Upper Mississippi River
Hazardous Spills Coordination Group

April 21, 2015

Meeting Summary

Participants

Roger Lauder	Illinois EPA
Adam Broughton	Iowa DNR
Joe Sanfilippo*	Iowa DNR
David Morrison	Minnesota PCA
Bryan Hopkins	Missouri DNR
Rick Gann	Missouri DNR
Skip Ricketts	Missouri DNR
Tom Kendzierski	Wisconsin DNR
Greg Schweitzer	NOAA
John Punkiewicz	USACE, Rock Island District
Leo Keller*	USACE, Rock Island District
Monica Maghini	USCG, NRT
Mike Sams	USCG, District 8
Scott Stoermer	USCG, Sector UMR
Matt Marler	USCG, Sector UMR
Dan Ferrell*	USCG, MSD St. Paul
Harold Winnie	USDOT, PHMSA
Tim White*	USDA, APHIS-Wildlife Services
Steve Faryan	USEPA, Region 5
Ann Whelan	USEPA, Region 5
Joe Davis	USEPA, Region 7
Jeff Weatherford	USEPA, Region 7
Sabrina Chandler	USFWS
Annette Trowbridge	USFWS
Mark Fuchs	National Weather Service
Kay Mays	Enbridge
Tom Fuhrhop	Environmental Restoration
Bob Baumgartner	TransCanada
Matt Stokes*	STARS Training
Mark Gerlach	Xcel Energy
Dave Hokanson	UMRBA
Mark Ellis*	UMRBA
Molly McDonald*	UMRBA

**Participated by phone.*

Call to Order and Introductions

The meeting was called to order at 8:00 a.m. by Chair Tom Kendzierski. Introductions of all participants followed.

Recent UMR Spill Events

Dubuque Area Ethanol Derailment
Joe Sanfilippo gave a summary of the derailment which occurred near Balltown, Iowa on February 4, 2015. He began by noting the setting in which rail routes run in this portion of the Mississippi River, as follows:

- The route runs near water level on the west side of the Mississippi River.
- Due to natural topography, most of the main line runs between the base of the river bluffs and the river.
- Due to the high bluffs and the river, access by land along a good portion of the route is difficult. At many locations the only access by land is the railroad track itself.

Sanfilippo said Iowa DNR had been notified by Canadian Pacific (CP) shortly after noon on February 4th that five to six ethanol tank cars had derailed about ½ mile northwest of Finley Landing along the Upper Mississippi River in Dubuque County, Iowa. He then described Iowa DNR's immediate response to the event, where two staff were deployed from the nearest field office and notifications were made to drinking water systems, Wisconsin DNR, Illinois EPA, Illinois EMA, the U.S. Fish and Wildlife Service and USACE (Lock and Dam 11).

Sanfilippo noted that a key decision made early on by the Incident Commander was to let the fire associated with the derailment burn out, rather than attempting to stop it. He then described the response actions which took place in the days that followed the initial incident, including:

- The rail contractor improved pasture access lane to allow for heavy truck traffic.
- Rail cars which could be moved by rail were removed from the site in this manner.
- Wrecked cars were emptied of remaining product, moved to a staging area, and cut up for salvage.
- Pooled ethanol was recovered and removed from the site by truck.
- An air sparging system was installed.
- Water quality monitoring was conducted in the Mississippi River and in a nearby creek.

In terms of actions remaining, Sanfilippo noted that some final site cleanup remains to be done and that a mussel study will be conducted by a CP contractor in early May.

Sanfilippo noted that communication was one of the primary challenges encountered during this incident, both in terms of on-scene communications (e.g., limited cell phone and internet access) as well as external communication to all potentially interested parties.

Hartford Pipeline Spill
Scott Stoermer reported on the April 17, 2015 pipeline spill at Hartford, Illinois which released approximately 30,000 gallons of low sulfur diesel into the Cahokia Canal and then into the Mississippi River at river mile 188. He noted that both an 8 inch and 14 inch line appeared to be potentially involved in the leak.

