



Department of Environmental Quality Division of Waste Management

Use of GIS to Improve Public Access & Knowledge
of DWM Site Inventories



Core Program Areas

Division of Waste Management

Superfund Section

Hazardous Waste Section

Solid Waste Section

Underground Storage Tank Section

Brownfields Program



Superfund Section

Investigates and remediates uncontrolled and unregulated hazardous substance and waste disposal sites.

Special Remediation Branch

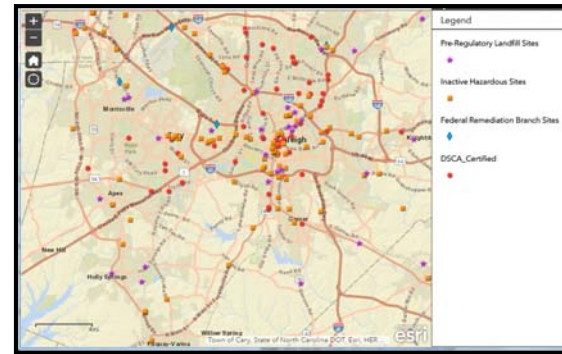
Addresses contamination at dry cleaning sites, under the authority of the Dry-Cleaning Solvent Cleanup Act of 1997.

Federal Remediation Branch

Implements the federal Superfund program in North Carolina for US EPA. Works to apply federal resources on sites with the most severe contamination and on those needing immediate emergency actions. These sites are typically DOD, DOE or NPL sites.

Inactive Hazardous Sites Branch

Responsible for oversight of the assessment and remediation of sites contaminated with hazardous substances. This Branch handles sites that are not regulated by other programs within the Division.

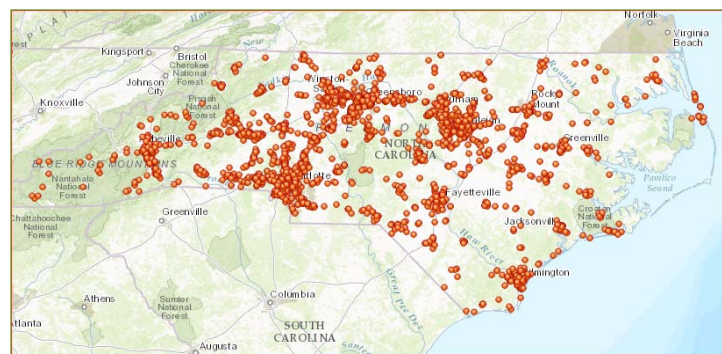


Hazardous Waste Section

Ensures the safe management of hazardous industrial waste by implementing federal regulations adopted under the Resource Conservation and Recovery Act (RCRA) and state requirements.

Types of Sites Include:

- Registered Generators of Large and Small Quantities
- Sites with known contamination
- Facilities Licensed to Transport, Treat and Store Hazardous Waste



Solid Waste Section

Regulates safe management of solid waste through guidance, regulations, permitting, monitoring and compliance evaluation.

Waste types at these facilities include:

- Construction & Demo Debris
- Industrial & Municipal Solid Waste
- Land Clearing
- Scrap Tires
- Medical
- Composting
- Septage

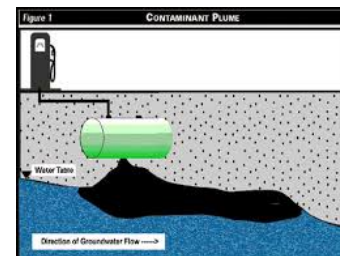


Underground Storage Tank Section

Registers, permits, inspects and collects operating fees for regulated (commercial) underground storage tanks (USTs). Oversees cleanups of releases from USTs and other petroleum spills. Administers the NC Leaking Petroleum UST Cleanup Funds.

Maintain several databases, including:

- Registered USTs (about 32,000 tanks)
- Leaks from USTs
- Petroleum spills, not from USTs



Brownfields Program

Provides a mechanism for treating prospective developers of brownfield sites differently from the parties responsible for contaminating them, to encourage economic redevelopment.

