

MEETING MINUTES

MARCH 21-22, 2001

INDIAN HEAD INSTALLATION RESTORATION TEAM MEETING

INDIAN HEAD NAVAL SURFACE WARFARE CENTER

INDIAN HEAD, MARYLAND

The meeting was held on March 21, 2001 through March 22, 2001, at the USEPA Region III Office in Philadelphia, Pennsylvania.

The following personnel attended the meeting on March 21, 2001:

Anne Estabrook – CH2M HILL
Tony Tomlin – CH2M HILL
Curtis DeTore – Maryland Department of the Environment
Shawn Jorgensen – NSWC Indian Head
Heidi Morgan – NSWC Indian Head
Jeff Morris – EFACHES
George Latulippe – Tetra Tech NUS
Dennis Orenshaw – US Environmental Protection Agency, Region III

The following personnel attended the meeting on March 22, 2001:

Anne Estabrook – CH2M HILL
Tony Tomlin – CH2M HILL
Curtis DeTore – Maryland Department of the Environment
Shawn Jorgensen – NSWC Indian Head
Heidi Morgan – NSWC Indian Head
Jeff Morris – EFACHES
George Latulippe – Tetra Tech NUS
Dennis Orenshaw – US Environmental Protection Agency, Region III
Kent Cabbage – Tetra Tech NUS
Steve Hirsh – US Environmental Protection Agency, Region III (Tier II)

Wednesday, March 21, 2001

- **Introductions**

Familiarizing group, catching up: USEPA (host), Dennis Orenshaw (chair), George Latulippe (timekeeper), Curtis DeTore (scribe), Tony Tomlin (minutes), Anne Estabrook, Jeff Morris, Shawn Jorgensen, and Heidi Morgan. Began meeting at 10 AM.

- **Review today's agenda**

- **Review previous meeting's minutes and meeting evaluation**

Specific comments noted at the meeting are as follows:

- Change flowchart to say, "EPA recognized method" in flowchart box on standard methods.
- Move partnering exercises and discussions into meeting evaluation.
- August meeting changed to August 15-16, note it in the table.

Heidi and Shawn will provide further comments in the next few days. Anne provided written comments.

- **Review Meyers-Briggs Results and Conduct Entry Procedures**

- **Curtis: Discuss Review Times for Documents**

The MDE standard review periods were discussed. MDE allows up to 90 days for review depending on the size and type of documents. The official signed comments letter may take another 5 weeks to get back to contractor. We can send MDE self-addressed, stamped envelopes in order to get draft, unsigned MDE comments.

The discussion turned to whether a draft final version is needed. Turning the document into the RAB is the key issue. They should not get an unreviewed, draft copy. Giving them a final copy does not give them much room to make comments. It was noted that on the Site 6, 39, and 45 Work Plan a draft copy was given to the RAB, but the Navy was given a pre-draft copy to check for problems. The turn-around time given was only a couple of days.

It was noted that if we discuss the draft copies with the RAB and guide them through their questions it might help to smooth the process. The RAB should advise but not direct the team. The Navy should keep close contact with them and make them feel included.

The team steered back to the topic of how much time to allow for document review. An initial, standard review period is needed for long-term scheduling. However, the team should be flexible in the scheduling of review times for specific documents.

One problem with having a really flexible schedule is that the Navy is less likely to meet its long-term goals. People tend to forget decisions and reasons for doing things if the schedule is elongated. People tend to put off doing the work and end up not doing it until the last

moment if the schedule is very flexible. If the review periods are too long, people also tend to wait until the last minute.

The goal of the discussion changed to setting up a timeframe for long-term planning schedules based on different categories of documents. It was suggested that 45 days be used as a standard for scheduling in the future independent of document type or version.

Consensus Decision: 45 days will be used as the long-term planning standard.

- **Lunch**
- **George: Sites That Use Data from Background Report**

A review of the existing data has been completed. More samples are needed based on the preliminary review of the data.

