

# Project Navigator, Ltd.'s Accomplishment over Activity

## Ascon Landfill Site

Huntington Beach, California



### At A Glance

- 38-acre oil field waste landfill, State Superfund Site in Huntington Beach, California.
- A high profile, developable Site located adjacent to residential neighborhoods, a high school, and a community park, and half a mile from the ocean. Contains ~1.4MM cys of oil field wastes and impacted materials.
- Consent Order between DTSC and the Ascon RPs was signed on January 8, 2003 to bring the Site to unrestricted use.
- RPs and PNL successful in modifying DTSC 'approved' remedy for the Site. Current preferred remedy is partial source removal with a protective cap over a large portion of the Site. (Consent Order will require modification.)
- Emergency Action was conducted in 2005 through early 2006 to strengthen berms and mitigate potential seeps after record-breaking winter rains. Interim Removal Measure proposed to DTSC in 2008, to remove approximately 5,000 – 10,000 cy of tars from Lagoons 1 and 2, beginning in 2009.
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### Health and Safety Metrics

- Total Work Hours: 6,920
- OSHA Recordables: 0
- Lost Time/Lost Work Day Incidents: 0
- Near Miss Reports: 0
- Loss Prevention Observations (LPO): 0
- Site Health and Safety Plan updated

### Technical Milestones

- Groundwater Interim Monitoring Reports were submitted to DTSC in April and October 2008. Groundwater being monitored through an interim program to be conducted through Remedial Action.
- Draft Remedial Action Plan submitted to DTSC in September 2007 is still under review.
- Environmental Impact Report process began late 2008, scheduled to conclude in 2010.
- Submitted Draft Initial Study/Mitigated Negative Declaration for Interim Removal Measure to DTSC in November 2008 to remove tars from onsite lagoons during 2009-2010.

### Stakeholder Relations by PNL

- Community outreach for Ascon:
  - Frequent communication and coordination with Huntington Beach Fire Department and other City departments.
  - Public meetings and Open Houses held, briefing community on Emergency Action, Feasibility Study, and overall project status.

# Project Navigator, Ltd.'s Accomplishment over Activity

## BKK West Covina Class I Landfill

West Covina, California



### At A Glance

- BKK Landfill Site encompasses ~583 acres, divided into 3 parcels
  - Parcel 1 is owned by the BKK Corp. and consists of a closed 190-acre Class I Landfill, a closed 170-acre Class III Landfill, and landfill control systems and administrative area.
  - Parcels 2 and 3 are owned by the City of West Covina and are not part of the landfill facility.
- Short term End-State Vision: Perform OM&M on the Class I landfill and develop remedy by performing an EE/CA.
- Long term End-State Vision: Implement remedy for Class I Landfill under a Consent Decree that includes all PRPs (including municipalities).

### Health and Safety

- Total Contractor and Subcontractor Work Hours: ~200,000
- OSHA Recordables: 3
- Lost Time/Lost Work Day Incidents: 1
- Near Misses: 8

### Technical Milestones

- Currently PNL manages the OM&M for the Class I Landfill.
- PNL is participating in negotiations for the 2nd Consent Decree, which includes an E-CA for the Class I Landfill.
- PNL accomplished the mitigation of ambient air exceedances at the Landfill.
- Completed critical tasks related to deferred maintenance of the Landfill control infrastructure.

### Stakeholder Relations by PNL

- The BKK Group has forged an open and cooperative relationship with DTSC.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Malone Superfund Site

Texas City, Texas



### At A Glance

- 150-acre former petroleum waste and chemical reclamation disposal facility.
- Regulatory Jurisdiction: EPA Region 6.
- Malone Cooperating Parties (MCP) have completed the obligations of Administrative Order.
- The MCP has reached a settlement with plaintiffs in landowner lawsuit.
- PNL has agreed to take temporary title to the property via Land Navigator.
- Currently working with Natural Resource Trustees to negotiate a NRD Settlement.

### Health and Safety

- Total 2008 Contractor and Subcontractor Work Hours: Approximately 1500 hours (all of this work was storm water management and hurricane response related)
- OSHA Recordables: None
- Lost Time/Lost Work Day Incidents: None
- Emergency Action Near Miss Reports: None

### Technical Milestones

- EPA has approved the Final FS Report, which completes the RI/FS portion of this project.
- Selected FS alternative is onsite solidification of waste, construction of RCRA cell and monitored natural attenuation of groundwater.
- EPA will defend this selection at a national remedy review board.
- The site's storm levee, damaged during Hurricane Ike, will be repaired.

### Stakeholder Relations by PNL

- Project Navigator is performing as Project Oversight/Coordinator.
- URS is RI/FS contractor.
- Entrix is NRD consultant.
- Project is lead by EPA.
- Monthly meetings and/or conference call with MCP led by Project Navigator.

