

**Minutes of the  
Upper Mississippi River  
Hazardous Spills Coordination Group Meeting**

**April 3, 2000**

**Regal Riverfront Hotel  
St. Louis, Missouri**

Jim O'Brien of the Illinois Environmental Protection Agency called the meeting to order at 12:30 p.m. on April 3, 2000. The following Spills Group members and observers were in attendance:

Jim O'Brien	Illinois Environmental Protection Agency
Dan Bowen	Illinois Environmental Protection Agency
Ken Teeter	Missouri Department of Natural Resources
Jared Meese	Missouri Department of Natural Resources
Rick Gann	Missouri Department of Natural Resources
Susan Hampton	U.S. Army Corps of Engineers, Mississippi Valley Division
Theresa Kauzlarich	U.S. Army Corps of Engineers, Rock Island District
Frank Catalano	U.S. Army Corps of Engineers, St. Louis District
Jim Twichell	U.S. Army Corps of Engineers, St. Louis District
Mike Kruckeberg	U.S. Army Corps of Engineers, St. Louis District
CDR Ed Stanton	U.S. Coast Guard, Eighth District
LCDR Anthony Lloyd	U.S. Coast Guard, National Strike Force
Ann Whelan	U.S. Environmental Protection Agency, Region 5
Steve Faryan	U.S. Environmental Protection Agency, Region 5
Betty Lavis	U.S. Environmental Protection Agency, Region 5
Marc Callaghan	U.S. Environmental Protection Agency, Region 7
LCDR Jason Maddox	National Oceanic and Atmospheric Administration, Cleveland
Gary Haden	Ecology and Environment, Inc.
Barb Naramore	Upper Mississippi River Basin Association

**Minutes of the October Meeting**

The minutes of the October 19-20, 1999 meeting were approved as written.

**Protection Strategies**

*Corps Coordination Protocol*

Barb Naramore briefly summarized the Spills Group's previous work on protection strategies, noting that the group's inquiries regarding coordination with the Corps of Engineers resulted in Colonel Mudd's July 13, 1999 letter to Rick Karl. That letter outlines procedures for FO SCs to coordinate with the Rock Island District concerning response activities that may affect Corps facilities or operations. At the October 1999 Spills Group meeting, members discussed Mudd's letter and decided to pursue a coordination protocol with the Corps that would govern all three districts on the Upper Mississippi. Naramore authored a letter dated December 16, 1999 to Dan Renfro of the Corps' Mississippi Valley Division outlining the Spills Group's

objectives and seeking guidance on how best to proceed. That letter highlighted the following perspectives from the Spills Group:

- The protocol should include a general statement regarding the Corps' UMR navigation system operating procedures, objectives, and constraints.
- It should also identify procedures for responders to make incident-specific requests for operational changes, use of Corps facilities, and information on river conditions.
- The protocol would not commit the Corps to take any particular action to facilitate response. Nor would the Corps be assuming a direct response role under the protocol.
- The protocol should govern the Corps' coordination with all types of responders, not merely FOSCs.

Naramore reported that she has not received a response to the letter to Renfro.

Susan Hampton briefly described the Corps' procedures for addressing discharges of oil and hazardous materials from Corps-owned vessels and facilities. She emphasized that the Corps has no authority to provide assistance in responding to spills from other vessels or facilities, other than technical assistance, unless there is an immediate threat to human life or safety. Hampton explained that the Corps can respond to FOSC requests for assistance, but emphasized that the Corps is quite limited in what it can do to facilitate the FOSC's response effort. Moreover, any requests for operational changes or the use of Corps facilities must come through the FOSC rather than a state or local responder. The Corps considers FOSC requests on a case-by-case basis.

Hampton concurred that it would be helpful to have a protocol laying out the Corps' basic roles and responsibilities and listing appropriate contacts within each district. She agreed to take the lead in drafting such a protocol, but emphasized that it will be quite limited in scope. In response to a question from Ed Stanton, Hampton agreed that there are relatively few scenarios under which the Corps could alter its operation of the navigation system to facilitate response. She observed that the potential is somewhat higher to use Corps facilities as staging areas and command centers.

