Minutes of the Upper Mississippi River Hazardous Spills Coordination Group Meeting

October 19-20, 1999

Holiday Inn Moline, Illinois

Jim O'Brien of the Illinois Environmental Protection Agency called the meeting to order at 1:15 p.m. on October 19, 1999. The following Spills Group members and observers were in attendance:

Jim O'Brien	Illinois Environmental Protection Agency
Dave Perry	Iowa Department of Natural Resources
Mike Rose	Minnesota Pollution Control Agency
Jared Meese	Missouri Department of Natural Resources
John Grump	Wisconsin Department of Natural Resources
Theresa Kauzlarich	U.S. Army Corps of Engineers, Rock Island District
Bill Koellner	U.S. Army Corps of Engineers, Rock Island District
Mark Gibbs	U.S. Coast Guard
Ann Whelan	U.S. Environmental Protection Agency, Region 5
Scott Hayes	U.S. Environmental Protection Agency, Region 7
Marc Callaghan	U.S. Environmental Protection Agency, Region 7
Paul Christensen	Bay West
Gary Haden	Ecology and Environment
Randy Schademann	Ecology and Environment
Barb Naramore	Upper Mississippi River Basin Association

Minutes of the April Meeting

The minutes of the April 6-7, 1999 meeting were approved as written.

Vessel of Opportunity Skimming System

Barb Naramore reported that CDR Ed Stanton has requested input from the Spills Group regarding a potential transfer of the St. Louis-based vessel of opportunity skimming system (VOSS). The St. Louis VOSS has never been deployed on the inland river system, and the Coast Guard is considering relocating VOSSs based in St. Louis and New Orleans to Alaska and Guam. This would leave two VOSSs in the Coast Guard's Eighth District, one in Corpus Christi and one in Galveston. The VOSSs can be transported relatively readily and the Coast Guard's plan would be to fly in one of the Gulf-based VOSSs if needed to respond to an inland river spill. Because VOSSs are limited to relatively low velocity conditions, the Coast Guard believes there will be few opportunities to use a VOSS on the inland rivers. Mark Gibbs offered to show a Coast Guard video on the VOSS at the Spill Group's next meeting. Jim O'Brien thanked Gibbs and asked him to arrange for the video.

O'Brien said previous failure to use the St. Louis VOSS may be attributable to:

- a lack of knowledge that the equipment is available, and
- a mistaken impression that the equipment has no utility on inland rivers.

Naramore noted that the proposed redeployment would result in a very strong coastal orientation and asked whether the Coast Guard had considered leaving the St. Louis VOSS in place and relocating either the Galveston or Corpus Christi equipment. Gibbs said he did not know what options were considered. After some further discussion, the consensus opinion of the Spills Group members was that the St. Louis VOSS should not be moved until responders have an opportunity to explore its utility in this region. O'Brien suggested conducting a trial deployment of the equipment this summer. He noted that a ferry might serve as an excellent operating platform for the VOSS. O'Brien also expressed interest in learning what other equipment is located with the VOSS.

Protection Strategies

UMR Protection Strategies Work Group

Theresa Kauzlarich announced that the Corps' Rock Island District Commander, Colonel Jim Mudd, sent a letter to EPA Region 5's Rick Karl detailing the district's area of operation and setting forth procedures for coordinating with district personnel in the event of a spill. Kauzlarich said she has contacted her counterparts in the St. Paul and St. Louis Districts, both of whom said they would explore the potential for similar letters.

Barb Naramore said she conferred with Steve Faryan, chair of the Protection Strategies Work Group, prior to this meeting. Naramore said Faryan had no other activities to report. Pending Work Group tasks identified at the April 1999 Spills Group meeting include training and outreach to local responders and intake operators. According to Naramore, Faryan expressed particular interest in working with intake operators on notification protocols and self -protection measures. Mark Gibbs noted that the Coast Guard contacts potentially affected intake operators in the event of a spill. Gibbs suggested that states and others could check with the Coast Guard prior to notifying intake operators if they wished to avoid duplication. Dave Perry and Jim O'Brien said state laws require them to contact intake operators directly. Perry and O'Brien said this is not a responsibility that they could delegate to another agency.

