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NAS JACKSONVILLE
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PARTNERING TEAM MEETING MINUTES 6 SEPTEMBER 2012 WITH UPCOMING MEETING
AGENDA NAS JACKSONVILLE FL
9/6/2012
PARTNERING TEAM

NAS JACKSONVILLE PARTNERING TEAM MEETING MINUTES

September 6th, 2012

Atlanta, Georgia

Attendees: Mark Peterson
Adrienne Wilson
Tim Curtin - Chair
Tim Flood, Facilitator
Hal Davis, USGS
Todd Haverkost
David Grabka
Eric Davis
Pete Dao - Gate/Timekeeper
Julie Johnson – Scribe
Mike Singletary, NAVFAC SE
Casey Hudson
Mike Maughon, Tetra Tech
Barb Becker, Tetra Tech via telecom
Alan Pate, Tetra Tech
Laura Smith, Tetra Tech

1.0 Team Meeting and Introduction

- 1.1 Team member greeting, introductions, and check in – Done
- 1.2 Assignment of Team Roles: Chair – Tim Curtin;
Gate/Timekeeper – Pete Dao; Scribe – Julie Johnson
- 1.3 Read Team Ground Rules – Ground rules were read by team members and attendees.

2.0 Initial Agenda Items

- 2.1 Review, submit revisions to, and reach consensus on previous meeting minutes. Done

Consensus: Team members approved the minutes from the July 2012 meeting.

- 2.2 Report on Assigned Action Items and Parking Lot Items. Done.
- 2.3 NAVFAC presents current budget execution plan. All funding for FY2013 has been set. Adrienne said that she must have a RIP date set for Building 200 Wash Rack next year. Adrienne said that OU 3 is still being sampled as separate sites (i.e., Areas A, E, B, & G). She asked the team if this separate sampling should be continued or should it be treated as one site (OU 3). Mike Singletary said until the ROD is modified, we should stay the course. Areas C & D are not being monitored under LTM, but are being sampled during the RI Addendum events and will be sampled two more times. Pete said that those areas are still required to have Annual Reports submitted. Adrienne said Areas B&G are currently on a bi-annual monitoring schedule. She shows monitoring for DRMO and Hangar 1000; she said she is going to try to come up with some kind of monitoring for PSC 55 next year. Hangar 101S and Polishing Pond are compliance sites and Jane said she is planning to switch them over to CERCLA via the permit modification. Adrienne said that Jane is taking them out of the permit. Adrienne said that Gas Hill, FFTF, Hawkins, and PCA 25 are some of the sites to be addressed in FY13.

3.0 Agenda

- 3.1 Schedules/SCAP/Exit Strategy/FDEP Document Tracker/FFA SMP/ Petroleum SMP:

Adrienne sent out the Final FFA SMP to the team. Mark updated the exit strategy and gave to Tier II last week. Dave said the petroleum SMP is with Kim Walker, Tier II. Dave also said that he could provide the team with his document tracker at a later time. Mark provided the team with the document schedule. Adrienne said she will update the document schedule with the BOA documents. Eric will update the schedule with DRMO documents. Julie emailed the schedule to Eric and Adrienne for their updates.

Action Item: Adrienne to add the BOA documents to the document schedule by next meeting.

Action Item: Eric to update the document schedule with the DRMO documents by next meeting.

3.1.1 Team Development – Tim Flood – Presentation and exercise: Your Creative Brain at Work.

The team bid Hal Davis farewell.

3.2 OU 1– Tim Curtin

LTM Update and Landfill Maintenance – Solutions-IES conducted monitoring at OU 1 and found all but one cluster of two wells. Donald Hardison is going to go to the site with a GPS and attempt to locate the wells next week. Solutions-IES should have a report out on this event next month.

3.3 OU 3 –

3.3.1 Groundwater Model Update – Mike M. said that he has updated the cross sections per the discussions at the last meeting. He reviewed the updated conceptual site model and said he included additional data. There are very low concentrations above the clay layer at location D15. Mike said, in his opinion there is not a need for an additional well inside the building. He asked if a well would be needed for the VI study inside Building 101 (cross section A-A'). Eric said that the area has not been identified as a data gap, but additional work is still pending. Mike M. said a well will be installed down gradient and one up gradient. Mark P. said the wells will be installed starting Monday September 10, 2012. Dave expressed that he has some concerns there may be a source under Building 101. Hal said that he believes the dry cleaner is the source for the deeper contamination, and the storm sewer is catching the shallower contamination from the dry cleaner and carrying it towards the St. Johns River. Mike S. asked Hal if there was a well immediately down gradient of the storm sewer, would you expect to see a decrease in concentrations; Hal answered yes. Adrienne said that the subslab test that CH2M Hill is doing will show if there is something under the building. Mike S. said he doesn't think one well in the building will show definitively that there is a source of contamination under the building. Eric said Building 101 is the only building out of 12 that they are not planning to do a subslab test. They were planning on conducting a top to down approach (looking at indoor air first then looking below the slab).

Consensus: The team agreed that there was no need to install a well inside Building 101 at this time. A decision will be deferred until the data from the new down gradient well and VI study are reviewed.

Action Item: Mike M. to provide updated cross sections (OU 3) to Adrienne, Tim, and Mike S. by next meeting.

Action Item: Laura S. to provide the Jacksonville Partnering team with the information regarding the Colorado EPA VI study, summa canister vs. what other type that was 20 percent the cost of summa canister.

3.3.2 Vapor Intrusion Discussion – Eric Davis – Field work is complete and everything has been recovered. Eric said they are in the data reduction/validation phase. Eric said that Tim C. was able to track down the floor plans for Building 103 east wing so they can now locate their sampling points. Eric said he should have the data complete by September 14, 2012. Eric said that Brad Peebles and Mike Novak have been connected so Brad can get the data needed for the risk assessments. Eric said he should get the draft report to the Navy and Tetra Tech by the end of October.

Eric was asking for clarification about getting VI data into NIRIS. He said the Mike M. had given him the codes in March. He said he has what he needs to get the data into NIRIS.

Mike S. said all of the VI investigation will not be complete by the due date of the RI and asked Pete if a supplemental RI could be issued after the initial RI Addendum to present the data. Pete Dao said that could be done.

Eric said he provided Adrienne, Tim, and Mike S. a list of sites stating problem and possible solutions. He said he would like them to take the list to the CO. The values, Eric said, are well below OSHA levels. This is the beginning levels of the CNO applications. Mike said the indoor air hits are likely from the indoor air not from VI. Mike S. said the plan is to go back to those areas with a technology to sniff out the source of the indoor air hits. He said that a lot can be due to indoor air. He said that a discovery at one building of indoor air hits was due to glue used to hang a white board, or possibly a solvent used on a regular basis, etc.

3.3.3 A discussion regarding the continuation of monitoring at Area C post completion ensued. This site has not been monitored since fall of 2007; however, samples were taken in 2010 by Tetra Tech. Mark Peterson will research the OU 3 ROD and report back to the team.

3.4 OU 6 (PSC 52) Hangar 1000 – Mark P. – Said that trend charts are being updated. Sampling will take place in October and the report will be issued in January 2013.

3.5 OU 7 PSC 46 Update – DRMO – Eric updated.
Adrienne said there is no need for a Tech memo. Pete D. said the Completion Report is sufficient. Dave brought up the two wells (11S and 11D) that were not located and wells that went dry. Adrienne said that they are still taking samples. Dave was wondering if the wells were compromised, possibly with a biomass. Mark couldn't find the wells in NIRIS.

Response for Action Item A-110712 - Email from Eric 9/19/12: "It appears that the issues were resolved during the August DRMO sampling event."

MW-11D was the only well that was a poor producing in May 2012. During the purging process in the August 2012 event, the pump was set at the lowest rate possible, parameters were taken several times, and then the well was sampled well before the well went dry (per FDEP guidelines).

MW-11S did not stabilize for turbidity due to heavy suspended solids in May 2012. The sampling tools were carefully dropped in the well in August 2012 event and the parameters stabilized before sampling.

3.6 OU 8 PSC 47 – Eric Davis – nothing new to update. Eric said he is planning a meeting with Adrienne and Mike to discuss path forward. He said a report will be forthcoming.

3.7 OU 9 – PSC 45 – Building 200 – RI is in internal review.

3.8 OU 10 – MRP Sites – Barb Becker – Response to Comments for Draft MRP SAP.
Barb went line by line reviewing the response to FDEP comments with the team.

For comments two, four, and six of the response to comments – Barb is going to review the SI report and provide a revised response regarding the PAH ecological PALs.

Comment three – the team agreed that the location of the Temporary Well TW07 would be moved as appropriate once the shovel-aided delineation of skeet fragments is complete.

Barb will rework the purpose of the surface water samples mentioned in Comment 7 to include the possible migration of contaminants from surrounding groundwater. She also will take another look at the sediment data from the drainages to make sure they were sufficiently evaluated during the SI.

3.9 PSC Sites with LUCs and no RODs – The PSC sites field activities for delineation sampling are scheduled for the end of September 2012. The delineation samples will be collected at locations that were presented to and agreed upon by the partnering team at the May 2012 meeting.

3.10 Petroleum Sites

3.10.1 Gas Hill (PCA 4) – Eric Davis – Annual report in review.

3.10.2 Hawkins's Property – nothing to report. Mark said the site was being reviewed by the city to see if it was eligible for a Brownfield Site Rehabilitation Agreement (BSRA).

Action Item: Mark to check to see if Hawkins has a BSRA by next meeting.

Action Item: Dave to follow up with Kim Walker if there is a BSRA on the site to gather further information.

3.10.3 PCA 25- Boat House Area – nothing to report. Dave said he cannot download the Solutions-IES report. Adrienne was going to contact them about getting Dave a hard copy of the document (UFP-SAP). Mark reviewed the site on GIS and discussed the anomalous well survey point being a foot higher. He said they recalculated the groundwater flow using both surveys and they both agreed. Mark then showed that the storm sewer just south of the well could be influencing groundwater flow in that area. Hal recommended reviewing any historical data and compare them to current data.

3.10.4 Kemen Test Cell – Site UST 000026 (PCA 26) – not funded yet. Nothing to report.

3.10.5 Firefighter Training Facility (OU 2) – Tetra Tech is putting in an additional deep zone well and Solutions-IES will sample.

3.11 PSC 55- Alan Pate – The Draft SI report has been sent to the Navy for review.

3.12 PSC 38 – Torpedo Rework Facility – Laura Smith – RI update See presentation in attachments.

Laura reviewed the results of the soil and groundwater data.

Dave said we need to delineate to below residential. Dave had questions about the validity of the metals results. He recommended installing temp wells with filter packs for future delineation. Mark Peterson said that Tetra Tech was already planning on installing temporary wells.

Laura asked the team about the synthetic precipitation leaching procedure (SPLP) sampling at the points with the maximum concentration. Since it is not in the UFP SAP, can it be done? Dave said it would require approximately 10 samples for SPLP and this seems like a lot of effort for one point. Dave said that because Dieldren is not in groundwater, that is evidence that SPLP would not be necessary. Once the temporary well is installed and the groundwater data for that well is reviewed the team will revisit whether SPLP is necessary. Dave said that if it is verified that there is a lead in groundwater in the vicinity, it would indicate that there should be lead SPLP testing.

Tetra Tech will install temporary wells in the locations where there are GCTL exceedances (based off the DPT results) and resample. Any step out locations will be determined based on the temporary well results.

Consensus: The team agrees to remove PGDN from soil and groundwater analysis; VOCs, SVOCs, and low level PAHs from soil analysis; and low level PAHs, pesticides (except sample for Dieldren will remain), and PCBs from groundwater analysis in the supplemental sampling event.

3.13 PSC 56 – NEX Gas Station – Nothing to report. Site has been transferred to the IR Program.

- 3.14 PSC 57 S-3 High Power Turn-up Pad – Adrienne said the site has been funded and Resolutions will be conducting the RI. Todd reported they are working on the UFP SAP and would like to set up a DQO scoping section via web meeting. Todd will set that up and send out a package to the team.

4.0 Miscellaneous

- 4.1 Proposed Construction Update – Tim Curtin – Tim gave an update of proposed construction and current construction projects.

- Funding has been cut from the maintenance and grounds keeping.
- Work has started on the marina, demo of the old piers.
- Talking of renovation of the golf course. No details yet.
- Security department wants to build an ATV training class at the south antenna farm. They are in need of dirt. Tim said he may let them have some of the dirt from the pond excavation (clean dirt) near the pistol range.
- They are still planning on repairing the runway. Delays due to the air show next year.
- Still talking about a new gym.
- Talking about modifying Birmingham Road near Subway.
- May repave Yorktown Avenue.
- The new AstroTurf is down at the soccer field.
- There is tubing left over from the decommissioning of the system at Building 780 hanging on the building. Randy from Hill knew it was some sort of sequestering agent.

- 4.2 Tier II Update – No Tier II update. They are meeting this week. Info received post meeting for the team's information.

The following are the Tier II meeting dates for 2013. Tier I Teams are asked not to set their meetings on these dates so that the Tier II link can be present at Tier I meetings.

Future Tier II Meeting Dates and Tier I Team to be Invited

March 20-21, 2013	Panama City
June 19-20, 2013	Key West
September 4-5, 2013	Cecil Field
December 11-12, 2013	Jacksonville

- 4.3 Institutional Controls Implementation Plans Update – Tim Curtin - Nothing new to report.
- 4.4 RCRA Activities – Jane Beason is transferring Building 101S and Polishing Pond to CERCLA. Jane is removing from the permit at next update.
- 4.5 Exit Strategy Review – **BOLD ALL CHANGES.**
- 4.6 BOA Contracts Update and Schedule – See Section 2.3 discussed throughout agenda. Solutions-IES is the sole BOA at this time.

5.0 Meeting Closing

- 5.1 Review Meeting Consensus Items – Done
- 5.2 Review Meeting Understandings – None
- 5.3 Review Action Items – Done
- 5.4 Next Meeting Proposed Agenda Changes
- 5.5 Set the future meeting dates in advance.

