PENSACOLA PARTNERING TEAM MEETING MINUTES

Date - June 29-30, 1999
Location - St. Augustine FL
Team Leader - Brian Caldwell
Recorder - Joe Fugitt
Gate Keeper/Time Keeper - Terry Hansen
Process Facilitator - Jerry Arcaro

ATTENDEES:

TEAM MEMBERS:

Brian Caldwell
Joe Fugitt
Terry Hansen
Allison Harris
Bill Hill
Ron Joyner
Gena Townsend
Amy Twitty

SUPPORT MEMBERS:

Paul Stoddard - Tier II
Robby Darby - Tier II
Tom Dillon - Adjunct Member (not present)
Jerry Arcaro - Facilitator

GUESTS:

Byas Glover - Southern Division
Dean Neptune - Neptune and Company, Inc.

Check-In
Jerry informs the Team he will be working on the Bush campaign. Amy Twitty (CH2M Hill) and Robby Darby (Southern Division) are new members to the Team. Tom Dillon was not able to be present at this meeting. His thumb is given to Gena.

Team Process Training
Jerry Arcaro presents Team Process Training on the subject of Team Culture. Team learns about boundaries in a team culture; team commitment and participation; proactive, not reactive participation; and identifying individual and team needs. Some Team Goals are identified (RODs for OU6 and Site 15) and a time frame for accomplishing these goals is established.

Team Training
Dean Neptune presents information on the Data Quality Objectives (DQO) Process, Approaches for Successful Implementation. His presentation included the following: the DQO Process and the importance of knowing the decisions to be made; data is collected to make decisions; these decisions are for managing or identifying **risk** (human and ecological); and ideally, data is collected using the best available technology which is economically achievable.

DQO documentation is available as pdf files from a link on the USEPA web site.
A handout of the presentation was provided to the Team and is included with the Team meeting minutes.

Site 38 DQO Discussion
Allison presents an overview of the site. Direct contact with soil is not an issue for this site. Groundwater (GW) is the issue at this site. Site remedies will include land use controls and the following possible actions: no further action (NFA), monitored natural attenuation (MNA), groundwater removal and treatment, and "hot spot" removal.
Groundwater data is needed for the site whether we choose MNA or GW treatment.

Questions to consider:
1) Is **NA** occurring before chemicals of concern (COCs) reach Pensacola Bay?
2) Is COC NA possible?
3) Is plume gradient for all COCs going down (spatial)?
4) Will model show that COC NA contain plume or attenuate significantly to be at clearance limits at the receptor (Bay)?
5) Do we have the same monitoring requirements for GW treatment?

Decision Rules: NA is occurring if score > 15 (Region 4 Guidance). NA is not likely to occur if score is < or = to 15. Demonstrate that gradient decreases along flow downgradient. More samples are required if gradient is small to demonstrate a decrease. Model the concentrations within the plume to see how they change over time and distance.
Uncertainty occurs due to data quality and model assumptions.

Two things we can do to build confidence in our model. Perform sensitivity analysis to see what affects the model the most and collect additional data as a practical reality check. We can make a decision for the site if model results are clear. If model results are "close" to a regulatory driver, a window of acceptability must be determined. Evaluate ranges for all variables and determine the probability density function (PDF). A Monte Carlo statistical evaluation will indicate the probability for exceeding a compliance limit and help to determine a decision point.

Additional Issues for this site that concern the Navy and FDEP were discussed briefly which include the following: applicability of Florida guidance in 62-785 and 62-777 to CERCLA sites; aquifer classification (G2) as stated in 62-520; low yield/low quality aquifer designation stated in 62--770 and 62-785. These issues are not immediately resolvable but need to be considered since they affect any remedial action proposed for the site.

9906-D17-The Team votes to use the DQO process to solve site problems. In the structure and specifications, with assumptions stated and rationale documented.

Dean Neptune gives Team a DQO Process Case Study. The Team also discusses the Navy Ecological Risk Assessment Tiered Approach. The importance of a ecological conceptual

model is discussed since the risk assessment decisions go "hand in hand" with risk management decisions and these can start early in the RI process.

