

MEETING MINUTES

MAY 23-24, 2001

INDIAN HEAD INSTALLATION RESTORATION TEAM MEETING

INDIAN HEAD NAVAL SURFACE WARFARE CENTER

INDIAN HEAD, MARYLAND

The meeting was held on May 23, 2001 and May 24, 2001, at CH2M HILL's WDC office in Herndon, Virginia.

The following personnel attended the meeting on May 23, 2001:

Anne Estabrook – CH2M HILL
David Steckler – CH2M HILL
Ed Corack – CH2M HILL
Bob Root – CH2M HILL
Curtis DeTore – Maryland Department of the Environment
Shawn Jorgensen – NSWC Indian Head
Jeff Morris – EFACHES
George Latulippe – Tetra Tech NUS
Lee Ann Sinagoga – Tetra Tech NUS
Dennis Orenshaw – US Environmental Protection Agency, Region III
John Trepanowski - Tier II link
Kelly Gragg – Hydrogeologic
Cindy Crane - Hydrogeologic

The following personnel attended the meeting on May 24, 2001:

Anne Estabrook – CH2M HILL
David Steckler – CH2M HILL
Bob Root – CH2M HILL
Curtis DeTore – Maryland Department of the Environment
Shawn Jorgensen – NSWC Indian Head
Jeff Morris – EFACHES
George Latulippe – Tetra Tech NUS
Lee Ann Sinagoga – Tetra Tech NUS
Dennis Orenshaw – US Environmental Protection Agency, Region III
John Trepanowski - Tier II link

Wednesday, May 23, 2001

- **Introductions**

Familiarizing group, catching up; Dennis Orenshaw (time keeper), George Latulippe, Curtis DeTore (scribe), David Steckler (minutes) Ed Corack, Anne Estabrook (host), Lee Ann Sinagoga, Jeff Morris (host), Shawn Jorgensen, Kelly Gragg, and Cindy Crane. Began meeting at 9 AM.

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

Specific comments noted at the meeting are as follows:

One team member noted that the host for the November partnering meeting is CH2M HILL not MDE.

- **Kelly: Sites 6, 39, and 45 Fieldwork Update**

Goal: Share status of fieldwork and obtain team input.

The leader opened by reviewing Sites 6, 39, and 45 and the contaminants associated with those sites. The leader then focused the discussion on Site 6. It was noted that fieldwork has not yet begun. The proposed field strategy for the site was reviewed. Next, the status of Navy operations preventing the fieldwork was discussed. A team member asked what the length of field effort was. The leader estimated about 2 days. It was suggested that other portions of the RI could move ahead before fieldwork at Site 6 was completed.

Action Item: Shawn will check on the possibility of doing fieldwork at Site 6 on Sundays (2 consecutive weekends) by the end of June by 6/8/01.

Consensus Decision: The RIs for Sites 39 and 45 will proceed and will be submitted with or without Site 6.

The leader next discussed Site 39. A summary of the investigation was presented along with a summary of preliminary results.

- Surface soil samples contained 15 metals above background.
- Two explosives were detected and several SVOCs.
- Subsurface soil samples contained 10 metals above background.
- One explosive was detected as well.
- No SVOCs were detected in subsurface soil.

A team member asked if the metals detected in soil are indicative of stack emissions at Site 39. The leader was not sure because the results were only preliminary. The discussion turned to 'background' samples and the comparison of site 'background' to facility 'background'. A team member asked another team member if metals were part of the stack emissions and what the prevailing wind direction at Site 39 is. The team member responded that he did not know what constituents are present in the stack emissions.

Action Item: Shawn will check on what could have come out of the stack at Site 39 by 6/8/01.

A team member asked what the primary concern at the site was at the time the workplan was written. It was noted that the stack may not be a source of contaminants.

The discussion turned to the one sample that contained ammonium perchlorate. It was noted that the detection was at the PQL and was likely a lab remnant.

The leader next discussed Site 45. A summary of past uses and a discussion of drum removal was presented. The leader then moved to a summary of the investigation activities and preliminary results.

- Surface soil samples contained 7 metals above background.
- One SVOC and 1 explosive was detected as well.
- Subsurface soil samples contained 3 metals above background.
- One explosive was detected.