There are four categories of samples: Upland, surface soil (7 samples); lowland, surface soil (3 samples); upland, subsurface soil (7 samples); and lowland, subsurface soil (3 samples). In the background report, the subsurface and surface soil data sets were lumped together. "Upland" and "lowland" are designations that were made to take into account soil types on the base.

Each analyte in each category was subjected to the student T-test to see what are the differences in the categories. A difference is being defined in this context as the change in position between the median of one bell curve to the median of another. Differences were seen in aluminum, arsenic, calcium, chromium, iron, mercury, and vanadium. To see if there was pattern in the differences, all categories were crosschecked against one another. There was no distinct pattern in the differences.

A handout was given showing the data for each analyte and the T-test results. The analytes where a significant difference was seen based on the T-test had black highlights. The handout also contained results of the category comparisons. A pattern would have been noted on page 4 of the handout; the black highlights would have fallen on the same grid line for each analyte. Since the categories have significant differences without a pattern, they should not be combined when interpreting the data.

The DQO process was briefly discussed. It is typically used to compare existing data sets to assumptions made about sets before they were compiled. The process becomes iterative where assumptions are refined as the data set is enlarged. The existing background study information was used as the existing data set and based on assumptions for standard deviations, confidence level, etc. the set was not deemed to have enough data. Tetra Tech will look into how many new samples will be used.

It was noted that in a risk assessment the subsurface and surface soil data is normally combined. Would that approach be appropriate in this case, where there are differences between analytes in each category? Since there are significant differences in the numbers, then it may not be statistically correct to do so.

The suggestion was made that site-specific background samples from the Site 11, 13, 17, 21, and 25 be provided to Tetra Tech for use in the data set. This may be done if some criteria for what a background sample is has been met. The anthropogenic effects on the site-specific samples may disallow their use in the background study. It was noted that if arsenic or

another analyte was high in the sample data, then the sample data could be thrown out as an outlier.

Action: Anne will send site-specific background data to George by 4/6.

Action: George will have his statistician look at the data sent by Anne and see how it changes the background data set by 4/24.

Stump Neck and Indian Head will be included together in the background report.

The discussion turned to the definition of release. Application of pesticides falls under the definition of release as defined in CERCLA. However, EPA finds it reasonable to allow areas only affected by anthropogenic problems not to be remediated. It was suggested that an anthropogenic analytical data set be set up based on results of sampling done in areas where documented anthropogenic activity occurred (e.g. along railroad tracks). Anthropogenic problems that constitute a human health risk will likely need to be cleaned up regardless.

Action: Heidi will talk to Jim Dolph about historical use of pesticides/herbicides at the base by 3/30.

The railroad tracks were discussed. Since the railroad ties may have leached arsenic, then the railroad tracks may not be able to be considered as an area affected only by anthropogenic activity. The arsenic from pesticide/herbicide use around the buildings may be used for the anthropogenic data set. Such a data set could be used to compare arsenic levels near the railroad tracks.

The topic of discussion turned to determining whether the proposed remedial action plan for Site 41 should be rethought. The idea was that background study values should be used to evaluate the need to clean up arsenic at the site. There are a number of high arsenic values in the area, but they are not the remediation drivers. The worry is that using background values or some screening level for the arsenic values will create a lot of excavation. The current proposed plan is to excavate specific, defined areas regardless of the arsenic levels. The defined boundary is based on the extent of the sampling done in the original investigation. The soil within in the boundary will be excavated to two feet below grade (minimum), then backfilled with clean fill.

Consensus: The proposed plan for Site 41 will be maintained.

Anne asked whether CH2M HILL should be using the existing background study for discussion in the Site 11 et al RI. The team believed it was appropriate, but the background data should not be used to screen out analytes from the risk assessments.