Brownfields Properties are:

Abandoned, idled, or underutilized properties at which redevelopment is hindered by actual environmental contamination or the possibility of environmental contamination.



DWM GIS Data Delivery

New data delivery formats including:

- Shapefile
- Web Service
- Embedded Web Map
- <http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps>

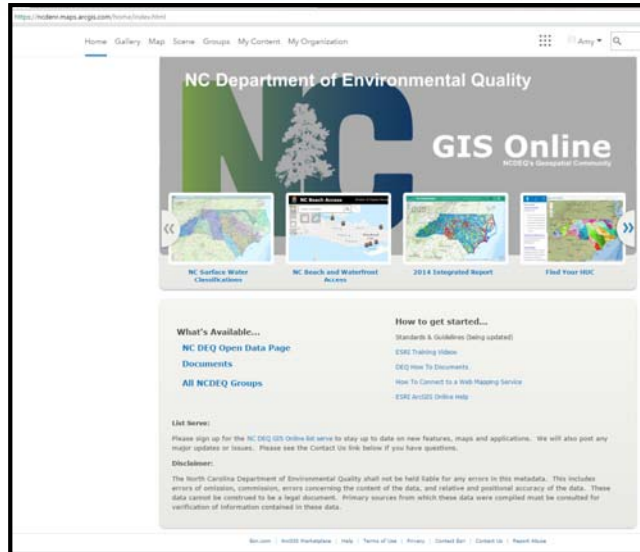
View Map	Description	Shapefile Download	Web Service Link
EPA_2012	Location of sites with a completed Brownfields Agreement as recorded in the 2012 Division of Waste Management Brownfields Register database.	Shapefile	EPA_2012
EPA_2013	Completed Brownfields Agreement sites located as recorded in the 2013 Division of Waste Management Brownfields Register database.	Shapefile	EPA_2013
EPA_2014	Location address and parcel information for sites that have been established in the GIS Program.	Shapefile	EPA_2014
EPA_2015	Location of sites under final contracts that are approved by the Executive Administrator of the Research Triangle and Research Triangle Park.	Shapefile	EPA_2015
EPA_2016	This data set summarizes historical industrial land and adjacent sites (in general) and includes other sites and nearby facilities and a variety of property data. This data "snapshot" shows the first land change was tracked at large numbers of sites at the time of program enactment. The data set includes closed information about that time a land use restriction occurred as part of the remedy.	Shapefile	EPA_2016
EPA_2017	Location of Manufactured Gas Plant (MGP) sites participating in the MGP Assessment and Remediation Program as identified in the Department of Environment and Natural Resources' MGP Inventory.	Shapefile	EPA_2017
EPA_2018	Location of health sites as permitted by the State and local health authority.	Shapefile	EPA_2018



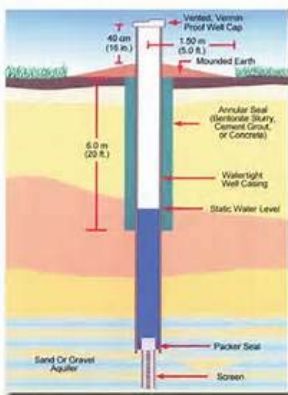
DEQ ArcGIS Online

Departmental ArcGIS Online Website

- Launch of new Applications and Data Services
- Documentation
- Links to other Division/Program data layers
- <https://ncdenr.maps.arcgis.com>



Well Permit Decision Tool Project



Legislative Directive

Regulatory Reform Act of 2013 (SL 2013-413)

Environmental Management Commission shall “adopt rules to provide for notice of known contamination to applicants who seek to construct new private drinking water wells...”

