Department of Environmental Quality
Division of Waste Management

Quick Overview
Well Permitting Decision Tool
• North Carolina Well Permitting Decision Tool (WPDT)

• Purpose
  • Provide county well permitting programs access to an inventory of sites in DEQ’s inventories that fall under the definition of a “known source of release of contamination”.
  • The WPDT enables the well permitters to easily determine what sites (if any) fall within 1000 feet of a proposed well.
• Background
  • NC Regulatory Reform Act of 2013
    • Adopt rules to provide notice if known contamination to applicants who construct new private drinking water wells.

• Details
  • Govern permits issued for private drinking water wells for circumstances in which the local health department has determined that the proposed site for a well is located within 1000 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 well on such site.
• Background – continued
• Collaborative effort
  • Department of Environmental Quality – contaminated sites
  • Department of Health and Human Services – new well permitters

• Hurdles
  • Definition of “known source of release of contamination”
    • Multiple sections means multiple definitions
  • Site a polygon or a point?
    • POINTS
Origins

NC rules prohibit constructing a well in an aquifer or water bearing zone known to be contaminated

- Local Health Departments have some knowledge of where past releases have occurred
- Local Health Departments don’t have access to all details of where the contamination has spread
- EMC shall adopt permitting rules for proposed private drinking water wells within 1,000 ft of a “known source of release of contamination”
- Rules shall provide for
  - notice and information of the known source of release of contamination
  - any known risk of issuing a permit for the construction and use of a private drinking water well on such a site.
- Applicants simply want a permit!
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.
Goal

- Create a simple online tool to allow LHDs to:
  - Identify well sites that need notice directed by rule
  - Inform well owner about potential risks
  - Recommend additional sampling to well owner

- A conversation starter
- NOT a map of potential sources of contamination
- NOT a definitive map of all contaminated groundwater
Known Source of Release of Contamination

- Locations of known sources to the Department of Environmental Quality, Waste Management and Water Resource Divisions
- Basic identifying information
  - Incident / Site number
  - Regulatory program/site category
  - Agency contact information
- Major groups of contaminants (metals, VOCs, CVOCs, pesticides, etc.)
• What to Provide?
  • Geography-based tool, easy to navigate for the general public
    • Ability to search within a given distance; i.e. 1000 feet
    • Generate a report of Incidents within search distance
    • Expose other data if needed
  • Provide information regarding the incidents and what to expect from each
  • Provide access to electronic documents
Known Source of Release of Contamination

• Available Data

Known Releases of Contamination

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site Name</th>
<th>Site Address</th>
<th>Site Type</th>
<th>Acreage</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
</table>

DWM → Known Releases of Contamination → DWR
Can find location by address, coordinate or using device GPS

Types of Sites
Pop-up window provides site data and links to more information
Find features within a buffered distance of a point (proposed well)
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DISTANCE</td>
<td>OBJECTID</td>
<td>SITE_ID</td>
<td>SITE_NAME</td>
<td>SITE_ADDRESS</td>
<td>SITE_CITY</td>
<td>SITE_TYPE</td>
<td>SITE_ACRES</td>
<td>LATITUDE</td>
<td>LONGITUDE</td>
</tr>
<tr>
<td>2</td>
<td>179.3146124</td>
<td>2991</td>
<td>NONCD0002878</td>
<td>ROBERTS ST HATCHERY</td>
<td>144 ROBERTS ST</td>
<td>ASHEVILLE</td>
<td>3</td>
<td>35.58612</td>
<td>-82.56613</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>196.2465821</td>
<td>1519</td>
<td>NCD98618878</td>
<td>ASHEVILLE COAL GAS PLANT #1</td>
<td>RIVERSIDE DR AT LYMAN ST</td>
<td>ASHEVILLE</td>
<td>3</td>
<td>35.58573</td>
<td>-82.5672</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>360.0465964</td>
<td>2804</td>
<td>NONCD0002626</td>
<td>ROBERTS ST ORGANICS</td>
<td>109 ROBERTS ST</td>
<td>ASHEVILLE</td>
<td>3</td>
<td>35.58702</td>
<td>-82.56721</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>422.840969</td>
<td>407</td>
<td>13018-09-11</td>
<td>Wilma Dykeman Riverway</td>
<td>Asheville Ice Plant</td>
<td>Asheville</td>
<td>1</td>
<td>0.32</td>
<td>35.584951</td>
<td>-82.56681</td>
</tr>
<tr>
<td>6</td>
<td>653.9228157</td>
<td>530</td>
<td>09033-05-11</td>
<td>Asheville</td>
<td>Asheville</td>
<td>1</td>
<td>3.14</td>
<td>35.587068</td>
<td>-82.568594</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>684.9946057</td>
<td>11386</td>
<td>11170 CLINGMAN AVE LLC PROPERTY</td>
<td>236 CLINGMAN AVE</td>
<td>Asheville</td>
<td>7</td>
<td>35.5854</td>
<td>-82.5646</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>748.530423</td>
<td>11183</td>
<td>28978</td>
<td>Duo Investors Property</td>
<td>87 Roberts Street</td>
<td>Asheville</td>
<td>7</td>
<td>35.588042</td>
<td>-82.567598</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>819.9311791</td>
<td>624</td>
<td>14026-10-11</td>
<td>The Old Wood</td>
<td>Asheville</td>
<td>1</td>
<td>0.49</td>
<td>35.587701</td>
<td>-82.568866</td>
<td></td>
</tr>
</tbody>
</table>

Example of Download
Application Demonstration