# Environmental Site Assessment Tool

Digital Government:
Government to Business

Project Start: September 2018
Project End: September 2019

Contact: Tom Diecidue, CIO

Pennsylvania Office of Administration

Conservation and Environment IT Delivery Center

tdiecidue@pa.gov

(717) 783-0384

# Executive Summary

## Introduction

In 2018, the Department of Environmental Protection received 940 requests for public records under Pennsylvania's Right-to-Know Law (RTKL), the second highest number of any state agency. Nearly half of these requests were for information needed for Phase I Assessments, which are typically conducted by consultants or realtors on behalf of businesses looking to purchase land. These information requests tended to be large, involving multiple bureaus within the department and voluminous paper records.

The RTKL requires agencies to respond to requests within five business days. Agencies may request an extension of an additional 30 calendar days for large or complex requests. However, it was taking the department up to 90 days to compile and provide records for Phase 1 Assessment requests. The goal of the project was to reduce the number of requests related to Phase I Assessments, provide instant access to information, reduce staff time dedicated to responding to requests, and increase agency transparency.

The Environmental Site Assessment (ESA) tool is a GIS-website created to provide self-service access to assessment data and enable an informal request process for additional information outside of the RTKL. The ESA too consists of a user-friendly interface that allows environmental consultants to search for varying types of "Feature Layers" (e.g. Active Storage Tanks, Municipal Waste Operations) within a specified radius of an address or a point that is dropped on a map.  The system will search for and display the results within the buffer on both a map and in tabular format along with additional, publicly available summary information (e.g. Facility Name, Facility Identifier).  Upon request, the system will generate a PDF containing a summary of the interaction. This information can be retained by the consultant. In many instances, especially when nothing is found within the requested buffer, the search results can take the place of a formal public records request.

The solution saves a significant amount of time for both consultants and DEP staff. By taking a more proactive approach in providing access to information upfront, businesses can eliminate submitting as many requests and, in many cases, gain instant access to the data they need.

Within its first year of operation, the ESA Tool was responsible for over 4,100 queries and 400 summary reports; these numbers represent requests that would have been previously submitted as RTKL requests and fulfilled manually by DEP staff. This has resulted in less time businesses have to wait for information and less time and money spent by DEP staff to fulfill these requests – an average of 7 hours per RTKL request at $40 per hour, encompassing benefit costs, totaling $280 in staff time for an average request, resulting in a savings of $148,946.

In a future phase of the ESA Tool, DEP will automatically provide the digitized documents back to the requester, which is expected to achieve much greater usage and savings.

## Concept

In Pennsylvania, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and the Superfund Cleanup Acceleration Act of 1998 require a Phase I Environmental Site Assessment (ESA) to evaluate land associated with real estate and its potential or existing environmental contamination liabilities. This assessment is also required to secure financing to purchase the land. Sampling or testing of the land is not required, but if a site is considered contaminated, a Phase II ESA may need to be conducted.  These statutes drive the need for businesses to have an easily accessible tool to quickly acquire any information necessary to assess land for real estate.

In Phase I, independent inspectors or consultants examine the land in-person and then request further information from the state to conduct a full analysis of the area. Some of this supplemental information may include maps, activity and use limitation records, or aerial photographs. Requests for this information were originally submitted under Pennsylvania's open records statute, known as the Right to Know Law (RTKL). These requests represented 50% of the Department of Environmental Protection's RTKL caseload. As a result, DEP receives the second largest number of RTKL requests of any commonwealth agency.

The overall volume of requests and the complexity required to respond resulted in a backlog. DEP recognized that this issue could be avoided if direct digital access could be granted to inquirers, and thus, kicked off further analysis and a potential plan to mitigate the number of requests to reduce turnaround time. Phase I requests have the most dramatic business impact by delaying any acquisition by at least 35 days when filed as a RTKL.  The work presented with providing information relevant to conducting Phase 1 assessments could be tackled in a relatively short period of time, then delivered to businesses and the public for use.