The discussion turned to the chemicals used at the site and whether it's possible to determine what constituents were in them. The leader returned the discussion to the RI.

- 15 metals were detected in groundwater.
- 7 metals were detected in surface water above facility background.
- Sediment contained one metal above background.
- One VOC was detected in sediment as well.

The leader moved to a review of future activities. The discussion turned to sample locations. A team member asked about the elevation of the water table. The leader told the team that groundwater was 3-5 feet bgs.

Break

Upon returning from the break, the team discussed soil samples already collected at Site 39 that are on hold until the field work can be completed. The leader then noted that there were no hits of UDH or acetal/formal.

Consensus: Given that there were no detections in the surface soils at Site 39, we will not analyze subsurface soils, as previously agreed upon.

- **David: Site 47 Update**

Goal: Share Site 47 RI data and obtain team input.

The leader opened the presentation with an overview of the handouts and posters: the first handout was an outline of the discussion, the second handout was an example of an MIP log. The first poster was a map of site with sample locations marked. The second poster was cross-section of site along a transect that intersected several MIP locations.

The leader then explained how to read the EC/MIP profiles.

EC: the taller the peak, the higher the clay content of the formation.

MIP: the taller the peak, the higher the organic content of the subsurface

The leader then focused the discussion on the results of the EC survey. The shallow subsurface is characterized as very sandy. A silt lens is present 10-15 feet bgs. The silt lens begins beneath

building 856 and terminates between MIP9 and MIP3. Underlying the sand is clay is greater than 30 feet thick. A team member asked about the lateral extent of the silt lens. The leader replied that the lens was not observed in MIP 4 located west of the site and that no profiles were performed east of the site due to access issues.

The leader then moved to the results of the MIP survey. VOCs were most concentrated in the silt lens. It was noted that the GC appeared to give higher values after probing through an area of high concentrations. A team member asked if the GC was recalibrated between MIP locations. The leader replied that it was.

There were no metals observed in groundwater at extremely elevated levels. No mercury detections were noted. Lead was detected in a few locations; highest at DP5.

The leader next focused on the monitoring wells:

- 6 wells installed.
- Shelby tube samples collected at each well except MW05.
- The wells were slug tested. The data is currently being analyzed.
- Samples were collected from each well for VOCs, SVOCs, explosives, TOC, AP, nitrate, nitrite, sulfate, chloride, and TAL inorganics.

The leader next discussed the results of monitoring well sampling:

- VOCs in GW03 decreased two orders of magnitude since July 1999
- VOCs detected in MW10 located west of the site.
- No mercury detections.
- Data for other parameters not yet available

The leader noted that the groundwater flow direction is known because the new wells have yet to be surveyed.

The leader next discussed the results of surface water, sediment and soil sampling:

- 2 surface water and 2 sediment samples and 9 surface soil samples were collected
- No VOCs in surface water or sediment, but some SVOCs.
- No metals in surface water, but mercury in one sediment sample at SD05
- Some VOCs, SVOCs, and metals were detected in surface soil samples, notably mercury at 4 locations and silver at one location
- Some VOCs, SVOCs, and metals were detected in subsurface soil samples

It was noted that some of the surface soil samples were collected from the swale and would have been sediment; however, there was no surface water at the time.

Lunch

Ed: Lab Area Update

Goal: Share status of the fieldwork and obtain team input.

The leader began by explaining that the Lab Area is a combination of Sites 15, 16, 49, 50, 53, 54, and 55. The leader then focused on the field effort. The work took 3 weeks. There were no PID readings or a Hg vapor readings during the entire field effort. A team member asked if the Hg

vapor reading would detect elemental Hg. Another team member said that the meter was very sensitive and would detect even a small quantity of elemental Hg.

The leader then moved to the sampling scheme. 80 samples were collected at locations around the buildings. All samples were collected for metals and VOCs. Some samples were collected for explosives, SVOCs, pH, and TOC.

The leader then discussed sediment sampling from manholes. Several manholes did not contain sediment; therefore samples were not collected. A team member asked if the Hg meter was used in the man-holes. The leader replied that it was; there were no detections.