Rick Gann recalled an incident in November 1999 near Lock and Dam 20. He noted that the lockmaster was quite willing to cooperate with responders. Steve Faryan reported that Corps personnel on the Illinois River were very prompt in reporting a release from an upstream generating facility. Theresa Kauzlarich recalled the same incident on the Illinois and said that the lock and dam personnel reported that they did not get sufficient information from responders regarding what, if any, actions responders wanted them to take.

Ed Stanton asked whether the Spills Group had identified specific response strategies that might involve changes to navigation operations or the use of Corps facilities. Jim O'Brien observed that the Corps' hydraulics people have the best idea of what actions are feasible. O'Brien suggested meetings between responders and hydraulics personnel to discuss options for particular reaches of the river. Hampton said the group might also want to seek funding for some Corps modeling work. After further discussion, it was agreed to develop the coordination protocol first. After that, the Spills Group will sponsor a series of discussions between responders, hydraulics people, and operations personnel regarding specific options on different portions of the river. These sessions may be held in conjunction with future Spills Group meetings and will focus on those pools where there appears to be some potential for modifying lock and dam operations to facilitate response.

### *Drinking Water Notification*

Steve Faryan noted that responders on the UMR currently notify drinking water operators directly about upstream spills. He suggested the Spills Group consider a monitoring and notification system like the one on the Ohio River. Under this system, intake operators monitor the river and report any spills detected to the Ohio River Valley Water Sanitation Commission (ORSANCO). ORSANCO then notifies any potentially affected downstream intakes.

Jim O'Brien noted that one of the primary responsibilities of Illinois' state duty officer is to notify public water supplies of any spills that may affect them. If needed, a state engineer contacts the intake operator to discuss options for protecting the facility. O'Brien said Illinois does not routinely notify industrial and power plant intakes, but may do so if warranted. Jared Meese indicated that Missouri also notifies drinking water plants. Ken Teeter elaborated, explaining that the state duty officer notifies the response program, which in turn notifies operators of drinking water, power plant, and industrial intakes. In response to a question from Jim Twichell, O'Brien and Meese said the 24-hour spill reporting numbers for each state are in the UMR Plan. Twichell and Mike Kruckeberg urged that this information be kept at the Corps' facilities on the UMR. O'Brien explained that, as a signatory to the plan, the Mississippi Valley Division is responsible for distributing copies of the plan within the Corps.

Faryan observed that, if the current notification system is working, there is no need to change it. O'Brien asked that each state member report at the next Spills Group meeting on their state's procedures for notifying intakes.

### *Twin Cities Response Strategies Pilot*

Naramore updated the Spills Group on the Twin Cities Sub-Area Committee's response strategies pilot. Members of the sub-area committee did field assessments of potential response sites on the UMR between downtown St. Paul and Hastings, Minnesota. A draft description of the sites and proposed response strategies, along with a series of maps, is out for review by the sub-area committee and local industry. Naramore encouraged comments from Spills Group members and noted that samples from the draft were distributed to members with a memo dated March 24, 2000. As the Twin Cities response strategies are finalized, MPCA intends to require facilities to be prepared to implement those strategies.

Betty Lavis noted that the Twin Cities committee will be developing response strategies for the remaining portions of the Mississippi River, as well as the Minnesota and St. Croix Rivers, within the sub-area. In addition, the committee is reviewing response options such as establishing permanent anchor points and using barges as an alternative to boom. Lavis announced that MPCA plans an exercise for this summer to test the use of barges as a substitute for boom. Ann Whelan mentioned that Scott Hayes is investigating a new fast water boom training class for potential applicability to the UMR.

### *Corps Information on Navigation Hazards*

Kauzlarich followed up on the discussion from the October 1999 Spills Group meeting regarding information that the Corps maintains on navigation hazards. According to Kauzlarich, the districts keep databases of dredge cuts and chronic grounding sites. However, they do not track spills. Kruckeberg said the districts also document incidents at their locks. Stanton noted that groundings, collisions, and allisions involving commercial

vessels must be reported to the Coast Guard's Marine Safety Offices. The MSOs keep a record of these reports. Hampton described the Corps' authority to remove abandoned barges that pose a hazard to navigation.