Meeting Date	Meeting Time	Location	Meeting Chairman
11/13/12	1 p.m. to 5:00 p.m.	Jacksonville	Pete Dao
11/14/12	8:00 a.m. to 12:00 noon		
1/15/13	1 p.m. to 5:00 p.m.	Jacksonville (TBD)	Eric Davis
1/16/13	8:00 a.m. to 12:00 noon		
3/12/13	1 p.m. to 5:00 p.m.	TBD	Dave Grabka
3/13/13	8:00 a.m. to 12:00 noon		
5/15/13	1 p.m. to 5:00 p.m.	Jacksonville (TBD)	Todd Haverkost
5/16/13	8:00 a.m. to 12:00 noon		

5.6 Set the next meeting location, duration, and roles

- Location – Jacksonville, FL Tetra Tech Office
- Dates – November 12 & 14, 2012
- Duration – two half days
- Chair – Pete Dao
- Gate/Timekeeper – Eric Davis
- Scribe – Julie Johnson

5.7 Facilitator Plus/Deltas – Done

Plus

Great location
 Tim Curtin Chair
 Food great
 Training
 Hedy is awesome

Deltas

Hal leaving the team
 cloudy outside

Site	<u>CONSENSUS ITEMS</u>
	Team approves meeting minutes from July 2012 meeting
OU 3 GW Model	The team agreed that there was no need to install a well inside Building 101 at this time. A decision will be deferred until the data from the new down gradient well and VI study are reviewed.
PSC 38	The team agrees to remove PGDN from soil and groundwater analysis; VOCs, SVOCs, and low level PAHs from soil analysis; and low level PAHs, pesticides (except analysis for Dieldren will remain), and PCBs from groundwater analysis in the supplemental sampling event.
Agenda Item No.	<u>PARKING LOT</u>
	A potential success story, identifying plume reduction project at OU 3 Area A, which will reduce requirements for HAZWOPER training (CNO award due in December 2012). Team due every other year and the installation done every year.
	NIRIS Update – Training for team – Tom Deck to train team next Jacksonville meeting?
	Yellow Water Weapons Housing Area – Dave Grabka wants to discuss this. Part of Site 15 (sweeping for MEC) Natural Resource Corridor. Public Safety. Tim said the station is looking at getting rid of that area. Tim said nobody wants the road (causing hold up). Dave said the main concern is the part of yellow water Site 15 extends out to the area between the ball field and the old fence line. Confirm that the LUCs will be acceptable for both sites. LUC = only good for a pass through (hiking, biking, horseback riding; no attractors).
	Discuss CNO Award.
	Monitoring for the OU 3 groundwater plumes continuing during the completion of the RI/FS. Areas A, B, G would continue to be monitored and Areas C and D are to be determined.

ACTION ITEMS

Action Item No.	Responsible Party	Status	Due Date	Site	Action Item
Action Items from May 15 - 16, 2012 Meeting					
A-30512	Eric	Working	Next Meeting	PSC 47	Eric to meet with Adrienne and Mike S. regarding the MNA /metals evaluation at PSC 47 by next meeting.
Action Items from July 17-18, 2012 Meeting					
A-110712	Eric	Done	Next Meeting	PSC 46, DRMO	<p>Eric will contact Venky to discuss the two wells that were problematic, 11S and 11D (went dry). <i>Email from Eric 9/19/12:</i> MW-11D was the only well that was a poor producing in May 2012. During the purging process in the August 2012 event, the pump was set at the lowest rate possible, parameters were taken several times, and then the well was sampled well before the well went dry (per FDEP guidelines).</p> <p>MW-11S did not stabilize for turbidity due to heavy suspended solids in May 2012. The sampling tools were carefully dropped in the well in August 2012 event and the parameters stabilized before sampling.</p>
Action Items from September 6, 2012 Meeting					
A-10912	Adrienne	Done	Next Meeting	PCA 25	Adrienne to ask Solutions-IES to send Dave Grabka a hard copy of the PCA 25 report.
A-20912	Adrienne	Done	Next Meeting	Schedule	Adrienne to add the BOA documents to the document schedule.
A-30912	Eric	Done	Next Meeting	Schedule	Eric to add the DRMO documents to the document schedule.
A-40912	Mike M.	Done	Next Meeting	OU 3, groundwater model	Mike M. to provide updated cross sections (OU 3) to Adrienne, Tim, and Mike S. by next

ACTION ITEMS

Action Item No.	Responsible Party	Status	Due Date	Site	Action Item
					meeting
A-50912	Laura S	Working	Next Meeting	OU 3, VI discussion	Laura S. to provide the Jacksonville Partnering team with the information regarding the Colorado EPA Region 8 VI study, summa canister vs. what other type that was 20 percent the cost of summa canister.
A-60912	Mark	Done	Next Meeting	Hawkins Site	Mark to check to see if Hawkins has a BSRA. Dave and Mark both said there is no BSRA for Hawkins Site
A-70912	Mark P	Done	Next Meeting	OU 3 Areas C and D monitoring program	Mark to review the ROD and determine the monitoring frequency set for Areas C and D at OU 3.
A-80912	Tim Curtin	Done	9/30/12	Station	Tim to create a straw man for the CNO award

NAS Jacksonville Team Agenda
Jacksonville, Florida
November 13th & 14th, 2012

Chair – Pete Dao
Gate/Timekeeper – Eric Davis
Scribe – Julie Johnson

Item	Description	Presenter	Time	Category
1.0	TEAM MEETING AND INTRODUCTIONS	Team		
1.1	Team member Greeting, Introductions, and Check-in; Guest Introductions	Team		
1.2	Assignment of Team Meeting Organization: Chair, Gate/Time Keeper, Scribe	Chair		
1.3	Read Team Ground Rules	Team		
2.0	INITIAL AGENDA ITEMS FOR EACH MEETING			
2.1	Review, submit revisions to, and reach consensus on previous meeting minutes	Team		
2.2	Reports on assigned action items and parking lot items	Team		
2.3	NAVFAC presents current budget execution plan	Adrienne		
3.0	AGENDA			
3.1	Schedules/SCAP/Exit Strategy/FDEP Document Tracker/FFA SMP/Petroleum SMP, FFA Review	Team		
	3.1.1 Team Development – NIRIS Training	Tim Flood		
3.2	OU-1			
	3.2.1 LTM Update and Landfill Maintenance			
3.3	OU-3			
	3.3.1 Groundwater Model Update	Donald		
	3.3.2 Vapor Intrusion Update	Eric		
3.4	OU-6 – PSC 52 – Hangar 1000	Donald		
3.5	OU-7 – PSC 46 DRMO update	Eric		
3.6	OU-8 – PSC 47 – Pesticide Shop	Eric		
3.7	OU-9 – PSC 45-Building 200 Wash Rack (groundwater only)			
3.8	OU 10 - MRP Sites – incl. Golf Course Shut down discussion	Barb Becker		
3.9	OU 11 - PSC Sites with LUCs and no RODs –			
3.10	Petroleum Sites			
	Gas Hill	Eric		
	Hawkins			
	PCA 25			
	Kemen Test Cell			
	Firefighter Training Facility (OU 2)			
3.11	PSC 55 -	Alan		
3.12	PSC 38 -	Alan		
3.13	PSC 56 – NEX Gas Station	Alan		
3.14	PSC 57 S-3 High Power Turn-up Pad			
4.0	MISCELLANEOUS			
4.1	Proposed Construction Update	Tim		
4.2	Tier II Update			
4.3	Institutional Controls Implementation Update	Tim		
4.4	RCRA Activities –	Tim		
4.5	Exit Strategy Review	Mark		

Item	Description	Presenter	Time	Category
4.6	BOA Contracts Update	Tim/Adrienne		
4.7	CNO Award	Tim/Adrienne		
4.8	NIRIS Training	Tom Deck	7:30 Wed	
5.0	MEETING CLOSING			
5.1	Review Meeting Consensus Items			
5.2	Review Meeting Understandings			
5.3	Review Action Items			
5.4	Next Meeting Proposed Agenda			
5.5	Set Dates for Future Meetings			
5.6	Set the Next Meeting Location, Duration, and Roles			
5.7	Facilitator Plus/Deltas			

NAS Jacksonville Partnering Team Document Review Status

Date of Status: 14-Nov-2012

No.	Document Name	Distribution (email or hardcopy)	Date Submitted (or to be submitted)	Deadline for Comments of draft (45 days to comment)	FFA Deadline for Comments of draft (90 days to comment)	Navy Deadline for Redline & RTC& draft final (45 days)	Navy Deadline for draft final submittal (60 days)	Navy Deadline for Extension Letter (10 days prior to deadline for Final or 20 days after DF submittal)	Deadline for Final letter of approval (30 days)**	Comments Received from				
										FDEP	EPA	NAVFAC SE RPM	NAVFAC SE Chemist	NAS JAX
Tetra Tech Documents														
1	Draft OU 4 LUC RD (email to Pete Dao) Sent hardcopy 2/2/12	email 12/30/11 hard copy (2/2/12)	30-Dec-2011									X	NA	X
2	Draft OU 3 LUC RD	hard copy	30-Jan-2012									X	NA	X
3	Final OU-1 LUCRD	hard copy	30-Jan-2012								X	X	NA	X
4	Final Annual Monitoring Report - Hangar 1000 - RTC from team	hard copy	10-Oct-2011									X	NA	X
5	Operable Unit 2 – Petroleum Contaminated Area 15, Former Fire Fighter Training Area January 2012 Sampling Event Letter Report	hard copy	23-Mar-2012						X	NA			NA	
6	Draft Tier II Sampling and Analysis Plan for Munitions Response Program RI of Former Machine Gun Range Complex Redline and Response to Comments. Sent via email 8/31/12	via email/hard copy	7-Sep-2012		11-Jun-2012	9-Sep-2012	24-Sep-2012	14-Oct-2012						
7	Draft Potential Source of Contamination (PSC) 55 SI Report	hard copy	31-Aug-2012											
8	Dit-Fnl Response to Comments and Redline Site Assessment Report for PCA 25 (CTO 0003) w/ MNA Work Plan	hard copy	10-Sep-2012							NA				
9	Potential Source of Contamination (PSC) 45 RI Report	hard copy	30-Dec-2012											
10	Potential Source of Contamination (PSC) 38 RI/FS Report	hard copy	30-Jan-2013											
11	Potential Source of Contamination (PSC) Sites LUCs with No RODs SI Report	hard copy	30-Dec-2012											
CH2MHILL Documents														
1	Draft Final Building 106 AS/SVE System Decommissioning Work Plan	email	5-Jul-2011	NA	NA	NA	NA	NA	NA	NA		X	X	X
2	Draft Final VI Work Plan	NIRIS and HC replacement pages	24-May-2012							X				
3	Draft Final VI UFP-SAP	NIRIS and HC replacement pages	24-May-2012							X				
4	Draft Final LUC RD - DRMO	hard copy	30-Jan-2012	NA	NA	NA	NA	NA	NA	NA		X	X	X
5	DRMO Letter to EPD Stating Start Date of Remedy	email	March? Letter Prepared by HILL, to be submitted by Navy	NA	NA	NA	NA	NA	NA	NA		X	X	X
6	Draft Final Pesticide Shop Work Plan Revision XX (JM40)	email	29-Jul-2011	NA	NA	NA	NA	NA	NA	NA		X	X	X
7	Draft Final Building 106 AS/SVE System Decommissioning Construction Completion Report	hard copy	30-Sep-2012	14-Nov-2012	29-Dec-2012	29-Dec-2012	13-Jan-2013	2-Feb-2013	13-Mar-2013					
8	Draft 2012 Gas Hill Annual Groundwater Monitoring Report	hard copy	30-Sep-2012	14-Nov-2012	29-Dec-2012	29-Dec-2012	13-Jan-2013	2-Feb-2013	13-Mar-2013					
9	Draft 2012 Pesticide Shop Annual Groundwater Monitoring Report	hard copy	30-Sep-2012	14-Nov-2012	29-Dec-2012	29-Dec-2012	13-Jan-2013	2-Feb-2013	13-Mar-2013					
10	Draft OU3 Vapor Intrusion Evaluation Report	hard copy	31-Oct-2012	15-Dec-2012	29-Jan-2013	29-Jan-2012	13-Feb-2012	5-Mar-2013	13-Apr-2013					
11	Draft DRMO RACR	hard copy	19-Apr-2012	3-Jun-2012	18-Jul-2012	1-Sep-2012	16-Sep-2012	6-Oct-2012	5-Nov-2012			X	N/A	X
12	Draft DRMO Project Completion Report	hard copy	9-Jan-2012	23-Feb-2012	8-Apr-2012	23-May-2012	7-Jun-2012	27-Jun-2012	27-Jul-2012			X	N/A	X
13	Draft DRMO After Aciton Report	hard copy	9-Jan-2012	23-Feb-2012	8-Apr-2012	23-May-2012	7-Jun-2012	27-Jun-2012	27-Jul-2012			X	N/A	X

X = Comments have been received from this reviewer
 Blank = No comments have been received from this reviewer
 Shaded - Documents to be submitted in the next 30 days.
 NA = no review required by this reviewer.

** The regulators will issue a letter approving the draft-final as final if no dispute resolution.

FFA Review time restrictions:

22-Mar-2012

21-May-2012



Document Reviews Underway

FEDERAL FACILITIES DATABASE

List of document reviews within the Federal Facilities database that have no value in the "Date Out" column and no explanation indicated in the "Explanation" column.