Returning to the topic of Colonel Mudd's letter, Naramore identified the following issues:

- How should the Spills Group and/or Protection Strategies Work Group proceed in working with the other districts to establish a consistent coordination protocol for the entire UMR?
- How can the concepts outlined in Colonel Mudd's letter be made more broadly applicable? As it stands, Colonel Mudd has written a letter to EPA Region 5. It only references the district's willingness to coordinate with federal on-scene coordinators, raising the question of how state and local responders are to coordinate with the Corps. Similarly, the applicability of this letter to FOSCs from EPA Region 7 and the Coast Guard is unclear.
- Once the nature and scope of the coordination protocol are more clearly defined, how should it be communicated? Naramore suggested including the final protocol in the UMR Plan in order to ensure that responders are aware of and have access to the agreement.

In response to a question from O'Brien, Naramore recommended including the protocol itself in the UMR Plan's policy section and placing the contact information in Appendix B. John Grump and Dave Perry urged that the protocol include provisions for direct coordination between state OSCs and the Corps. Grump noted that, in practice, Wisconsin responders already work directly with the Corps when necessary. Kauzlarich said the reference to FOSCs in Colonel Mudd's letter was not intended to limit the scope of coordination. She expressed confidence that lockmasters would work with any public sector responder in the event of a spill. Jared Meese cautioned that lockmasters could easily interpret Mudd's letter as limiting the range of responders with whom they should coordinate. Kauzlarich said the cover letter transmitting Mudd's correspondence to the Rock Island District's lockmasters would clarify that they should coordinate with federal, state, and local responders. She said she would also ask her counterparts in the St. Paul and St. Louis Districts to make sure their initial letters reflect this broader approach.

Operational and Response Issues at UMR Locks and Dams

Bill Koellner explained that he and his staff must authorize all gate changes at the locks and dams, save in the case of a federal emergency. In operating the gates, Koellner said he must be aware of and concerned with all potential effects, such as induced flooding from holding back water. Thirty-seven Mississippi River gages in the Rock Island District provide data needed to regulate the dams. He explained that pool levels on the Mississippi are controlled according to target levels either at the dam or at a hinge point upstream in the pool. The Rock Island District's pools are all generally regulated at the dam, though Lock and Dam 16 is under hinge point control during high flow. According to Koellner, control at the dam minimizes water level fluctuation, scouring, debris in backwaters, and adverse environmental impacts. However, controlling water levels at the dam requires more land and flowage easements. For this reason, several pools in the St. Paul and St. Louis Districts are operated under hinge point control.

Koellner reviewed the individual pool profiles and dam characteristics for the Rock Island District. He invited Spills Group members to contact Theresa Kauzlarich for a copy of his presentation material. Koellner noted that dams built on pile foundations are especially vulnerable to scour, thus limiting the Corps' operational flexibility at these sites. He also described constraints imposed by winter conditions, including the general difficulty of changing gate settings and the impossibility of resubmerging an iced-up gate until ice is removed.

Koellner said there are generally ways, for short periods of time, that the Corps may be able to facilitate containing a spill within a pool. However, these options are often rather limited. He also cautioned that there are not such options under flood conditions, when the Corps is no longer regulating river flows. He encouraged responders to consult with the Corps' hydraulics staff on an incident-specific basis. He also suggested that an exercise would be a helpful way of getting responders, hydraulics staff, and lockmasters accustomed to working with one another. Koellner said Pools 13, 18, and 19 are the slowest to rise and fall in the Rock Island District. As such, they present the greatest potential for attempting to contain a spill with in a pool by holding back water. He said Pools 11 and 16 also have some operating flexibility. Options in Pools 21 and 22 would depend on where the spill is in the pool. By contrast, Pool 20 reacts extremely quickly and presents limited containment potential. Pool 12 is a short pool with high velocities and thus would also have few options. Koellner said there would be a chance to contain a spill in the upper portion of Pool 14, but no chance of doing so if the spill were in the lower pool. Containment in Pool 15 would be difficult and is further limited by potential damages in the large population center of the Quad Cities.