Rules shall

- Govern permits issued for private drinking water wells for circumstances in which the local health department has determined that the proposed site for a private drinking water well is located within 1,000 feet of a known source of release of contamination;
- Provide notice and information of the known source of release of contamination; and
- Share any known risk of issuing a permit for the construction and use of a private drinking water well on such a site.



Well Permitting Decision Tool Project

An Inter-Agency Team to develop the necessary tools and rules to address SL 2013-413 revisions to NC GS 87-97

- Team includes members from DWM, DWR, DHHS and Local County Programs
- Draft a definition of Known Source of Release of Contamination
- Compilation of sites from both DWM and DWR that fall under the definition
- A geographically based Tool built on an ArcGIS Online (AGOL) platform



Draft Definition

“Known source of release of contamination” means a location where any of the following activities, facilities, or conditions have been documented by the Department of Environmental Quality or a local health department:

- Groundwater contamination incidents arising from agricultural operations, including application of agricultural chemicals pursuant to 15A NCAC 02L;
- Groundwater contamination associated with the construction or operation of injection, monitoring, and other wells subject to permitting under the Well Construction Act (G.S. 87-88) and 15A NCAC 02C;
- Groundwater contamination associated with the operation of non- discharge, discharge (NPDES) facilities, land application of animal waste, and other activities subject to permitting under G.S. 143-215.1
- Releases of hazardous waste or constituents that currently exceed the Groundwater Quality Standards listed in 15A NCAC 02L at facilities governed under G.S. 130A-294;
- Dry-Cleaning Solvent Cleanup sites regulated under G.S. 143-215.104;
- Pre-regulatory landfills and Inactive hazardous substance or waste disposal sites governed under the Inactive Hazardous Sites Act of 1987 (North Carolina General Statute 130A-310 et seq);
- Solid waste facilities subject to 15A NCAC 13B that have monitoring wells with exceedances of the Groundwater Protection Standards as defined in 15A NCAC 13A .1634(g) and (h);
- Releases of petroleum and hazardous substances subject to G.S. 143-215.75 through 215.98;
- Sites that fall within the authority of the Brownfields Program as defined by NC General Statute 130A, Article 9 Part 5; or
- Contamination associated with pollution sources in soils or other sites known or suspected to have exceeded the Groundwater Quality Standards listed in 15A NCAC 02L.



Well Permitting Decision Tool

Create an easy to use online tool to help Well Permitting Programs:

- Identify well sites that need notice under G.S. 87-97(e1)
- Inform well owner about potential risks
- Recommend additional sampling to well owner

Use Requirements

- A conversation starter
- NOT a definitive map of all contaminated groundwater
- Be publicly available



Geodatabase Schema



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Demonstration

- Well Permit Decision Tool Application
 - [Demo](#)