JACKSONVILLE NAVAL AIR STATION (NAS JAX)

43 Document Reviews Underway

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Final 2013 Federal Facilities Agreement Site Management Plan Amendment, August 28, 2012	9/11/2012			DPG	
Draft Tier II Sampling & Analysis Plan (FSP & QAPP), August 2012, MRP - Remedial Investigation of Former Machine Gun Range Complex	9/6/2012			DPG	
Response to Comments from Partnering Team on Draft Draft Tier II Sampling & Analysis Plan (FSP & QAPP), August 2012, MRP - Remedial Investigation of Former Machine Gun Range Compl	9/6/2012			DPG	
B101S Groundwater Monitoring Results, June 2012, (July 13, 2012)	7/27/2012			DPG	w/CD
Draft Semiannual Monitored Natural Attenuation Evaluation Report OU 6, Hangar 1000, July 3, 2012	7/5/2012			DPG	
Draft After Action Report (AAR), MR for Soil/Sediment Remediation, OU7, PSC 46 - Defense Reutilization & Marketing Office, Revision.00, January 2012, (May 2, 2012)	5/8/2012			DPG	w/CD
Draft Final Sampling & Analysis Plan (FSP & QAPP), April 2012, Groundwater Monitoring - Petroleum Contaminated Area (PCA) 15, Fire Fighting Training Facility, (April 25, 2012)	4/27/2012			DPG	w/CD
Draft Remedial Action Completion Report, Soil/Sediment Remediation & Groundwater Sampling OU 7, PSC 46 - Defense Reutilization & Marketing Office, Rev 01, April 2012, (April 19, 2012)	4/24/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 3, (January 30, 2012)	2/3/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 4 - Casa Linda Lake, (January 30, 2012)	2/3/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 7, (January 30, 2012)	2/3/2012			DPG	w/CD
Final Land Use Control Remedial Design OU 1, (January 19, 2012)	2/1/2012			DPG	
Draft Project Completion Report-Soil/Sediment Remediation & Groundwater Sampling OU 7 - PSC 46-Defense Reutilization & Marketing Office, Revision 00, (January 2012)	1/11/2012			DPG	w/CD

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43 Document Reviews Underway

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Final Annual Monitored Natural Attenuation Evaluation Report, OU 6- Hangar 1000, (October 2011)	10/11/2011			DPG	w/CD
Final 2011 Annual Groundwater Monitoring Report - Potential Source of Contamination 47, Revision 01, (October 2011)	10/6/2011			DPG	w/CD
Draft-Final Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) - Phase I Remedial Investigation, PSC 38-Torpedo Rework Facility, Revision 1, (August 2011)	8/11/2011			DPG	w/CD
Draft Site Assessment Report - Petroleum Contaminated Area 25 - UST Site 119 Fuel Transfer Sump, Rev 0, (July 2011)	7/19/2011			DPG	w/CD
Annual Sampling Report - Long-Term Monitoring Program, OU 3, Area A, (May 31, 2011)	7/12/2011			DPG	w/CD
Work Plan MR for Soil/Sediment Remediation at OU 7, PSC 46 - Defense Reutilization & Marketing Office, Revision 01, (May 2011)	5/19/2011			DPG	
Annual Monitoring Report - Long-Term Monitoring Program Potential Source of Contamination 51, (October 2010)	5/9/2011			DPG	Received By E-Mail
January 2011 Biannual Monitoring Report OU 3, Site 11 Area B & Site 15 Area G	4/26/2011			DPG	w/CD
Munitions Response Site Prioritization Protocol Work Sheets for Munitions Response Program Sites	10/1/2010			DPG	
Site Inspection Report MRP Site Inspection at Former Machine Gun Range Complex, (September 2010)	10/1/2010			DPG	w/2 CDs
Annual Groundwater Monitoring Report - Potential Source of Contamination 47, Revision 00, (June 2010)	6/8/2010			DPG	w/CD
Monitored Natural Attenuation Plan Petroleum Contaminated Area 4-- Gas Hill Fuel Farm, Revision 02	4/29/2010			DPG	w/CD
Sampling Event Report for OU 1 (November 2008)	11/25/2008			DPG	CD w/HASP, SAP, SERs for Additional Assess. @ OU 1 & 3
Final Sampling & Analysis Plan for Groundwater Assessment Upgradient of Building 106 & Area C & Soil Assessment at Building 106, OU 3	11/3/2008			DPG	w/CD
Smoke and Dye Tracer Testing and Sampling of the Eastern Storm Sewer at OU 3, Areas F & G	7/24/2008			DPG	Received by E-mail
PSC 47 Interim Remedial Action-Concrete Placement, Contract N62467-01-D-0331, CTO #0064, Revision No. 03	3/25/2008			DPG	E-Mail

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43 Document Reviews Underway

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
2007 Annual Monitoring Report Storm Sever Sampling OU#3 Areas F & G, Rev. 0	12/4/2007			DG	report with cd
Remedial Action Work Plan Soil/Sediment Remdiation and Groundwater Sampling OU#7 PSC 46 Defense Reutilization and Marketing office, Rev.0	10/17/2007			DG	rec. by email
Final Land Use Control Remedial Design for Hangar 1000	10/15/2007			DG	report no cd
Remedial Action Work Plan Soil/Sedimanet Remdiation and Groundwater Sampling at OU#7 and Maintenance office naval air Station Jacksonville, Rev. 0	10/12/2007			DG	report with cd
Final Treatability Study Report for Petroleum Contaminated Area (PCA) 16 (hawkins 103rd. Street Property)	8/20/2007			DG	report with cd
Final Report Annual Long Term monitoring (LTM) Report, Jan. 5-6, 2007 Sampling Event for Area B (PSC 11) and Area G (PSC 15) OU#3	3/5/2007			JHC	report with cd
Final Land Use Control Remedial Design for OU#3 Area A	2/8/2007			JHC	report with cd
Draft Land Use Control Remdial Design OU#3 Area A, Rev. 0	12/27/2006			JHC	report no cd
Final Removal Action Completion Report Gas Hill Fuel Farm Tanks Demolition and Disposal	12/18/2006			JHC	report with cd
Remedial Investigation/Feasibility Study Sampling and Analysis Plan Addendum for Potential Source of Contamination 47	11/30/2006			JHC	report no cd
Final Land Use Control Remedial Design at OU#5 PSC 51	11/27/2006			JHC	report with cd
Final Removal Action Completion Report Gas Hill	10/16/2006			JHC	Report with cd
Closure Assessment report for underground storage tanks 880-6 and 7 at bldg. 429	7/19/2006			JHC	report no cd
SWMU Report for the kemenTest Cell	8/26/2004			JHC	no Cd



Facility Document Reviews

FEDERAL FACILITIES DATABASE

List of document reviews within the Federal Facilities database that were previously tracked in the DODTRS.xls spreadsheet. The documents are grouped by Facility and sorted with the most recent documents first.

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Final 2013 Federal Facilities Agreement Site Management Plan Amendment, August 28, 2012	9/11/2012			DPG	
Draft Tier II Sampling & Analysis Plan (FSP & QAPP), August 2012, MRP - Remedial Investigation of Former Machine Gun Range Complex	9/6/2012			DPG	
Response to Comments from Partnering Team on Draft Draft Tier II Sampling & Analysis Plan (FSP & QAPP), August 2012, MRP - Remedial Investigation of Former Machine Gun Range Compl	9/6/2012			DPG	
B101S Groundwater Monitoring Results, June 2012, (July 13, 2012)	7/27/2012			DPG	w/CD
Draft Aite Assessment Report for Petroleum Contaminated Area 25, UST Site 119 Fuel Transfer Sump, July 2, 2012	7/19/2012	7/30/2012		DPG	
Draft Rev 2, Sampling & Analysis Plan, FSP&QAPP, July 2012, Groundwater Monitoring-PCA 25, UST Site 119 Fuel Transfer Sump	7/10/2012	7/16/2012		DPG	w/CD
Draft Semiannual Monitored Natural Attenuation Evaluation Report OU 6, Hangar 1000, July 3, 2012	7/5/2012			DPG	
Draft Work Plan & Draft UFPSAP, OU 3 Phase II - Vapor Intrusion Evaluation, Response to Comments, May 2012 (May 23, 2012)	5/25/2012	7/19/2012		DPG	w/CD
Draft After Action Report (AAR), MR for Soil/Sediment Remediation, OU7, PSC 46 - Defense Reutilization & Marketing Office, Revision 00, January 2012, (May 2, 2012)	5/8/2012			DPG	w/CD
Draft Final Sampling & Analysis Plan (FSP & QAPP), April 2012, Groundwater Monitoring - Petroleum Contaminated Area (PCA) 15, Fire Fighting Training Facility, (April 25, 2012)	4/27/2012			DPG	w/CD
Draft Remedial Action Completion Report, Soil/Sediment Remediation & Groundwater Sampling OU 7, PSC 46 - Defense Reutilization & Marketing Office, Rev 01, April 2012, (April 19, 2012)	4/24/2012			DPG	w/CD
Draft Tier II Sampling & Analysis Plan MRP, Remedial Investigation - Former Machine Gun Range Complex, April 2012, (April 12, 2012)	4/12/2012	7/9/2012		DPG	w/CD

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
January 2012 RCRA Groundwater Sampling Report - Polishing Pond, March 2012, (April 9, 2012)	4/11/2012		NRR	DPG	w/CD -- RCRA
Semi-Annual Groundwater Monitoring Report - Hangar 101S, December 2011 Sampling Event, (March 27, 2012)	3/30/2012		NRR	DPG	w/CD -- RCRA
OU 2 - Petroleum Contaminated Area 15, Former Fire Fighter Training Area, January 2012 Sampling Event Letter Report, March 23, 2012	3/26/2012	8/22/2012		DPG	w/CD
Draft OU 3, Phase II Vapor Intrusion, Evaluation Work Plan, Revision 02, March 2012, (March 22, 2012)	3/23/2012	4/12/2012		DPG	w/CD
Final Tier II SAP - (PSC 52) Hangar 1000, Monitored Natural Attenuation Sampling, OU 6, March 2012, (March 7, 2012)	3/9/2012	3/8/2012		DPG	w/CD
Draft Land Use Control Remedial Design OU 3, (January 30, 2012)	2/3/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 4 - Casa Linda Lake, (January 30, 2012)	2/3/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 7, (January 30, 2012)	2/3/2012			DPG	w/CD
Final Land Use Control Remedial Design OU 1, (January 19, 2012)	2/1/2012			DPG	
Final Sampling & Analysis Plan (FSP & QAPP) - Phase I Remedial Investigation, PSC 38 & Responses to Additional Comments, Revision 3, (January 24, 2012)	2/1/2012		NRR	DPG	w/2 CDs
Final Sampling & Analysis Plan (FSP & QAPP), Phase I Remedial Investigation, PSC 38, Revision 3, (January 2012)	1/23/2012	1/23/2012		DPG	Received By E-Mail
Draft Project Completion Report-Soil/Sediment Remediation & Groundwater Sampling OU 7 - PSC 46-Defense Reutilization & Marketing Office, Revision 00, (January 2012)	1/11/2012			DPG	w/CD
Final Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan) - Phase I Remedial Investigation - Potential Source of Contamination 38--Torpedo Rework Facility, (December 2011)	12/14/2011	1/13/2012		DPG	w/CD
Final Summary Form for Final Five-Year Review - OUs 1, 2, 3, 4, 5, 6, 7 & 8, Revision 2, (December 12, 2011)	12/14/2011		NRR	DPG	w/CD
OU 2 - Petroleum Contaminated Area 15 - Former Fire Fighter Training Area, July 2011 Sampling Event Letter Report, (December 2, 2011)	12/5/2011	3/30/2012		DPG	
Site Assessment Report - NEX Gas Station - Former Underground Storage Tanks 880-6 & 880-7, (December 2011)	12/2/2011	2/28/2012		DPG	w/CD

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Draft Tier II Sampling & Analysis Plan - Monitored Natural Attenuation Sampling OU 6 (Potential Source of Contamination 52, Hangar 1000), (October 2011)	10/26/2011	2/20/2012		DPG	
Health & Safety Plan for Monitored Natural Attenuation Sampling - Hangar 1000, (October 2011)	10/13/2011		NRR	DPG	
Final Annual Monitored Natural Attenuation Evaluation Report, OU 6- Hangar 1000, (October 2011)	10/11/2011			DPG	w/CD
Final 2011 Annual Groundwater Monitoring Report - Potential Source of Contamination 47, Revision 01, (October 2011)	10/6/2011			DPG	w/CD
Response to Comments - Draft Land Use Control Remedial Design, OU 1, (September 22, 2011)	9/23/2011		NRR	DPG	EPA Comments
Hangar 101S June 2011 Sampling Event, (August 24, 2011)	9/22/2011		NRR	DPG	w/CD -- RCRA
Errata Pages for Final Five-Year Review for Ous 1, 2, 3, 4, 5, 6, 7 & 8, Revision 2, (September 6, 2011)	9/7/2011		NRR	DPG	w/CD
Work Plan Revision, Revision No 3, Monitored Natural Attenuation Plan, Petroleum Contaminated Area 4 - Gas Hill Fuel Farm, (June 5, 2011)	9/6/2011	10/5/2011		DPG	Received By E-Mail
Final Federal Facilities Agreement Site Management Plan Amendment, Calendar Year 2012	8/16/2011	10/14/2011		DPG	Received By E-Mail
2011 Annual Groundwater Monitoring Report - PSC 47, Revision 01, (August 2011)	8/15/2011	9/13/2011		DPG	w/CD
Draft-Final Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) - Phase I Remedial Investigation, PSC 38-Torpedo Rework Facility, Revision 1, (August 2011)	8/11/2011			DPG	w/CD
Final Explosive Safety Submission (ESS) Including Amendment 2, (Munitions Response for Soil/Sediment Remediation OU 7, PSC46) - DLA SE (Formerly DRMO), (July 28, 2011)	8/2/2011		NRR	DPG	Letter w/CD
Draft Site Assessment Report, NEX Gas Station - Former Underground Storage Tanks 880-6 & 880-7, (July 2011)	8/1/2011	10/7/2011		DPG	w/CD
Draft Site Assessment Report - Petroleum Contaminated Area 25 - UST Site 119 Fuel Transfer Sump, Rev 0, (July 2011)	7/19/2011			DPG	w/CD
Final Site Investigation Report, Potential Source of Contamination 45 - Building 200 Wash Rack, (July 2011)	7/19/2011	8/31/2011		DPG	w/CD
Annual Sampling Report - Long-Term Monitoring Program, OU 3, Area A, (May 31, 2011)	7/12/2011			DPG	w/CD

