Remediation of the RVSD Larkspur Landing Property:

Progress Update:
Obtaining USEPA Approval for Site Remediation and Closure

(March 16th, 2016)
Introduction

• PCB Impact Summary
• USEPA Meeting Summary
• Path Forward
• Characterization Areas
• Remedial Activities
• Remediation Timeline
• Questions, Answers and Discussions
Site Map
WWTP Demolition Limits

- Site Boundary
- Limits of WWTP Demolition
- Location of Demolished Structure (Approximate)
Backfill Limits

- **Site Boundary**
- **Limits of Construction Backfill**
  - (Initial Imported Soil & crushed concrete)
- **2012 Regraded Area**

**Conceptual Layers**

- **Imported Soil**
- **Concrete Debris**
Representative Cross Sections

Original Ground Surface

Limits of Demolition Excavations
Representative Cross Sections

Original Ground Surface

Crushed Concrete (construction backfill)

Limits of Demolition Excavations
Representative Cross Sections

- Initial Imported Soil (construction backfill)
- Original Ground Surface
- Crushed Concrete (construction backfill)
- Limits of Demolition Excavations
Representative Cross Sections

- Initial Imported Soil (construction backfill)
- Original Ground Surface
- Crushed Concrete (construction backfill)
- Limits of Demolition Excavations
- Historical Remedial Excavations
Representative Cross Sections

- Initial Imported Soil (construction backfill)
- 2012 Regraded Imported Clean Soil
- Original Ground Surface
- Crushed Concrete (construction backfill)
- Limits of Demolition Excavations
- Historical Remedial Excavations
- Clean Soil
USEPA Meeting Summary

• Proposed self-directed remediation option to USEPA:
  - Known remediation endpoint
  - Less discretionary input from USEPA

• USEPA strongly suggests risk-based remediation approach:
  - Can still use known remediation endpoint (0.24 mg/kg)
  - Provides for flexibility in approach and remedial activities
Path Forward

- Identify areas requiring further characterization.
- Prepare Characterization/Remediation Work Plan and obtain USEPA approval.
- Use approved work plan to prepare contractor bid package.
- Characterize Site to address data gaps.
- Implement the remediation project.
- Report results to USEPA for closure approval.
Characterization Areas

- Site Boundary
- Limits of Construction Backfill
- Sidewalk Area
- Drainage Swale
Remedial Activities

- Investigation to characterize materials:
  - Sidewalk area
  - Drainage swale
  - Construction backfill area
- Excavate clean surface materials and stockpile on-site.
- Excavate PCB-impacted soils and dispose:
  - Excavate materials in 1-foot lifts
  - Characterize each lift and dispose
  - Collect confirmation soil samples
Remedial Activities (cont’d)

• Collect confirmation samples.
• Backfill with clean imported material and regrade.
• Obtain no further action determination from USEPA.
• Site is now ready for unrestricted use.
Remediation Timeline

- Work Plan Preparation: 2 months
- USEPA Review/Approve Work Plan: 3 to 4 months
- Contractor Team selection, contract: 2 to 4 months.
- Remediation Work on Site: 3 to 6 months
- Prepare Closure Report: 2 to 3 months
- USEPA Approve Closure Report, Issue NFA: 3 to 6 months
- Overall timeline of 18 to 24 months, with consistent effort.
QUESTIONS, ANSWERS, DISCUSSION....