Site 2 DQO Discussion
Allison presents an overview of the site. COCs are bis (2-ethyl-hexyl)phthalate and metals. Decision Rules - What are affects to benthic community (survivability, reproduction, and growth). Need diversity to indicate a healthy environment.

There are several ways to compare bioassay and control data: compare mean, median, or upper tolerance limit for each data set. Each approach may help evaluate where the data is different. A difference in the comparison between bioassay data and the control data indicate a potential risk.
Reality check is that the state of ecological risk assessment is evolving and data can be difficult to interpret.

It is important to develop the site conceptual model (assessment endpoints, receptors, completed pathways). Document these clearly so that the public will understand. Pay attention to the lines of evidence between different trophic levels. The more structure the better.
Dean points out that Massachusetts DEQ Web site has a paper on The Weight of Evidence Approach. This approach is important in assigning importance to each part of assumption. This approach has worked in the past to help multi-agency teams reach a consensus on important decisions.

To sum up DQO discussion from Dean, "The process discussed today is a process which is scientifically sound to achieve a consensus of closure for various sites. The structure and documentation of the process will help avoid revisiting decisions and help defend decisions made by the Team." Thanks again Dean!

More discussion on Site **2** below.

Petroleum UST Site Presentation NAS Pensacola and OLF Bronson
Byas Glover, Southern Division, presents an update of the status of investigations being conducted at Petroleum UST Sites at **NAS** Pensacola, Saulfley Field, and OLF Bronson.

NAS Pensacola: UST Sites **20** (Berthing Pier) and **2**1 will require remediation, UST Site 18 (former Crash Crew Training Area) will require landfarming. UST Site **20** is location of a million gallon AST and is considered the most significant petroleum site at NAS Pensacola. Site **22** (Refueler Repair Shop) is now UST Site 26. UST Site 14 (Building 3644) is undergoing a free product removal. Funding for an RAP for UST Site 14 is under discussion between Southern Division and Naval Air Command.

Byas request that FDEP write a letter to the Navy in order facilitate a resolution to the funding issue for UST Site 14.

9906-A40-Joe will write a letter and shake a regulatory stick at someone.

Saufley Field: One UST Site requires remediation at this facility.

OLF Bronson: There are 8 Petroleum UST Sites at this facility. Five of the sites are proposed to have monitoring only. Three of the sites (Sites 1159, 1107, and 1120) are proposed to have an RAP prepared.

Byas will provide a Site Management Plan (SMP) to CH2M Hill for planning purposes.

9906-A41- Bill will make sure Byas sends Amy the SMP.

Byas reports that Dean Spencer has left NAS Pensacola and that Greg Campbell has assumed responsibilities for UST Sites at the facility. A handout detailing Petroleum Site status was provided to the team at the meeting and is included with the minutes.

Site 2 Sampling and Remedies (Part Deux)

Gena reports that Fred Sloan will not be able to resample at the site in July due to other field efforts. It may be October for he is able to resample Site 2.

Ron reported on his underwater dive at the site. Five areas were explored within the area of the site approximately 200 to 400 feet off the seawall. Water depths varied from 10 to 12 feet closer to the sea wall and approximately 20 feet further away. Visability was poor. There was approximately 18 to 24 inches of soft mud in most of the areas. One area in the south west portion of the site had sand which was not densely packed. Concrete was encountered below the mud in the central area of the site, which covered at least a 25 foot area.

In light of this information, previous dredge samples may have been collected deeper than 6 inches from water bottom. If this soft mud bottom is located throughout the site, the bottom samples may have been collected at 18 inches or greater below the water bottom. If this is the case, there are other confounding factors that would explain toxicity or lack of diversity. One confounding factor would be ammonia present in the deeper portion of the soft sediments.

9906-A42-Allsion will identify availability of data which may indicate any potential confounding factors in the existing sediment data.