Stoermer described how the plume of the release – a patch of sheen up to 20 miles in length at its maximum – was tracked as it moved downriver, to approximately river mile 100, where the sheen was then no longer visible. He noted that NOAA assisted in fate and trajectory work related to the spill, with the trajectory modeling proving to be quite accurate. The fate component was not quite as accurate, likely due to changes in weather conditions.

Stoermer said notifications were made to federal, state, and local partners regarding the spill, including public water systems. As a result, Illinois American Water briefly closed intakes at Granite City and East St. Louis until boom was put in place. UMR navigation was also closed between river miles 195 and 160 for a number of hours on April 17th and 18th.

Stoermer noted that no air hazards were identified via air monitoring and no impacts to wildlife have been observed or reported. He said shoreline assessment was conducted, finding mostly degraded, gray to light gray product residual, with minimal rainbow sheen. Stoermer reported that water monitoring to date had found either no detects or detections within established limits.

Stoermer commented that the responsible party (Phillips 66) acted swiftly in response and their OSRO (Heritage Environmental Services) was on site quite quickly. He said most of the ongoing recovery and repair actions are now taking place in the Cahokia Canal, with pipeline repair and product recovery focused on the north side of the canal. Recovery operations are currently ongoing at the canal include skimming and sorbent use. Stoermer explained that monitoring and assessment work related to the spill is ongoing.

Bryan Hopkins asked if there has been an assessment looking for fish kills and, if so, who had conducted this. Stoermer responded that Coast Guard SCAT teams had done this assessment in collaboration with USFWS and state natural resource agency staff. Mike Sams asked who is conducting ongoing air monitoring Stoermer answered that CTEH is doing this work in coordination with state agencies.

Joe Davis asked whether any product was observed moving down the Chain of Rocks Canal (shipping canal) or if all the product went through the flowing Chain of Rocks. Stoermer answered that no sheen was observed in the shipping canal, so presumably all the product in the river went through the flowing Chain of Rocks. He added that booming to direct product into the canal was not attempted.

Hopkins asked whether any notification to the public was made regarding impacts to recreational uses, such as fishing in the Chain of Rocks. Stoermer replied that information was made available to the public, but very little response was received, with only media members attending the briefings that were held. He noted that weather during the incident had been such that interest in river recreation may have been limited.

Greg Schweitzer asked if the duration of the release was known. Stoermer said this was not currently known, nor was the specific cause of the rupture. Rick Gann commented that previous, intermittent reports of sheening have come in from this area. In light of Gann's observation, Hopkins encouraged the Coast Guard to look into preceding reports of releases in the area. Stoermer said USCG would look into this.

Galena Area Derailment

Steve Faryan gave a summary of the incident involving the derailment of a Burlington Northern Santa Fe (BNSF) train near Galena, Illinois on March 5, 2015. He said the derailment took place on the afternoon of the 5th, occurring at 1:24 p.m. and was reported to the NRC at 2:52 p.m. Faryan said the incident involved the derailment of 21 cars carrying Bakken region crude which were part of a longer, 105-car train. Of these 21 cars, a total of 12 were impacted via leaking or burning of product.

Similar to the Dubuque ethanol incident, Faryan noted that the decision was made early on by the incident commander (Galena Fire Department) to let the cars burn, rather than trying to extinguish the fire. He said initial response focus was on life safety, incident stabilization, and protection of the environment, adding that a total of 415 personnel were involved in the early stages of the response.

In terms of response management, Faryan reported that the Galena Fire Department and the Illinois Emergency Management Agency (IEMA) had used NIMS from the outset. Eventually, a Unified Command was established that incorporated Galena Fire, BNSF, USEPA, IEMA, Joe Daviess County EMA, and Illinois EPA. Faryan observed that the value of the October 2014 La Crosse functional exercise definitely came to light during this response, as many of the same entities which had been part of that exercise were engaged in the Galena response. He also noted that the USCG Strike Team was also engaged and was of great assistance during the response.