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Explosives Safety Submission for MR for Soil/Sediment Remediation, OU 7, Potential Source of Contamination 46 - Defense Reutilization & Marketing Office (Amendment No. 01), (June 2011)	7/11/2011		NRR	DPG	Letter w/CD
Final Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan) - Site Investigation - PSC 55, Rev 1, (June 2011)	7/1/2011		NRR	DPG	w/CD
Draft-Final Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan) - Site Investigation for PSC 55, (June 2011)	6/22/2011	6/23/2011		DPG	w/CD
Work Sheet 1 Additional Page - Final SAP (FSP & QAPP) for Extended SI for PSC 5, 8, 9, 29, 31, 32, & 50, Revision 3, (June 10, 2011)	6/14/2011		NRR	DPG	
Health & Safety Plan for PSCs 38, 45, & 55, (June 7, 2011)	6/10/2011		NRR	DPG	
Health & Safety Plan for PSCs 5, 8, 9, 29, 31, 32, & 50, (June 7, 2011)	6/10/2011		NRR	DPG	
Sampling & Analysis Plan (FSP & QAPP) - Remedial Investigation - PSC 45-Former Building 200 Wash Rack Disposal Pit, Rev 1, (May 2011)	6/10/2011		NRR	DPG	
Final Five-Year Review for OUs 1, 2, 3, 4, 5, 6, 7, & 8, Revision 2, (May 26, 2011)	6/1/2011	7/12/2011		DPG	
Response to Comments for Draft-Final Five-Year Review for OUs 1, 2, 3, 4, 5, 6, 7, & 8, (May 2011)	6/1/2011	7/12/2011		DPG	
Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan), Extended Site Investigation for PSC Sites 5, 8, 9, 29, 31, 32, & 50, Revision 3, (May 2011)	5/27/2011		NRR	DPG	
Work Plan MR for Soil/Sediment Remediation at OU 7, PSC 46 - Defense Reutilization & Marketing Office, Revision 01, (May 2011)	5/19/2011			DPG	
Ocala National Forest Property Near Salt Springs, FL - Project Completion Report, AV-8 Harrier Crash Site Remediation - Excavation of Aircraft Debris & Petroleum-Contaminated Soil, Revision 01, (March 2011) -- "Mishap July 18, 2010"	5/18/2011	8/11/2011		DPG	
Annual Monitoring Report - Long-Term Monitoring Program Potential Source of Contamination 51, (October 2010)	5/9/2011			DPG	Received By E-Mail
Operating/Corrective Action/Post-Closure Permit 72437-HO-009 - Field Investigation of off Station Migration of Chlorinated solvent Constituents, (April 21, 2011)	4/27/2011		NRR	DPG	RCRA
January 2011 Biannual Monitoring Report OU 3, Site 11 Area B & Site 15 Area G	4/26/2011			DPG	w/CD

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
January 2011 Semiannual Monitoring Report OU 2 - Fire Fighter Training Facility, (April 2011)	4/26/2011	3/30/2012		DPG	w/CD
Explosives Safety Submission, Munitions Response - Soil/Sediment Remediation OU 7, Potential Source of Contamination 46 - Defense Reutilization & Marketing Office, (January 2011)	4/15/2011		NRR	DPG	w/CD
Interim Explosives Safety Submission Approval, Munitions Response - Soil/Sediment Remediation OU 7, Potential Source of Contamination 46 - Defense Reutilization & Marketing Office, (March 17, 2011)	4/15/2011		NRR	DPG	
Draft Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan), April 2011 - Remedial Investigation - Potential Source of Contamination (PSC) 45 -- Former Building 200 Wash Rack Disposal Pit	4/7/2011		OBR	DPG	w/CD
RCRA Groundwater Sampling Report January 2011, (March 2011)	3/31/2011		NRR	DPG	w/CD, RCRA
Draft Letter Report OU 11, Terrestrial February-March 2010 Ground-Water Monitoring & Follow-Up Soil Assessment, (March 2011)	3/25/2011	10/5/2011		DPG	Received By E-Mail
Response to Comments & Annual Groundwater Monitoring Report Replacement Pages for PSC 47, Revision 01, (March 2010)	3/22/2011	6/10/2011		DPG	w/2 CDs
Hangar 101S December 2010 Sampling Event, (February 24, 2011)	3/3/2011		NRR	DPG	w/CD, RCRA
Five Year Review--OUs 1, 2, 3, 4, 5, 6, 7, & 8, Revision 1, (February 2011) and Response to Comments for Draft Five Year Review--OUs 1, 2, 3, 4, 5, 6, 7, & 8, (February 24, 2011)	2/28/2011	3/21/2011		DPG	w/CD
2010 Annual Groundwater Monitoring Report - Petroleum Contaminated Area 4-Gas Hill Fuel Farm, Revision 01, (February 2011)	2/4/2011	4/8/2011		DPG	w/CD
Site Library Documents Through July 2010 (DVD 1 - 1980-1999, DVD 2 - 2000-2006, & DVD 3 - 2007-2010)	1/21/2011		NRR	DPG	
Draft Annual Monitored Natural Attenuation Evaluation Report OU 6 - Hangar 1000, (December 2010)	12/23/2010	1/7/2011		DPG	w/CD
Draft Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) - Site Investigation for Potential Sources of Contamination 55, (December 2010)	12/23/2010	1/10/2011		DPG	w/CD
Draft Semi-annual Monitored Natural Attenuation Evaluation Report OU 6 - Hangar 1000, (December 21, 2010)	12/22/2010	1/7/2011		DPG	
OU 3 Vapor Intrusion Screening Evaluation Report, Revision 01, (December 2010)	12/16/2010	3/28/2011		DPG	w/CD

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Remedial Action Completion Report - Areas B & G at OU 3, (December 13, 2010)	12/15/2010	5/3/2011		DPG	w/CD
Administrative Record & Site Library Updates (AR Documents Prepared Through July 2010)	11/18/2010		NRR	DPG	Letter w/CD
Draft Five-Year Review - OUs 1, 2,3, 4, 5, 6, 7 & 8, Rev 0, (November 2010)	11/12/2010		OBR	DPG	w/CD
Annual Monitoring Report, Year 6, May & June 2010 - Long-Term Monitoring Program - Potential Source of Contamination 51, (October 2010)	11/2/2010	1/7/2011		DPG	w/CD
Final Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) for Extended Site Investigation for Potential Sources of contamination 5, 8, 9, 29, 31, 32 & 50, (October 2010)	11/2/2010	12/17/2010		DPG	w/CD
Draft Site Investigation Report for Potential Source of Contamination 45-Building 200 Wash Rack, (October 2010)	11/1/2010	1/10/2011		DPG	w/CD
Munitions Response Site Prioritization Protocol Work Sheets for Munitions Response Program Sites	10/1/2010			DPG	
Site Inspection Report MRP Site Inspection at Former Machine Gun Range Complex, (September 2010)	10/1/2010			DPG	w/2 CDs
Annual Groundwater Monitoring Report, Petroleum Contaminated Area 4-Gas Hill Fuel Farm, Revision 01, (September 2010)	9/27/2010	4/8/2011		DPG	w/CD
Final RCRA Groundwater Monitoring Plan - Former Polishing Pond, (August 2010)	9/15/2010		NRR	DPG	w/CD, RCRA
Operating/Corrective Action/Post-Closure Permit 72437-HO-009 -- Groundwater Monitoring Report for Hangar 101S June 2010 Sampling Event, (August 2010)	9/3/2010		NRR	DPG	w/CD, RCRA
Remedial Action Report - Potential Source of Contamination 47, Revision 01, (September 2010)	9/3/2010	10/22/2010		DPG	w/CD
Draft Milestones for Federal Facilities Agreement, Site Management Plan Amendment, Calendar Year 2011 w/Munitions Response Program Sites Added	8/26/2010	9/27/2010		DPG	Received By E-Mail
Operable Unit 1 - LNAPL Recovery System Performance Objectives, (March 19, 2010)	8/26/2010	10/20/2010		DPG	Received By E-Mail
Draft Milestones for Federal Facilities Agreement, Site Management Plan Amendment, Calendar Year 2011	8/3/2010	9/27/2010		DPG	Received By E-Mail

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Site Inspection Report - MRP Site Inspection Former Machine Gun Range Complex, (June 2010)	7/30/2010	9/27/2010		DPG	
Response to Comments: Site Assessment Report & Remedial Action Plan, Petroleum Contaminated Area 4-Gas Hill Fuel Farm, Revision 00,	7/2/2010	8/27/2010		DPG	Received By E-Mail
Draft Land Use Control Remedial Design OU 1, (June 24, 2010)	6/25/2010	5/5/2011		DPG	
Final Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan) - Remedial Investigation/Feasibility Study Addendum Activities at OU 3	6/25/2010		NRR	DPG	Letter w/CD
Annual Sampling Report, February 2010, OU 3--Area A, (June 8, 2010)	6/17/2010	6/21/2010		DPG	w/CD
Annual Groundwater Monitoring Report - Potential Source of Contamination 47, Revision 00, (June 2010)	6/8/2010			DPG	w/CD
Draft Sampling & Analysis Plan (SAP) - (Field Sampling Plan & Quality Assurance Project Plan) -- Extended Site Investigation-Potential Sources of Contamination Sites 5, 8, 9, 29, 31, 32 & 50	5/19/2010	6/18/2010		DPG	w/CD
Monitored Natural Attenuation Plan Petroleum Contaminated Area 4-- Gas Hill Fuel Farm, Revision 02	4/29/2010			DPG	w/CD
Draft Sampling & Analysis Plan (Field Sampling Plan & Quality Assurance Project Plan) for Remedial Investigation/Feasibility Study Addendum Activities OU 3, April 2010	4/26/2010	5/27/2010		DPG	w/CD - Second Letter June 18, 2010
Work Plan OU 3-Vapor Intrusion Screening Evaluation, Revision 02, April 2010	4/19/2010	8/26/2010		DPG	w/CD
Groundwater Monitoring Report - Fire Fighter Training Facility, July 2009	4/1/2010	3/30/2012		DPG	w/CD
RCRA Groundwater Sampling Report, January 2010, March 8, 2010	3/15/2010		NRR	DPG	w/CD, RCRA
Hangar 101S December 2009 Sampling Event & Operating/Corrective Action/Post-Closure Permit 72437-HO-009	3/4/2010		NRR	DPG	RCRA
Monitored Natural Attenuation Plan, Petroleum Contaminated Area 4, Gas Hill Fuel Farm, Revision 01, February 2010	2/26/2010	4/6/2010		DPG	w/CD
Work Plan, Revision 01, OU 3 - Vapor Intrusion Screening Evaluation (Revisions No. 00)	11/9/2009	1/22/2010		DPG	
Work Plan - OU 3 -- Vapor Intrusion Screening Evaluation (Revision 01), October 2009	11/4/2009	1/22/2010		DPG	w/CD
Health & Safety Plan Update for OU 3 (October 2009)	10/26/2009		NRR	DPG	