**Timeline:**

> September 2018 – Environmental Site Assessment Search Tool project began.

> April 2019 – Environmental Site Assessment Search Tool: A Geographical Information System (GIS) tool went live. This allows consultants and realtors to search for information regarding a specific target property and information about other properties of interest within a specified radius.  The results of the search may satisfy the needs of the assessment or can be used to create a more targeted informal or RTKL request.

> September 2019 – Deployed a public-focused version of the ESA Search tool, at the Department of Environmental Protection Secretary's request, enabling members of the general public to search for information regarding a specific target property and information about other properties of interest within a specified radius.

The ESA Tool is part of a larger initiative that addresses a long-term vision for a comprehensive RTKL Portal for DEP to allow external users and businesses to independently search for information and submit requests.

The larger initiative will require digital records, in the OnBase Electronic Content Management System, that are potential matches will be identified and reviewed by DEP staff for applicability and potential

confidentiality or need for redaction. Those identified and selected will be securely sent electronically to the requester.

The first stage of this initiative represents a manageable increment that was selected due to its ability to deliver business results quickly. This initial phase consists of a user-friendly GIS interface that allows environmental consultants to search for varying types of "Feature Layers" (e.g. Active Storage Tanks, Municipal Waste Operations) within a specified radius of an address or a point that is dropped on a map (sensitive data, such as large tanks, certain dams, nuclear plants, are not available to view). The system will search for and display the results within the buffer on both a map and in tabular format along with additional, publicly available summary information (e.g. Facility Name, Facility Identifier). Upon request, the system will generate a PDF containing a summary of the interaction, including:

- Search Layers Requested
- Search Information (e.g. Address, Latitude and Longitude of a point)
- Date and Time of search
- Summary of results found (including if no results found)

This information can be retained by the consultant. In many instances, especially when nothing is found within the requested buffer, this can then take the place of a formal public records request.

The Project team used the Scrum framework, an Agile approach, to manage, develop, and deliver the product. Work within Phase I was broken down into two-week increments to allow for development flexibility with possible industry changes. The Scrum Team consisted of one Scrum Master/Project Manager, one Product Owner, one GIS resource, and one Developer for a period of 6 months. Awareness and adoption communication rollouts involved email campaigns to consultants, DEP web page updates, and Right-to-Know application changes.

- Direct link to view the Environmental Site Assessment Tool:
  https://www.depgis.state.pa.us/esaSearch/

## Significance

Aligning with the NASCIO's State CIO Top Ten Priority of "Digital Government," the ESA Tool leverages the department's new Electronic Content Management repository, OnBase. Using a GIS-enabled portal to search for this content pushes the department to continue upgrading and using digital services to promote accessibility and improve the experience for customers.

Using GIS technology for the ESA tool provides a framework in which scientific data can be easily communicated to any audience in a user-friendly manner. It analyzes spatial location and organizes layers of information into visualizations using maps and 3D scenes. The ESA Tool is innovative in that it streamlines the user experience and is designed specifically to allow for GIS searching and displaying of results based on any and all layers. It is the first system and user experience intended specifically for this purpose – in addition to the front-end searching innovations, it allows for the Phase I Environmental Search consultants and realtors to get immediate results and feedback.

*ESA Tool: search pane located on the left, search results and map with layers on the right of the window.*



