Presentation Map

- Construction Dewatering vs. Remediation
  - Activities Covered
  - Ensuring the right permit coverage through the application process

- Alternatives to these permits
Presentation Map

- Construction Dewatering vs. Remediation
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- Alternatives to these permits
Activities Covered

- Both permits cover discharges to GW and/or SW from construction activities (e.g., excavating, grading)

Photographs by Tom Gore
Activities Covered

- **Construction Dewatering GP**
  - Discharges of *uncontaminated* water that has come into contact with construction activities

- **Remediation GPs**
  - Discharges of *potentially contaminated* water from construction activities

Permit Delays!
Presentation Map

- Construction Dewatering vs. Remediation
  - Activities Covered
  - Ensuring the right permit coverage through the application process

- Alternatives to Permitting
Determining Permit Coverage

**Step 1:** Applicant identifies nearby sources of potential groundwater contamination (due diligence)

- Voluntary Cleanup Programs (VCUPs)
- Corrective Action Sites
- Historical Landfills
- Superfund Sites
- National Priorities List (NPL) Sites

Leaking Underground Storage Tanks
Submitting Data with the Permit Application

Step 2: As needed, collect a water sample and submit analytical data for the proposed discharge
### Determining Permit Coverage

**Required* Monitoring Parameters**

<table>
<thead>
<tr>
<th>Project Location Relative to a Source of Potential Groundwater Contamination</th>
<th>Analytical Data Likely to be Required with the Permit Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within 0.5 mile</strong> of an <em>open</em> Leaking Underground Storage Tank (LUST) site</td>
<td>Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) only</td>
</tr>
<tr>
<td>(Note that closed LUSTs are assumed to pose a low risk for potential groundwater contamination and, therefore, the submission of analytical data based on proximity to a closed LUST is not required)</td>
<td></td>
</tr>
<tr>
<td><strong>Within 0.5 mile</strong> of a Voluntary Cleanup (VCUP) site</td>
<td>Metals/Volatiles/Semi-volatiles (as listed in the permit application)</td>
</tr>
<tr>
<td><strong>Within 0.5 mile</strong> of an Environmental Covenant</td>
<td></td>
</tr>
<tr>
<td><strong>Within 0.5 mile</strong> of an <em>open</em> Resource Conservation Recovery Act (RCRA) Corrective Action Site</td>
<td><em>Note: Additional parameters may be required</em></td>
</tr>
<tr>
<td><strong>Within 1.0 mile</strong> or more of a Superfund site or National Priorities List (NPL) site with associated groundwater contamination</td>
<td></td>
</tr>
</tbody>
</table>

*Monitoring for the indicated parameters is required unless the permit applicant can demonstrate that the source of contamination does not impact the construction dewatering site*
Identifying Potential Sources of Contamination

- **Leaking Underground Storage Tanks (LUSTs):**
  CO Division of Oil and Public Safety - Storage Tank Information System (“COSTIS”):
  [http://costis.cdle.state.co.us/home.asp](http://costis.cdle.state.co.us/home.asp)

- **Voluntary Cleanup Sites (VCUPs):** CDPHE
  Hazardous Materials and Waste Management Division (HMWMD) - List of VCUPs by County:
  [https://www.colorado.gov/pacific/cdphe/voluntary-cleanup](https://www.colorado.gov/pacific/cdphe/voluntary-cleanup)
Identifying Potential Sources of Contamination

- **Environmental Covenants:**

- **Superfund Sites:**
  [https://www.colorado.gov/pacific/cdphe/superfund-sites](https://www.colorado.gov/pacific/cdphe/superfund-sites)

- **RCRA Corrective Action (RCRA) Sites:**
  [www.epa.gov/myenvironment](http://www.epa.gov/myenvironment)
Identifying Potential Sources of Contamination

- Contact the Permits Section for assistance at 303-692-3500.
Submitting Data with the Permit Application

Step 3: Submit a complete permit application.

- **No known GW contamination**
  - No analytical data required
  - Construction Dewatering GP

- **Known potential GW contamination**
  - Analytical data is required
  - May be Construction Dewatering or Remediation GP
Step 4: Upon application receipt, the Division will:

- **Review** your application and due diligence effort
- **Evaluate** any data submitted with the application
- **Request** data as needed
Reasonable Potential (RP) Analysis

Is there “reasonable potential” for a constituent in your discharge to exceed a water quality standard?
Reasonable Potential (RP) Analysis

Are Detected Concs > ½ Water Quality Standards?