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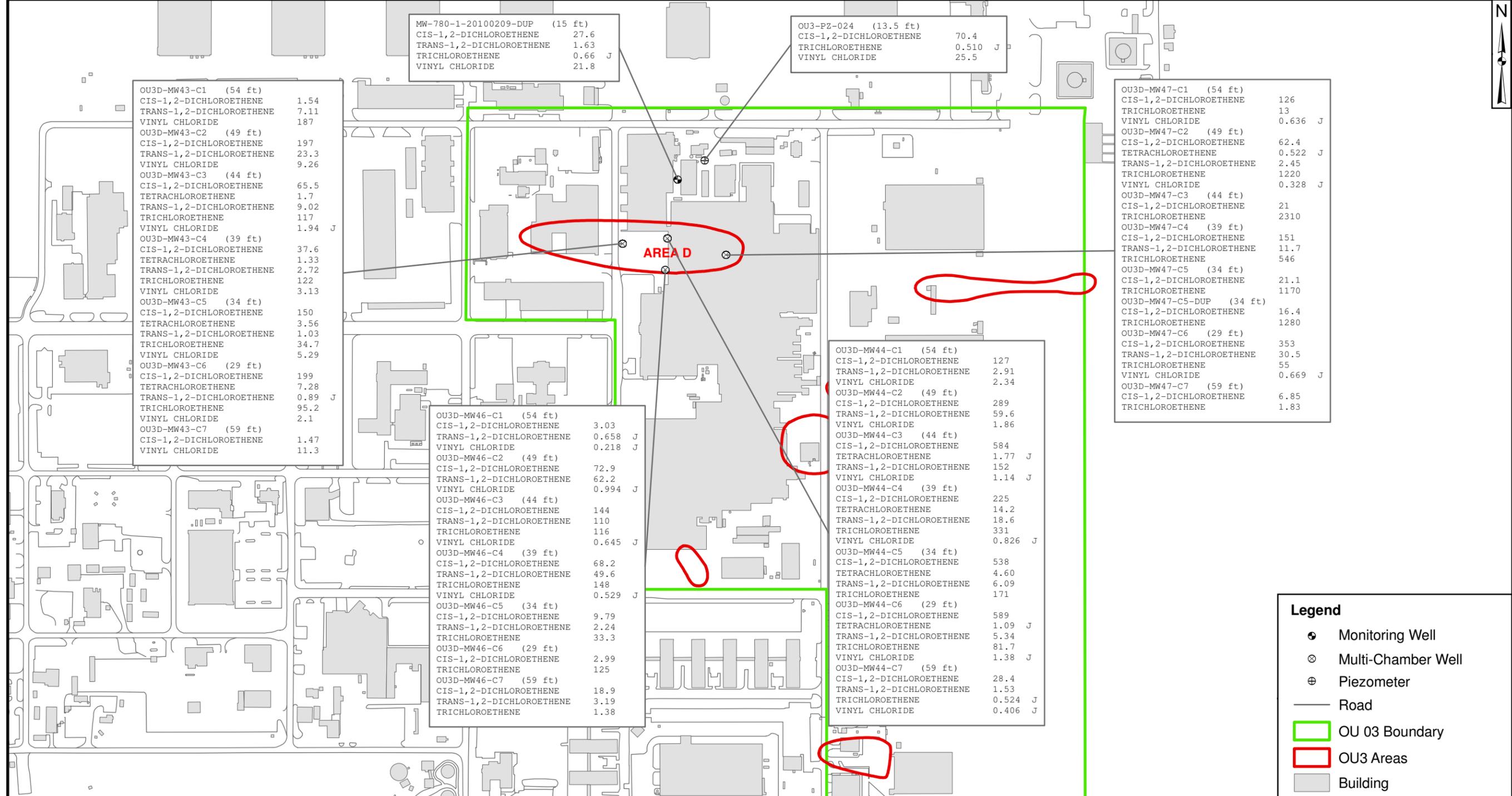
Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Land Use Control Remedial Design, Revision 5, OU 8 - Potential Source of Contamination 47	10/2/2009		NRR	DPG	w/CD, Revision 2 Already Approved 7/10/2009
Subpart X Miscellaneous Unit Interim Source Removal Hangar 101S - Fleet Readiness Center Southeast (Source Removal Report Engineer's Certification)	9/29/2009		NRR	DPG	w/CDs, RCRA
Sampling Event Report -- Potential Source of Contamination 30 (September 2009)	9/15/2009	9/18/2009		DPG	
Final Sampling Event Report, Potential Source of Contamination (PSC) 30 (September 2009)	9/14/2009	9/18/2009		DPG	w/CD
Draft Final Quality Assurance Project Plan/Sampling Analysis Plan -- Munitions Response Program - Small Arms/Skeet Ranges	8/6/2009	10/7/2009		DPG	Letter w/SAP Worksheet #1-Title & Approval Page attached
Draft-Final Quality Assurance Project Plan (QAPP), Sampling Analysis Plan (SAP) - Munitions Response Program (MRP), Site Inspection - Former Machine Gun Range Complex	7/30/2009	10/7/2009		DPG	
Remedial Action Plan-Petroleum Contaminated Area 4 Gas Hill Fuel Farm (Revision 00) May 2009	6/1/2009	1/21/2010		DPG	w/CD
Annual Sampling Report, November 2008, OU 1 - Long-Term Monitoring Program	5/20/2009	7/24/2009		JC/DPG	w/CD
Annual Sampling Report, November 2008, OU 3 (Area A) - Long-Term Monitoring Program	5/20/2009	7/30/2009		JC/DPG	w/CD
Land Use Control Remedial Design, Revision 2, OU 8 - Potential Source of Contamination 47	5/19/2009	7/10/2009		DPG	w/CD (Rev 1) May 15, 2009
Title & Approval Page for the Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) for Site Assessment Activities at Potential Source of Contamination (PSC) 45 - Building 200 Wash Rack, Revision 1	5/19/2009	7/10/2009		DPG	w/CD (Revision 1a)
Land Use Control Remedial Design, Revision 1, OU 8 - Potential Source of Contamination 47	5/13/2009	7/10/2009		DPG	w/CD (May 2009)
Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) for Site Assessment Activities at Potential Source of Contamination (PSC) 45-Building 200 Wash Rack (Revision 1) April 2009	5/13/2009	7/10/2009		DPG	w/CD (May 2009)
RCRA Groundwater Sampling & Monitor Well Abandonment Report (January 2009)	4/7/2009		NRR	DPG	w/CD, RCRA
January 2009 Groundwater Monitoring Report -- Fire Fighter Training Facility	3/6/2009	3/17/2009		DPG	w/CD

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Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Technical Memorandum Groundwater Treatment-Soil Vapor Extraction System Decommission-Building 780C	3/2/2009	3/6/2009		DPG	Received By E-Mail
Final Health & Safety Plan for Site Assessment Activities-Building 200 Wash Rick	2/25/2009		NRR	DPG	w/CD
Draft Sampling & Analysis Plan (SAP) (Field Sampling Plan & Quality Assurance Project Plan) for Site Assessment Activities at Potential Source of Contamination (PSC) 45 - Building 200 Wash Rack	1/26/2009	3/20/2009		DPG	w/CD
Feasibility Study Addendum/Interim Remedial Action Completion Report, Potential Source of Contamination 47 (Revision 00 - December 2008)	12/9/2008	5/8/2009		DPG	w/CD
Application for Hazardous Waste Operation, Post Closure & Corrective Action Permit 72437-HO-009	12/1/2008		NRR	DPG	w/CD, RCRA
Land Use Control Remedial Design, Revision 0, OU 8 - Potential Source of Contamination 47	11/25/2008	1/12/2009		DPG	
Sampling Event Report for OU 1 (November 2008)	11/25/2008			DPG	CD w/HASP, SAP, SERs for Additional Assess. @ OU 1 & 3
Site Assessment Report, Petroleum Contaminated Area 4, Gas Hill Fuel Farm (Revision 00 November 2008)	11/24/2008	1/21/2010		DPG	w/CD
Final Sampling & Analysis Plan for Groundwater Assessment Upgradient of Building 106 & Area C & Soil Assessment at Building 106, OU 3	11/3/2008			DPG	w/CD
Final Annual Long Term Monitoring (LTM) Report, April 1, 2008 Sampling Event for Area B (PSC 11) & Area G (PSC 15), OU 3 (Revision 1)	10/31/2008	1/7/2011		DPG	w/CD
Final Record of Decision, Revision 2, OU 8, Potential Source of Contamination 47	10/8/2008	12/1/2008		DPG	w/CD
Indoor Vapor Intrusion Letter Report OU 1	9/22/2008	5/15/2009		DPG	
Draft Record of Decision, Revision 1, OU 8 - Potential Source of Contamination 47	9/19/2008		OBR	DPG	
Draft Record of Decision for OU 8 - Potential Source of Contamination 47	8/6/2008	9/12/2008		DPG	
Groundwater Monitoring Report - Fire Fighter Training Facility	7/29/2008	3/17/2009		DPG	w/CD
Monitoring Well Installation OU 3, Areas F & G	7/24/2008		NRR	DPG	Received by E-mail
Smoke and Dye Tracer Testing and Sampling of the Eastern Storm Sewer at OU 3, Areas F & G	7/24/2008			DPG	Received by E-mail

JACKSONVILLE NAVAL AIR STATION (NAS JAX)

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Draft Sampling and Analysis Plan for Groundwater Assessment Upgradient of Building 106 and Area C and Soil Assessment at Building 106, OU 3	7/21/2008	8/5/2008		DPG	
Final Proposed Plan for OU 8 - Potential Source of Contamination 47	7/18/2008	8/12/2008		DPG	Received By E-Mail
Draft Proposed Plan for OU 8, Potential Source of Contamination 47	6/30/2008		OBR	DPG	
Monitored Natural Attenuation Work Plan for Hangar 1000 (June 2008)	6/10/2008	6/20/2008		DPG	w/CD
Draft Proposed Plan for OU 8, Potential Source of Contamination 47, April 2008	4/29/2008	5/27/2008		DPG	
IRA WP Monitoring Well Installation and Monitoring Program Implementation OU 3, Areas F & G - Revision No. 00 (April 2008)	4/25/2008	6/2/2008		DPG	w/CD
Annual Sampling Report for Long-Term Monitoring Program OU 1	4/7/2008	8/19/2008		DPG	
Final Annual Sampling Report, November 2007 for Long-Term Monitoring Program OU 1 & OU 3, Area A, AES Project #0104-216-24, BOA Contract #N62467-03-G-0110, CTO #0006	4/7/2008	7/30/2009		DPG	w/CDs
December 2007 Groundwater Monitoring Report for Fire Fighter Training Facility, Contract No. N62467-03-G-0297, CTO #0001	4/3/2008	4/16/2008		DPG	w/CD
PSC 47 Interim Remedial Action-Concrete Placement, Contract N62467-01-D-0331, CTO #0064, Revision No. 03	3/25/2008			DPG	E-Mail
Installation Restoration Program Partnering Team Appreciation Letter to Tetra Tech NUS	3/24/2008		NRR	DPG	
Final Remedial Investigation and Feasibility Study, Revision 2, Operable Unit 8, PSC47 -- CLEAN Contract #N62467-94-D-0888 - CTO #0162	2/25/2008	4/22/2008		DPG	w/CD
Site Assessment Report & Remedial Action Plan - Petroleum Contaminated Area 4-Gas Hill Fuel Farm, Rev. 0	2/13/2008	1/21/2010		DG	report with cd
Draft Sampling Event Report Potential Source of Contamination 30	2/5/2008		OBR	DG	report with cd
Sampling Event Report for OU 1	2/5/2008	8/19/2008		DG	report with cd
2007 Annual Monitoring and Effectiveness Report for the Enhanced in Situ Biodegradation-OU#3 Area C	1/11/2008	7/28/2009		DG	report with cd
Final Sampling and Analysis Plan for Additional Assessment of Area C, OU#3 with Living Cd	1/4/2008	1/28/2008		DG	report with cd
Contamination Assessment Plan for site Assessment Activities at the NEX Gas Station former Underground Storage Tanks 880-6 and 880-7	12/19/2007	1/28/2008		DG	report with cd
Interim Remedial Action Work Plan PSC 47	12/19/2007	1/31/2008		DG/JL	forward to Jeff Lockwood on 12/28/07



OU3D-MW43-C1 (54 ft)	
CIS-1,2-DICHLOROETHENE	1.54
TRANS-1,2-DICHLOROETHENE	7.11
VINYL CHLORIDE	187
OU3D-MW43-C2 (49 ft)	
CIS-1,2-DICHLOROETHENE	197
TRANS-1,2-DICHLOROETHENE	23.3
VINYL CHLORIDE	9.26
OU3D-MW43-C3 (44 ft)	
CIS-1,2-DICHLOROETHENE	65.5
TETRACHLOROETHENE	1.7
TRANS-1,2-DICHLOROETHENE	9.02
TRICHLOROETHENE	117
VINYL CHLORIDE	1.94 J
OU3D-MW43-C4 (39 ft)	
CIS-1,2-DICHLOROETHENE	37.6
TETRACHLOROETHENE	1.33
TRANS-1,2-DICHLOROETHENE	2.72
TRICHLOROETHENE	122
VINYL CHLORIDE	3.13
OU3D-MW43-C5 (34 ft)	
CIS-1,2-DICHLOROETHENE	150
TETRACHLOROETHENE	3.56
TRANS-1,2-DICHLOROETHENE	1.03
TRICHLOROETHENE	34.7
VINYL CHLORIDE	5.29
OU3D-MW43-C6 (29 ft)	
CIS-1,2-DICHLOROETHENE	199
TETRACHLOROETHENE	7.28
TRANS-1,2-DICHLOROETHENE	0.89 J
TRICHLOROETHENE	95.2
VINYL CHLORIDE	2.1
OU3D-MW43-C7 (59 ft)	
CIS-1,2-DICHLOROETHENE	1.47
VINYL CHLORIDE	11.3

MW-780-1-20100209-DUP (15 ft)	
CIS-1,2-DICHLOROETHENE	27.6
TRANS-1,2-DICHLOROETHENE	1.63
TRICHLOROETHENE	0.66 J
VINYL CHLORIDE	21.8

OU3-PZ-024 (13.5 ft)	
CIS-1,2-DICHLOROETHENE	70.4
TRICHLOROETHENE	0.510 J
VINYL CHLORIDE	25.5

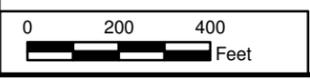
OU3D-MW47-C1 (54 ft)	
CIS-1,2-DICHLOROETHENE	126
TRICHLOROETHENE	13
VINYL CHLORIDE	0.636 J
OU3D-MW47-C2 (49 ft)	
CIS-1,2-DICHLOROETHENE	62.4
TETRACHLOROETHENE	0.522 J
TRANS-1,2-DICHLOROETHENE	2.45
TRICHLOROETHENE	1220
VINYL CHLORIDE	0.328 J
OU3D-MW47-C3 (44 ft)	
CIS-1,2-DICHLOROETHENE	21
TRICHLOROETHENE	2310
OU3D-MW47-C4 (39 ft)	
CIS-1,2-DICHLOROETHENE	151
TRANS-1,2-DICHLOROETHENE	11.7
TRICHLOROETHENE	546
OU3D-MW47-C5 (34 ft)	
CIS-1,2-DICHLOROETHENE	21.1
TRICHLOROETHENE	1170
OU3D-MW47-C5-DUP (34 ft)	
CIS-1,2-DICHLOROETHENE	16.4
TRICHLOROETHENE	1280
OU3D-MW47-C6 (29 ft)	
CIS-1,2-DICHLOROETHENE	353
TRANS-1,2-DICHLOROETHENE	30.5
TRICHLOROETHENE	55
VINYL CHLORIDE	0.669 J
OU3D-MW47-C7 (59 ft)	
CIS-1,2-DICHLOROETHENE	6.85
TRICHLOROETHENE	1.83

