






Getting started is easy. First, you map the boundaries that need to be monitored - or we can do it for you. For example, institutional control boundaries, engineering control boundaries, site boundaries, or limits of a groundwater plume. You can also define multiple sub-areas to differentiate the type of monitoring that needs to be done within a site. Then, we work with you to pick the best and most cost effective suite of monitoring sources, from the list shown below, on a site or sub area-specific basis. And within days, we build you a Site Sentinel - a web-based view of your monitoring areas, sub areas (if relevant) and the monitoring sources and frequency for each area. With your approval, we then activate LandWatch monitoring for your sites. Terradex LandWatch monitors land activities at hundreds of sites nationwide for public and private clients. Terradex's setup and quarterly subscription fees depend on the number of sites and data sources selected.

 Real Estate Activity		 Excavation Activity	
For Sale Listings	<p>Comprehensive real estate sales listing targeted to commercial and residential transactions.</p> <p>Relevance Identifies potential land sales at identified environmental or IC sites.</p> <p>Frequency. Ordinarily compiled continuously (typically daily).</p>	Excavation Clearance	<p>Continuous stream of planned excavation events via direct feed from state One Call centers.</p> <p>Relevance. Identifies potential excavation activities that could compromise or breach environmental remedies or ICs.</p> <p>Frequency. Ordinarily compiled twice per day.</p>
Foreclosure	<p>Public pre-foreclosure and foreclosure notices from commercial and/or government sources.</p> <p>Relevance. Identifies potential or recent foreclosure sales (foreclosure sales can "wipe out" recorded deed restrictions).</p> <p>Frequency. Ordinarily compiled weekly.</p>	Dredging	<p>Public records of federal and/or state government permits for dredge or fill activities.</p> <p>Relevance. Identifies proposed dredging activities that could compromise or breach environmental remedies or ICs.</p> <p>Frequency. Ordinarily compiled monthly.</p>
Property Transfer	<p>Property records and tax assessor records from government and/or commercial sources.</p> <p>Relevance. Identifies the current owner and allows notice to new owners of an institutional or engineering controls.</p> <p>Frequency. Ordinarily compiled monthly.</p>	Street Opening Permits	<p>Public records of local government permits issued for excavation, such as grading permits and street opening permits.</p> <p>Relevance. Identifies excavation, trenching, earth moving and similar activities.</p> <p>Frequency. Ordinarily compiled weekly.</p>
Occupancy	<p>Public records of new utility (e.g., water, electricity) accounts and/or telephone listings, available from commercial and/or government sources for commercial and residential property.</p> <p>Relevance. Identifies new tenants and new occupants at identified environmental or IC sites.</p> <p>Frequency. Ordinarily compiled monthly.</p>	 Sensitive Land Use	
 Land Development		<p>Public records of new occupancy licenses or other type of government approvals, available from commercial and/or government sources, for new childcare centers and schools (as well as hospitals and senior care in some jurisdictions).</p> <p>Relevance. Identifies proposed sensitive uses at or near environmental or IC sites (sensitive uses may comply with zoning but nonetheless jeopardize an IC).</p> <p>Frequency. Ordinarily compiled monthly.</p>	
Building Permits	<p>Public records of city or county building permit issuances, available from commercial and/or government sources.</p> <p>Relevance. Indicates new structure construction or existing structure modification.</p> <p>Frequency. Ordinarily compiled weekly.</p>	 Water Wells	
Land Development	<p>Public records from government and commercial sources as well a news sources related to development applications, construction bids, zoning variances, entitlements, and environmental reviews associated with land development projects.</p> <p>Relevance. Identifies anticipated land uses changes and new development projects.</p> <p>Frequency. Ordinarily compiled monthly.</p>	<p>Public records of water well permits and/or completion reports.</p> <p>Relevance. Indicates new groundwater use.</p> <p>Frequency. Ordinarily compiled monthly.</p>	

Turn the page for more data sources



Environmental Releases

Public records of sites identified as requiring cleanup or remediation by state or federal agencies, available from government sources.

Relevance. The existence of neighboring cleanup sites may impact the management, stewardship, or ICs at identified sites.

