. Haden added that one of the advantages of this approach is that additional layers are relatively easy to add.

### **St. Louis Response Strategies Demonstration/Inland Sensitivity Atlas Update**

Hokanson provided a demonstration of the recently assembled CD product that contains information about site-specific response strategies for the UMR in the St. Louis area, and was the result of a collaborative planning effort taking place over the preceding year. He also demonstrated the new GeoPDF maps that are being included in the ongoing update to the Inland Sensitivity Atlas, which provide GIS-like functionality in a PDF file. Hokanson reported that the first volume of the updated Minnesota atlas should be completed this summer and that the entire Minnesota atlas should be completed by approximately the end of the calendar year.

Davis observed that it is important to field test proposed strategies, such as this set for St. Louis. Stokes concurred, noting that industry shares this perspective. Silver suggested that review of the strategies could become part of facility inspections.

### **UMR Pipeline Crossings/Hazards to Navigation**

Whelan and Mendoza raised the issue that some UMR pipeline crossings are hazards to navigation, and may present a risk for failure/collision. Whelan suggested that the group should consider how best to connect with the pipeline industry and in pipeline issues. Bieller noted that there is a pipeline group that meets periodically and where updates are provided. Tucker commented that there is also an Iowa Pipeline Association that hosts “meet and greet” sessions.

Whelan emphasized that her concern was with the vulnerability of existing pipelines on the UMR and that she did not envision the issue as being related to enforcement, but more of an effort to address and mitigate specific existing risks. She also emphasized that the issue was river-specific.

Haden observed that, given the nature of the issue, the pipeline association did not seem to be the correct mechanism to move the discussion forward. Silver asked who would be appropriate to invite for a discussion. Fritz suggested that the Office of Pipeline Safety (OPS) would need to be involved. Mendoza suggested that US EPA could make some contacts within OPS and invite OPS representatives to the next UMR Spills Group meeting.

## **Refuge Planning**

Whelan indicated that recent rail spills along the UMR had raised the idea of enhancing contingency planning for National Wildlife Refuge areas on the UMR. Hokanson described that US FWS, US EPA, Wisconsin DNR, and Minnesota PCA had all been involved in initial discussions regarding refuge planning. Group members suggested that the states of Iowa and Illinois, as well as the National Park Service, should be brought into the discussion. Whelan suggested that there would be two products of the effort: 1) a communications piece, and 2) site-specific response strategies.

Livingston suggested that training would need to accompany the effort. Whelan agreed that some training should augment the effort. Bieller and Livingston suggested that ICS training would be an important component. Stokes also emphasized the importance of health and safety training.

As an example, Whelan commented that build-outs of ramp structures in recent rail incidents may have had important natural resource impacts, and that coordination in these types of scenarios is important. Fritz commented that it is these types of situations that require a plan to be developed. Whelan concurred, noting that the specific issues associated with Refuge lands highlight the need for a Refuge-specific contingency planning effort.

*The meeting was adjourned for the day at 5:00 p.m.*

## **Freshwater Spills Symposium Preview and Preparation**

Davis provided a brief overview of the Freshwater Booming Strategies short course he would be helping lead on April 27 at the Freshwater Spills Symposium. Kenney highlighted the Oiled Wildlife Response short course that she would be contributing to. Fritz mentioned that he and Whelan would be helping lead the Shoreline Cleanup Assessment Technique (SCAT) short course. Haden mentioned that the exact time and location of the Greater St. Louis Sub Area meeting taking place in conjunction with symposium was still to be determined, and depended on the final scheduling of the St. Louis Response Strategies presentation.

## **Upper Mississippi River Response Techniques and Tools Presentation**

Hokanson next walked through the presentation that he, Davis, and Steve Faryan would be giving at the Freshwater Spills Symposium, with the intent of both refining the presentation and gathering information to aid in the documentation of successful techniques and tools for response on the UMR. The Group provided a number of comments to Hokanson for use in correcting and amending the presentation; among the recommendations for modification from the Group were the following:

- Adding additional information about the UMR's locks & dams at the beginning of the presentation.
- Using aerial photos, and in particular photo of Mississippi River/Missouri River confluence to illustrate the complexity of the system.