OU3D-MW46-C1 (54 ft)	
CIS-1,2-DICHLOROETHENE	3.03
TRANS-1,2-DICHLOROETHENE	0.658 J
VINYL CHLORIDE	0.218 J
OU3D-MW46-C2 (49 ft)	
CIS-1,2-DICHLOROETHENE	72.9
TRANS-1,2-DICHLOROETHENE	62.2
VINYL CHLORIDE	0.994 J
OU3D-MW46-C3 (44 ft)	
CIS-1,2-DICHLOROETHENE	144
TRANS-1,2-DICHLOROETHENE	110
TRICHLOROETHENE	116
VINYL CHLORIDE	0.645 J
OU3D-MW46-C4 (39 ft)	
CIS-1,2-DICHLOROETHENE	68.2
TRANS-1,2-DICHLOROETHENE	49.6
TRICHLOROETHENE	148
VINYL CHLORIDE	0.529 J
OU3D-MW46-C5 (34 ft)	
CIS-1,2-DICHLOROETHENE	9.79
TRANS-1,2-DICHLOROETHENE	2.24
TRICHLOROETHENE	33.3
OU3D-MW46-C6 (29 ft)	
CIS-1,2-DICHLOROETHENE	2.99
TRICHLOROETHENE	125
OU3D-MW46-C7 (59 ft)	
CIS-1,2-DICHLOROETHENE	18.9
TRANS-1,2-DICHLOROETHENE	3.19
TRICHLOROETHENE	1.38

OU3D-MW44-C1 (54 ft)	
CIS-1,2-DICHLOROETHENE	127
TRANS-1,2-DICHLOROETHENE	2.91
VINYL CHLORIDE	2.34
OU3D-MW44-C2 (49 ft)	
CIS-1,2-DICHLOROETHENE	289
TRANS-1,2-DICHLOROETHENE	59.6
VINYL CHLORIDE	1.86
OU3D-MW44-C3 (44 ft)	
CIS-1,2-DICHLOROETHENE	584
TETRACHLOROETHENE	1.77 J
TRANS-1,2-DICHLOROETHENE	152
VINYL CHLORIDE	1.14 J
OU3D-MW44-C4 (39 ft)	
CIS-1,2-DICHLOROETHENE	225
TETRACHLOROETHENE	14.2
TRANS-1,2-DICHLOROETHENE	18.6
TRICHLOROETHENE	331
VINYL CHLORIDE	0.826 J
OU3D-MW44-C5 (34 ft)	
CIS-1,2-DICHLOROETHENE	538
TETRACHLOROETHENE	4.60
TRANS-1,2-DICHLOROETHENE	6.09
TRICHLOROETHENE	171
OU3D-MW44-C6 (29 ft)	
CIS-1,2-DICHLOROETHENE	589
TETRACHLOROETHENE	1.09 J
TRANS-1,2-DICHLOROETHENE	5.34
TRICHLOROETHENE	81.7
VINYL CHLORIDE	1.38 J
OU3D-MW44-C7 (59 ft)	
CIS-1,2-DICHLOROETHENE	28.4
TRANS-1,2-DICHLOROETHENE	1.53
TRICHLOROETHENE	0.524 J
VINYL CHLORIDE	0.406 J

Legend

- Monitoring Well
- ⊗ Multi-Chamber Well
- ⊕ Piezometer
- Road
- ▭ OU 03 Boundary
- ▭ OU3 Areas
- ▭ Building



DRAWN BY	DATE
S. STROZ	04/21/10
CHECKED BY	DATE
D. HARDISON	04/21/10
REVISED BY	DATE
SCALE	AS NOTED



GROUNDWATER MONITORING WELL RESULTS
 OU 3
 NAS JACKSONVILLE
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO.	REV
	0

Within Area C, the highest application rate of substrate was the only location where solvent transformation was observed. These data suggest that an insufficient mass of HRC® may have been injected elsewhere in the target treatment zone. In Area D, solvent transformation was observed at application rates ranging from approximately 1 to 2 pounds HRC® per yard of soil treated. Over half the treatment zones in Area C received an equivalent substrate dose to Area D; therefore, positive confirmation of substrate limited conditions in Area C is not possible with the data set collected.

4.4 Conclusions

The injection of HRC® to enhance *in situ* degradation of chlorinated solvents present in site groundwater has resulted in conditions favorable for reductive dechlorination processes. Within Area C, active solvent biotransformation was observed at monitoring wells U3C-MW31 and U3C-MW40. Degradation activity was also observed in Area D monitoring wells U3D-MW30 and U3D-GEW002. The body of evidence collected in groundwater sampled from these locations supports this conclusion through changes in VOC concentrations and environmental parameters indicative of microbial transformation. Elsewhere within Area C and Area D groundwater, there was little evidence to support active biotransformation processes were occurring. Groundwater sampling revealed conditions effective for solvent biodegradation were focused, and overall, the areas of active solvent biotransformation within Area C and Area D are highly localized.

4.5 Recommendations

The positive response of the Area C and Area D sites to substrate injection indicates that reductive dechlorination processes can be an effective tool to treat the solvent contamination provided that favorable environmental conditions are maintained *in situ*. Localized transformation of solvent in Area C and Area D are likely due to the combination factors previously discussed. Limitations in substrate distribution and absence of true anaerobic conditions are likely the root cause of the localized solvent transformations. Therefore, strategies to improve distribution are likely to have the greatest effect on subsurface solvent concentrations if HRC® is utilized in the future.

Based on a thorough review of available performance monitoring data, the following actions are suggested to potentially enhance remedial actions implemented within Area C and Area D:

- Restart the groundwater monitoring program to determine if additional changes in solvent concentrations have occurred.
- Consider substrate re-application or change delivery approach to enhance subsurface distribution if HRC® is utilized in the future. This may include pulse feeding of buffered electron donor followed by a flush with water to support better dispersion of donor.
- Consider application of an alternate substrate to support reductive dechlorination. Soluble substrates like lactate, cheese whey, and high fructose corn syrup may be easier to disperse since they each have a lower viscosity than HRC®.

- An alternate substrate such as emulsified vegetable oil could also be considered. This product may work to more effectively buffer and control pH since it does not immediately hydrolyze and release acid upon groundwater contact. Emulsified vegetable oil also has a lower viscosity than HRC® which may result in better subsurface distribution.
- Focus substrate re-injection efforts in areas where contaminant transformation has been documented. Alternately, re-inject at the seawall to develop biotreatment zone for groundwater treatment prior to off site movement.
- Solvent concentrations in the area of monitoring well U3C-MW35 are high. If subsequent groundwater sampling confirm the absence of biological activity in this location, *in situ* chemical oxidation may be helpful to reduce concentrations to lower values where reductive dechlorination processes may be favored.

Based on the documentation and evaluation included in this Remedial Action Completion Report, the completed remedial action of HRC® injection at Area C and Area D will not achieve the RAO of reducing VOCs in groundwater to the ARARs/action levels within 5 years such that no controls (administrative or physical) of residual risk will be required for the sites.

Currently, TtNUS (with NAVFAC EFD SOUTH, CH2M HILL, and the U.S. Geological Survey) is completing an overall site-wide optimization assessment for OU 3. The groundwater plumes at Area C and Area D, as well as the potential effects of Building 106 (Potential Source of Contamination 48) as a continuing source of contamination to Area C and Area D, are included in this assessment. During completion of the optimization assessment, Area C monitoring wells U3C-MW31, U3C-MW39, U3C-MW40, U3C-MW41, and U3C-MW42 will be monitored semi-annually to track the conditions of the groundwater contaminant plume at the seawall on the eastern OU 3 boundary. The February 2006 groundwater monitoring event included in this report was the initial monitoring event with the next monitoring event scheduled for August 2006.

PSC 38 – Torpedo Rework Facility

Remedial Investigation
Update

September 2012

PSC 38 Torpedo Rework Facility

- PSC 38, the Torpedo Rework Facility, encompasses approximately 2.5 acres within the restricted Magazine Area in the central-western portion of NAS Jacksonville.
- Access is limited to Navy personnel with weapons clearance.
- There are three buildings within PSC 38: Building 327, the Torpedo Rework Facility; Building 367, the Bulk Waste Storage Area; and Building 330, a storage building for paint and hazardous materials.
- Phase I field sampling effort of the Remedial Investigation in accordance with UFP-SAP (date)

Soil Sampling Plan

- 10 soil sample locations
 - VOCs at 6"-2' and 2'-4'
 - SVOCs at 0'-6", 6"-2', and 2'-4'
 - Low Level PAHs at 0'-6" and 6"-2'
 - Pesticides at 0'-2' and 2'-4'
 - PCBs at 0'-2' and 2'-4'
 - Metals at 0'-6", 6"-2' and 2'-4'
 - PGDN at 2'-4'

Groundwater Sampling Plan

- 10 groundwater sample locations by DPT
 - VOCs
 - SVOCs
 - Low Level PAHs
 - Pesticides
 - PCBs
 - Metals
 - PGDN

Project Action Levels (PALs)

- PALs for soil based on screening criteria (background; FDEP SCTLs; EPA Region 3,6,9 Risk RSLs; LOQ if $LOD > PAL$)
- PALs for groundwater based on background; FDEP GCTLs; EPA Region 3,6,9 RSL for Tap water; LOQ if $LOD > PAL$

Surface Soil Results

- Metals

Parameter	Project Action Limit (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Arsenic	0.8 (BK, E-LCH)	3	0.918 - 10.5 J
Iron	852 (BK, E-LCH)	12	866 - 9,170 J
Mercury	0.03 (E-LCH)	4	0.0328 J - 0.0568

PCBs

Parameter	Project Action Limit (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Aroclor-1260	0.024 (E-LCH)	3	0.133 J - 4.190

Surface Soil Results

- Pesticides

Parameter	Project Action Limit (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Aldrin	0.00065 (E-LCH)	1	0.00163 J
Alpha Chlordane	0.013 (E-LCH)	1	0.691 J
Dieldrin	0.00017 (E-LCH)	3	0.000368 J - 0.0112 J
Gamma BHC	0.00036 (E-LCH)	1	0.000421 J
Gamma Chlordane	0.013 (E-LCH)	1	0.739 J
Heptachlor	0.0012 (E-LCH)	1	0.00267 J
Heptachlor Epoxide	0.0007 (LOQ) ¹	1	0.00646 J

¹ According to the UFP-SAP, "in cases where the PAL is less than the LOQ, the Partnering Team has agreed to replace the PALs with the laboratory LOQs for decision making purposes"

Subsurface Soil Results

- Metals

Parameter	Project Action Limit (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Arsenic	1.48 (BK, E-LCH)	1	4.02 J
Iron	5818.2 (BK, E-LCH)	1	7,820 J
Mercury	0.03 (E-LCH)	1	0.352 J

- PCBs

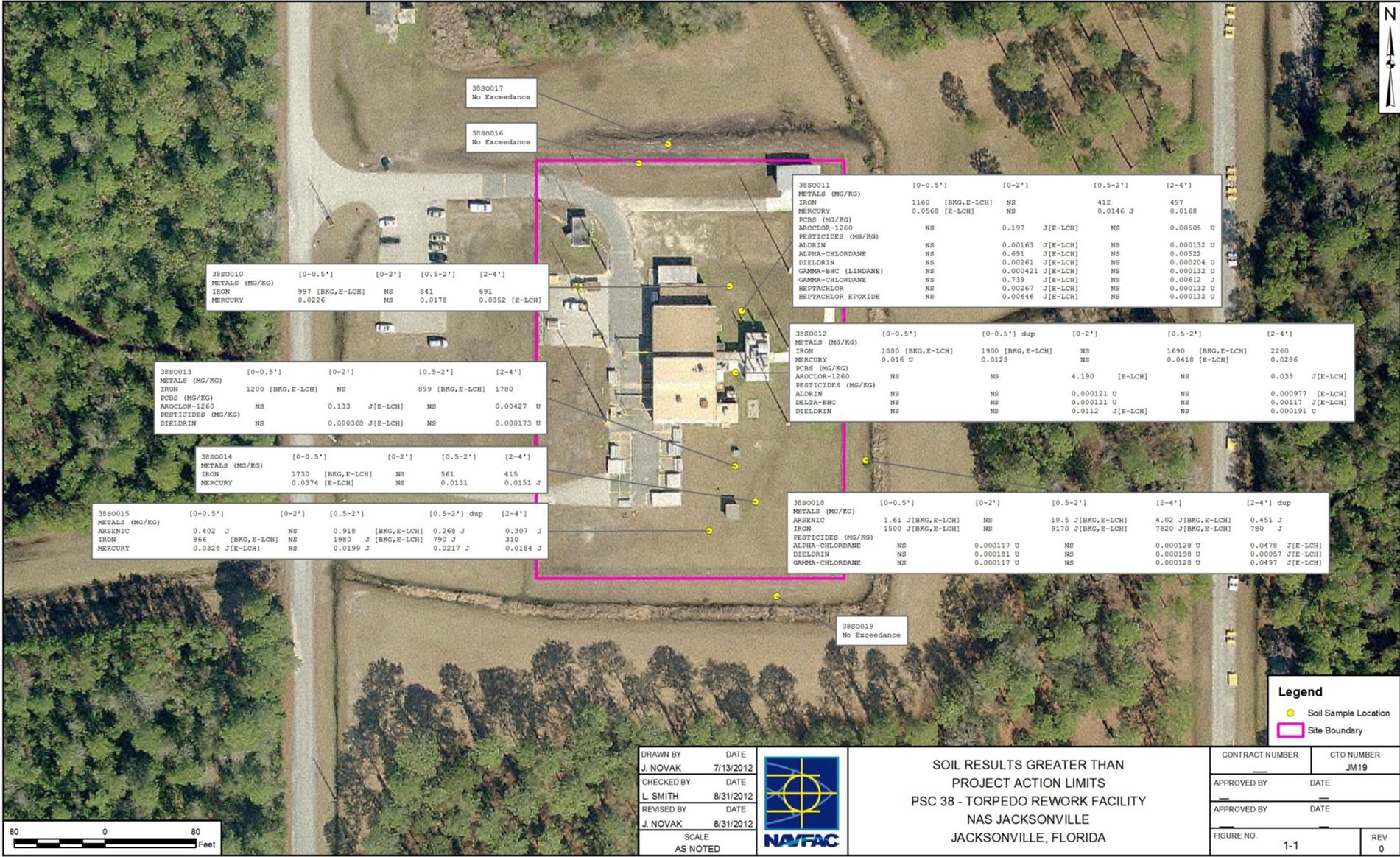
Parameter	Project Action Limit (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Aroclor-1260	0.024 (E-LCH)	1	0.038 J