# Project Navigator, Ltd.'s Accomplishment over Activity

## MAR Services Oil field Site

Cankton, Louisiana



### At A Glance

- 73-acre former oil recovery and commercial oil field waste land farm near Lafayette, LA.
- Soil was impacted with oily soil, metals and salts.
- Shallow groundwater is affected by salt.
- Five 20K-bbl ASTs and numerous smaller tanks containing sludge were the subject of a remedial action program in 2000.
- Undergoing periodic maintenance and monitoring to ensure the salt treatment is achieved.
- Continued monitoring and sampling performed in 2007 for first point of compliance.

### Health and Safety

- OSHA Recordables: None
- Lost Time/Lost Work Day Incidents: None

### Technical Milestones

- An extensive borehole sampling program conducted in 1998 characterized the site.
- Approximately 240 boreholes were drilled and sampling was performed to characterize the site under the provisions of Louisiana Statewide Order 29b.
- In 2000 approximately 25,000 bbl of sludge were removed from the site and the 5 ASTs were scrapped.
- Soil remediation for non-soluble components was achieved by vertical mixing with soil using excavators and other heavy equipment.
- Sodium contamination was addressed using chemical amendments combined with soil mixing.
- Periodic maintenance includes disking and ripping of soil to maintain percolation which enhances sodium remediation.
- Groundwater monitoring includes water level measurement and testing of shallow and drinking water aquifer testing from 14 wells on the site.
- Periodic soil sampling is performed to monitor salt remediation progress.
- 2007 sampling of all cells was performed to monitor the treatment level and assess further work.

### Stakeholder Relations by PNL

- Community leaders, elected officials and the State of Louisiana cooperated with the MAR group to work out a scope and timetable for the work. The public relations campaign implemented to map out the process and progress was instrumental in the success of the project. Periodic updates are provided to the community through the nearby community of Cankton, LA, which serves to maintain good relations as the project continues through the O&M period.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Newark Bay Study Area

Newark, New Jersey



### At A Glance

- ~ 6 miles long and 1 mile wide with impacted sediments influences from and to Passaic River, Hackensack River, many tributaries and New York Harbor.
- ~3.3 MM cu. yd. of potentially impacted sediments that may need to be addressed.
- In 2004 US EPA signed an Administrative Order on Consent with Occidental Chemical Corporation to perform a phased Remedial Investigation of the Newark Bay Study Area that includes portions of the Passaic and Hackensack Rivers, and other water bodies. Remedial Investigation being conducted by Terra Solutions, Inc. on behalf of Occidental Petroleum.
- Fish and shellfish advisories have been in effect for more than 10 years.

### PNA Role

- PRP Group Coordinator for select entities who received General Notice Letters and who are cooperating with Terra Solutions, Inc. (on behalf of Occidental Chemical).
- Data Analysis.
- Geospatial plotting of key Chemicals of Potential Concern (COPC).
- Assess the nature and extent of contamination.
- Prepare strategic options.
- Project scope and budget control and group fund management.

### Technical Milestones

- Obtained all Phase I/II RI data from Terra plus data collected by others.
- Conducted initial analysis of more than 800,000 data points.
- Prepared geospatial plots of key COPC's to demonstrate location and concentration by sediment depth to enhance understanding.
- Created an online information management system to receive, track and search all relevant project information, documents and deliverables. System allows files to be associated with geospatially relevant portion of Newark Bay.

### Stakeholder Relations by PNL

- Coordinate regular meetings and conference calls between GNL Group and Terra Solutions, Inc.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Operating Industries, Inc. (OII) Landfill Site

Monterey Park, California



### At A Glance

- 190-acre landfill with steep slopes over a freeway (N) and residences (S & W).
- The landfill generates 6MM SCF/day of methane and 10 -20K gpd of landfill leachate.
- The South Parcel (SP) gas collection system and cap remedy was constructed from 1997 to 2000, when PNL acted as NCI's President and Project Coordinator.
- The North Parcel (NP) design(s) (for both environmental-only and integrated remedies) were completed in 2007. PNL made a significant contribution to both designs, especially adding value by bringing the designs to life with our 3D visual tools.

### Health and Safety

- Total Contractor and Subcontractor Work Hours: 138,000
- OSHA Recordables: None
- Lost Time/Lost Work Day Incidents: None
- Emergency Action Near Miss Reports: None

### Technical Milestones

- North Parcel cap and containment designs reports were approved by US EPA and Caltrans in 2008.
- The SP remains in gas compliance, both at the cap surface and at the perimeter probes.
- A Perimeter Liquids Control (PLC) system was constructed on the North Central areas of the site in 2008.
- PNL has presented findings regarding the investigation and characterization of Enhanced Oxidation Zones (locales of high (>150F)), and continues to devise mitigation schemes.
- PNL performed upgrades to the installed site wide WiFi system for the collection and management of data collected from digital probes (e.g. temperature).