Stanton said the Coast Guard's incident database, which is available through its headquarters office, is the most extensive source of information on incidents involving vessels. He noted that the database includes information about location and some indication as to cause, but does not provide detailed information about cause. O'Brien said the Spills Group's interest is in identifying obvious high-risk areas on the UMR. Stanton said people on the river, including staff in the MSOs, lockmasters, and tow operators, have a good handle on the most hazardous areas. He suggested that the Spills Group start by consulting with the St. Louis MSO.

#### *Ohio River Experience Using Locks and Dams to Facilitate Response*

Faryan said he has not yet received a response to his requests for information about experience on the Ohio River using locks and dams to facilitate response. Faryan said he is aware that responders on the Ohio have used lock chambers for containment and have used dams to help volatilize spills. O'Brien suggested deferring the topic until the next meeting in hopes of obtaining additional information.

#### **Vessel of Opportunity Skimming System (VOSS)**

Barb Naramore noted that the Coast Guard's Eighth District had previously asked the Spills Group for its input on the possible relocation of the St. Louis-based VOSS. The Spills Group discussed the issue at its October 1999 meeting and recommended against moving the VOSS out of the area, at least until there is an opportunity for the region's responders to evaluate its potential applications on the inland river system. Naramore conveyed the group's perspectives in a December 10, 1999 letter to Ed Stanton. That letter requested an opportunity to view the Coast Guard's VOSS video and also recommended a field deployment of the VOSS on the UMR to assess its potential usefulness.

Ed Stanton explained that the Eighth District currently has VOSSs based in Corpus Christi, Galveston, New Orleans, and St. Louis. Each Strike Team also has a VOSS. The UMR falls within the response area of the Fort Dix-based Strike Team. These VOSSs were purchased with OPA 90 funds. Stanton noted that the St. Louis VOSS has never been used. Because it is limited to low velocity (i.e., less than one knot) conditions, Stanton questioned the VOSS's potential utility on the inland river system. He explained that the Coast Guard would like to relocate the St. Louis VOSS to Guam and the New Orleans VOSS to Alaska, both of which are relatively remote areas with limited access to equipment and contractors.

Stanton reviewed the VOSS's components. The system includes an inflatable barge used to store material as it is recovered. This barge drafts 9 feet and is thus unsuitable for use on the river due to potential for it to rupture. According to Stanton, the skimmer is the most adaptable part of the system and can work in any low velocity environment. He noted that similar skimmers are available from many contractors and explained that the Coast Guard cannot deploy its equipment if doing so would compete with the private sector. In response to a question from Susan Hampton, Stanton estimated that it would take five or six hours to fly a VOSS in from the Gulf or Atlantic coasts. With the St. Louis-based VOSS, he estimated that there would still be at least a two-hour delay for the Strike Team to reach the area to deploy the system.

Stanton said the Spills Group's December letter is on file and assured the group that the St. Louis VOSS will not be relocated out of the region if the group objects. However, he also emphasized that there may be options for other equipment better suited to the inland rivers. In particular, according to Stanton, the Coast Guard plans to purchase six high-speed skimmers that can operate in currents up to four knots. He said that one of these skimmers might be based in St. Louis if the VOSS is moved from the area.

After watching the Coast Guard's VOSS video, the Spills Group continued its discussion. In response to questions from O'Brien, Stanton said the Coast Guard would be willing to release the VOSS skimmer to any qualified contractor for use in spill response. He estimated that it would take five people approximately half a day to deploy the full VOSS. Stanton said the Coast Guard might be able to fund a VOSS exercise on the UMR in FY 01. O'Brien said he would explore the possibility of using one of the Illinois Department of Transportation's river ferries as a platform for the VOSS exercise.

Summarizing his previous remarks, Stanton noted that current, water depth, and the prohibition on competing with private contractors are the most significant limiting factors for the VOSS on the inland rivers. In addition, he observed that the VOSS is really only useful on fairly large spills (i.e., those exceeding 10,000 gallons). Stanton did suggest that moving the system upstream as it collects product may be one way of addressing the velocity limitation. However, he cautioned that this approach would be constrained by the need to limit the velocity on the face of the boom to two knots.