The leader then discussed subsurface soil samples. There were some utility clearing problems during sampling along the pipes. One sample was abandoned due to an unexpected utility line. It was noted that there was no bedding along the sewer lines (i.e. the pipes were laid directly into the trench.) One team member asked if all samples are ND, could the site be considered 'clean'. The discussion turned to using an institutional control at the site as a presumptive remedy. Due to the limitations of the subsurface investigation, it may not be possible to define the nature and extent of Hg in soil at the site. A team member noted that the significant Hg detections at the site (prior to this investigation) were in the manholes.

The leader then turned the discussion to the chemical disposal pit. A chemical disposal pit was removed from the west side of building 444. The disposal pit was a concrete manhole. The manhole was removed plus 1 foot of soil around and beneath the manhole. During the excavation a concrete slab was observed beneath the disposal pit. The slab was determined to be a former waste acid disposal pit. Brick walls were also observed, defining the extent of the former acid waste pit. A team member asked what the depth of the former waste acid pit was (as reported in previous studies). The response was 15-20 feet bgs, with a 4-inch diameter pipe to the surface. A team member noted that someone who knows where the former pit was should confirm the location to ensure the observed slab is the former waste acid disposal pit.

Action Item: Heidi will check on historical information for abandoned waste acid disposal pit in lab area by 8/15/01

- **Anne: Site 5 Update**

Goal: Discuss the Site 5 RI workplan and obtain team input

The leader summarized previous discussions. The main point: one area of the swale was not fully characterized. CH2M HILL researched the 10 mg/kg cleanup level to determine where it came from. The cleanup level was made prior to the site getting on the NPL (i.e. EPA had no input). The discussion turned to whether the 10 ppm level would be modified at a later date. There was a general feeling that it should not be modified because it is a conservative cleanup goal and was agreed-upon by all parties at the time. The discussion turned to removals that were conducted at Site 5. There was no EE/CA done; however, cleanup goals were negotiated with the state and post removal sampling was performed.

The leader suggested that 3 samples be collected from the portion of the swale that is not characterized. The data could be compared to the TIE study.

2 questions were posed by the leader:

-Do we need further sampling in areas already characterized?

-Do we need to sample in the area not already characterized?

A team member noted that there should be a formal process if there is to be a formal close out Site 5. There was a general feeling that there should not be any more sampling in the areas already remediated. It was noted that Site 5 is a site screening area (SSA). It was then noted that the areas where a removal action has occurred, the work needs be better documented. A question came up as to whether the data could be used for a HHRA

It was suggested that 3 samples should be collected from the swale and to document the previous work to close out a Site 5. This will eliminate the need for a ROD.

Consensus: Collect 3 samples from lower part of swale 2, compare the results to results of TIE study and/or the Site 42 HHRA, if that analysis shows no risk, then we will proceed with a decision document to close out soil and sediment at Site 5.

- **John: Tier II Input**

The leader noted that the minutes could not be printed from the web

Action Item: Anne will check the posting of minutes on web site (printability) by 6/8/01

The leader then noted that groundwater for remediation the site must meet 2 qualifications: it must come from a usable aquifer and it must have a discernable plume (i.e. there must be more than one well with contaminants above comparison criteria.) The discussion turned to what constitutes a 'usable aquifer'.

- **George: Long-Term Monitoring Format and Content**

Goal: Team to provide input regarding format, content and scope of LTM plan as represented by LTM plan outline.

The leader opened the discussion by reminding the team that the format previously agreed to allows for the document to grow as needed. The leader focused on the decision tree shown on page 5 of the handout. The leader felt the discussion should be limited to the contaminants of concern. The leader noted that the language of the handout is generic and not meant to be specific to Site 12. The leader pointed out that in the handout, 4 sampling events are suggested to remove a compliance well from the sampling. There is a general consensus that including a specific number of sampling events is best. The discussion turned to whether comparison criteria is used or health numbers.

The leader suggested that the approach should be to brainstorm options. One team member noted what was agreed to at the last meeting. Another team member asked for the team to review what was discussed at the previous meeting. The discussion turned to the difference between LUCAPs, LUCIPs, and LTMs.