O'Brien asked whether it is possible to calculate velocities from the flow information that is posted on the Internet. Koellner said he has developed some rough curves that could be used. He cautioned that the curves should be used only to calculate a bracketed range of estimated travel times and should not be relied upon for highly specific predictions. Koellner also noted that velocity can vary considerably through the water column. O'Brien said even general travel time predictions would be helpful for responders in assessing options and issuing warnings. Perry asked whether anyone was aware of cases where operational changes were made at locks and dams to facilitate containment. Ann Whelan said she thought there was such an instance on the Ohio River. O'Brien said he would ask the Ohio River Valley Sanitation Commission (ORSANCO) about any relevant experience on the Ohio River.

Regional Response Capabilities

Ann Whelan noted that she previously expressed concern regarding regional response capabilities to address a worst case discharge. Whelan said EPA Regions 5 and 7 have since pulled information about response resources from FRPs. Scott Hayes and Whelan distributed tables summarizing the equipment information in the FRPs. Whelan also distributed a report on Region 5's unannounced exercises, a map showing selected response resources and sensitive areas along the river, and a list of OSROs that say they can respond in the St. Louis Captain of the Port zone.

Whelan said less than 30 percent of the facilities that Region 5 tested successfully completed the unannounced exercise. The successful companies were all refineries and had on-site equipment. None of the storage facilities Region 5 has reviewed so far has equipment on-site. Several facilities did have contracts calling for response within one hour, but none of the contractors responded that quickly. Whelan also observed that only 15 percent of facilities were in compliance with the Preparedness for Response Exercise Program (PREP) requirements.

Whelan explained that the map she distributed depicts the location of OPA-regulated facilities with equipment, federally managed natural resource areas, and water intakes. She observed that the location of the equipment does not match up very well with potential protection priorities. In particular, many of the federal lands are quite a distance from any equipment. Whelan also noted the facilities are not obligated to share equipment, meaning areas needing protection may well be further from available equipment than the map would suggest. She said she would be working to refine the response equipment data. In addition, Whelan noted that the Twin Cities Sub-Area Committee is continuing its pilot effort to develop site-specific protection strategies.

Hayes said all of the FRPs on file with Region 7 were reviewed. In addition to the regional summary, Hayes directed group members' attention to the list of equipment at UMR facilities. According to the information provided by the facilities, Hayes said there should be approximately 38,000 feet of boom in the St. Louis area. He noted that this data has not been verified and also that the total does not reflect equipment held by the Coast Guard and other public agencies. Paul Christensen offered a correction to Hayes' list, noting that Bay West owns 7,600 feet of boom and sub-contracts for an additional 1,200 feet.

Whelan said Region 5 has identified several facilities subject to FRP requirements that have not filed a plan with EPA. Noting that boom is of limited use in fast currents and that its availability is limited, Whelan emphasized the importance of considering additional response

options. As examples, she cited the possibility of using barges in place of boom and using lock chambers as containment and recovery areas. O'Brien observed that there is a baseline spills risk everywhere on the river, but that there are certain areas where risk is concentrated, such as pipeline crossings, vessel hazard areas, and fixed facility locations. Whelan stressed that rail lines and roads are diffuse sources of risk along the entire river and that the available data are not adequate to assess this risk. O'Brien said much more product can be lost from a pipeline or barge and also that the chance for recovery is greater with larger quantities of spilled material. In contrast, he said rails and roads present a substantially lower risk. O'Brien asked whether the Corps of Engineers maintains an accident database or other information that would be useful in identifying vessel hazard areas. Kauzlarich said she believed the Corps has some data that would be helpful and agreed to look into the matter.

Mike Rose briefly reviewed Minnesota's program to provide local responders with training and boom. Whelan said she understands Minnesota may also be considering providing resource managers with training and equipment so that they could deploy boom to protect key resource areas in the event of a spill. Rose emphasized that deploying boom on a large river can be quite hazardous, particularly if the boat is small and/or the anchor points are inadequate. Whelan said Region 5's unannounced exercises revealed that many storage facilities do not have enough personnel on hand to respond safely even if they did have the necessary equipment. Rose expressed concern that many facilities are counting on the same contractor and that the contractor's resources would not be adequate to respond to multiple incidents. Whelan said she is also concerned that facilities are not doing equipment deployment exercises, but that these need not be done with their clients. Whelan acknowledged Christensen's point, but said she believes that the exercises should test the effectiveness of specific response strategies as well as whether the equipment is in working order. To determine this, she said OSROs need to exercise with their clients.