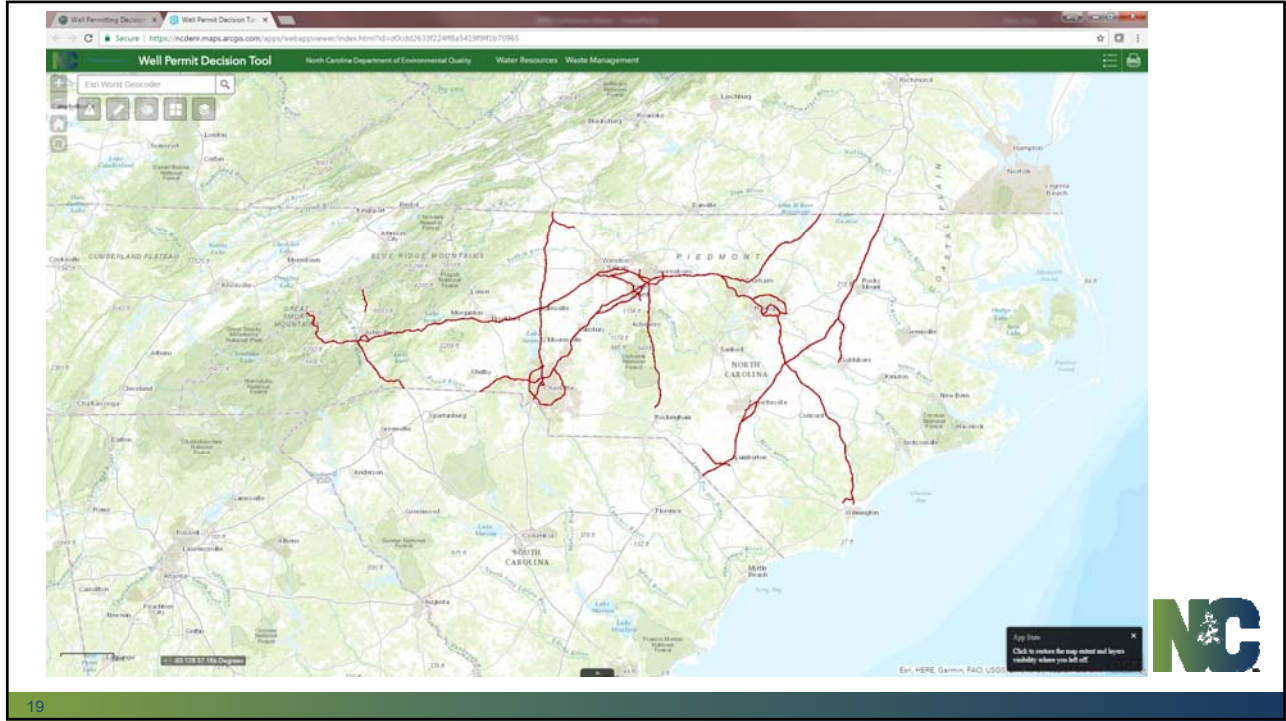




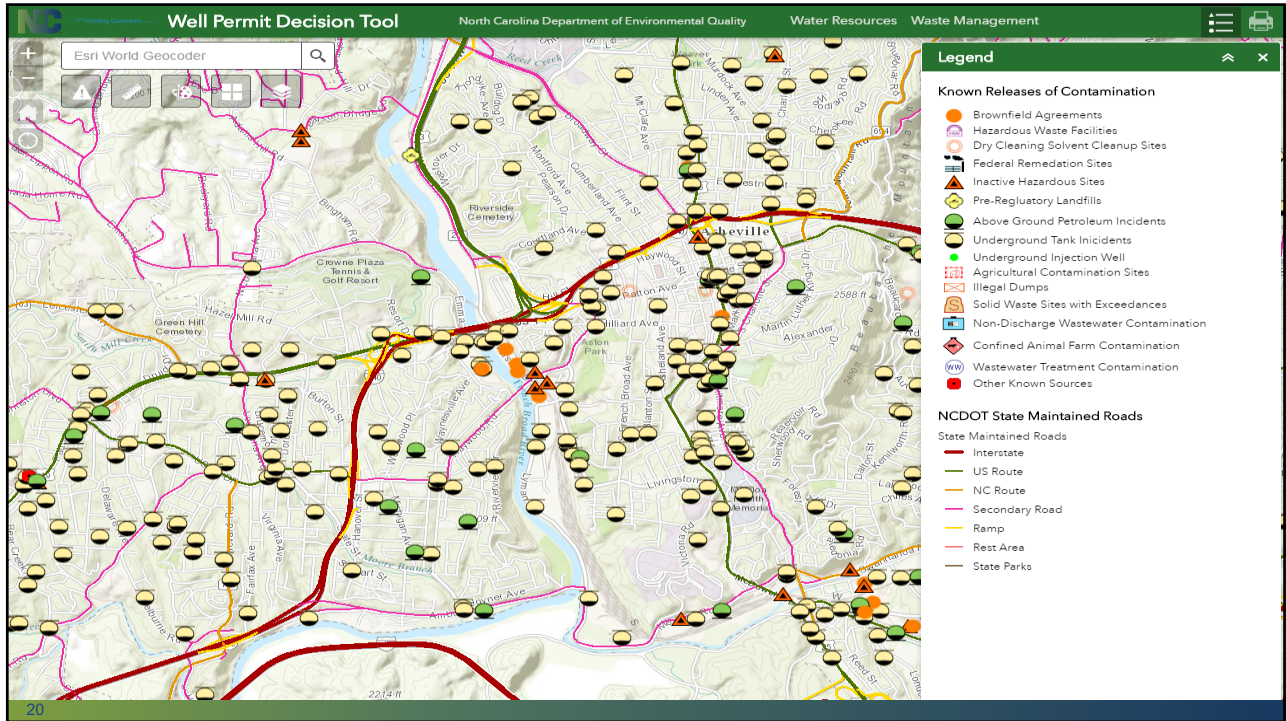
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Division of Waste Management
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Hydrogeologist