### **Potential UMR Spills Monitoring**

By way of background, Barb Naramore briefly described a joint federal-state monitoring program on the UMRS that is part of the Environmental Management Program (EMP). The EMP's Long Term Resource Monitoring Program (LTRMP) is funded through the Corps of Engineers and implemented jointly by USGS and the five states. The LTRMP emphasizes long term trend monitoring of water quality, fisheries, and vegetation. The water quality parameters are largely habitat-related, including temperature, dissolved oxygen, and turbidity. There is no on-going contaminants monitoring under the program. According to Naramore, the LTRMP does have some limited ability to do "opportunistic" monitoring and research in response to specific events. The LTRMP's six field stations are located at Lake City, MN (Pool 4); Onalaska, WI (Pool 8); Bellevue, IA (Pool 13); Alton, IL (Pool 26); Cape Girardeau, MO (Open River); and Havana, IL (Illinois River).

Ann Whelan described ORSANCO's 15-station organics detection network, consisting of 12 stations on the Ohio River and 3 more on major tributaries. Drinking water suppliers operate 11 of the stations, while the remaining 4 stations are located at power plants. ORSANCO provides equipment and technical support, while the intake operators furnish the lab space and staff time needed for testing. The baseline monitoring is daily sampling, generally using automatic sampling. Facilities have the option to do additional sampling. ORSANCO serves as the central place where data from the sampling is collected, analyzed, and disseminated as necessary.

Whelan encouraged the Spills Group to explore the possibility of establishing some kind of monitoring network on the UMR. She emphasized that such a network would not necessarily have to follow the Ohio River model. Jim O'Brien observed that the Ohio River has more reported spills and a wider variety of spilled substances than does the UMR. He suggested that the Upper Mississippi may not need the full capabilities of the Ohio River system. O'Brien also noted that the network on the Ohio River evolved over a period of years.

He recommended that each state Spills Group member determine what monitoring is already being done by intake operators in their state. The group concurred and asked the state members to report back at the next meeting concerning current monitoring capabilities and practices.

### **River Traffic Levels and Incidence of Spills**

Ann Whelan noted that the Corps of Engineers is conducting a navigation feasibility study on the UMRS. The study is evaluating potential federal investment in expanding the system's navigation capacity. In response to a request from the Fish and Wildlife Service, EPA analyzed the relationship between traffic levels and incidence of spills. According to Whelan, EPA's analysis found a strong statistical correlation between increased traffic and increased spills. Ed Stanton noted that one capacity option under consideration is the extension of lock chambers to 1,200 feet. This would allow tow configurations of up to 15 barges to lock through without decoupling. Stanton asked whether EPA's analysis considered this potential source of risk reduction. Whelan said she was not familiar with the details of the analysis.

### **Outreach/Training**

Barb Naramore reported that the February 2000 joint workshops with the Tri-State Hazmat Group were quite successful, with a good mix of local responders, industry representatives, resource managers, and marina operators. Attendance was estimated at 80 in Wabasha and 120 in Prairie du Chien. Participants provided favorable feedback on the sessions. Naramore noted that copies of the agenda and press clippings describing the workshops were included in the read ahead materials distributed to the Spills Group. She thanked the several Spills Group members who contributed to the success of the workshops and noted that the Tri-State Group was also pleased with the outcome.

Naramore reported that Tom Baumgartner, from Iowa's Emergency Management Agency, has asked the Spills Group to work on a similar training session being planned by the Quad Cities Sub-Area Committee for September 2000. Naramore said she has consulted with Dave Perry, who asked that she convey his support for the Spills Group's involvement in the Quad Cities training. Jim O'Brien expressed Illinois' support as well.

Gary Haden urged that the proposed training session not come at the expense of a much-needed exercise of the Quad Cities Sub-Area Plan. O'Brien observed that holding the training prior to the exercise may well serve to increase awareness of the plan, thereby enhancing the exercise.

Ann Whelan noted that the February workshops did not include a written evaluation. She urged that future training include time for participants to evaluate the session. Naramore said she would inform Perry and Baumgartner that the Spills Group is willing to participate in the Quad Cities training session.