Faryan described some of the specific elements and considerations of the response as follows:

- Once the fire was out, investigation by the Federal Railroad Administration and National Transportation Safety Board proceeded, with particular focus on how the newer CPC-1232 design tank cars involved in the derailment had fared.
- Roadway access to the area difficult was quite difficult. The only pre-established "roadway" to the area was a bike path.
- The Bakken area crude involved in this incident had an unusual greenish tint (though this may not be the case for other Bakken crudes).
- A retention berm and underflow dam were constructed to prevent loss of product to open water, which was very successful. A Clean Water Act Section 404 permit was needed in order to construct retention berm, and this was issued by USACE.
- Ice was definitely a factor in the response, as it had been in Dubuque, which points out the need for further training regarding ice operations, sampling, and recovery of product from ice.
- Use of a "quad copter" to photograph the incident site and response operations was very successful.
- Steps taken regarding the rail cars and rail line included: moving un-impacted cars from the area removing damaged cars from the right-of-way, empting, cleaning, purging, cutting up and scrapping cars (hauled out by truck), excavating contaminated soils under tracks, and replacing damaged tracks.
- There was strong interest in resuming rail operations as soon as possible, as over 100 trains had backed up due to the incident.
- Safety was primary consideration, particularly given the scale, type, and number of operations ongoing. Once the line was re-opened, trains were actively passing through the area, creating another important safety consideration.

Faryan next described some of the monitoring that had taken place alongside the recovery effort. He said water monitoring both upstream *and* downstream of the incident site found detectable levels of diesel range organics and as such these detections could not be attributed to the spill itself. Soil sampling at the site of the derailment found that most of the spilled product remained in the top four feet of soil. He said monitoring of the area is currently ongoing, with the rail contractor (CTEH) working in coordination with the Illinois Department of Public Health and ATSDR.

Other ongoing work noted by Faryan included flushing of rail track ballast to recover oil, onsite water treatment, and backfill/restoration of the area. Lastly, Faryan presented a table of metrics associated with the spill and recovery to date as follows:

Product	**Total**
Crude Oil	230,242 gallons
Oil/Water Mixture	35,132 gallons
Contact Water (treated)	216,800 (+) gallons
Contaminated Soil	3,568 (+) tons
Oily & General Debris	40 (+) yards
Tankers wrecked	12

Hopkins asked whether restoration of the affected wetland area would be part of the settlement from the spill. Faryan answered that this is yet to be determined, but would likely be part of the settlement. Hopkins also asked whether Faryan felt there is greater instance of spills occurring during the winter. Faryan said this seems to be the case and may be influenced by winter weather conditions and frost heave, though investigations of the recent spills is still ongoing. Adam Broughton said he agrees that winter/early spring conditions have seemed to contribute to spill events, recalling the Guttenberg derailment where a boulder dislodged and impacted the rail track.

Sabrina Chandler observed that both of these events occurred very near the UMR National Wildlife and Fish Refuge (UMR Refuge) and as such a major priority in the response was to keep the spill from reaching the refuge. She also emphasized the critical importance of good communication during these type of events. Additionally, Chandler said USFWS continues to pursue training relevant for spill-related activities. Annette Trowbridge added that USFWS Ecological Services staff has been coordinating with USEPA and US Coast Guard regarding spill response processes, including consultation and documentation steps.

Dave Morrison observed that the fire associated with this derailment may have been advantageous in terms of response, as it likely reduced air quality issues. He said Minnesota had a release of similar product without a fire occurring and months later is still detecting benzene. As such, he suggested that if a fire had not occurred in the Galena incident, the need for respirators – and the issues associated with this – would likely have been quite prominent.

In-Situ Burning

Ann Whelan began the discussion by observing that in a number of recent exercises questions regarding in-situ burning (ISB) had been raised, but there had not been the time and tools available to fully evaluate ISB options during the course of these exercises. Hopkins suggested it would be important to have protocol(s) in place in regard to ISB.