Subsurface Soil Results

- Pesticides

Parameter	Project Action Limit (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Aldrin	0.00065 (E-LCH)	1	0.000977
Alpha Chlordane	0.013 (E-LCH)	1	0.0478 J
Delta BHC	0.0007 (LOQ) ¹	1	0.00117 J
Dieldrin	0.00017 (E-LCH)	1	0.00057 J
Gamma Chlordane	0.013 (E-LCH)	1	0.0497 J

¹ According to the UFP-SAP, "in cases where the PAL is less than the LOQ, the Partnering Team has agreed to replace the PALs with the laboratory LOQs for decision making purposes"



3880017
No Exceedance

3880016
No Exceedance

3880010	[0-0.5']	[0-2']	[0.5-2']	[2-4']
METALS (MG/KG)				
IRON	997 [BKG, E-LCH]	NS	841	691
MERCURY	0.0226	NS	0.0178	0.0352 [E-LCH]

3880011	[0-0.5']	[0-2']	[0.5-2']	[2-4']
METALS (MG/KG)				
IRON	1160 [BKG, E-LCH]	NS	412	497
MERCURY	0.0568 [E-LCH]	NS	0.0146 J	0.0168
PCBS (MG/KG)				
AROCLOL-1260	NS	0.197 J[E-LCH]	NS	0.00505 U
PESTICIDES (MG/KG)				
ALDRIN	NS	0.00163 J[E-LCH]	NS	0.000132 U
ALPHA-CHLORDANE	NS	0.691 J[E-LCH]	NS	0.00522 U
DIELDRIN	NS	0.00261 J[E-LCH]	NS	0.000204 U
GAMMA-BHC (LINDANE)	NS	0.000421 J[E-LCH]	NS	0.000132 U
GAMMA-CHLORDANE	NS	0.739 J[E-LCH]	NS	0.00612 J
HEPTACHLOR	NS	0.00267 J[E-LCH]	NS	0.000132 U
HEPTACHLOR EPOXIDE	NS	0.00646 J[E-LCH]	NS	0.000132 U

3880013	[0-0.5']	[0-2']	[0.5-2']	[2-4']
METALS (MG/KG)				
IRON	1200 [BKG, E-LCH]	NS	899 [BKG, E-LCH]	1780
PCBS (MG/KG)	NS	0.133 J[E-LCH]	NS	0.00427 U
AROCLOL-1260	NS			
PESTICIDES (MG/KG)				
DIELDRIN	NS	0.000368 J[E-LCH]	NS	0.000173 U

3880012	[0-0.5']	[0-0.5'] dup	[0-2']	[0.5-2']	[2-4']
METALS (MG/KG)					
IRON	1880 [BKG, E-LCH]	1900 [BKG, E-LCH]	NS	1690 [BKG, E-LCH]	2260
MERCURY	0.016 U	0.0123	NS	0.0418 [E-LCH]	0.0286
PCBS (MG/KG)					
AROCLOL-1260	NS	NS	4.190 [E-LCH]	NS	0.038 J[E-LCH]
PESTICIDES (MG/KG)					
ALDRIN	NS	NS	0.000121 U	NS	0.000977 [E-LCH]
DELTA-BHC	NS	NS	0.000121 U	NS	0.00117 J[E-LCH]
DIELDRIN	NS	NS	0.0112 J[E-LCH]	NS	0.000191 U

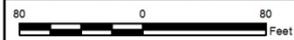
3880014	[0-0.5']	[0-2']	[0.5-2']	[2-4']
METALS (MG/KG)				
IRON	1730 [BKG, E-LCH]	NS	561	415
MERCURY	0.0374 [E-LCH]	NS	0.0131	0.0151 J

3880015	[0-0.5']	[0-2']	[0.5-2']	[0.5-2'] dup	[2-4']
METALS (MG/KG)					
ARSENIC	0.402 J	NS	0.918 [BKG, E-LCH]	0.268 J	0.307 J
IRON	846 [BKG, E-LCH]	NS	1380 J [BKG, E-LCH]	790 J	310
MERCURY	0.0328 J[E-LCH]	NS	0.0199 J	0.0217 J	0.0184 J

3880018	[0-0.5']	[0-2']	[0.5-2']	[2-4']	[2-4'] dup
METALS (MG/KG)					
ARSENIC	1.61 J[BKG, E-LCH]	NS	10.5 J[BKG, E-LCH]	4.02 J[BKG, E-LCH]	0.451 J
IRON	1500 J[BKG, E-LCH]	NS	9170 J[BKG, E-LCH]	7820 J[BKG, E-LCH]	780 J
PESTICIDES (MG/KG)					
ALPHA-CHLORDANE	NS	0.000117 U	NS	0.000128 U	0.0478 J[E-LCH]
DIELDRIN	NS	0.000181 U	NS	0.000198 U	0.00057 J[E-LCH]
GAMMA-CHLORDANE	NS	0.000117 U	NS	0.000128 U	0.0497 J[E-LCH]

3880019
No Exceedance

Legend
 Soil Sample Location
 Site Boundary



DRAWN BY J. NOVAK	DATE 7/13/2012
CHECKED BY L. SMITH	DATE 8/31/2012
REVISED BY J. NOVAK	DATE 8/31/2012
SCALE AS NOTED	

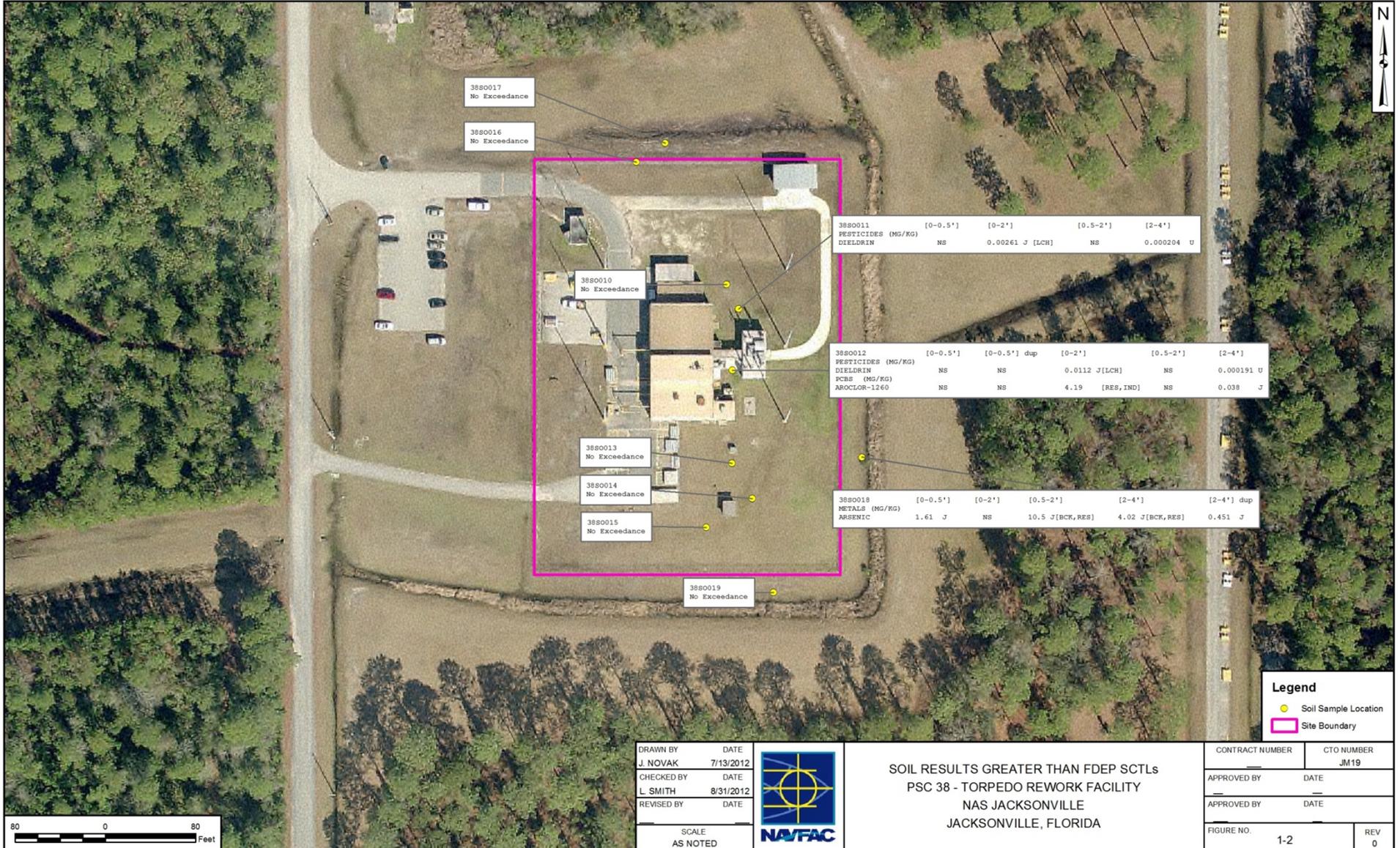


SOIL RESULTS GREATER THAN
PROJECT ACTION LIMITS
PSC 38 - TORPEDO REWORK FACILITY
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER JM19
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 1-1	REV 0

Soil Results Greater Than FDEP SCTLs

Parameter	FDEP SCTL (mg/kg)	Number of Exceedences	Range of Exceedences (mg/kg)
Arsenic	2.1 (residential) 12 (industrial)	2 0	4.02 J – 10.5 J N/A
PCBs (Aroclor 1260)	0.5 (residential) 2.6 (industrial) 17 (leachability)	1 1 0	4.190 4.190 N/A
Dieldrin	0.002 (leachability)	2	0.00261 J – 0.0112 J



3880017
No Exceedance

3880016
No Exceedance

3880010
No Exceedance

3880013
No Exceedance

3880014
No Exceedance

3880015
No Exceedance

3880019
No Exceedance

3880011	PESTICIDES (MG/KG)	[0-0.5']	[0-2']	[0.5-2']	[2-4']
	DIELDRIN	NS	0.00261 J [LCH]	NS	0.000204 U

3880012	PESTICIDES (MG/KG)	[0-0.5']	[0-0.5'] dup	[0-2']	[0.5-2']	[2-4']
	DIELDRIN	NS	NS	0.0112 J [LCH]	NS	0.000191 U
	PCBS (MG/KG)	NS	NS	4.19 [RES, IND]	NS	0.038 J
	AROCOR-1260	NS	NS			

3880018	METALS (MG/KG)	[0-0.5']	[0-2']	[0.5-2']	[2-4']	[2-4'] dup
	ARSENIC	1.61 J	NS	10.5 J [BCK, RES]	4.02 J [BCK, RES]	0.451 J

Legend

● Soil Sample Location

□ Site Boundary



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SOIL RESULTS GREATER THAN FDEP SCTLs
PSC 38 - TORPEDO REWORK FACILITY
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER
	JM19
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FIGURE NO.	REV
1-2	0

Discussion of Soil Results

- Three sample locations had no exceedences (S0016, S0017 and S0019)
- No exceedences for VOCs, SVOCs, low level PAHs or PDGN
- No detections of PDGN
- Although 3 metals, 1 PCB, and 8 pesticides exceed project action limits; only arsenic, Aroclor-1260, and dieldrin exceed FDEP SCTLs
- Only sample 38S0012 from 0-2' exceeds an industrial SCTL (for total PCBs)
- Highest concentration of dieldrin (0.0112 J mg/kg) is located in vicinity of 38GW005 which did not have a detectable concentration of dieldrin

Groundwater Results

- Metals

Parameter	Project Action Limit (µg/l)	Number of Exceedences	Range of Exceedences (µg/l)
Arsenic	13.2 (BK, Tap)	2	18.8 - 21.6
Lead	45.8 (BK, GCTL)	2	50.4 - 66.7
Manganese	204 (BK, Tap)	2	212 - 253