As a next step, Whelan said she would refine and consolidate the available data on regional response capabilities, including information from vessel response plans if that is accessible. This data can then be used to analyze the risk areas relative to the available equipment. If deficiencies are found, Whelan said it may be appropriate to establish additional standards in the area and sub-area plans with which industry must be consistent. O'Brien observed that the number and capabilities of contractors in an area are determined by the amount of available work. In that sense, limited response capabilities on the UMR are at least partly attributable to our own good spills history. O'Brien concurred with Whelan's proposal to consolidate and analyze the data on response capabilities.

Christensen asked about plans for future unannounced exercises. Whelan said Region 5 believes its initial round was quite productive and intends to continue the effort. However, she said Region 5 does not have specific plans at this point, though Regions 5 and 7 may do some joint unannounced exercises next spring. Whelan said she does not know what other regions may be planning. Christensen observed that, based on the first round, it is reasonable to expect that most facilities will not be successful in an unannounced exercise. He asked whether EPA would consider requiring some changes in facility plans prior to conducting a second round. Whelan said EPA's legal counsel has not yet determined whether this would be feasible.

Nahant Marsh Restoration

Gary Haden introduced Randy Schademann, Ecology and Environment, who worked on the Nahant Marsh restoration. Schademann explained that Nahant Marsh is a roughly 200 acre

wetland complex. Approximately 15 acres of the marsh were contaminated with lead shot from a gun club's trap shooting area. An estimated 250 tons of lead were left in the marsh over the lifetime of the club. Schademann said the restoration effort was driven by concerns over the environmental impacts of the lead. He explained that waterfowl, which selectively consume lead shot because it corresponds to the size of grit they need, were most affected. Exposure of other species, including eagles, was also a concern.

A pre-project site assessment revealed densities of up to 3,000 shot per square foot. The greatest concentration was approximately 300 feet out from the shooting platforms, tapering off to virtually nothing at about 650 feet. Schademann said the clean-up and restoration work was scheduled for winter, in hopes of taking advantage of frozen ground. Mild weather required rethinking the planned approach and using special equipment. As a result, the project was slower and more labor intensive than anticipated. Water level management was also a challenge and extensive trenching and pumping were required.

Schademann explained that the shot was generally contained within the top six to nine inches of soil. However, because of fall back from the equipment, approximately two to three feet of soil had to be removed. Approximately 10,000 cubic yards of soil were removed. Lead content in the water itself was not high and the soil was dewatered on site. The soil was then disposed of in a landfill. Before the project, the area was shallow and heavily vegetated. Post-project conditions are characterized by deeper, more open water, which is expected to have waterfowl benefits. Schademann said future management of the site is still under discussion.

The meeting adjourned for the day at 4:30 p.m. for a field trip to Nahant Marsh.

UMR Spills Plan

Interstate Notification

The meeting reconvened at 8:15 a.m. on October 20. Jim O'Brien reported that he had received questions regarding the notification protocol in the UMR Plan. O'Brien recalled that the notification protocol was one of the first things on which the Spills Group worked. It came in response to previous experiences with unsatisfactory interagency and interstate notification. The UMR Plan's notification protocol calls for the first aware state to initiate notification. This then triggers consultation under the Plan's response protocol regarding who is best able to respond among the entities with jurisdiction. O'Brien acknowledged that the UMR notification protocol may result in duplication of contacts made by the National Response Center, but stressed that this is far preferable to a failure to notify.