Chandler said there are indeed protocols in place for ISB within USFWS, and there is precedent for carrying out burns on USFWS properties in other regions. As such, some of the approaches used in other regions could potentially be adapted to the UMR. However, she added, there are restrictions in what Refuge staff can do as they are not trained for nor would participate directly in a burn. Therefore, USFWS would definitely be part of any conversations and decisions regarding ISB on Refuges, but could not directly conduct any burn.

Monica Maghini asked if USFWS has been working with the US Forest Service in regard to burning protocols. Whelan observed that, while she has worked with the Forest Service in the past, the issues the Forest Service addresses related to burning are largely different than those most prominent on the UMR/in the UMR Refuge. She added that a main goal on the UMR would be to make sure that any Refuge-specific planning is integrated into other regional plans and policies. Further, Whelan explained, another area to work on is public communication component due the population centers on the river located in proximity to areas where burning may be considered as an option.

Tom Kendzierski asked how effective ISB typically is, noting that in his experience that it does not always remove the product so additional cleanup is still needed. Whelan replied that the effectiveness is very dependent on the product spilled. Chandler added that the presence of vegetation also makes a difference, observing that the recent release to Weaver Bottoms could have been very amenable to a burn, but that other areas are not as amenable.

Mike Sams said in his experience the RRT is the body responsible for creating protocols related to ISB, adding that in the coastal zone ISB has been both evaluated and employed many times. Whelan

commented that two regions (RRTs) are involved on the UMR, with Region 5 having a comparatively "liberal" approach in regard to the application of ISB. Additionally, she noted, there is benefit in exploring potential concerns with ISB at a more localized level. As such, Whelan suggested that having planning as specific as possible for the Refuge may be helpful in bridging across any regional differences and in addressing local concerns. Broughton concurred, saying that if ISB is to be considered as an option, then having pre-planning in place will be helpful.

Chandler said UWFWS can look into where on the Refuge burning may be an appropriate option, but would like to have concurrence from the state and federal partners in the Group that this effort has merit and that the states will be comfortable with the likely outcomes of this work. Gann said such an effort appears to have merit, but that he would like to have additional specifics which he could bring back to his state. Chandler said USFWS could do some initial work and then check back in with the Group at its next meeting or call.

Training and Exercises

SCAT Training

Whelan said she and Schweitzer are working together to develop SCAT training for the region that will take place in two states simultaneously, with classroom portion delivered remotely and then field component done on site in each of the states. She said there has been a great deal of interest in SCAT training from both the public and private sectors and it is hoped that this type of training will reach the most people possible most efficiently. Whelan said a refresher training module is also being considered, as well as the development of freshwater SCAT forms. Schweitzer added that NOAA is very supportive of this type of training design, as opposed to trying to conduct both classroom and field training in multiple locations.

Upcoming Exercises and Training on the UMR

Whelan said Marathon Petroleum is holding an exercise in the St. Louis area on August 25-27, 2015, which will be natural disaster driven and will focus on two simultaneous releases – from a vessel and a storage tank. Hokanson said this scenario will be explored as part of the upcoming joint RRT meeting and that Pat McCaffrey of Marathon Petroleum is the primary contact for those interested in further information about the August exercise.

Whelan also noted that FEMA will be holding a tabletop exercise in La Crosse on June 10-11, 2015 focusing on a rail-based release of Bakken region crude oil. She said this exercise will differ from the one supported by the UMR Spills group last October in that the FEMA exercise will include a fire component and therefore have a greater public safety emphasis. However, she added, it will also include an environmental component and that the exercise developers have reviewed the AAR from the October 2014 exercise. Whelan explained that the FEMA exercise is invitation-only and approximately 70 people are expected to participate.

Stokes said a boom school will be held June 18-20, 2015 on Arsenal Island in Rock Island, in coordination with the Arsenal Island Fire Department. He explained that the training is focused on local agencies, but that all are welcome to attend. Stokes said he is the contact point for this training if anyone is interested in more information. He also added that Wakota CAER had not done boom schools in 2014, but that the schedule of 2015 boom schools should be available soon (see http://wakotacaer.org/boom-school/).