- SVOCs

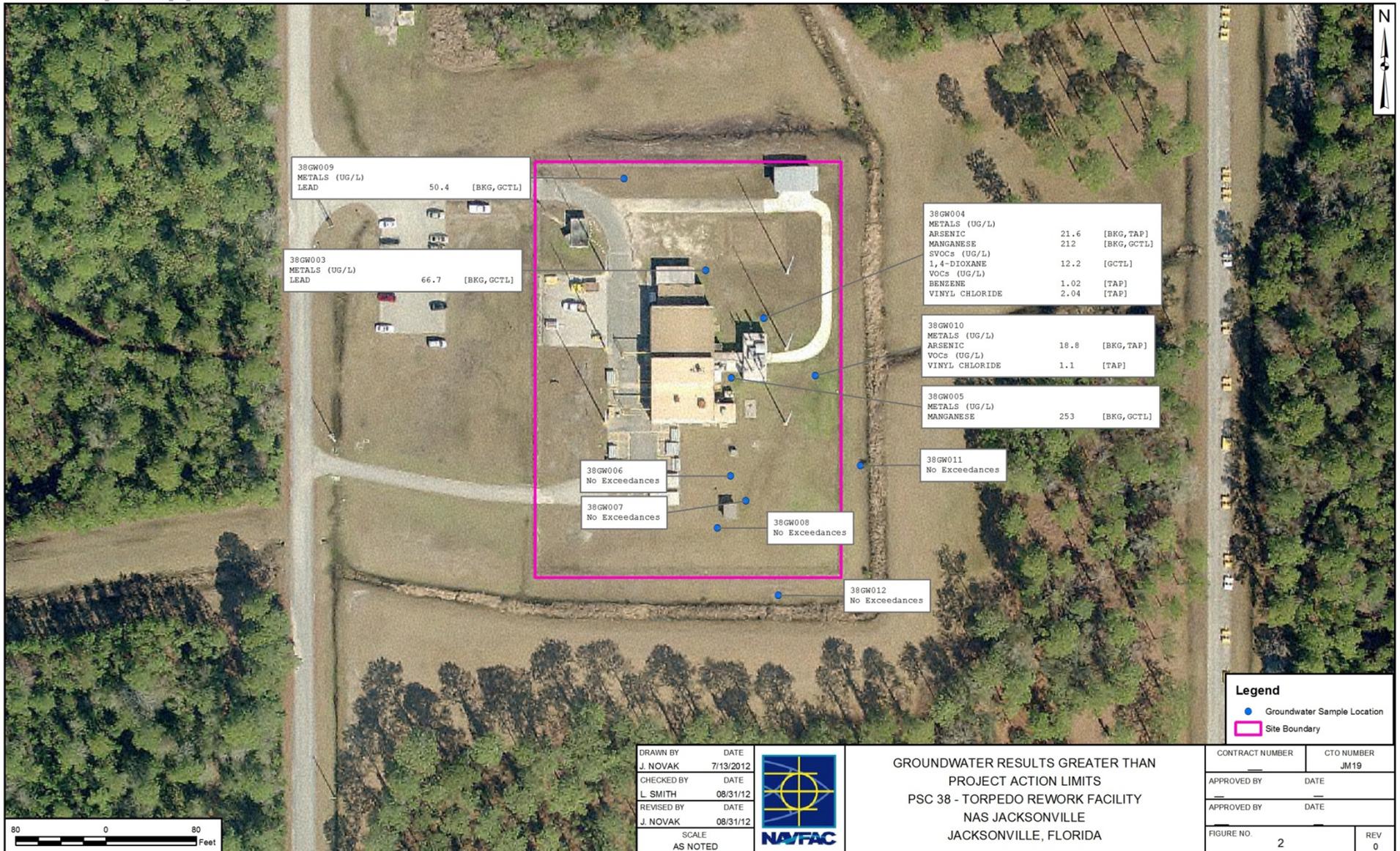
Parameter	Project Action Limit (µg/l)	Number of Exceedences	Range of Exceedences (µg/l)
1,4-Dioxane	3.2 (GCTL)	1	12.2

Groundwater Results

- VOCs

Parameter	Project Action Limit (µg/l)	Number of Exceedences	Range of Exceedences (µg/l)
Benzene	1 (LOQ) ¹	1	1.02
Vinyl Chloride	1 (LOQ) ¹	2	1.1 - 2.04

¹ According to the UFP-SAP, "in cases where the PAL is less than the LOQ, the Partnering Team has agreed to replace the PALs with the laboratory LOQs for decision making purposes"



Discussion of Groundwater Results

- Five sample locations had no exceedences (GW006, GW007, GW008, GW011, and GW012)
- No exceedences for low level PAHs, PCBS, Pesticides, PDGN
- No detections of PCBs or PDGN
- Arsenic above GCTL at 38GW004 and 38GW010
- Lead above GCTL at 38GW003 and 38GW009
- Manganese above GCTL at 38GW004 and 38GW005
- 1,4-dioxane above GCTL at 38GW004
- Benzene above GCTL at 38GW004
- Vinyl Chloride above GCTL at 38GW004 and 38GW010

Summary of GCTL and SCTL Exceedences

Soil

- Arsenic above residential SCTLs at 0.5'-2' and 2'-4' at 38SO018
- PCBs above industrial and residential SCTLs and below the leachability SCTL at 0-2' at 38SO012
- Dieldrin above leachability SCTL at 0-2' at 38SO011 and 38SO012

Groundwater

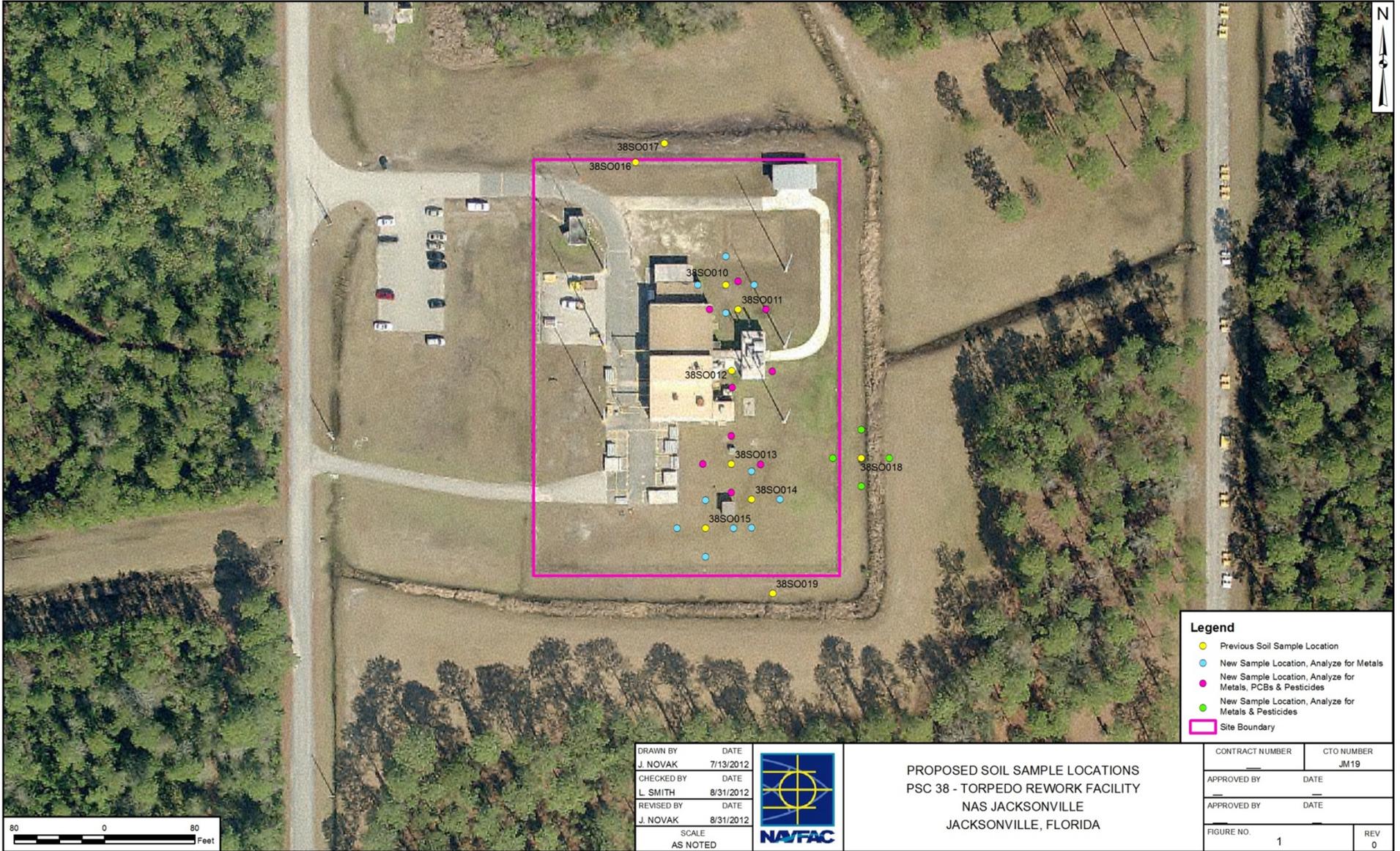
- Arsenic above GCTL at 38GW004 and 38GW010
- Lead above GCTL at 38GW003 and 38GW009
- Manganese above GCTL at 38GW004 and 38GW005
- 1,4-dioxane above GCTL at 38GW004
- Benzene above GCTL at 38GW004
- Vinyl Chloride above GCTL at 38GW004 and 38GW010

Recommendations

- Step out to define extent of soil and groundwater contamination based on project action limits
- Collect soil sample for SPLP analysis from location(s) of highest detected concentration for compounds exceeding SCTL leachability criteria. Compare SPLP results to Florida GCTLs and groundwater sample concentrations. If SPLP results and nearby groundwater sample concentrations are less than Florida GCTLs then propose NFA for leachability.
- Remove PDGN from analysis for both soil and groundwater
- Remove VOCs, SVOCs, and low level PAHs from analysis for soil
- Remove low level PAHs, pesticides and PCBs from analysis for groundwater
- Following definition of the extent of soil and groundwater exceedences, consider a risk management option to include land use controls and limited excavation for any

Proposed Soil Sampling Plan

- Collect soil samples from 24 new sampling points at distances up to 25 feet from soil exceedences
- Soil samples that would have resulted in drilling within buildings were eliminated from the plan due to the sensitive nature of the activities performed within the buildings
- Analyses to be performed
 - Metals – 80 samples including 8 field duplicates (three depths per sample location)
 - Pesticides – 29 samples including 3 field duplicates (two depths per sample location)
 - PCBs – 20 samples including 2 field duplicates (two depths per sample location)



Legend

- Previous Soil Sample Location
- New Sample Location, Analyze for Metals
- New Sample Location, Analyze for Metals, PCBs & Pesticides
- New Sample Location, Analyze for Metals & Pesticides
- Site Boundary

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L. SMITH	8/31/2012
REVISED BY	DATE
J. NOVAK	8/31/2012
SCALE AS NOTED	

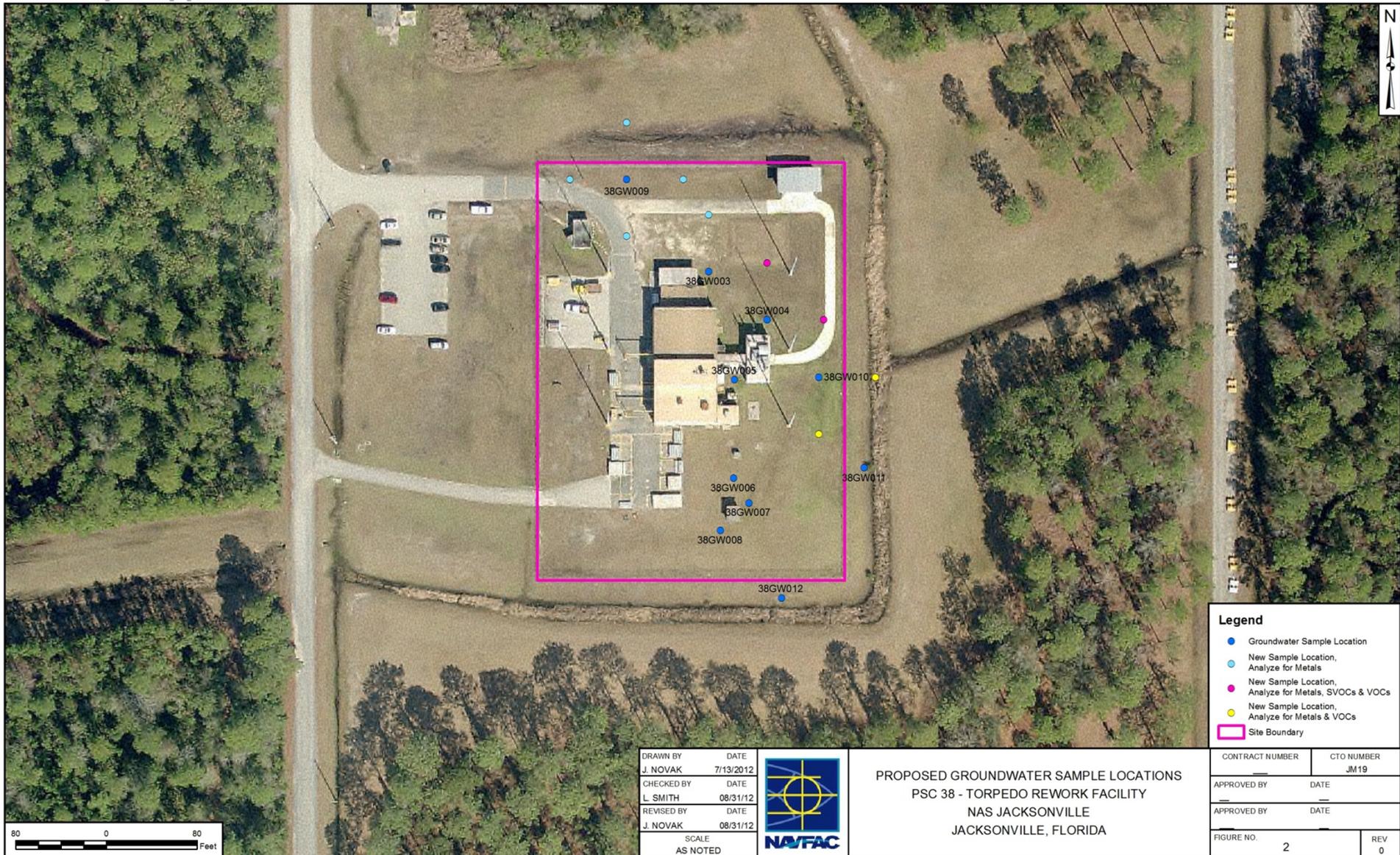


PROPOSED SOIL SAMPLE LOCATIONS
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FIGURE NO.	REV
1	0

Proposed Groundwater Sampling Plan

- Collect groundwater samples using DPT at distances of approximately 50 feet from groundwater exceedences
- Sample locations which would have resulted in drilling within buildings were eliminated from the plan due to the sensitive nature of the activities performed within the buildings
- Analyses to be performed
 - Metals – 10 samples including one field duplicate
 - VOCs – 5 samples including one field duplicate
 - SVOCs – 3 samples including one field duplicate



Legend

- Groundwater Sample Location
- New Sample Location, Analyze for Metals
- New Sample Location, Analyze for Metals, SVOCs & VOCs
- New Sample Location, Analyze for Metals & VOCs
- Site Boundary

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J. NOVAK	08/31/12
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PROPOSED GROUNDWATER SAMPLE LOCATIONS
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FIGURE NO.	REV
2	0