No  ➔  Construction Dewatering GP
Yes ➔  Remediation GP
### Step 5: Division Issues Permit Certification

**Construction Dewatering Permit Certification**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>30-Day Average</th>
<th>7-Day Average</th>
<th>Daily Max.</th>
<th>Monitoring Frequency</th>
<th>Sample Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH, (Min-Max)</td>
<td>s.u.</td>
<td>NA</td>
<td>NA</td>
<td>6.5 -8.5</td>
<td>Weekly</td>
<td>In-situ</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/l</td>
<td>30</td>
<td>45</td>
<td>NA</td>
<td>Weekly</td>
<td>Grab</td>
</tr>
<tr>
<td>Flow</td>
<td>gpm</td>
<td>NA</td>
<td>NA</td>
<td>600</td>
<td>Weekly</td>
<td>Instantaneous or Continuous</td>
</tr>
<tr>
<td>Oil and Grease Visual</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Weekly</td>
<td>Visual</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>mg/l</td>
<td>NA</td>
<td>NA</td>
<td>10</td>
<td>Weekly</td>
<td>Grab</td>
</tr>
</tbody>
</table>

**Remediation Permit Certification (example)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>30-Day Average</th>
<th>7-Day Average</th>
<th>Monitoring Frequency</th>
<th>Sample Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (Total Recoverable)</td>
<td>ug/l</td>
<td>3</td>
<td>NA</td>
<td>NA</td>
<td>Weekly</td>
</tr>
<tr>
<td>Uranium (Total Recoverable)</td>
<td>ug/l</td>
<td>30</td>
<td>NA</td>
<td>NA</td>
<td>Weekly</td>
</tr>
</tbody>
</table>
## Construction Dewatering vs. Remediation

<table>
<thead>
<tr>
<th>Permit Type</th>
<th>What type of discharge?</th>
<th>Limited Parameters</th>
<th>Type of Treatment</th>
</tr>
</thead>
</table>
| Construction Dewatering| Uncontaminated source water encountered during construction | - Flow  
- TSS or TDS  
- pH  
- Oil & Grease  
- E. Coli/Total Coliform  
- BTEX | Passive Treatment Only |
| Remediation Discharges | Potentially Contaminated source water               | Same as above, *plus*:  
- Organics, Inorganics, Metals, Rads, etc. | Active Treatment May be Required |
Overview of Permit Application Process

1. Does the source water that will be discharged have the potential to be contaminated?
   - Use Table 1

   a. Yes
      - What is the contamination source?
        - Use Table 1
      - LUST
        - Analyze a representative sample of source water for BTEX
      - Other
        - Analyze a representative sample of source water for the parameters in Attachment 1

   b. No
      - Is the project associated with the discharge permitted under a Stormwater Discharge Associated with Construction Activities (COR030000) Permit?
      - No
        - See the Division's Low Risk Discharge Guidance: Discharges of Uncontaminated Groundwater to Land Policy for applicability
      - Yes
        - This is an allowable discharge to ground within the permitted boundaries covered under the COR030000 General Permit (see Part I.D.3.d)

2. BTEX sampling results were less than 1/2" the water quality standard for the receiving water
   - Discharge may be covered under Construction Devaterning (COG070000) See Table 2

3. BTEX sampling results were greater than 1/2" the water quality standard for the receiving water
   - The sampling results are less than 1/2" the water quality standards for the analyzed parameters
     - Discharge may be covered under Construction Devaterning (COG070000) See Table 2
   - The sampling results are greater than 1/2" the water quality standards for the analyzed parameters
     - Discharge may be covered under Remediation Discharges to Groundwater (COG316000) See Table 2

4. If the above two options do not cover the discharge, the discharge may be covered under Construction Devaterning (COG070000) See Table 2

5. If the above two options do not cover the discharge, the discharge may be covered under Remediation Discharges to Surface Water (COG315000) See Table 2

6. Discharge may be covered under Remediation Discharges to Groundwater (COG316000) See Table 2
Presentation Map

- Construction Dewatering vs. Remediation
  - Activities Covered
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- Alternatives to these permits
Alternatives to these Permits

- Discharge Under Your Construction Stormwater Permit
- Low Risk Discharge Policy
- Ship Water Offsite
- Beneficial Use
Discharge Under Your Construction Stormwater Permit

- Source water is uncontaminated GW (due diligence)
- Source is identified in SWMP
- Land application only
- No runoff

Photograph by Tom Gore
Low Risk Discharges
Water Quality Policy 27

- Source water is uncontaminated GW (due diligence)
- Land application only
- Low risk criteria apply

- Low Risk = No CDPS Permit Required
Ship Contaminated Water for Lawful Disposal Offsite

- No Discharge = No permit required
- Determine water rights first
Beneficial Use of Construction Generated Water

- Find approved beneficial uses
  - Application rates matter
- Determine water rights first
Beneficial Use Contacts

- **Beneficial Use Questions:**
  - CDPHE Solid Waste Program
  - 303-692-3320
  - Toll-free 1-888-569-1831 Ext 3320

- **Water Rights:**
  - State Engineer Office
  - 303-866-3581
WQCD Permit Section
Contact Information

[Link to WQCD Permit Section Website]

- Permit Section Main Line:
  - 303-692-3500

- Margo Griffin, Permit Writer
  - 303-692-3607
  - Margo.Griffin@state.co.us