Dave Perry said he sees potential gray areas in how the protocol should be implemented. As an example, he cited a recent train derailment in Iowa that resulted in a pesticide spill. The spill occurred on a Saturday and was initially estimated at 100 gallons. Iowa's response personnel did not immediately notify Illinois and Missouri. The quantity ultimately was determined to be approximately 1,000 gallons. Perry said he notified Illinois and Missouri, as well as additional downstream water intakes, on the Monday following the spill. Perry sought clarification from the group regarding what spills are significant enough to trigger the UMR Plan's notification protocol. O'Brien said there is no minimum threshold. He noted that the Spills Group originally discussed establishing a threshold and elected not to, preferring to report all spills under the UMR protocol. O'Brien said notification of even minor spills is helpful for states in responding to media inquiries and notifying intakes so that they can take appropriate steps (e.g. curtailing routine maintenance that might exacerbate the situation). In response to a question from O'Brien, the state Spills Group members indicated that they all routinely receive NRC faxes. Mike Rose said Minnesota's state duty officer almost always receives a direct incident report before getting an NRC report. Perry noted that only about 25 percent of barge incidents are reported directly to Iowa, with the state hearing about the balance of barge spills only from the NRC. Jared Meese and O'Brien concurred, observing that their states often do not receive direct reports on barge spills.

Ann Whelan said two NRC initiatives may be of interest to the Spills Group. The first is a pilot one-call system under which a responsible party's reporting requirements would consist of a single call to the NRC. Whelan said she believes the one-call system is being piloted in Maine and Tennessee. The state Spills Group members expressed unanimous opposition to such a one-call system. Whelan said the second initiative is a request from Louisiana to permit email as an acceptable alternative to voice notification. She said the NRC has been resistant to the idea, which industry groups support. Perry said Iowa has explored the possibility of e-mail and rejected it as a sole means of notification because it is too subject to failure. Barb Naramore noted that e-mail problems could include people failing to check for messages, equipment failure at the notification center, and transmission problems that the sender may not learn about until the message bounces back to them hours later. Meese said an e-mail system would not work in Missouri, where emergency calls are forwarded to people's homes at night. O'Brien said Illinois has 24-hour dispatchers but emphasized that voice contact is the only means of ensuring that a notification is made. O'Brien said he would oppose allowing email as a substitute for voice notification.

Rose asked how the other states disseminate spills reports to their counties. O'Brien and Perry said the responsible party is required to directly notify counties in Illinois and Iowa. John Grump said there is no such requirement in Wisconsin. Instead, the state forwards reports to the local jurisdictions.

Rose stressed that the states' internal preparedness is also an issue when it comes to implementing the UMR notification protocol. He said the MPCA is trying to ensure that its responders are all familiar with the protocol. Among the agency's techniques are quarterly quizzes and mock tabletops for response staff. O'Brien agreed that training staff on the UMR Plan's protocols is a challenge, particularly since spills on the river are relatively infrequent. O'Brien said Illinois publishes an internal notification roster every six months. The roster includes special issues and considerations, such as the UMR protocol.

Supplementing the UMR Plan with Digital Maps

Naramore briefly summarized the group's previous discussions about developing a series of UMR corridor maps to supplement the Spill Response Plan. At the April 1999 Spills Group meeting, the group expressed a preference for a series of black and white paper maps. Following that meeting, Naramore consulted further with members regarding the tradeoffs required to produce legible, reproducible, black and white maps. Such maps would have to be simplified significantly from the full color maps being done as part of EPA Region 5's OPA mapping project. Group members were asked to review a prototype black and white hardcopy map and a sample of the digital OPA maps. Naramore said the feedback she received after members' review strongly favored using the digital OPA maps rather than developing a special series of black and white paper maps. She reminded the group that Region 5 will be publishing a series of atlases, both hardcopy and digital, that will cover the entire UMR, including one county on each side of the river. In response to questions from Naramore, group members expressed a preference for having a special CD that covers the entirety of the

UMR, rather than using the series of CDs Region 5 will be publishing. Members also concluded that the CD need only contain the maps in PDF format, rather than also including the Arcview shapefiles. Naramore said UMRBA staff would work to develop such a CD once the OPA maps for the UMR are all finalized. They will try to include as much of the counties bordering the river as possible while keeping the PDFs to a single CD for the UMR from the Twin Cities to Cairo.

Ann Whelan reported that Region 5 is considering posting draft OPA maps on its web site. She said the draft maps generally do not receive many additions and corrections before they are finalized. Posting the draft maps would allow people access while the maps are undergoing the rather lengthy review and final production process. However, Whelan said Region 5 is somewhat concerned with the prospect of posting drafts that undoubtedly have some errors and are subject to further change. Whelan asked group members for input. O'Brien said draft data is far better than no data and said Illinois EPA staff have already used the draft Chicago Sub-Area maps during three separate incidents.