Future UMR Spills Group-Supported Training

Noting the earlier case study discussions involving winter response, Faryan suggested an ice response course may be an appropriate next focus for UMR Spills Group-supported training. Stokes said he has previously helped conduct ice training and is familiar with what this would entail. Morrison said Minnesota PCA and Wakota CAER have also been involved in previous ice response training. Faryan

suggested that perhaps UMR Group-supported training could take place in winter 2015-2016. He and Kendzierski suggested that such training could include response tactics, equipment operation, and safety considerations.

Morrison suggested that another potential training/exercise component would be committing to exercising pool-based geographic response plans (GRPs) as these are developed.

Response Resources

USCG Equipment Resources
Sams provided a briefing on the status of USCG pollution response trailers in Sector UMR. He displayed maps displaying trailer locations and noted the following:

- The current inventory of trailers was completed March 15, 2015.
- There are currently nine trailers in the UMR area.
- Five trailers are on loan to Community Awareness and Emergency Response (CAER) organizations (Wakota CAER and Red Wing CAER) and are prepositioned along the UMR.
- One trailer is on loan to a local fire department (Osage Beach, Missouri) and is prepositioned inland.
- Three trailers positioned at USCG units (two in the Quad Cities and one in St. Louis).
- Loaned trailers remain USCG property. The only available "permanent" disposition options for USCG are the Defense Reutilization and Marketing Office (DRMO) or internal USCG transfer.

Dave Morrison asked whether, for the trailers located at USCG installations, whether USCG would deploy the boom directly. Scott Stoermer answered that USCG would not deploy the boom but rather would make the trailer available if needed to an OSRO or responsible party to deploy as needed. Hokanson asked whether USCG has interest in loaning out the trailers which are currently located at USCG installations. Stoermer replied that there is definitely interest in loaning these out. Gann said he is interested in arranging for a loan of a trailer. Davis said TexPar in the Quad Cities may also have interest in adding a trailer.

Sams emphasized that if the trailers go through the DRMO process, bidding is wide open and USCG would not have control over where trailers end up. He said any Group members with an interest in arranging for a trailer loan should communicate with Matt Marler at Sector UMR (matthew.v.marler@uscg.mil).

Cooperative Development
Stokes gave an update on the development of cooperatives/CAER groups along the UMR. He noted the following activities and action items for these cooperatives as follows:

- Red Wing CAER:
  - Is working on its web site design.
  - Is hosting summer training event the first week in August 2015, which will be scenario-based and include both transportation and fixed-facility components.
  - Will hold HAZWOPER refresher in April 2015.
- Dubuque CAER:
  - Work continues on the group agreement with liability a focus of concern.
  - The group decided to elect co-chairs coming from the private and public sectors. It also has filled the position of Secretary.

- The group is meeting on a monthly basis with training and discussion following a brief business meeting, discussion topics have included after action from Dubuque and Galena incidents, the Inland Sensitivity Atlas, and USACE navigation charts. The group has been particularly involved in the after action report (AAR) for the Dubuque area ethanol spill.
- The group has received fabulous support from the Mississippi River Museum in Dubuque, where its monthly meetings are held.

Faryan asked if there has been any progress toward the creation of a CAER group in the La Crosse area. Stokes replied that there has been interest and it makes sense to perhaps form a La Crosse-Winona group given that the Winona area has also seen interest.