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Well Permit Decision Tool North Carolina Department of Environmental Quality Water Resources Waste Management

Esri World Geocoder

Known Releases of Contamination
 This is an Inactive Hazardous Sites site
 Site ID or Record Number:
NONCD0002626
 Site Name:
ROBERTS ST ORGANICS
 Site Address:
**109 ROBERTS ST
 ASHEVILLE**

To query this ID in our online Document Management System (DMS) [Click Here](#)
 To access the Known Releases of Contamination fact sheet [Click Here](#)
[Zoom to](#)

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Well Permitting Decision - x Well Permit Decision To - x Search - Laserfiche WebLink

edocs.deq.nc.gov/WasteManagement/Search.aspx?dbid=0&searchcommand=([WM];[ID]="NCD986188787")

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Template
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 Facility Name/Subject
 Document Date
 from to
 Received Date
 from to
 Description
 Author
 Facility/Site Address

Name	Hits	Facility Name/Subject	ID	Description
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SF_F_NCD986188787_10-06-2006_IHS_PrgMON	0	Asheville Coal Gas Plant #1	NCD986188787	Groundwater Monitoring Report
SF_F_NCD986188787_09-01-2014_IHS_PrgMON	0	Asheville MGP 1	NCD986188787	Groundwater Monitoring Report
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SF_F_NCD986188787_09-01-2012_IHS_PrgMON	0	Asheville MGP 1	NCD986188787	Groundwater Monitoring Report
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SF_F_NCD986188787_08-01-2009_IHS_PrgMON	0	Asheville MGP 1	NCD986188787	Groundwater Monitoring Report
SF_F_NCD986188787_08-01-2007_IHS_PrgMON	0	Asheville MGP 1	NCD986188787	Groundwater Monitoring Report
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SF_F_NCD986188787_08-01-2004_IHS_RAP	0	Asheville MGP 1	NCD986188787	Remedial Action Plan
SF_F_NCD986188787_06-29-2008_IHS_PrgMON	0	Asheville Coal Gas Plant #1	NCD986188787	Groundwater Monitoring Report
SF_F_NCD986188787_06-01-2006_IHS_DPLUR	0	Asheville MGP 1	NCD986188787	Declaration of Perpetual Land Use Restrictions
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SF_F_NCD986188787_05-01-2010_IHS_SAP	0	Asheville MGP 1	NCD986188787	Phase II Environmental Site Assessment Work

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Superfund Section

Description of Dataset

The Superfund Section investigates, prioritizes, monitors and remediates uncontrolled and unregulated hazardous substances and waste disposal sites. The Superfund Section's data presented here is tracked under program areas: The Inactive Hazardous Sites Branch, Dry-Cleaning Solvent Cleanup Act Program and Federal Remediation Branch.

The **Inactive Hazardous Sites Branch** is responsible for oversight and approval of the assessment and remediation of hazardous substances contaminated sites. This includes historical and recent accidental releases of hazardous substances and pollutants, but excludes discharges associated with DEQ permits, agricultural operations, petroleum releases and sites covered by the other Branches in the Section.