Ron took underwater video during the dives to each area of the site. The Team will review the video at a later time.

Dean walks the Team through the DQO process for Site 2.
How does the Navy determine if action is required at the site?
1) Is the Site 2 sediment environment a suitable habitat for the benthic macro invertibrates? Key question!
2) Are confounding factors influencing results? Such as ammonia production, sediment size, and salinity.

3) Where is the biologically active zone at this site? Should we also consider micro invertibrates?
4) What would be the impact of remedial action on site?

We start by looking at the benthic macro invertibrates and also document why the upper trophic levels are not considered. Consider the above questions first before any redo or additional sample collection.
Trophic Lines of Evidence - What is affected (Survival?, Growth?, Reproduction?) for our assessment endpoints?

Multiple lines of evidence, while good, may cost more to assess and be more difficult to interpret.
Decision rule for line of evidence: For acute effects, decide survival rate % (population at Site 2 versus control population in lab or reference area). Consider confounding factors in our bioassay design. Decide how to make comparisons (means, average, etc.). We then look at historical data set to determine if data is sufficient.

Tip from Dean: QA G9 Data Quality Assessment document is available on the USEPA website.

DQOs should be specified for original survey design to make the determination if the data set is sufficient.
This is where we need the subject matter experts - Marine Ecologist, Bio-Statistician to specify a survey design, which is legally defensible. We need to consider then the following:
Site Conceptual Model - What COCs are there? What COCs do we expect? Knowing the history of the site helps develop the conceptual model. Helps develop proper sampling and analysis plan, determine sensitivity of the analytical data, ID other operations (PRPs) and sources.

Sediment quality TRIAD ties sediment chemistry, bioassay, and sediment quality data together. The site conceptual model helps to limit the assessment endpoints. The biologist does a survey to determine what the ecosystem of a site could or should look like. What is there, what logically could be there, and are any species endangered or threatened.

A healthy sustaining ecosystem has diversity and species at all trophic levels. If primary consumers are there arid healthy, primary producers may be considered healthy and therefore we may not have to perform the TRIAD. If the problem can be understood during planning, better information can be collected and evaluated to gain greater understanding of the real impacts to eco assessment endpoints.

Feasibility Study (FS) Remedies - Smallest practical application can sometimes be an issue. USACOE limits the amount which can be dredged by conventional means. If the area under consideration was too small, a justification for not using that method is obtained. Vacuum dredging is also discussed for Site 2. In selection of remedies, size of area and severity of problem should be considered.

9906-A43-Gena will contact eco group to discuss suitability of Site 2 eco habitat.

Team will review Site 2 data (compilation to date) and reevaluate sampling strategy for the site. This will discussed at the July meeting.

9906-A44-Joe will review this strategy with the eco risk assessors at FDEP and be prepared to discuss the State position regarding this approach at next meeting.

9906-A45-Gena will coordinate with Fred Sloan about anew date to resample Site 2.

Tier II Update

Paul Stoddard presents a Tier II Update. Items include: applicability of Florida 62-785 and the 62-777 Rule to CERCLA, signature authority at FDEP, Fixed Price Insured Contracts from Southern Division, Bechtel phasing out as RAC, Land Use Controls, Site Specific Contaminant Levels (Arsenic), Team Performance Model (TPM), DOD and BRAC Funding, new O&M Contract from Southern Division, and Team Success Stories due by end of July 1999. Need for Team Training also discussed.

Site 38 DQO, Additional Information

Gena would like to see a literature or data base search to identify the location of water lines or utilities which may be contributing to lead (Pb) observed in the groundwater samples in the vicinity of Buildings 71 and 72. Gena believes we need additional information from the Building 72 area. This includes: identify source of Pb in the groundwater in this area; determine if Pb is ubiquitous in this area (associated with the older part of the facility); and determine if natural attenuation is also occurring at Building 72.

9906-A46-Ron will determine if **any** additional data for older utilities is available for the facility.