Stokes also commented on the recent deployment of additional response equipment on the UMR as follows:

- BNSF at La Crosse, Wisconsin: 2 trailers with 4800' of 6 x 6" boom, anchors and attachments, 2 hydraulic skimmer trains with 2 collapsible tanks.
- BNSF at Prairie Du Chien, Wisconsin/ Dubuque, Iowa and Davenport, Iowa area: 3 trailers with 8600' 6 x 6" boom, 3 hydraulic skimmer trains, 3 collapsible tanks, and Current Buster skimming system. Presently working on deployment with contractors EMS in Davenport, Newt Marine in Dubuque, and Bob's Towing in Prairie Du Chien.
- CP Rail river support trailer: 1000' 6 x 6" boom, 14' vessel, 15 horsepower outboard with command capability. Staging location is to be determined, but likely will be the Twin Cities.
- River and incident response trailer at Davenport, Iowa: 700' of boom, anchors and attachments, tank patch and repair, and necessary PPE.

He also said monthly maintenance is now conducted on the trailers on loan from USCG to the CAER groups, which has included: LED lights and rewire, LED lights on interior, greasing bearings (annually), brakes being reworked when beyond repair they will be replaced with electric brakes, and further organization and replenishment as needed.

Geographic Response Planning

Mark Ellis reported on the status of geographic response plans (GRPs) developed via an interagency process in the region. He noted that GRPs are now in place for UMR Pools 7, 8, 10, 13 and 19, as well as the Horicon Marsh in Wisconsin. Additionally, Ellis said response strategies (but not fully functional GRPs) have been created for the Twin Cities, Quad Cities, St. Louis, and a portion of the St. Croix River. He said the next GRP to be created on the UMR will cover Pools 5, 5a, and 6. Ellis also noted the Pool 7 GRP will be updated to match the formatting of more recent GRPs.

Faryan asked whether Pools 11 and 12 will receive greater priority for GRP development, given the recent spills in and near these pools. Ellis said this has been discussed with USFWS and USEPA, but that Pools 5, 5a and 6 are still seen as a greater need, with GRP development in Pools 11 and 12 to follow. He added that Pool 9 may also be included with Pool 11 and 12 work so that a continuous length of Pools (from 5 through 13) would then be in place. Chandler said USFWS is in concurrence with the development of GRPs as described by Ellis.

Sub-area Updates

Greater St. Louis
Jeff Weatherford said the St. Louis Sub-area Planning Committee would like to build out the existing St. Louis response strategies into a full-fledged GRP. He noted that the Committee is also seeking to

coordinate with Marathon Petroleum in regard to the August exercise and the next Sub-area meeting will take place in July 2015.

Quad Cities
Davis said Ramon Mendoza of USEPA Region 5 had recently attended an LEPC meeting in the Quad Cities to help build connections to sub-area planning and that a sub-area committee meeting will likely be scheduled in the near future.

Minneapolis-St. Paul
Ellis said the group is finalizing some changes to the sub-area plan and then will consider it final and updated.

UMR Spill Response Plan and Resource Manual

Hokanson said signature of the Plan memorandum of agreement (MOA) is awaiting the final green light from several member agencies. Once agencies indicate readiness to sign, the MOA will be circulated for signature.

Separately, Hokanson said he had presented to the Mississippi River Basin Panel on Aquatic Nuisance Species (ANS) on May 15th, in followup to the Group's earlier interest in incorporating ANS concerns into the UMR Spill Plan. Annette Trowbridge said USFWS remains very interested in seeing this topic addressed in the UMR Spill Plan.

Hokanson noted that, in response to a request from the UMRBA Board Chair, staff had developed a brief, draft fact sheet describing key planning and response tools for the UMR. He shared this draft with Group and said their input on the document is most welcome.

Administrative Items

Chair Transition
Hokanson noted that the UMR Spills Group has followed a process where its Chair rotates every 2 years. He explained that if this rotation is followed, Kendzierski's service as Chair would end at the close of this meeting, with Gann taking over as Chair and Sanfilippo as Vice Chair. All concurred with this approach. Gann agreed to take over as Chair and thanked Kendzierski for his service to the group.

Next Meeting
Hokanson said the next meeting of the Group would be in the Quad Cities in Fall 2015, noting that a conference call could be held prior to that if needed. He said he would be in touch with the Group via email to schedule a next meeting and/or call.

With no further business, the meeting adjourned at noon.