The **Dry-Cleaning Solvent Cleanup Act Program's** responsibilities include administration and oversight of the assessment and cleanup of certified dry-cleaning solvent contaminated sites; and conducting compliance inspections and enforcement actions to ensure that active dry-cleaning facilities and wholesale distribution facilities are compliant with applicable regulations.

The **Federal Remediation Branch** works cooperatively with the US EPA to implement the federal Superfund program under the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA). The section helps US EPA apply their resources on sites with the most severe contamination and on those needing immediate emergency actions, while working to identify those few sites where federal enforcement authority will be appropriate.

For more in depth information about the Superfund Section and its programs, please visit their website at <http://deq.nc.gov/about/divisions/waste-management/superfund-section>

All of the sites are on the Superfund Section's inventory due to the high likelihood of contamination being present at the site.

Contaminants potentially present

Superfund Section Sampling Recommendations:

- Volatile Organic Compounds
- Semi-Volatile Organic Compounds
- Hazardous Substance List Metals
- Herbicides and Pesticides


Contact Information

To request additional information related to sites that are managed by the Superfund Section please contact the following Branch Managers:

Inactive Hazardous Sites Branch: Charlotte Jesneck at 919-707-8327 or charlotte.jesneck@ncdenr.gov

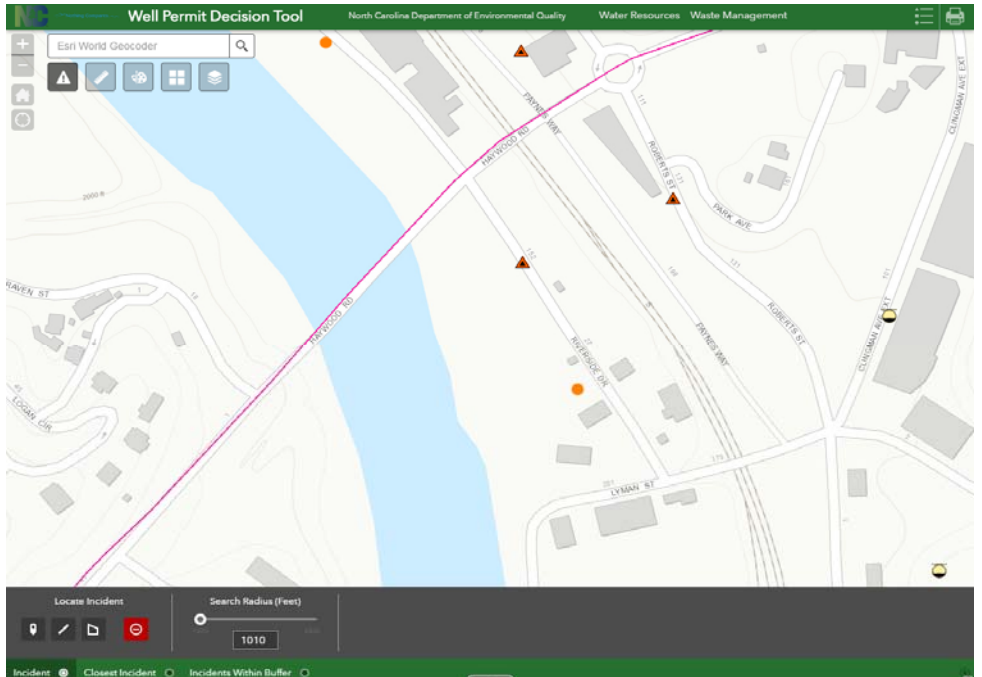
Dry-Cleaning Solvent Cleanup Act Program: Peter Doorn at 919-707-8369 or peter.doorn@ncdenr.gov