Frequency. Quarterly to annually.



Vapor Extraction System Monitoring

Continuous monitoring of Vapor Extraction Systems (VES) performance using VaporTrac remote monitors with status sent via cellular or wireless network.

Relevance. Maintains active remedy integrity by alerting to when distributed VES system fails.

Frequency. Hourly updates to Terradex LandWatch.



Affirmative Obligations

Keeps track of affirmative monitoring duties (e.g., inspections, certifications, notices, etc.) and sends reminders.

Relevance. Institutional and engineering controls embed affirmative obligations for reporting, monitoring and maintenance.

Frequency. Obligations reviewed daily.



Inspection

Mobile web application allowing for the collecting of notes, photos, videos, and signatures for use in the field when inspecting institutional or engineering controls.

Relevance. Streamlines inspection and syncs with Landwatch monitoring results.

Frequency. As determined for compliance or risk management.



Aerial Change Detection

Periodic targeted aerial imagery and then change detection monitoring.

Relevance. Identifies changes across land tracks including new structures, excavations and land disturbances. Provides record of site conditions.

Frequency. Annual frequency typically in summer.

Custom Data Sources

Client specified data sources present in government or third party sources.

Relevance. Any land activity or use data source relevant to site management can be requested for regular collection and review.

Frequency. As determined by client.

Building the Site Sentinel

Getting started with Terradex LandWatch involves the construction of a web-based Site Sentinel like the one shown below. Put simply, the Site Sentinels work as your home base to see your list of monitored sites and, in turn, to view each site's monitored areas, sub areas, and the monitoring sources. Though not necessary, Site Sentinels often link to your key documents, such as environmental covenants, no further action letters, or other documents that relate to land activity monitoring. Through our secure website, you can view Site Sentinels anytime, providing an organized means to quickly view your portfolio of monitored sites.

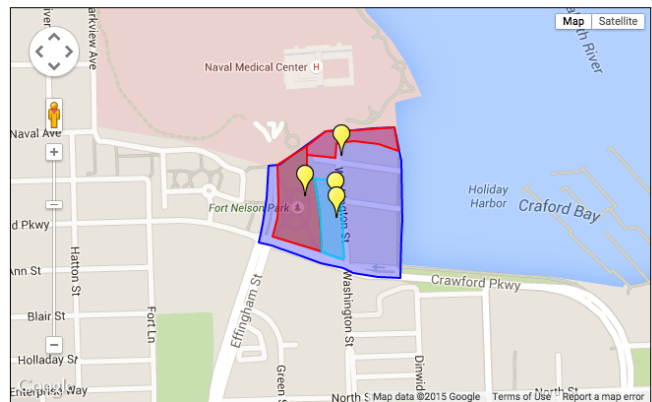
Once setup, LandWatch monitoring begins. See www.terradox.com for details about Landwatch monitoring.

Portsmouth MGP

Swimming Point Neighborhood
Portsmouth, VA 23704

Map

Click map icon for institutional control zone legend.



Site Information

Location Description: An area northeast of the intersection of Effingham Street and Crawford Parkway, now known as the "Swimming Point" neighborhood, in Portsmouth, VA.
Chemicals of Concern: MGP Residuals
Contaminated Media: Groundwater, Soil.

Zone Specific Information

Monitoring Zone Name: Excavation Plan Zone (Purple Area)
Monitoring Zone ID and Type: 5571

Monitoring Source	Description/Frequency	Alert Criteria and Procedure
Excavation Notices	Review of One Call Excavation Ticket. Reviewed each business day.	Alerts will be issued when the excavation appears to extend below two feet.
Water Usage	Review of County Public Health Records. Reviewed monthly.	Alerts will be issued when well permit records show evidence of well installation within Site boundaries.

Follow Up: Terradex will follow-up with an e-mail notification to the primary and secondary alert contacts if the primary alert contact has not responded to the Alert within 5 business days.

LUC Link and/or Other Info: Click To View

Notice Contact Information

Name: Sidney
Organization:
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Merrillville, IN 46410
Phone: 243
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Alert Escalation Role: Primary, receives and responds to alerts

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