The discussion returned to the placement of sampling procedures, HASP, SOPs, etc. It was noted that it may be best to begin a non-specific LUCAP to avoid these questions in the future. One team member noted that the Navy has new counsel, which may affect the process.

Action Item: Jeff will report to team on LUCAP/LUCIP after meeting with Navy counsel by 6/27/01.

- **George: Site 42 Draft FS Update**

Goal: Share status of Site 42 draft FS and receive preliminary team comments.

The leader opened the discussion with alternative 2. It was explained that a limitation at the site is a steam line. The leader noted that a surveyor will be out at the site to site bench marks. A team member noted that MDE will not accept a soil cap at the site but requires an engineered cap. A concern was raised that excavating for the cap would require the steam lines to be moved. A team member asked another team member why MDE would not accept a soil cap. The response pertained to the location of waste above the water table.

The discussion turned to the various remedial options open to Site 42. One of the options requires the partial removal of the landfill which could be cost prohibitive. The discussion turned to the minimum thickness of an engineered cap. It is noted that in some instances an engineered cap could be as thin as 2 feet.

The leader turned the discussion to the lay of Site 42 to help explain the limitations posed by the site. The critical elevation is the top of the pedestal that the steam lines sit on. It appears there is only 1 foot exposed now; therefore, some excavation would be required. Additionally, the depth of the pedestal is not known. It may be more shallow than the excavation. It was also noted that to move the pipe would bring about asbestos issues.

A second option was noted. It may be possible to place bituminous concrete from the parking lot past the pedestal. The discussion turned to whether a bituminous concrete cap would be acceptable to MDE.

Action Item: George will send groundwater elevation information for Site 42 by 6/1/01.

Action Item: George will check on the need to have 2 feet of soil over the waste before a geomembrane can be installed 6/1/01.

Action Item: Shawn will check on as-builts for the steam line footers at Site 42 by 6/8/01.

It was noted that the questions and comments raised by MDE are the critical path at Site 42.

Jeff Tornatore: GIS Presentation

Goal: Share information on what some other activities are doing with GIS.

The focus of the presentation was ABL. The leader explained that for many bases, a desktop GIS is distributed on CD ROM.

The leader then moved to the query tool. Data can be queried by site, media type, analyte group, analyte, and comparison criteria.

The leader then explained the document browser. Information about a SWMU or AOC can be queried. The discussion turned to the use of this technology at Indian Head. Items such as fact sheets could be hot linked to the GIS.

The leader showed some of what is already being used at Indian Head. The discussion focussed on getting TTNUS and CH2M HILL data in a usable format for the Indian Head GIS.

- **End meeting at 4:50 PM**

Thursday, May 24, 2001

- **Introductions**

Familiarizing group, catching up:, Dennis Orenshaw (time keeper), George Latulippe, Curtis DeTore (scribe), David Steckler (minutes), Anne Estabrook (host), Lee Ann Sinagoga, Jeff Morris (host), and Shawn Jorgensen. Began meeting at 8:15 AM.

- **Review today's agenda**

- **George: Background Study Data Set**

Goal: Share background study data set and obtain team input.

The leader began the discussion with a summary of the topics to be presented and an outline to keep the discussion focused. A team member noted that there may be some overlap between this and the next topic. The team member and the leader discussed the use of the background data set and what can be defined as anthropogenic.

One team member asked another what compounds are considered anthropogenic. The response was that any compound could be considered anthropogenic. The example of lead was used. Lead occurs naturally and could occur naturally at high levels. However, higher levels relative to natural could be observed at a site indicating an anthropogenic origin.

The leader returned the discussion to the IH background data set. Originally the data was analyzed using the students T-test. Recently the data was reanalyzed using the Deft Model. It had been agreed in the past that the background data set would only be used for soils. There are four categories: surface soil, subsurface soil, uplands soil, and lowlands soil. The database was reviewed in terms of a grain size distribution. A coefficient of variance (standard deviation/mean) was calculated for each soil group. The data was also reviewed in terms of analytes that are important for HHRAs. It was determined based on the reanalysis that 8 additional samples would be needed to complete the background data set

The leader suggested that at the next partnering meeting the team determine where best to collect the additional samples. The discussion turned to the use of the data set in terms of uplands and lowlands versus USCS classification. The leader explained the best way to apply the data set was to determine whether a site is in an uplands or lowlands area and compare the appropriate data set. The discussion turned to the use of the coefficient of variance. It was explained that the parameter is used to define the number of samples needed. The larger the coefficient of variance, the larger the number of samples needed to complete a valid background data set. The discussion then turned to the definition between upland and lowland and lowland. For many sites, it will be known clearly which it falls under. For other sites, decisions may need to be made after the some preliminary statistics are completed.