- **Shawn: Self-Directed Team Building**

A handout was provided "How Do You Like Your Recognition?" The team filled out the form and discussed it. After discussion, the team was asked to share what they learned.

- **George: Site 12 Responsiveness Summary**

The goal of this discussion was to discuss the comments from the Site 12 public meeting and response period. Elmer Biles was the only community member that sent comments on the proposed plan. His two comments were read. The first dealt with the question of when the

site master/management plan would be updated and what controls are in-place in the interim. Second, he asked that a buffer be placed around the landfill to restrict access to areas where he believes persons, specifically construction workers, could come in contact with leachate.

The team discussed Elmer's second comment first. The team did not feel a buffer zone was needed because:

- The selected remedy will be protective of human health.
- The landfill is already within the industrial area in which there is controlled access.
- Capping and grading will minimize potential for leachate generation.
- Signs will minimize potential for trespassing.
- Institutional controls will be in-place.

As to the first comment, both the present policies that restrict access and use of the site and the future LUCAP/LUCIP generation should be mentioned in the response. A timeline will not be discussed in the response, because there is not a final schedule for updating the site master plan. In the response, it will be noted only that there is not an exact date to update the master plan.

The discussion turned to what needs to be done to get the master plan revised. Presently, IH does not have a technician to make changes to the GIS information. The master plan, itself, is only set up to be reviewed every 10 years. Public works (PW) is in-charge of the master plan. Since the updating of the master plan is in the ROD, that may be used to push PW to update the master plan.

Action: By 3/30, Shawn will talk to PW, specifically Lou, about updating the master plan.

Action: Jeff will find out if DERA funds can be used to update the master plan due to institutional control concerns by 4/24.

It was noted that a list of the public meeting attendees needs to be added as an appendix to the ROD.

- **End meeting at 5:00 PM**

Thursday, March 22, 2001

- **Introductions**

Group discussed previous night: USEPA (host), George Latulippe (timekeeper), Dennis Orenshaw (chair), Curtis DeTore (scribe), Tony Tomlin (minutes), Anne Estabrook, Jeff Morris, Shawn Jorgensen, Kent Cabbage, Heidi Morgan, and Steve Hirsh. Began meeting at 8 AM.

- **George and Kent: Mattawoman Creek Draft Work Plan Brief**

The purpose of the discussion was to go over the progress of the Mattawoman Creek study. The draft work plan has been sent out via e-mail and on CD. A workplan brief is being sent out. There is now a human health component to it. A handout was given, "Status Report and Outstanding Issues." The problem formulation was added to the work plan. The plan reflects the "baseline study" approach that came out of the problem formulation phase of the work.

The highlights of the work plan were:

- Sediment and surface water sampling,
- Fish tissue collection for toxicity testing,
- Aquatic vegetation collection for bioaccumulation studies.

Five areas were designated for sampling based on sediment deposition and ecology/habitat. The upgradient reference locations for this study will be the same as those for past fish and wildlife studies. Another reference location may be added (Nanjemoy Creek). Some samples will be held in reserve (phase II) to fill in possible gaps in data. It was noted that HILL has done near shore sediment and surface water sampling at Site 11 and 17.

Action: Anne will send surface water and sediment data from Sites 11 and 17 to Kent Cabbage by 4/6.

The human health risk component is an add-on to the original scope. Dean Neptune had requested it. The samples for the ecological assessment will be used in the human health risk assessment. The fish tissue toxicity study results will be used differently to show what may accumulate in humans eating fish filets. The human health issue is a secondary issue in the scheme of the study. Mainly worker scenarios will be used in the human health risk assessment. EPA's human risk assessor will review the plan.