### Stakeholder Relations by PNL

- Frequent meetings with the City of Monterey Park, the NP developer, and EPA on the plans and schedule to build out the NP integrated remedy and associated retail development.
- Frequent meetings with Caltrans on the NP remedy and the removal of wastes from the 60 Freeway right of way.

# Project Navigator, Ltd.'s Accomplishment over Activity

## PAB Oil and Chemical Service, Inc.

Abbeville, Louisiana



### At A Glance

- 9.4-acre oil field waste disposal area north of Abbeville, Vermilion Parish, Louisiana.
- 3 on-site pits were used to separate oil, water, and solids.
- The site is surrounded by a leaking levee rising 6 to 7 feet above the general grade.
- ~39,000 cu. yds. of oily sludge are held within the levee.
- 3 steel tanks believed to hold liquid "slop" oil.

### Health and Safety

- 2008 Total Contractor and Subcontractor Work Hours: 240
- OSHA Recordables: None
- Lost Time/Lost Work Day Incidents: None
- Emergency Action Near Miss Reports: None

### Technical Milestones

- The former oil field waste site is through its 5-year review.
- The site is in O&M.
- The site groundwater will be sampled two times prior to the next 5-year review.
- The cap is mowed twice per year and the site perimeter cleared and maintained.

### Stakeholder Relations by PNL

- The PAB LLC meets as needed to address technical and legal issues. The last group meeting was in November 2007.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Patrick Bayou Superfund Site

Deer Park, Texas



### At A Glance

- Patrick Bayou is a tributary of the Houston Ship Channel (HSC) and is located near Deer Park, Texas.
- Historical data indicates that sediments are impacted with a range of chemicals include PCBs, PAHs, metals, VOCs and SVOCs.
- Project Navigator is the Project Coordinator for a multi-party PRP Group at this site.

### Health and Safety

- Approximately 25,000 hours worked without incident
- OSHA Recordables: 0 (project total – 1)

### Technical Milestones

- The site is currently in the Remedial Investigation/Feasibility study phase.
- Initial site activities included development of a Preliminary Site Characterization Report and a bathymetry survey.
- Sediment sampling, radiometric profiling, and additional field investigations have been conducted.
- A sediment transport model has been developed and will be refined and further calibrated to determine the rates of natural recovery. The model will be an important risk management tool during the FS. Preliminary findings indicate the model accurately predicts sediment deposition rates across the site and that Monitored Natural Recovery (MNR) can be forecast based on exponential decay curves.
- Use of Adaptive Management Strategies has enhanced project flexibility. In this approach, work is completed and evaluated in a phased and prioritized manner so that the conceptual site models for contaminant sources and distribution, site hydrology, exposure pathways, and risk analyses are continually updated as new information becomes available.
- An innovative probabilistic risk assessment approach will be utilized at the site. Sediment sites typically have a high level of uncertainty and this approach will further improve the understanding of the true risk to receptors at the site. Due to the relatively new science involved, PNL has coordinated training in this methodology for the state agency and Natural Resource Trustees.

### Stakeholder Relations by PNL

- PNL coordinates with the EPA, TCEQ, state and federal Natural Resource trustees and the City of Deer Park.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Purity Oil Sales Superfund Site

Malaga, California



### At A Glance

- 7-acre, former used-oil recycling facility, Federal Superfund Site in Malaga, California (Fresno County).
- A high-profile Site located adjacent to commercial properties.
- Site is located above a sole-source groundwater aquifer.
- Chevron Environmental Management Company (CEMC) is addressing the Site in two Operable Units: OU-1 Groundwater and Tanks; and OU-2 Soil Remediation.

### Health and Safety Metrics for OU-2

- Total Project Work Hours (RECON, SECOR, SAIC, STCI, Project Navigator, Ltd.): 51,920 hours (project total - 199,809 hours)
- OSHA Recordables: 0 (project total – 1)
- Lost Time/Lost Work Day Incidents: 0 (project total – 0)
- Near Loss Reports: 3 (project total – 16)
- Loss Prevention Observations: 107 (project total – 517)
- Job Safety Analyses: 47 (project total – 142)

### Technical Milestones

- Completed construction of OU-2 low-permeability cap in June 2008.
- Initiated OU-1 ERD pilot study in September 2008.
- Conducted soil vapor investigations in January, February, and September 2008 in preparation of the OU-2 soil vapor extraction pilot study.
- Submitted OU-2 Remedial Action Completion Report to EPA in October 2008.
- Submitted OU-2 Soil Vapor Pilot Study work plan to EPA in October 2008.
- Submitted OU-2 O&M manual to EPA in November 2008.

