HPNS BCT Meeting

Five-Year Review of Remedial Actions

Overview

- Walk-through of the draft report (5/13/13)
- Five-year review (5YR) process
- Status of remedial actions
- Technical assessment questions A, B, and C
- Issues, recommendations, and follow-up actions
- Protectiveness statement
- Report review schedule

Why is a 5-Year Review Necessary?

- A 5YR is required because the selected remedies will not reduce contaminant concentrations to levels allowing unlimited use and unrestricted exposure.
- This is the <u>third</u> 5YR for Hunters Point Naval Shipyard.
- 5YR focuses on parcels where remedial actions are complete or in progress – Parcels B, C, D-1, G, UC-1, and UC-2.
  - Previous (2008) 5YR focused on Parcel B, which was the only parcel with a completed ROD.

Walk-through of Draft 5YR Report

Major Sections:

1. Introduction
2. Chronology (tabular summary of major events and documents, by parcel)
3. Background (physical characteristics, resource use, initial cleanup actions taken—by parcel)
4. Remedial actions (RAOs and selected remedy for each parcel and status of implementation)
5. Progress since last 5YR (status of issues raised in second 5YR)
6. 5YR process:
   - Document and data review
   - Site inspection
   - Interviews with stakeholders
   - Formulation of protectiveness statement

Walk-through of Draft 5YR Rpt (con't)

Major Sections (con't):

7. Technical assessment
   A. Is the remedy functioning as intended by the ROD?
   B. Any changes to assumptions, toxicity data, cleanup levels, or RAOs?
   C. Has new information come to light?
8. Issues, recommendations, and follow up actions
9. Protectiveness statement
10. Next 5YR (will be due in 2018)
11. References

Five-Year Review Process

- Document and data review
  - Key documents included RODs, remedial designs, and remedial action completion reports
  - Data review included evaluation of chemical concentration trends in groundwater
- Site inspection
  - Conducted by the Navy with the BCT on 3/1/13
- Interviews with stakeholders
  - BCT members and SF Dept of Public Health
  - Local community members and base tenants
  - Operation and maintenance contractors
- Formulation of protectiveness statements, by parcel

Status of Remedial Actions

Parcel	Remedy Component	ROD	RD	RA in progress	RA complete
B (IR-07/18)					
	Cover	■	■	■	■
	Shoreline revetment	■	■	■	■
	Methane monitoring	■	■	■	■
	Groundwater monitoring	■	■	■	
	Radiological surface scan and removals	■	■	■	■
	Implement ICs	■	■	■	
B (remainder)					
	Excavate soil	■	■	■	■
	Cover	■	■	■	
	Shoreline revetment	■	■	■	
	SVE at IR-10	■	■	■	
	Groundwater treatment	■	■	■	
	Groundwater monitoring	■	■	■	
	Radiological removals	■	■	■	■
	Implement ICs	■	■	■	
C					
	Excavate soil	■	■		
	SVE for source reduction	■	■		
	Cover	■	■		
	Groundwater treatment	■	■	■	
	Groundwater monitoring	■	■	■	
	Soil gas survey	■			
	Radiological removals	■	■	■	
	Implement ICs	■	■	■	
D-1					
	Excavate soil; remove stockpiles	■	■	■	
	Cover	■			
	Groundwater treatment	■	■	■	■
	Groundwater monitoring	■	■	■	
	Soil gas survey	■	■	■	■
	Radiological removals	■	■	■	
	Implement ICs	■	■	■	
D-2					
	Radiological removals	■	■	■	■
E					
	ROD in preparation				
	Radiological removals	■	■	■	

Parcel	Remedy Component	ROD	RD	RA in progress	RA complete
E-2					
	Excavate soil	■			
	Radiological removals	■			
	Cover and liner	■			
	Subsurface hydraulic controls	■			
	Landfill gas treatment	■			
	Shoreline revetment	■			
	Monitoring and maintenance	■			
	Implement ICs	■			
F					
	ROD not yet started				
G					
	Excavate soil; remove stockpiles	■	■	■	■
	Cover	■	■	■	
	Groundwater treatment	■	■	■	■
	Groundwater monitoring	■	■	■	
	Soil gas survey	■	■	■	■
	Radiological removals	■	■	■	■
	Implement ICs	■	■	■	
UC-1					
	Cover	■	■	■	■
	Soil gas survey	■			
	Radiological removals	■	■	■	■
	Implement ICs	■	■	■	
UC-2					
	Cover	■	■	■	■
	Groundwater monitoring	■	■	■	
	Soil gas survey	■	■	■	■
	Radiological removals	■	■	■	■
	Implement ICs	■	■	■	
UC-3					
	ROD in preparation				
	Radiological removals	■	■	■	■