The handout was discussed. It was noted that the sampling is scheduled to start in late spring or early summer. Items listed on the handout may be points of controversy in the plan. The first item dealt with field screening methods. The team reviewed how the triad approach was derived. This approach is consistent with a baseline assessment. Since the approach was devised, Mr. Neptune and BTAG have started to ask for the screening of some areas. To allow for some screening while maintaining the baseline approach it was suggested that the team look into the Navy's SPAWAR group. They are developing a field method for

screening data. It appears that their field screening methodology is geared toward metals. The approach would allow for screening of areas in the field, so samples could be placed closer to hot spots/areas of concern. The issue of cost of using SPAWAR was brought up. The Navy will need to check into costs to see if the use of SPAWAR's boat and equipment is monetarily feasible. The extent of SPAWAR's capabilities also needs to be figured out.

The question was asked what would be gained by screening. The areas where sampling is proposed are large. Sampling locations are to be chosen on a qualitative basis. Screening would add a quantitative aspect to the locating of samples.

The question was asked whether screening would increase the proposed area over which samples would be collected in the work plan. The screening would not necessarily add sample points, but it would help pinpoint where to take the samples.

Item 6, data interpretation, from the handout was discussed. Ecological data can be loosely interpreted and there are a number of ways to approach the data. "Weight of evidence" approaches are usually used. Tetra Tech proposed to produce a data interpretation approach document so that the team can discuss and agree on an approach before the risk assessment is drafted. Doing this will keep the issue from coming up after the draft RI report is completed. Not all the scenarios and possible problems can be anticipated, but the major framework of the approach can be set-up. It was noted that BTAG has a history of not wanting to commit to one particular approach. Tetra Tech feels that it is at least worthwhile to start the conversation now instead on waiting until after the RI report has been drafted. At least the areas of agreement and disagreement would be on the table.

Items 2-5 were reviewed together. They are related to more ecological specific matters and are not overall project issues. There is an ecological study being completed at Quantico that used different species than those proposed for Mattawoman Creek. BTAG may want to consider adding those species to this study. It was noted that a similar type of ecological study is almost complete at Dahlgren. Tetra Tech has looked into some of the issues at Dahlgren, but does not believe it will be as applicable to Mattawoman as the Quantico study.

The question was brought up as to why this study was needed. It will provide the public with information on the health of the creek's ecology. If a human health risk is found, it will help to define the need for restrictions on the creek. It may help to show the Navy's contribution to any pollution in the creek. The study also combines the ecological studies for a number of sites; therefore individual surface water and sediment samples are not needed at each site.

Tetra Tech asked the team prioritize specific areas of concern as they review the work plan.

- **Anne: Site 47 Fieldwork Update**

The purpose of the discussion was to provide the team an update on the on-going fieldwork at Site 47. The first item of business was the discussion of the MIP data. A handout was provided that showed the locations of the MIP borings and the data profiles generated. Information shown in the data profiles included:

- The confining clay layer begins approximately 20-ft below ground surface (bgs). The clay layer is at least 10-ft thick.

- There is a lens of lower permeability soil that appears to be holding up the carbon tetrachloride at approximately 10-ft bgs.

Groundwater grab (12) samples were taken at locations near the MIP borings. Data from the groundwater samples will be available in the last week of March. Based on the MIP data and grab groundwater data, monitoring wells will be located and placed in early April. It was noted that dense liquids, such as carbon tetrachloride, do not always travel with groundwater. This should be taken into account when locating wells.

The team was asked to decide on whether the deep, double-cased well is needed. Per the data, the clay layer is thicker than 10-ft. A soil boring will be completed in its place to check the lithology of the area, and a sample of the clay layer will be taken for hydraulic permeability testing. It was noted that the soil boring should be done outside of the plume.

The discussion moved to where the shallow wells will be placed. At least one will be placed in the woods. Access to this location may be best from the east side. The contamination plume appears to be confined to the eastern side of the site near the treeline; it stretches from Building 856 to magazine 1072. The concern was raised that the plume is not defined enough, especially on the east side, to start setting well locations.