Rose said satellite imagery and imagery exploitation software hold the promise of being tremendously useful to responders. Whelan said imagery is included on the Region 5 OPA CDs where available, but noted that the focus has been on acquiring data about sensitive resources and potential sources of risk. She observed that satellite imagery is quite expensive for large areas, but said she expects it may become more affordable.

Plan Updates

Naramore reviewed several pending updates to the UMR Plan, including adding the bioremediation policy approved at the October 1998 meeting and eliminating all residential numbers for Fish and Wildlife Service employees. She asked state members to review and update the hazmat disposal regulation information and asked all members to review and verify the notification roster numbers. She also asked EPA representatives to let her know if there have been any changes to the Region 5 and 7 RRTs' *in-situ* burning policies currently described on page 20 of the Plan. Spills Group members agreed to provide all updates to Naramore by November 1. Naramore said she would then incorporate the updates and distribute copies of the updated pages to each member agency's representative to the group. In addition, once the updates are complete, Naramore said she would work with the Corps of Engineers' Rock Island District to post the plan on its Navigation Information Center web site. Whelan said Region 5 would establish links to that site once the UMR Plan is posted. In response to a question from O'Brien, Whelan said Region 5 is posting the sub-area plans as they are completed.

Exercise/Training Issues

Barb Naramore reported that joint workshops with the Tri-State Hazmat Group are tentatively planned for January or February in Winona, Minnesota and Prairie du Chien, Wisconsin. Dave Perry, John Grump, and Naramore have been working actively with members of Tri-State to plan the workshops, which will be geared primarily to local responders. The agenda will familiarize attendees with the UMR Plan, state and federal response resources, potential spill sources, OPA maps, river characteristics, and challenges of riverine response. Space permitting, workshop invitations will also be sent to state and federal responders and resource managers as well as facility operators. John Grump expressed optimism that the workshops will help forge better links between local incident commanders and state and federal responders.

OPA-Related Issues

Report on Quad Cities Sub-Area Tabletop

Scott Hayes reported that the Quad Cities Sub-Area Plan has been finalized. The sub-area committee held a tabletop exercise yesterday, October 19, with good participation from local, state, and federal agencies. The exercise involved a worst case discharge scenario and focused primarily on testing notification. The scenario involved a facility explosion, which resulted in secondary fires and debris hitting a barge. Hayes said issues related to security, evacuation, and relocation were generally handled well. He also observed that communications and staging are difficult to test with a tabletop. The response was led by the Bettendorf Fire Department and local responders did not request federal assistance during the exercise. Hayes said there were some difficulties with trustee notification.

Ann Whelan noted that it is difficult to get state and federal responders involved in a tabletop exercise if the exercise starts at the beginning of an incident. She said the Bettendorf Fire Department did quite well, clearly understood the sub-area plan, and made use of mutual aid agreements. Dave Perry said he tried to work through channels during the exercise and found that he received limited information from Scott County personnel away from the scene. Perry noted that, in a real world incident, he would have sought information directly from someone on-scene.

Hayes said the Quad Cities Sub-Area Committee is planning some sort of practical exercise for next spring. Possibilities include an unannounced exercise or a training opportunity involving boom deployment. Hayes said the local members of the committee have expressed a preference for training. In response to a question from Jim O'Brien, Hayes said no formal evaluation of the October 19 tabletop is planned. Gary Haden said he took notes on the debriefing and would make those available to committee members.

Planning Updates

Hayes and Haden reported that they are working on some updates to the Quad Cities Sub-Area Plan. Haden also reported that the Omaha/Council Bluffs Sub-Area Committee recently held a large orientation meeting to introduce their plan. The Omaha group is also planning an exercise.