*ESA Tool: closeup of Search and Filter pane*
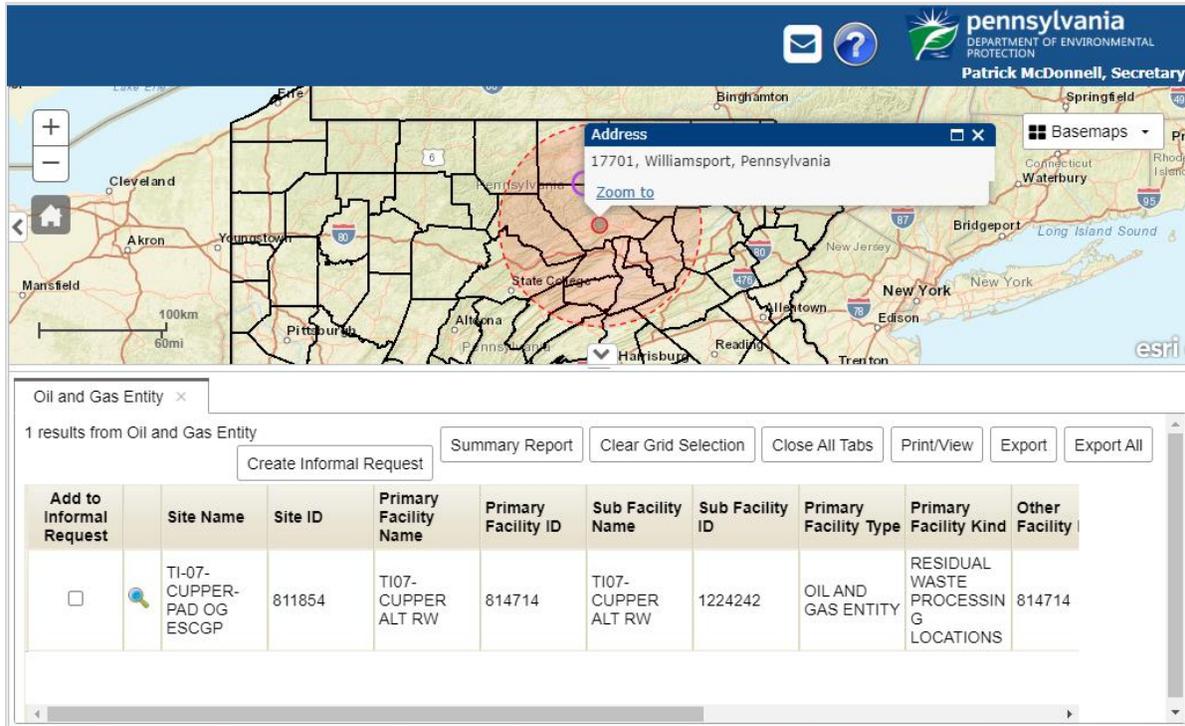
*ESA Tool: closeup of Search and Map results.*

## Impact

Right-to-Know requests for records needed to conduct Phase 1 assessments were previously mailed in, faxed, emailed, or requested over the phone – all fulfillment was manual, which has been part of a larger initiative to identify the need and then retrieve any content pertaining to the request. DEP has 5 business days to respond to the submitter in addition to taking a 30-calendar-day extension to pull together all the information; this can end up as 35 days to complete a request for the business. The ESA Tool promotes transparency with the public and saves consultants and realtors time and money surrounding travel costs if one would need to travel to a DEP office to review any records, cost of duplicating or using flash drives, and acquiring maps; in addition, it helps to decrease the need for a RTKL request by providing immediate results.

Success and effectiveness of the tool is primarily measured by its main objective – the amount of Phase I RTKL requests that need be submitted to DEP from businesses. Within its first year of operation, the ESA Tool was responsible for over 4,100 queries and 400 summary reports; these numbers represent what would have been previously submitted as RTKL requests. This has resulted businesses waiting less time for information and DEP staff spending less time and money fulfilling these requests – an average of 7 hours per RTKL request at $40 per hour, encompassing benefit costs, totaling $280 in staff time for an average request, resulting in an estimated savings of $148,946.

| Phase 1 /ESA | Inception to Date |
|---|---|
| Number of Queries | 4,175 |
| Number of Summary Reports Generated | 404 |

| | |
|---|---:|
| *Reduction in Informal Request/RTK Request* | 531.95 |
| *Rate* | $40 |
| *#Hours Saved* | 7 |
| *Total Savings* | **$148,946.00** |

In the future phase, DEP will automatically provide the digitized documents back to the requester, which is expected to achieve much greater usage and savings.