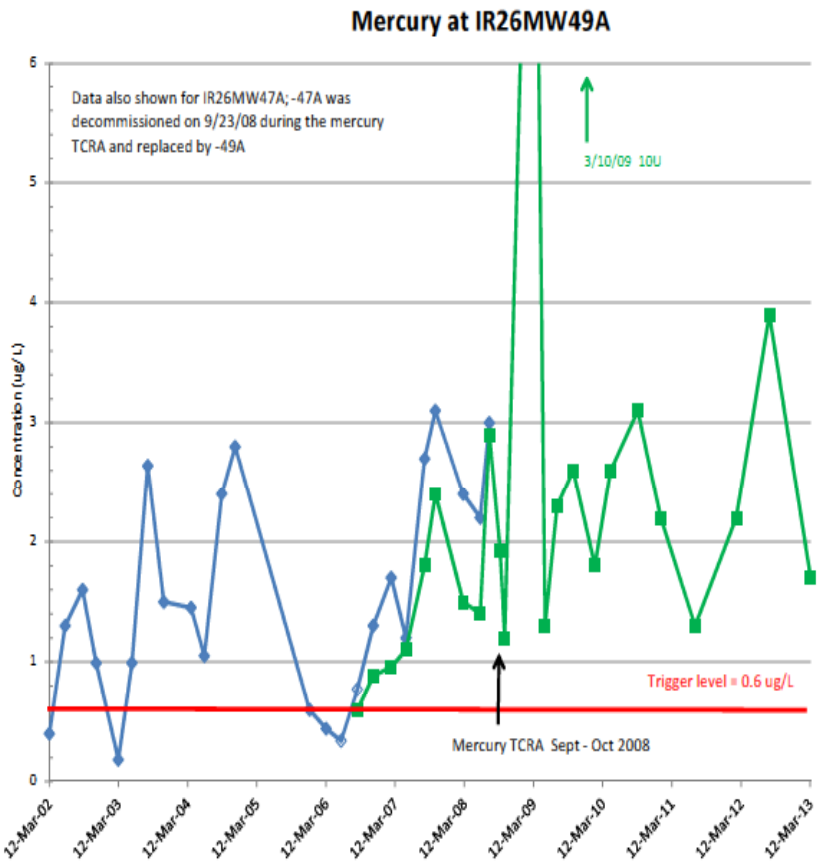
Technical Assessment

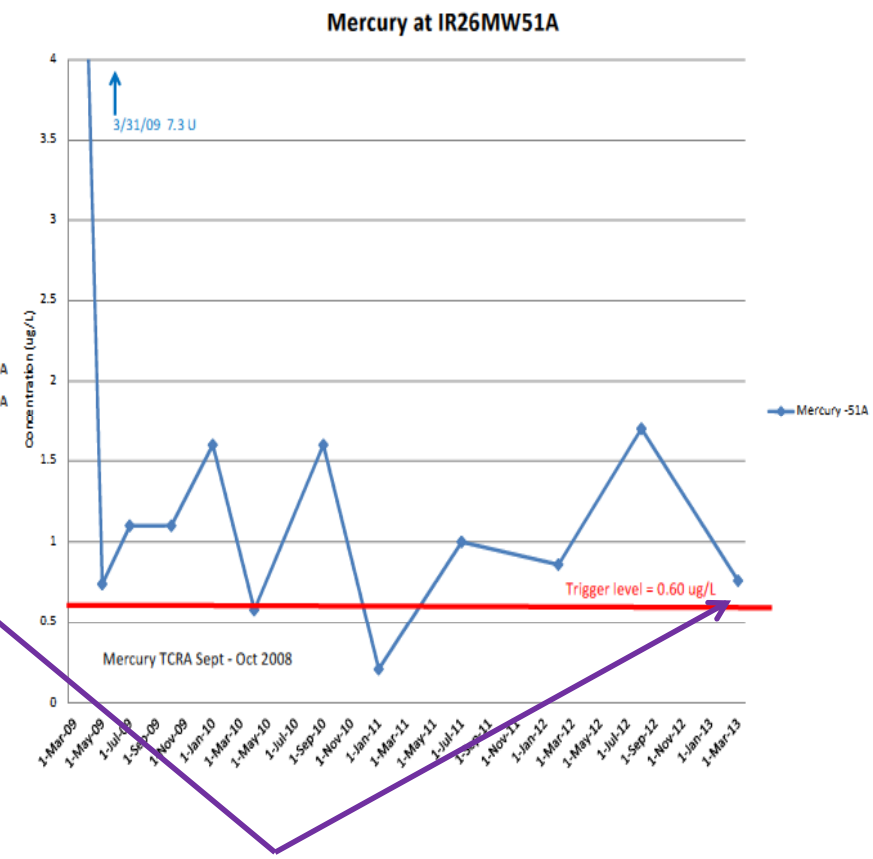
- Question A – Is the remedy functioning as intended by the ROD?
  - Yes, for Parcels B, D-1, G, UC-1, and UC-2 where remedies have been undertaken
- Question B – Are exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of remedy selection still valid?
  - Yes
- Question C – Has any other information come to light that could call into question the protectiveness of the remedy?
  - No

Issues, Recommendations, and Follow-up

- Issue:
  - Concentrations of mercury in groundwater at two wells in Parcel B (IR26MW49A and IR26MW51A) remain above trigger levels even after removal and stabilization of mercury in soil and bedrock in the area.
- Recommendation and Follow-up Action:
  - Monitor wells IR26MW49A and IR26MW51A for mercury
  - Samples collected in March 2013 indicate large reductions from August 2012 values (graphs follow)

Mercury in Groundwater at IR-26





New Data

Protectiveness Statement

- The remedy is protective of human health and the environment.
  - Parcel B (IR-07/18)
- The remedy is expected to be protective of human health and the environment upon completion. In the interim, remedial activities completed to date have adequately addressed all exposure pathways that could result in unacceptable risks in these areas.
  - Parcels B (remainder), D-1, G, UC-1, and UC-2

Report Review Schedule

- Draft report submitted May 13, 2013
- Comments due June 28, 2013
- Final report scheduled October 29, 2013