Jared Meese said the Greater St. Louis Sub-Area Committee is scheduled to meet on October 28. Pending work includes mapping sewer district boundaries. Meese said participation has been good from state and federal agencies, but somewhat inconsistent from most of the local jurisdictions. He noted that lack of access to some local data has been a problem, but said the group has generally been helpful in fostering information exchange. As an example, he said the Coast Guard and City of St. Louis Fire Department had forged an agreement under which the city assumed the first response role for fires on a large part of the Mississippi River in the metro area. EPA was unaware of this arrangement until it was mentioned during the course of the committee's work. Meese also reported that the City of St. Louis is holding a full scale exercise of a chemical attack today and a tabletop exercise of a biological attack on October 22. He said the city's extensive involvement in this Defense Department-funded counter-terrorism work is likely part of the reason for its lack of participation in the sub-area planning.

Naramore reported that the protection strategies pilot work is continuing in the Minneapolis/St. Paul Sub-Area. Responders and resource managers participated in a pilot field assessment

in June. The assessment focused on a stretch of river below St. Paul and included evaluation of different sites for potential containment, diversion, and deflection strategies. Naramore said the group's next steps include revising the specific information gathered, refining the site evaluation methodology, and determining how to represent the protection strategy information in both text and map forms. Whelan observed that the resource managers who participated in the field pilot had a wealth of information about river conditions as well as biological resources.

Status and Schedule for Mapping Products

Naramore reported that work continues on the OPA map series that will cover the UMR. The Twin Cities Sub-Area and Pools 3-9 have been finalized. Maps covering Pool 10 to the Greater St. Louis Sub-Area are in various stages of draft development and review. The Open River maps are essentially ready for final map production. Whelan said she expects maps covering Pools 16 to 26 to be ready for review in November and anticipates that the final Open River maps will be ready in December.

Agency Updates/Reports on Recent Incidents

Jim O'Brien reported on a UMR spill at Fulton last spring. A tank barge was being unloaded and the underwater unloading line leaked, releasing a significant volume of liquid ammonium nitrate. The leak went undetected for several days and was eventually discovered due to the discrepancy between the amounts recorded as offloaded and received. O'Brien said there were no noticeable fish kills immediately, but dead fish were discovered a few days later downstream. Illinois notified Iowa as well as downstream water intakes about the spill. While nitrate levels in the river did spike upward, drinking water facilities were still able to treat and use the water. O'Brien said high water levels and flow rates at the time resulted in rapid mixing and dilution of the product. The Fish and Wildlife Service and Illinois DNR investigated the spill but did not find significant impacts. O'Brien said Illinois has filed suit against the responsible party, who will be replacing the flexible, underwater unloading line with a double walled, metered, above water system.

O'Brien also reported that federal and state trustees are seeking compensation for natural resource damages stemming from a January 1998 spill at Wood River. According to O'Brien, Illinois will generally be pursuing natural resource damage recoveries more aggressively. As part of this effort, Illinois has established an internal notification system to ensure that trustees in Illinois DNR are notified quickly of all spills that may involve resource damages. This should facilitate data collection during the early phase of an incident. Illinois DNR and EPA will continue to share the trustee role. He also noted that Illinois has placed more emphasis on enforcement within the last five years. Settlements often include projects intended to enhance preparedness in lieu of penalties. As an example, he said a settlement with a railroad included \$100,000 to establish a hazmat team in St. Claire County. The team includes both industry and public sector members. Illinois' compliance work leading up to enforcement has also been formalized pursuant to changes in state law. O'Brien said having a specific series of steps with set timeframes keeps the compliance process moving along and prevents parties from stalling.

O'Brien said there was an explosion last week at a 3M plant in Cordova. The initial report was of multiple fatalities with a plume suspected to be hydrofluoric acid. River traffic was shut down. As it turned out, there was no large release, and the plant's sprinkler system extinguished the fire. The resulting water was retained within the plant. The incident was ultimately traced to a ruptured disk in a batch reactor. Regarding Y2K preparations, O'Brien said Illinois' emergency operations center will be activated from noon on December 31 to

6 p.m. on January 1, as well as from 6 a.m. to 6 p.m. on January 3. Standby response staff will be doubled and communications will be tested every two hours. O'Brien said Illinois also plans to survey approximately 1,200 facilities regarding their preparedness.