A concern was expressed that DNAPLs may have dropped off the clay lens and the MIP data may not have captured the flow direction of the DNAPLs. The MIP data does present data to the top of the confining clay layer, so this scenario is unlikely along the western portion of the plume. The elevations of the MIP data will be adjusted based on the topography to get a true elevation of the clay lens and confining layer. That will allow for HILL to determine the pitch/slope of the layers, which will show where the DNAPLs are likely to flow.

There appears to be a data gap along the east side of the site. The MIP borings along the east side were not completed due to access problems through the woods. Perhaps two wells, instead of the one proposed, are needed along the eastern side of the site. The team would like to see the results of the grab groundwater sample via e-mail before deciding on well locations.

Action: Anne will e-mail groundwater data to team for discussion and a decision on the well locations at Site 47 by 3/28.

- **Anne: Update on Site 11 et al RI, Lab Area Fieldwork, and Site 6 et al Fieldwork**

The Site 11 et al RI's HHRA second interim deliverable has been submitted; however it was a week late. The due date for the RI will be delayed until the first week in May, because the HHRA interim deliverables and their review have become the critical items in the schedule.

The fieldwork for Lab Area is in the subcontractor procurement stage. It is scheduled to begin the last week in April. Ed Corack will be the team leader for the work.

Site 6, 39, 45 work is ready to start on March 26. The cost of analyzing for UDMH and acetal/formal will be \$15,000 for 60 samples. There are no known risk numbers for these chemicals. HILL asked whether it was necessary to complete the sampling for these compounds. It may not be necessary to do all the samples. Some samples probably need to be collected to show if these chemicals are in the environment. The total of number of samples proposed could be collected, and then only a portion of the samples could be

analyzed to save costs. If a data gap was determined, some or all of the remaining samples could be analyzed. The team decided it needed more information to make a decision.

Action: Shawn will provide IH laboratory procedures for exotics (UDMH and Acetal/Formal) to Dennis and Tony by 4/6.

Action: Dennis will have the EPA laboratory look at the procedures by 4/24.

Consensus: The analysis of exotics is needed.

Action: Shawn and Heidi will provide Tony with any analytical information from the building demolitions at Site 39 by 3/30.

It was noted that the data for exotics can not be validated. The comment was made that the Army may have some risk numbers on these and other exotics.

Action: Dennis will check with Steve to find out the contact at the Army that may have risk numbers. Get the risk numbers if they exist by 4/6.

Action: Tony will talk to IH lab to get a unit cost and see how that unit cost changes with the number of samples. E-mail to the team by 3/30 the unit cost(s) for samples and a recommendation on the number of samples to be collected.

The IH laboratory should be contracted directly by EFA-Chesapeake, since it is a government laboratory.

- **Lunch**
- **Jeff: Design Breakdown (30, 60, 90%)**

Jeff began by talking about how other designs had been handled. The implication was that there is not a standard design breakdown. The discussion turned to what should be included in each submission package. There is a Navy document that provides guidance on what should be included in the submission packages. According to the guidance, temporary structures, such as treatment systems, should not be fully designed before handing over the design to the Remedial Action Contractor (RAC).

The discussion moved to the interaction of the A/E and the RAC. The personnel that review the design documents for the RAC may not be the same as those implementing it in the field. This leads to changes and questions in the field. It is not abnormal for the RAC to start work on a project before the design is complete. This can also lead to design changes and rethinking of design elements before the final design is submitted.

The Site 12 design was brought up as a specific design package the team could discuss and set up submission milestones. Presently, the design is scoped to be completed without a 30% design package. That is because the design is considered as a simple one. Not all the people on the team agreed that this type of design is simple.

The discussion went back to what submittals are needed. At the last IHIRT meeting, John Fairbank had discussed the need for 30% design submissions. From the present meeting, it appears that Tier II is not requiring a 30% design package submission. Tier I may have the latitude to decide the number of and level of detail for design packages.

Action: Curtis will talk to John Fairbank about the need for 30-60-90 design submission packages by 3/30.