The discussion turned to the effort to apply the uplands and lowlands categories. The leader explained that because in any lowlands or uplands sample, the soil type could vary widely from sample to sample. Because it is not possible to generate a perfect data set that is applicable to every sample collected at the site, a balance needs to be struck between accuracy and effort. A team member noted what is being done at other bases. Some bases collect numerous samples

upfront for a comprehensive data set while other bases build the data set as new sites are investigated. Other bases have used soil type classification.

The leader noted that the SCS uses the uplands/lowlands classification to aid the soil surveying. One team member suggested that the uplands and lowlands categories should contain samples from all sub categories to be applicable in a broad site. The team agreed in a general sense, however, many team members noted that it is not practical or cost effective to attempt to collect samples from all sub-classes. Again, the accuracy versus practicality issue.

Consensus: To utilize uplands/lowlands classification and to collect the additional samples as required to establish statistical viability of the background data set.

Dennis: Background Study – Anthropogenic Issues

Goal: Discuss differences among Navy, EPA, and MDE policies regarding anthropogenic compounds.

The Leader opened the discussion by reminding the team of what has been discussed in the past. The leader then explained that the EPA's stance was somewhat flexible. The leader then asked team members what their general policy was. One team member explained the general policy of the Navy. The team member explained that anthropogenic compounds are generally those things that are 'site' specific rather than basewide. Another team member explained MDE's position. The position was the same as the Navy's.

Elevated levels of pesticides and herbicides at 'sites' will not be considered releases under the Superfund program. One team asked the question about HHRA: even if arsenic is not a 'release', what if the soils or other media are above health risks? A team member responded that even though compounds are considered 'background' does not mean that the media will not be remediated.

Consensus: The development of non-site related reference area data sets is appropriate.

Break

Continue: Background Study – Anthropogenic Issues

The leader returned to the discussion by posing the question "should we develop a reference background anthropogenic data set?". One team member noted that a true background data set has no anthropogenic impacts. The response was that background as it relates to the IH partnering team means those releases that are CERCLA related. The discussion turned to the use of base-wide data sets versus reference data sets (e.g. railroad tracks or urban areas). There was a general consensus that it should be made clear which data set is being used to compare to which site.

A team member noted that background data sets must contain data from an area as large as the data set is meant to cover (i.e if 10% of the base is covered by railroad tracks than 10% of the data should come from railroad tracks, if the data set is meant to be facility wide); therefore, it is extremely likely that the background data set will contain anthropogenic impacts.

Consensus: The use reference area data sets will be restricted to IR sites with similar settings.

Consensus: The team will not develop 'reference area' data sets up front. Reference area data will be developed on an as needed basis.

Consensus: Site investigations should consider the need to develop 'reference area' data sets as part of the scoping for an IR site investigation.

The discussion turned to base-wide versus reference area-wide background data sets. A base-wide or reference background data set will contain anthropogenic impacts and can be compared to any site at a base. Reference area background data sets will contain anthropogenic impacts and will be used to compare to IR sites with similar land uses.

Action Item: Lee Ann will prepare some suggestions for additional sampling for background/incorporation of existing data by 6/27/01

Action Item: Anne will send Lee Ann CH2M HILL site-specific background sampling information by 6/8/01

- **George: Site 12 Remedial Design Update**

Goal: Share status of Site 12 remedial design and obtain team input.

The leader opened the discussion by noting that the contract has been awarded and suggesting the team review the design package. A team member noted that if significant problems are found in the design package it should be brought to the attention of the team. However, if the review only brings about negligible changes, the team should not spend too much time.

The leader informed the team that the 65% design has been submitted. Some of the calculations have been held back in the event that some things need to change. The design accomplishes the intent having 2 feet of soil over the waste. This includes soil at the site. This design elevates the Atkins Road Extension.