Regarding the Fulton ammonium nitrate spill, Dave Perry reported that Fish and Wildlife Service and Iowa DNR staff investigated potential impacts on the Iowa side of the river. Managers were particularly concerned about mussel beds in the area, but no significant damage was found. Regarding the 3M incident in Cordova, Perry said the Bettendorf hazmat team responded to do decontamination. Davenport's hazmat team was on standby. Perry said Bettendorf's Fire Department provided good information about chemicals at the plant.

Perry also expanded on the pesticide spill he had mentioned previously. The train derailed approximately 7 miles north of Bellevue on a Saturday, spilling what was initially thought to be 100 gallons of pesticide. The Davenport water facility was notified on Saturday. Additional intake operators, Illinois, and Missouri were notified on Monday, when it became evident that the spill was closer to 1,000 gallons.

Perry said Iowa DNR has established a policy of imposing penalties for all manure spills that reach public waters. Field staff have more discretion in determining whether to assess penalties for many other products. If the responsible party is responsive and the damages are not great, the state often elects not to impose penalties. Perry reported that Iowa's emergency operations center will be staffed for parts of December 31 and January 1.

John Grump reported that there was a large propane spill from a tank truck at a wayside rest stop on I-94 in Wisconsin. The interstate was shutdown for a period. With respect to state enforcement, Grump explained that a spill team consisting of regional spill coordinators, attorneys, and wardens determines what action to pursue. The state is quite focused on spill prevention, including an outreach program on mercury and other hazardou's materials frequently found in schools. Grump said all Wisconsin state agencies report that they are Y2K-ready. Wastewater treatment plants and SARA Title III facilities have been surveyed regarding their readiness. Grump said all wardens and spill coordinators will be on standby status December 31 and January 1. Back-up communication plans include using teletype machines and ham radios.

Jared Meese reported that there have been no major spills in Missouri involving the Mississippi River since the last Spills Group meeting. Meese said Missouri has launched a statewide mercury collection project under which emergency response personnel accept unwanted mercury from citizens. The material is gathered in Jefferson City and shipped to a recycler. The state is considering a special outreach effort to get more mercury out of the system. Meese said Missouri is also establishing collection stations for materials from clandestine drug labs. Eight such stations are in operation and four more will be opened soon. The Drug Enforcement Administration continues to handle material from large labs, while the state-operated stations receive material from smaller busts. Meese said local law enforcement officials have found the stations to be very beneficial. He reported that 100 small drug labs were found on an 80-acre property near Eureka. Meese said the state's emergency operations center will be operational over the New Year. DNR personnel will either be there or in DNR's incident command center.

Theresa Kauzlarich reported that a crane went off a bridge into the Mississippi River last week. The Corps received a call from an Iowa law enforcement officer about the incident and Kauzlarich provided him with notification numbers for the NRC, Illinois, and Coast Guard.

Ann Whelan reported that the National Governors Association is sponsoring a meeting on area planning. The meeting will be held October 25-26 in Portland. Whelan announced that Region 5 will be designating high volume areas for OPA-regulated facilities. Facilities in these areas will have to meet higher standards for response times. Facilities subject to the new standards will be notified when they receive their five-year FRP review notices. Whelan said EPA is granting damage waivers to facilities should their Y2K readiness testing result in a release. EPA Region 5 personnel will likely be stationed in FEMA Region 5's regional operations center.

Scott Hayes said EPA Region 7 has not been involved in any major river-related spills recently. Last May, there was a pipeline break on a creek five miles upstream of the Missouri River in Kansas. Approximately 225,000 gallons were released. Williams Pipeline says it recovered 60 percent of the spilled product. Hayes said this estimate may be optimistic. While low flows and minimal vegetation made recovery relatively easy, Hayes said the response was rather slow. He said quite a bit of material reached the Missouri River and was detectable at least as far downstream as Jefferson City. Intakes as far away as St. Louis were notified. Hayes reported that FEMA Region 7 will activate its regional operations center from December 27 to January 2. EPA will have personnel at the center and all Region 7 OSCs will be on standby.

Other Business

Spills Group members expressed interest in holding their next meeting in conjunction with the HazMat 2000 conference, scheduled for April 4-6, 2000 in St. Louis. Barb Naramore said she would explore options and confer with the group regarding meeting arrangements.

With no further business, the meeting adjourned at 11:30 a.m.