### **Regional Response Capabilities**

Ann Whelan reported that she had obtained data from the National Strike Force Coordination Center on equipment that is owned by OSROs. According to these figures, OSROs have 24,700 feet of boom along the Upper Mississippi, most of which is in the St. Louis area. OSROs have an additional 13,650 feet within 200 miles of the UMR. The Coast Guard has 10,000 feet of boom pre-positioned at various points on the river. Noting the geographic distribution of the OSRO-owned boom, Whelan said these figures suggest that it would require

several hours to get enough boom to most portions of the UMR to implement response strategies beyond containment. She said most protection strategies would likely be limited to deflection booming, given the limited amount of equipment in the region. Whelan suggested that innovative approaches, such as using barges as a substitute for boom or using lock chambers for containment, could help augment response capabilities.

Jim O'Brien agreed that there is not sufficient boom on most portions of the river to deal with a major spill. However, he said there do not appear to be many options for addressing the situation. Whelan said EPA can talk with industries on the river about what their strategies are, whether they have timely access to sufficient resources to implement those strategies, and whether those strategies meet OPA requirements. In response to a question from Whelan, Susan Hampton and Theresa Kauzlarich declined to provide an average speed for the UMR, explaining that the river's velocity is highly variable and depends on many factors. Whelan said EPA must use some assumption about river speed in assessing response time and the adequacy of industries' proposed strategies. She noted that EPA is considering identifying high volume areas on the river, observing that the concentration of railways, pipelines, vessels, and fixed facilities puts some portions of the river at substantial risk. EPA regulations require faster response time in such areas.

Whelan noted that the Spills Group has never identified a worst case scenario for the Upper Mississippi. She said that the Region 5 RRT would be very interested in the group's perspectives on risk and vulnerability. Hampton suggested that the double hull requirements for tank vessels will reduce the risk of spills on the Mississippi River. Whelan concurred that double hulls may reduce the risk of spills from barges, but noted that this requirement will do nothing to change the risk presented by railways, pipelines, roadways, fixed facilities, or tow boats themselves. Ed Stanton emphasized that response options on large rivers are often quite limited, particularly for spills under adverse conditions, such as high water levels. Whelan acknowledged this and said EPA is very interested in the group's input regarding what is reasonable to expect from companies on the UMR.

Whelan said she will be requesting a spatial analysis of equipment locations, potential spill sources, response times, and sensitive areas. The assessment will attempt to identify gaps — i.e., areas of risk and vulnerable resources without much response capability. In response to a question from Whelan, Stanton said the Coast Guard would consider repositioning some of its UMR equipment if such an analysis identified significant gaps. However, he noted that the Coast Guard's equipment is very limited and suggested that vessels and facilities would likely have to increase their response capabilities to appreciably enhance regional response capacity. O'Brien observed that pipelines are the most significant source of risk on the UMR. Stanton agreed to work with Whelan to facilitate a coordinated gap analysis by EPA, the Coast Guard, and the Office of Pipeline Safety (OPS). Tony Lloyd said he would address the issue with the National Strike Force Coordination Center, and Whelan said she would contact OPS. The Spills Group discussed the possibility of voicing its concerns regarding regional response capabilities in a letter to the three federal regulatory agencies. After some discussion, it was agreed to defer such a letter, pending the outcome of the informal gap analysis.

## **UMR Spills Plan**

Barb Naramore reported that she is in the process of making updates to the UMR Spills Plan. Many of these updates are based on information gathered as part of the OPA mapping process. As a result, completion of the plan updates is somewhat dependent on the review process for the UMR maps. Naramore also reported that the current digital version of the plan

must also be modified in several ways to allow on-line posting. In order to avoid having two different versions of the plan (i.e., the hardcopy format and the downloadable format), Naramore suggested that the group consider replacing hardcopies of the plan at the same time that the plan is posted on-line. She indicated that the UMRBA will provide Spills Group members with both a digital file of the plan and a copy-ready original. As has been the practice in the past, Spills Group members will then be responsible for distributing copies of the plan within their own state or agency as they deem appropriate. Naramore urged Spills Group members to contact her with any corrections or updates to the plan.