### Stakeholder Relations by PNL

- Submitted OU-2 O&M manual to EPA in November 2008.
- Weekly construction meetings and monthly technical exchange meetings are held with EPA, Tetra Tech (EPA's oversight agency), and the project team.
- Projecttoolbox is used as an online method of storing and organizing all project submittals.
- Weekly photograph progress reports are prepared for the benefit of stakeholders.
- Purity blog site is used as an online method of displaying spatially-referenced data, videos, and photographs for the benefit of stakeholders.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Tex Tin Superfund Site

Texas City, Texas



### At A Glance

- Former WWII tin smelter operated through 1980s.
- 120 acres.
- 7 ponds.
- Soils, slag, groundwater impacted with acid, metals and radioactive materials.
- In 2003, EPA awarded the Tex Tin site the first Superfund "Ready for Reuse Determination" in the nation.

### Health and Safety

- Over 100,000 man-hours worked without a lost time injury.
- Challenges included control of dust containing heavy metals including lead, arsenic and radioactive materials.

### Technical Milestones

- Remedy included demolition of dilapidated buildings, smelter slag and impacted soil treatment and onsite disposal, soil stabilization, acidic water treatment, pond closure, cap and cover of impacted soils, radioactive material control, and installation of evapo-transpiration system.
- Contracting the work as a design-build project expedited the work and reduced what would otherwise have been expended for separate design and construction.
- Innovative use of slurry walls and surface hydraulic controls was devised to reduce future groundwater impact.
- Metallic waste materials were processed and contained on site and materials recycled to the extent possible to offset costs.
- The project was completed in 2003 and the site was issued one of the first Ready for Reuse determinations by EPA in December of 2003. Sale of the site for beneficial reuse was concluded in late 2005.
- PNL continues to manage the project, coordinating O&M activities, EPA relationships, financial aspects, etc. The initial Five Year Review indicated the remedy was performing as designed and all stakeholders are very satisfied.
- PNL has provided oversight for site work including pipeline installations completed by others. Our oversight includes coordination with the PRP Group, EPA, the Site Owners and the companies contracting and performing the work. This ensures compliance with site standards and maintains integrity of the remedy.

### Stakeholder Relations by PNL

- The PRPs engaged a professional public relations firm and along with PNL coordinated meetings and presentations at key project milestones for stakeholders in the project.
- Use of local labor, materials and equipment as well as support from local government and business was a key element of the project.

# Project Navigator, Ltd.'s Accomplishment over Activity

## Waste Disposal, Inc. Superfund Site

Santa Fe Springs, California



### At A Glance

- 40-acre landfill.
- Soil is contaminated with metals, polynuclear aromatic hydrocarbons (PAHs) and volatile organic compounds (VOCs).
- Private school, homes and businesses are located on or adjacent to the site.
- The site is in OM&M and PNL is working with developers to facilitate site reuse.

### Health and Safety

- Total Contractor and Subcontractor Work Hours: 47,682
- OSHA Recordables: None
- Lost Time/Lost Work Day Incidents: None
- Emergency Action Near Miss Reports: None

### Technical Milestones

- FY 2006-2007 OM&M Activities Completed.
- Demonstrated to the satisfaction of EPA/DTSC that the gas being recovered by the LFG Control System is below regulatory thresholds. System converted to passive operation from active operation. Sampling reduced from monthly to 2 times per year.
- Demonstrated to the satisfaction of EPA/DTSC that groundwater remains unaffected by the site. Monitoring frequency reduced from semi-annually to annually.
- Demonstrated to the satisfaction of EPA/DTSC that the VW wells do not need to be sampled quarterly. Sampling reduced from quarterly to semi-annually.
- Issued the Semi-annual OM&M Report.
- Constructed/Operating the LC wells pumping system.
- Have recommended further changes to the OM&M activities including reductions to monitoring of the in-business air, soil vapor, and groundwater and reducing the number of constituents being tested for. These recommendations are supported by evaluations of the empirical data collected to date that shows no exposure to the public and environment from site Chemicals of Concern.

### Stakeholder Relations by PNL

- Meetings and working with various developers to help answer any technical and coordination questions and represent the WDIG to protect the in-place remedy.
- Successfully completed the 1st year of OM&M without issue.
- Presentations and consistent contact with local businesses in close proximity to the site prior to and during the OM&M period.
- Frequent meetings with the local high school located adjacent to the site.