Federal Remediation Branch: David Lowm at 919-707-8325 or david.lowm@ncdenr.gov




Well Permit Decision Tool North Carolina Department of Environmental Quality Water Resources Waste Management

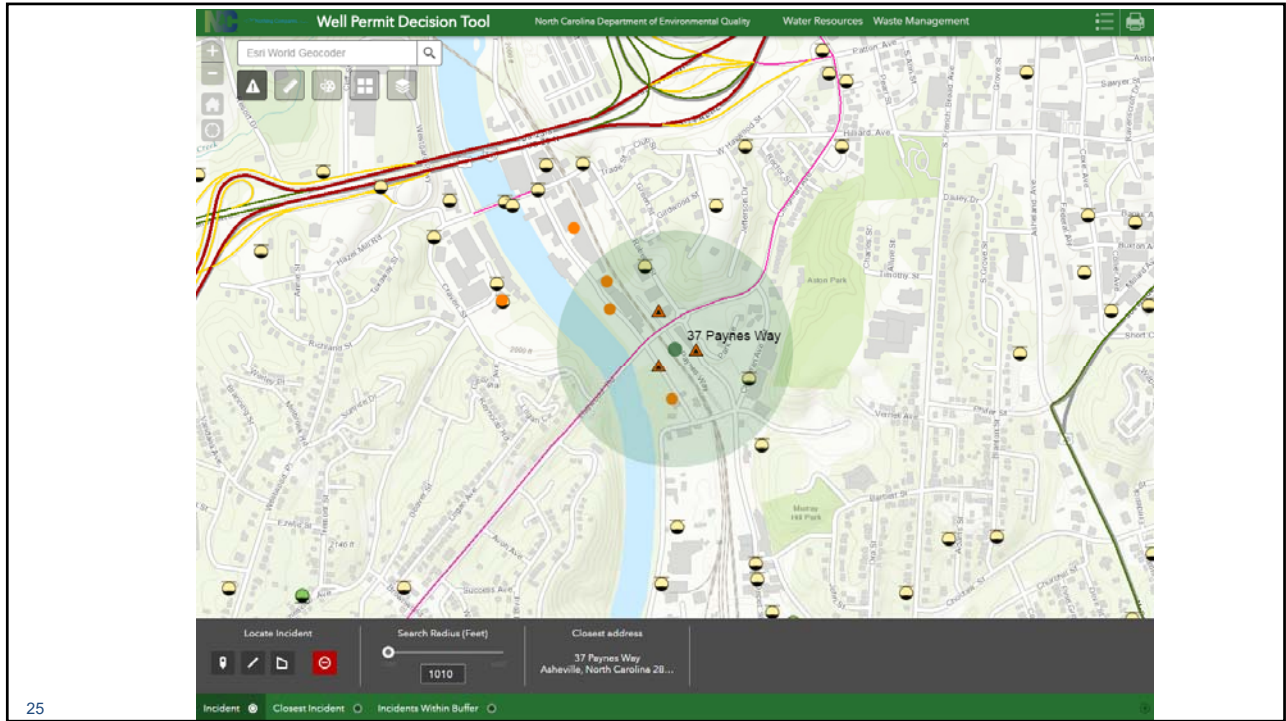
Esri World Geocoder



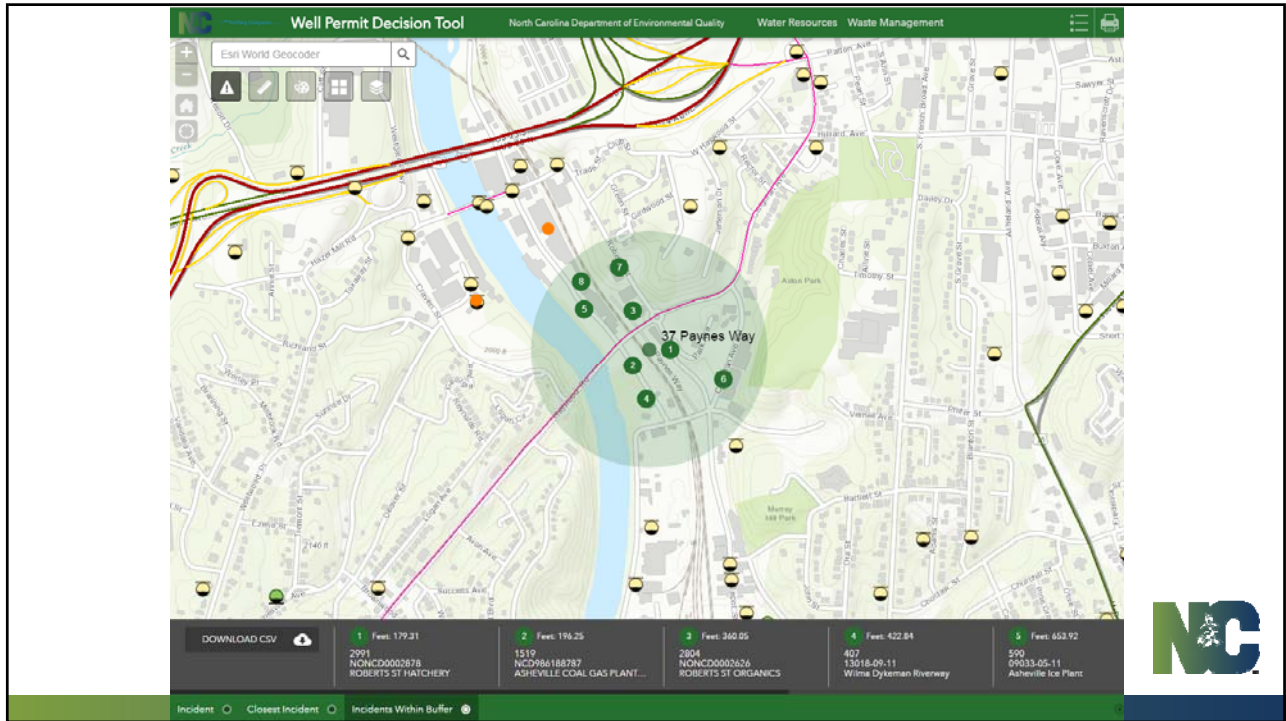
Search Radius (Feet): 1010

Incident Closest Incident Incidents Within Buffer





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	A	B	C	D	E	F	G	H	I	J	K
1	DISTANCE	OBJECTID	SITE_ID	SITE_NAME	SITE_ADDRESS	SITE_CITY	SITE_TYPE	SITE_ACRES	LATITUDE	LONGITUDE	
2	179.3146124	2991	NONCD0002878	ROBERTS ST HATCHERY	144 ROBERTS ST	ASHEVILLE	3		35.58612	-82.56613	
3	196.2465821	1519	NCD986188787	ASHEVILLE COAL GAS PLANT #1	RIVERSIDE DR AT LYMAN ST	ASHEVILLE	3		35.58573	-82.5672	
4	360.0465964	2804	NONCD0002626	ROBERTS ST ORGANICS	109 ROBERTS ST	ASHEVILLE	3		35.58702	-82.56721	
5	422.840969	407	13018-09-11	Wilma Dykeman Riverway		Asheville	1	0.32	35.584951	-82.56681	
6	653.9228157	590	09033-05-11	Asheville Ice Plant		Asheville	1	3.14	35.587068	-82.568594	
7	684.9946057	11386	41170	CLINGMAN AVE LLC PROPERTY	236 CLINGMAN AVE	ASHEVILLE	7		35.5854	-82.5646	
8	748.530423	11183	28978	Duo Investors Property	87 Roberts Street	Asheville	7		35.588042	-82.567598	
9	819.9311791	624	14026-10-11	The Old Wood		Asheville	1	0.49	35.587701	-82.568686	
10											
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12											

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