- **Review Workload Tool, Goals, Action Items and Parking Lot**

Items left in the Parking Lot:

Parking Lot
Team building exercise (keep on parking lot all the time)
Where to take background samples on base vs. off base
Review model agenda
Discuss Team's involvement in construction changes
Site 6, 39, 45 data update (May)
Lab Area (May)

- **Close Out**

The following items were suggested for inclusion in the next meeting agenda:

Next Agenda	Lead	Time (hr)
Sites 11 et al RI Report update	Anne	1
Long-term monitoring plan outline	George	1
Site 47 update	Anne	1
Team building exercise	Shawn	.25
Site 28 investigation priority	Heidi	.5
RAB review and which document they will receive	Shawn	.5
Develop process to implement institutional controls	Heidi/Anne	2
Determine level of detail and number of submission packages for Site 12 design	George	1
Mattawoman Creek update	George	.5
Responsiveness Summary for Sites 41 and 44	George	.5

- **Schedule of Future Meetings**

Date of meeting	24-25 April 2001	23-24 May 2001	27-28 June 2001	15-16 August 2001	12-13 September 2001
Location	Baltimore	Herndon	Virginia Beach	Indian Head	Philadelphia
Host	CH2M HILL	CH2M HILL	CH2M HILL	Indian Head	Dennis
Chair	Curtis	Jeff	Shawn	TBD	Dennis
Scribe	TBD	TBD	TBD	TBD	TBD

Tier II Link	Armelia	TBD	TBD	TBD	TBD
Time Keeper	TBD	TBD	TBD	TBD	TBD

Conference call will be on April 17 at 10 AM.

- **Meeting Evaluation**
(Separate file)
- **Adjourned at 2:35 PM.**

ACTION ITEMS COMPLETED SINCE LAST MEETING

Goal Number	Goal	Status of Goal	Action Number	Action	Person Responsible for Action	Date Action Created	Status of Action	Date Action Must Be Completed
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00 (b) Finalize Proposed Plan by 09/13/00	In progress	253	Work up outline of the Site 12 long-term monitoring plan	George Latulippe	01/11/2001	Completed on 3/21/01	Completed
To be defined	To be defined	To be defined	257	Update web site and send out new deliverable pages to Jeff	Tony Tomlin	02/07/2001	Completed on 2/16/01	Completed
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00 (b) Finalize Proposed Plan by 09/13/00	In progress	258	Revise posters for Sites 41 and 44 Proposed Plan and email to team	George Latulippe	02/07/2001	Completed on 2/16/01	Completed
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00 (b) Finalize Proposed Plan by 09/13/00	In progress	259	What is title of Maryland law/annotated code for RCRA that creates COMAR?	Curtis DeTore	02/07/2001	Completed on 2/9/01	Completed
To be defined	Basewide Background Report	To be defined	260	EPA lawyers need to be consulted to figure out normal application of pesticides vs. normal application of lead based	Dennis Orenshaw	02/08/2001	Completed on 3/21/01	Completed

ACTION ITEMS COMPLETED SINCE LAST MEETING

Goal Number	Goal	Status of Goal	Action Number	Action	Person Responsible for Action	Date Action Created	Status of Action	Date Action Must Be Completed
				paint.				
To be defined	Basewide Background Report	To be defined	261	Compare TAL metals list with background list.	Tony Tomlin	02/08/2001	Completed on 2/21/01	Completed
To be defined	Basewide Background Report	To be defined	262	Set up special conference call to discuss issues 4, 7, 8, and 9.	Tony Tomlin	02/08/2001	Completed on 2/21/01	Completed
To be defined	To be defined	In progress	264	Ask risk assessor about SVOCs in groundwater because gw is 40 feet bgs, and there is a clay layer.	Dennis Orenshaw	02/08/2001	Completed on 2/16/01	Completed
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00 (b) Finalize Proposed Plan by 09/13/00	In progress	265	Send copies of waiver for Site 12 soil cover to Navy.	Curtis DeTore	02/08/2001	Completed on 3/21/01	Completed
To be defined	To be defined	In progress	266	Check on availability of kickoff training.	Janet Eastman	02/08/2001	Completed on 3/21/01	Completed
To be defined	To be defined	In progress	267	Check on availability of kickoff training.	Dennis Orenshaw	02/08/2001	Completed on 3/21/01	Completed