### **OPA-Related Issues**

Jim O'Brien reported that the Quad Cities Sub-Area Committee held a tabletop exercise in October 1999 and a meeting in January 2000. The committee is scheduled to meet again on May 25 to discuss plans for the September training session (see above discussion under Outreach and Training). Gary Haden said the Quad Cities group may also have a functional exercise in 2001. Scott Hayes said EPA Region 7 will be holding a public availability session for regulated industries in the Quad Cities on May 24. A similar session is also planned for St. Louis. Jared Meese reported that the Greater St. Louis Sub-Area Committee is close to putting its draft plan out for comment. The St. Louis committee's work will also be the subject of a panel presentation at the Hazmat 2000 conference. Meese noted that the next St. Louis Sub-Area Committee meeting is scheduled for April 18.

Barb Naramore highlighted the status of the following mapping products: Twin Cities and UMR Pools 3-9 — completed; UMR Pools 10-15 — scheduled to send final edits to UMESC in April; UMR Pools 16-26 and Greater St. Louis Sub-Area — draft maps are out for review, will probably send final edits to UMESC in June or July; Chicago Sub-Area — scheduled to send final edits to UMESC in May; Wisconsin River — scheduled to send draft data to UMESC in June. Ann Whelan noted that this schedule is subject to further revision.

Naramore reported that the Coast Guard published the proposed 2000-2002 PREP schedule in the March 7 *Federal Register*. The March 7 notice was included in the read ahead materials distributed to Spills Group members. In response to a question from Naramore, no Spills Group members expressed an interest in commenting on the proposed schedule. Whelan reported that a national PREP meeting is scheduled for late May or early June.

### **Agency Updates/Reports on Recent Incidents**

Rick Gann reported that there was a mystery spill near Lock and Dam 20 in mid-November. Missouri DNR received the report of the spill on a Friday evening and responded to the area. DNR personnel were able to observe visible product pooled along the shoreline and against the dam at L&D 20. DNR and Coast Guard personnel checked with fixed facilities on the Missouri side and with vessels, all of which denied responsibility, leading to the tentative conclusion that the source was likely on the Illinois side. Due to darkness, further work was deferred until Saturday morning. Jim O'Brien explained that, by Saturday, there was so much debris mixed with the product that recovery was impossible. Illinois EPA personnel attempted to track the product to its source, but the release stopped before the source could be identified. O'Brien speculated that the source may well have been a tank on a levee pump.

O'Brien said Illinois EPA used the UMR Plan in responding to the spill at L&D 20. He observed that the resource appendix format is somewhat cumbersome because information is organized by theme and then by river mile within theme. He said a consolidated listing of all types of features by river mile would be quite helpful to responders seeking a quick overview



of what is present in a given area. Naramore said that it would be simple enough to create such a listing, with some basic information, but noted that format constraints would probably preclude providing all of the information found in the current appendices. She also suggested a searchable database as another option. O'Brien said he favors the consolidated list by river mile, while Ken Teeter expressed a preference for the database option. After further discussion, Spills Group members asked Naramore to explore the potential for both a river mile list and a database.

Teeter reported that a tow sunk south of Cape Girardeau with approximately 6,000 gallons of diesel fuel on board. Ed Stanton said he heard that only a small amount of fuel was released from the tow. Stanton noted that the salvage barge took approximately three or four days to reach the sunken tow.

Susan Hampton said MVD will be requiring its districts to report any spill on their property to the division. If the district is the responsible party, the division must be notified within 24 hours. Hampton clarified that this reporting requirement is a supplement to, not a substitute for, reporting required under state and federal law.

Stanton noted that a construction barge broke loose on the UMR above St. Anthony Falls in the Twin Cities. The barge was caught in an ice flow, complicating efforts to recover the vessel.

### **Other Business**

Barb Naramore said Dave Perry told her he was very impressed with a recent presentation by LCDR Jeff Hammond concerning the Oil Spill Liability Trust Fund. Perry had suggested that the Spills Group consider asking Hammond to make the presentation at one of its meetings. After some discussion, the group concluded that there might be better opportunities to reach the broad range of people who could benefit from such a presentation. The September 2000 Quad Cities training session was mentioned as one possibility.

The next Spills Group meeting was scheduled for October 25-26, 2000 in the Quad Cities. [Note: The location was subsequently changed to the Twin Cities to allow members to observe a Wakota CAER exercise on the UMR below St. Paul.]