- Emphasizing that some of the UMR's high value natural resources – mussels in particular – are not mobile and therefore can be more sensitive to incidents.
- Providing additional description of National Wildlife Refuges on the UMR.
- Emphasizing the limited amount of response equipment and the UMR and noting that what is available is found primarily in St. Louis and the Twin Cities.
- Noting that spill travel times on the UMR can be rapid, while response times may be slow due to location of equipment and responders.
- Asking the audience to share where they see similarities between the UMR and other large rivers in terms of response, to hopefully gather lessons learned from other areas.
- Specifying that 6" boom is more appropriate for fast water/river channel and 12" boom more appropriate for slower water/off channel areas.
- Making the map of Wakota CAER boom cache locations its own separate slide.
- Noting that boom vane can be effective, and was deployed recently on Missouri River, but that anchoring is extremely important and the equipment itself is fairly expensive.
- Noting that boom deflector is fairly commonly used and has been effectively deployed on the UMR.
- For the vessel of opportunity skimming system (VOSS), noting that it may be best used in situations of an ongoing release, due to the time needed to deploy and fit a vessel for use.
- Adding a separate slide regarding skimmers, noting that they may be use in off-channel areas and showing photos of skimmers in operation.
- Placing more emphasis on the potential use of barges, both to function as boom and as work platforms. Adding photos of barges operating in each context.

Also, in response to the discussion, several members of the Group observed that it would be important to review and update the equipment list contained within the UMR Spill Plan. Hokanson indicated that he would work with the Group in updating this list.

### **Upper Mississippi River Spill Response Plan Updates**

Hokanson noted that, as discussed during the previous meeting of the Group, the UMR Plan had been modified to provide contact phone numbers for downstream states (Arkansas, Kentucky, and Tennessee), as well as contact information for USCG's Sector Lower Mississippi River (Memphis). He indicated that, if these changes were acceptable to the group, he would subsequently distribute the revised pages electronically and that UMRBA would also update the version of the UMR Plan on its website accordingly. No objections to these changes to the UMR Plan were raised by the Group.

Hokanson also distributed laminated copies of the UMR Emergency Action Field Guide to members of the Group.

### **UMR Notification/Recent Notification Drill**

Tucker reported that a UMR notification drill was carried out on February 11, 2009 using the following scenario:

*At 0630, an Artco line boat pushing the red flag barge "Bridge Destroyer" allided with the Burlington Northern RR bridge at mile marker 383.9 UMR in Fort Madison, IA. The barge loaded with 400,000 gallons of diesel fuel has major damage to the port side where it has a gash through two center tanks on the side of the barge. Tanks in the bow section are protected by the location of the oil barge in the tow with a cargo barge out front. The hull rupture in the oil barge is just below the waterline and product immediately starts flowing out. The spill occurs rapidly, with the barge losing 236,000 of diesel fuel from the two damaged tanks within 8 hours. The captain beaches the tow on the Iowa side just downriver of the bridge. Most of this volume being discharged near-shore where the barge is secured immediately following the collision however diesel is flowing to the Illinois side of the river due to the wind. For safety reasons, no physical intervention takes place to slow the leak or retrieve the product remaining in the damaged tanks.*

*Winds are 20 to 30 knots across the river from the west, and wave action is a 1 foot chop. Surface water flow is at about 3 knots. There are reports of the smell of diesel fuel in Fort Madison. Artco captain/supervisor calls NRC to report the spill and allision soon after the incident.*

Tucker noted that, overall, the drill was successful and that readiness may have been heightened by an actual incident occurring the day before the drill (corn oil spill at Muscatine, Iowa). He explained that industry (Artco) initiated the drill by notifying Iowa DNR, adding that Artco was able to use the drill to satisfy some of their own requirements. Tucker indicated that notification to affected agencies appeared to have been successful, with the possible exception of timely notification of USACE.

Lauder confirmed that Illinois EPA had been notified during the drill and in turn had passed notification along to their public water systems.

Davis observed that this scenario brings out one potential issue with NRC notification, in that the incident involved a vessel that was the beached. He explained that US EPA is not always notified by NRC regarding incidents involving vessels (as that is USCG's jurisdiction), but that US EPA often eventually ends up being involved in the response.

In response to discussion about the applicability of notification plans for products beyond just oil, Davis indicated that notifications are received for a wide variety of spilled products. Gann indicated that Missouri DNR is interested in being notified regarding all types of spills, not just oil. He added that Missouri DNR uses an email system to route through notifications, including NRC notifications.

Lauder raised the issue that, under catastrophic conditions with multiple spills, notification may be challenging.

Lauder and Gann indicated that they would be willing to work together in organizing the next notification drill, which would likely take place before the next meeting of the UMR Spills Group.

### **UMR Response Training**

Tucker asked the Group how members would want to approach future training activities. Davis indicated an interest in possibly doing training in the Twin Cities area, potentially working with Minnesota PCA and Wakota CAER.