ACTION ITEMS COMPLETED SINCE LAST MEETING

Goal Number	Goal	Status of Goal	Action Number	Action	Person Responsible for Action	Date Action Created	Status of Action	Date Action Must Be Completed
To be defined	To be defined	In progress	268	Does anyone else in Navy needs training?	Jeff Morris	02/08/2001	Completed on 3/21/01	Completed
To be defined	To be defined	In progress	269	Make change to entry/exit procedures (add to agenda).	Tony Tomlin	02/08/2001	Completed on 3/21/01	Completed

OPEN ACTION ITEMS

Goal Number	Goal	Status of Goal	Action Number	Action	Person Responsible for Action	Date Action Created	Status of Action	Date Action Must Be Completed
To be defined	Basewide Background Report	To be defined	270	Send site-specific background data to George	Anne Estabrook	03/21/2001	In Progress	04/06/2001
To be defined	Basewide Background Report	To be defined	271	Have statistician look at the data sent by Anne and see how it changes the background data set	George Latulippe	03/21/2001	In Progress	04/24/2001
To be defined	Basewide Background Report	To be defined	272	Talk to Jim Dolph about historical use of pesticides/herbicides at the base	Heidi Morgan	03/21/2001	In Progress	03/30/2001
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00 (b) Finalize Proposed Plan by 09/13/00	In progress	273	Get with PW, specifically Lou, about updating the master plan	Shawn Jorgensen	03/21/2001	In Progress	03/30/2001
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00 (b) Finalize Proposed Plan by 09/13/00	In progress	274	Find out if DERA funds can be used to update the master plan due to institutional control concerns	Jeff Morris	03/21/2001	In Progress	04/24/2001
12	Mattawoman Creek Risk Study	In progress	275	Send surface water and sediment data from Sites 11 and 17 to Kent Cubbage	Anne Estabrook	03/22/2001	In Progress	04/06/2001
3	Finalize Remedial Investigation Report for Site 47 by 07/17/00	In progress	276	E-mail groundwater data to team for discussion and a decision on the well locations at Site 47	Anne Estabrook	03/22/2001	In Progress	03/28/2001

OPEN ACTION ITEMS

Goal Number	Goal	Status of Goal	Action Number	Action	Person Responsible for Action	Date Action Created	Status of Action	Date Action Must Be Completed
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In progress	277	Provide IH laboratory procedures for exotics (UDMH and Acetal/Formal) to Dennis and Tony	Shawn Jorgensen	03/22/2001	In Progress	04/06/2001
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In progress	278	Have the EPA laboratory look at the procedures	Dennis Orenshaw	03/22/2001	In Progress	04/24/2001
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In progress	279	Provide Tony with any analytical information from the building demolitions at Site 39	Shawn Jorgensen	03/22/2001	In Progress	03/30/2001
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In progress	280	Check with Steve to find out the contact at the Army that may have risk numbers. Get the risk numbers if they exist.	Dennis Orenshaw	03/22/2001	In Progress	04/06/2001
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In progress	281	Talk to IH lab to get a unit cost and see how that unit cost changes with the number of samples. E-mail team the unit cost(s) for samples and a recommendation on the number of samples to be collected.	Tony Tomlin	03/22/2001	In Progress	03/30/2001
To be defined	To be defined	In progress	282	Talk to John Fairbank about the need for 30-60-90 design submission packages	Curtis DeTore	03/22/2001	In Progress	03/30/2001