The discussion turned to use of the 65% submission as opposed to a 30%. One team member noted that if a 30% design was submitted, there would be more time for comments. The leader explained that much what has been done to date was driven by funding. The discussion then turned to when comments could be expected from regulatory agencies.

The leader pointed out that in one area of the cap the grade was over 4% which may require a build up to meet that requirement.

The leader noted that the location of monitoring wells at Site 12 still needs to be addressed.

The question was asked whether the RAC (OHM) had prepared a workplan. The team member the question was directed to did not know at this time. It was also brought up that the team may want a representative from the RAC to attend some future meetings.

Jeff: Site 12 Long Term Monitoring Plan

The leader suggested it may be a good idea to prepare the plan. This would allow the team to comment on it.

Action Item: George will prepare draft Site 12 Long Term Monitoring Plan, LUCAP, and LUCIP by 6/27/01.

Jeff: Site 47 Plume

The leader noted that the team may not want generate a report for Site 47 until it is clear that additional field work is not necessary.

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

Action Item: George will send Anne information on risk numbers for exotic chemicals by 6/8/01.

Action Item: Curtis will ask his contact in the MDE Solid Waste Division where monitoring wells should be placed at Site 12 and generally by 6/8/01.

Items left in the Parking Lot:

Parking Lot
Partnering Session (Team Building)
Discuss Team's involvement in construction changes
Update on institutional controls process
Discuss policy on base for ICs after meeting w/base personnel
Old acid waste disposal in lab area

- **Close Out**

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

Next Agenda	Lead	Time (hr)
Determine background sample locations (SS and SB samples)	Lee Ann	1.5
Suite of analytes to be tested for background samples	Lee Ann	0.5
Reconsider 2/8 consensus statement regarding background issues	Shawn	0.5
OHM representation at our meetings and their roles	Dennis	0.5
Partnering Exercises	Dennis	1
Mattawoman Creek update to include screening and scheduling	Kent	1
Sites, 11, 13, 17, 21, and 25 update	Anne/David	1.5
Location of Site 12 monitoring wells	Curtis	0.5
Site 42 alternative selection	Curtis	0.5

- **Schedule of Future Meetings**

Date of meeting	27-28 June 2001	15-16 August 2001	12-13 September 2001	9-10 October 2001	14-15 November 2001	January TBD
Location	Virginia Beach	Indian Head	Philadelphia	Lancaster	Baltimore	Indian Head
Host	CH2M HILL	Shawn	Dennis	Tier II	CH2M HILL	TBD
Chair	Shawn	TBD	Dennis	Dennis	Curtis	TBD
Scribe	TBD	TBD	TBD	TBD	TBD	TBD
Tier II Link	TBD	TBD	TBD	TBD	TBD	TBD
Time Keeper	TBD	TBD	TBD	TBD	TBD	TBD

Conference call will be on May 18 at 2 PM.

- **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
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	Completed	05/11/2001
To be defined	To be defined	In progress	283	Scope LTM/LUCAP/LUCIP	Jeff Morris	04/24/01	Completed	06/27/01
To be defined	To be defined	In progress	284	Check on LTM/LUCAP/LUCIP Guidance	George Latulippe	04/24/2001	OBE	05/11/2001
To be defined	To be defined	In progress	285	Set up meeting with base personnel to discuss institutional controls	Heidi Morgan	04/24/2001	Completed	05/23/2001
To be defined	To be defined	In progress	286	Check with other RPMs on processes to implement institutional controls and relay that information to Heidi and Shawn	Jeff Morris	04/24/2001	Completed	05/23/2001
To be defined	To be defined	In progress	288	Talk to Steve Hurff about GIS format	Jeff Morris	04/24/2001	Completed	05/23/2001