Biellier asked whether it would be possible for the Illinois MABAS groups to acquire boom, and in particular expressed an interest in USCG response trailers that USCG had been seeking to locate with other entities. Catalano indicated that the USACE has been working with USCG to deploy some of these materials to USACE facilities, but that USCG is seeking to retain ownership of the equipment even if it is deployed with other entities. Punkiewicz indicated that that several USACE properties, including Lock & Dam 14 might be promising sites for equipment deployment. John Martin reported that he was maintaining two of the response trailers at MSD Quad Cities and intended to keep this equipment. Hokanson indicated that he would be in contact with Rob McCaskey of USCG, Sector UMR, to determine if any trailers were available at this time for deployment at non-USCG sites. (Note: McCaskey subsequently indicated that no trailers were available for deployment.)

Returning to the discussion of training, Whelan indicated that, historically, the group has help support training that occurred at different locations along the UMR. Biellier indicated that there is a need for ongoing training. In subsequent discussion, the Group targeted the LaCrosse area as most promising for a potential next training event.

### **NRC Report of Recent UMR Spills**

Hokanson distributed an NRC report summary, prepared by Faryan, covering the UMR from October 1, 2008 to March 16, 2009. He noted that the February 11, 2009 report was actually the UMR notification drill discussed earlier in the meeting.

Allen asked how accurate the NRC report was in describing all spills to the river and accurately characterizing the circumstances of individual spills. Davis explained that the NRC functions primarily as an initial notification system, and therefore does not reflect final information regarding an incident in terms of volumes, products, etc.

### **Upper Mississippi River Early Warning Monitoring Network**

Allen gave a presentation regarding the structure and status of the Upper Mississippi River Early Warning Monitoring Network project being funded by US EPA, where he is the lead researcher. He began with an overview of the “early warning system paradigm” underlying the approach being taken in this effort.

Allen next provided an update on the status of the installations, noting that three stations in Minnesota (St. Cloud, Xcel Energy Sherco plant, and the Minneapolis Water Works) have been up and running and that two additional stations in the area of the Quad Cities (University of Iowa/LACMRER and Mid American Energy) are in progress. He added that an additional station associated with the National Great Rivers Research and Education Center in Alton, Illinois may be pursued in 2010. Allen explained that the US EPA Regionally Applied Research (RARE) grant of \$200,000 had covered the cost of the first four installations, other US EPA funding sources would cover the fifth station, and that extramural funding would cover the sixth station.

Allen explained that bivalves (mussels) were chosen for use in these stations due to their lower cost, and because their response can likely be representative of biological response

in a broader community. He noted that data collection and transmission appeared to be going well and that work on algorithm continues so that events can be detected with unnecessary triggering of false alarms.

Anderson noted that Lock & Dam 14 is no longer a site for monitoring station, due to issues regarding the intake location and its proximity to shipping vessels that could stir up sediment and lead to a water quality condition not reflective of that of the river more generally. He explained that the Mid American site was seen as an alternative to the Lock & Dam 14 site.

Allen explained that upcoming work on the project included finalization of the algorithm for UV and YSI instrument data, and the development of a data sharing agreement. He indicated that work would also need to be done at the Mid American site to determine how to best deliver water to the monitoring equipment. Schnoebelen indicated that there both technical issues and data sharing/security questions to be resolved in determining how to supply data to users.

Allen characterized the instrumentation set as being quite robust, and anticipated only minor further adjustments to the instrumentation for the monitoring stations – although he mentioned that technology continues to improve and future stations need not necessarily be limited to equipment provided only by specific manufacturers.

Whelan asked whether detection and response to spills was still a main focus of the project. Allen replied that this continued to be focus of the project, along with other potential applications in the water quality sector.

Greg Swanson provided a perspective from the public water suppliers, indicating that they viewed these monitors as the first of several barriers that helps assure the quality of their water.

Allen offered to include any members of the Group who have an interest in future conference calls on the topic. Several members of the Group indicated an interest in obtaining a copy of Allen's presentation. Hokanson indicated he would work with Allen to distribute this to the Group.

### **Next Meeting**

The Group agreed that its next meeting should take place in the Quad Cities in October 2009, with the weeks of the 5<sup>th</sup>, 12<sup>th</sup>, and 26<sup>th</sup> appearing to be possibilities for meeting. Hokanson indicated that he would send an email to determine final date for the meeting.

*The meeting of the UMR Hazardous Spills Coordination Group was adjourned at noon on April 2, 2009.*