The Team discussed two decision points for this site: 1) Install two downgradient monitoring wells to the former Building 72 area near the sea wall and sample for Pb. If Pb is below the applicable standard, no further assessment would be required. 2) If Pb is above standard in the downgradient monitoring wells, delineate further and specify appropriate action.

A monitoring well located to the west and to the north of the former Building 72 area would be required to complete.this delineation. These would also be used for determining the concentration gradient and also used for monitoring for natural attenuation at the former Building 72 area.

9906-D18-Team decides to install two monitoring wells at the sea wall south of former Building 72

Team has uartial consensus (some sideways thumbs) on the monitoring wells to the west and north (partial consensus) of the former Building 72 area.

Only temporary monitoring wells would be installed and sampled for Pb.

Site 41 RI Addendum Fish Models
Allison presents an overview of the RI Addendum. She states that the fish model in the addendum was evaluated in accordance with the USEPA Guidance Document - Water Quality Criteria Methodology, 1998 which presents the chemical specific transfer trophic coefficients and their application to the model.

Since Tom Dillon was not able to attend this meeting, a conference call will be set up at a later date to discuss the assumptions and results presented in the RI Addendum.

9906-A47-Allison will set up a conference call with Tom Dillon to discuss the fish model assumptions.

OU13 and Site 15 Long Term Monitoring Plan
Brian presented an overview of the site and the proposed monitoring plan. Two sentinel wells are proposed immediately downgradient of each arsenic plume at Site 15. EPA and FDEP have tentatively agreed to these locations. There was some discussion of the sampling frequency outside and within the plume.

No consensus was reached at this time by the Team for sampling within the hotspot of the plume or the final compliance locations of the sentinel wells. This topic will be included in the July Agenda for further discussion.

Other Team Matters:
September meeting location and date.
Team members travel budget.
email update: Jerry's email j.s.arcaro@worldnet.att.net

Previous Action Items Still Pending:

9903-A13	Bill will submit a letter to EPA and State requesting that OU 10 be handled under RCRA authority.	Pending
9802-A14	Brian to follow up on the list of wells to be kept for future modeling.	Ongoing
9806-A44	Review Tier II deliverable package (rev.9) for corrections and respond to Bill.	Ongoing
9811-M03:	Bring MBTI materials to all meetings.	Ongoing

PLUS	DELTA
DQO Training	No decisions (I see two in above minutes...)
Tier I Training	Staying focused
Covered a lot of info	"Eat Elephants" not pieces
Becoming more focused	Hard on the scribe
Facilities	Loss of energy on 2nd afternoon
Tier I1 Update	Stay through hard parts
Deans' participation 2nd day	Taking it personally
Progress - Site 38	Lack of respect
Navy promotes DQO	Make a decision
Receptiveness to DQO process	Lack of focus
Use of DQO process	Lack of communication
Integrating Neptune's' help	Need to break issues into smaller manageable pieces and deal with them in a logical, organized fashion.

NEXT MEETING
July 27-28
Place: CH2M Hill Office
Atlanta, GA

Team Leader - Joe Fugitt
Recorder - Terry Hansen
Gate Keeper/Time Keeper - Allison Harris
Meeting Host - Amy Twitty

Agenda:

Item	Goal	Time Allotted	Item Leader
62-785	Update	1.0	Hansen
Site 15	Network	0.5	Hill
OU13	Network	0.5	Hill
Site 41	Fish Collection	1.0	Harris
Site 1	Update	0.5	Joyner
Site 2*	Update	2.0	Harris/Townsend
RODs	Update	0.5	Harris
MOA	Update	0.5	Hill
Training	Team Dev.	1.0	Arcaro
TPM Survey	Survey	0.5	Arcaro
Success Stories	Tier II Info	0.5	Hill
Check In	Team	1.0	Team
Check Out	Team	1.0	Team

Group Exercise	Have Fun	??	Twitty

Future Meeting Locations

August 24 and 25, 1999	EnSafe Office	Pensacola, Florida
September 28 and 29, 1999	??	??

Whew!! ☺