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	290	Get RAC involved in review of Site 12 RA design	Jeff Morris	04/24/2001	Completed	05/23/2001
To be defined	To be defined	In progress	291	Check ranking of Site 28 using new data	Jeff Morris	04/24/2001	Completed	06/27/2001
To be defined	To be defined	In progress	292	Send SW/SD coordinates to Kent	Anne Estabrook	04/25/2001	Completed	05/04/2001
To be defined	To be defined	In progress	293	Investigate topsoil removal from Site 13 and provide information to Anne	Heidi Morgan	04/25/2001	Completed	05/04/2001
To be defined	To be defined	In progress	294	Review soils data from confirmatory sampling at Site 5 including 'unknown' section of swale and determine if risk assessment was done	Anne Estabrook	04/25/2001	Completed	05/23/2001
To be defined	To be defined	In progress	295	Research/recommendation on closing out Site 5 (administrative requirements)	Jeff Morris	04/25/2001	Completed	05/23/2001
To be defined	To be defined	In progress	296	Ask Dean about screening for Mattawoman Creek study	Kent Cabbage	04/25/2001	Completed	05/04/2001
To be defined	To be defined	In progress	297	Set up an Eco subgroup meeting with BTAG and J. Bossart for the week of 5/7/01	George Latulippe	04/25/2001	Completed	05/04/2001
To be defined	To be defined	In progress	298	Check with Jeff about meeting	Heidi Morgan	04/25/2001	Completed	05/04/2001

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	299	Check with BTAG about meeting	Dennis Orenshaw	04/25/2001	Completed	05/04/2001
To be defined	To be defined	In progress	300	Check with Dean about meeting	Kent Cabbage	04/25/2001	Completed	05/04/2001
To be defined	To be defined	In progress	301	Determine if there is a more descriptive technique (SOP) for exotics analysis	Shawn Jorgensen	4/25/2001	Completed	05/11/2001

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	To be defined	In progress	287	Scope for BMP update	Jeff Morris	04/24/2001	In Progress	06/27/2001
To be defined	To be defined	In progress	289	Check on site contract to get GIS data into system	Jeff Morris	04/24/2001	In Progress	06/27/2001
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In Progress	302	Check on the possibility of doing fieldwork at Site 6 on Sundays (2 consecutive weekends)	Shawn Jorgensen	5/23/2001	In Progress	06/08/2001
To be defined	Finalize Remedial Investigation Report for Sites 6, 39, and 45	In Progress	303	Check on what could have come out of the stack at Site 39	Shawn Jorgensen	5/23/2001	In Progress	06/08/2001
To be defined	To be defined	In Progress	304	Check on historical information for abandoned waste acid disposal pit in lab area	Heidi Morgan	5/23/2001	In Progress	08/15/2001
To be defined	To be defined	In Progress	305	Check on the posting of the minutes on the website (printability)	Anne Estabrook	5/23/2001	In Progress	06/08/2001
To be defined	To be defined	In Progress	306	Report to team on LUCAP/LUCIP after meeting with Navy council	Jeff Morris	5/23/2001	In Progress	06/27/2001
1	Sign Record of Decision for Sites 12, 41, 42, and 44 by 04/04/01: (a) Finalize Feasibility Study by 04/19/00	In Progress	307	Send groundwater elevation information for Site 42	██████████ ██████████	5/23/2001	In Progress	06/01/2001

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
	(b) Finalize Proposed Plan by 09/13/00							
To be defined	To be defined	In Progress	308	Check on the need to have 2 feet of soil over the waste before a geomembrane can be installed	[REDACTED]	5/23/2001	In Progress	06/01/2001
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	309	Check on as built for the steamline footers at Site 42	Shawn Jorgensen	5/23/2001	In Progress	06/08/2001
To be defined	Basewide Background Report	In Progress	310	Prepare some suggestions for additional sampling for background/incorporation of existing data	Lee Ann Sinagoga	5/24/2001	In Progress	06/27/2001
To be defined	Basewide Background Report	In Progress	311	Send Lee Ann CH2M HILL site-specific background sampling information	Anne Estabrook	5/24/2001	In Progress	06/08/2001
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	312	Prepare Site 12 Long Term Monitoring Plan, LUCAP, and LUCIP	[REDACTED]	5/24/2001	In Progress	06/27/2001

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	To be defined	In Progress	313	Send Anne information on risk numbers for exotic chemicals	George Latulippe	5/24/2001	In Progress	06/08/2001
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	314	Ask Solid Waste where monitoring wells should be placed at Site 12 and generally	Curtis DeTore	5/24/2001	In Progress	06/08/2001