Hydrovac Code of Practice

Engagement Information

Hydrovac Sector Session

June 2021

Agenda

- Overview of Code and WCR Proposed Changes
- COP - Components
- Next steps
- Additional Questions?

What the Code **Cannot** do

- The code cannot incorporate site specific conditions.
- The Director cannot authorize deviations from the Code.
  - The code is rigid – like a regulation.
- This code does not provide guidance on general land applications of waste.
- Cannot be used until referenced in regulation.

What the Code Can Do

- The Code provides requirement associated with the registration, construction, operation and closure of a hydrovac facility.
- The Code can add list design elements which change based on specific conditions.
  - Example: High water table
- The Code can allow for Director authorizations, when they come from the regulation or the Act.
  - Example: the Code language will not restricted the material from following that authorization.

Engagement in December 2020 included:

- a draft code of practice for hydrovac facilities and
- proposed changes to the Waste Control Regulation

So what is new?

Code Changes

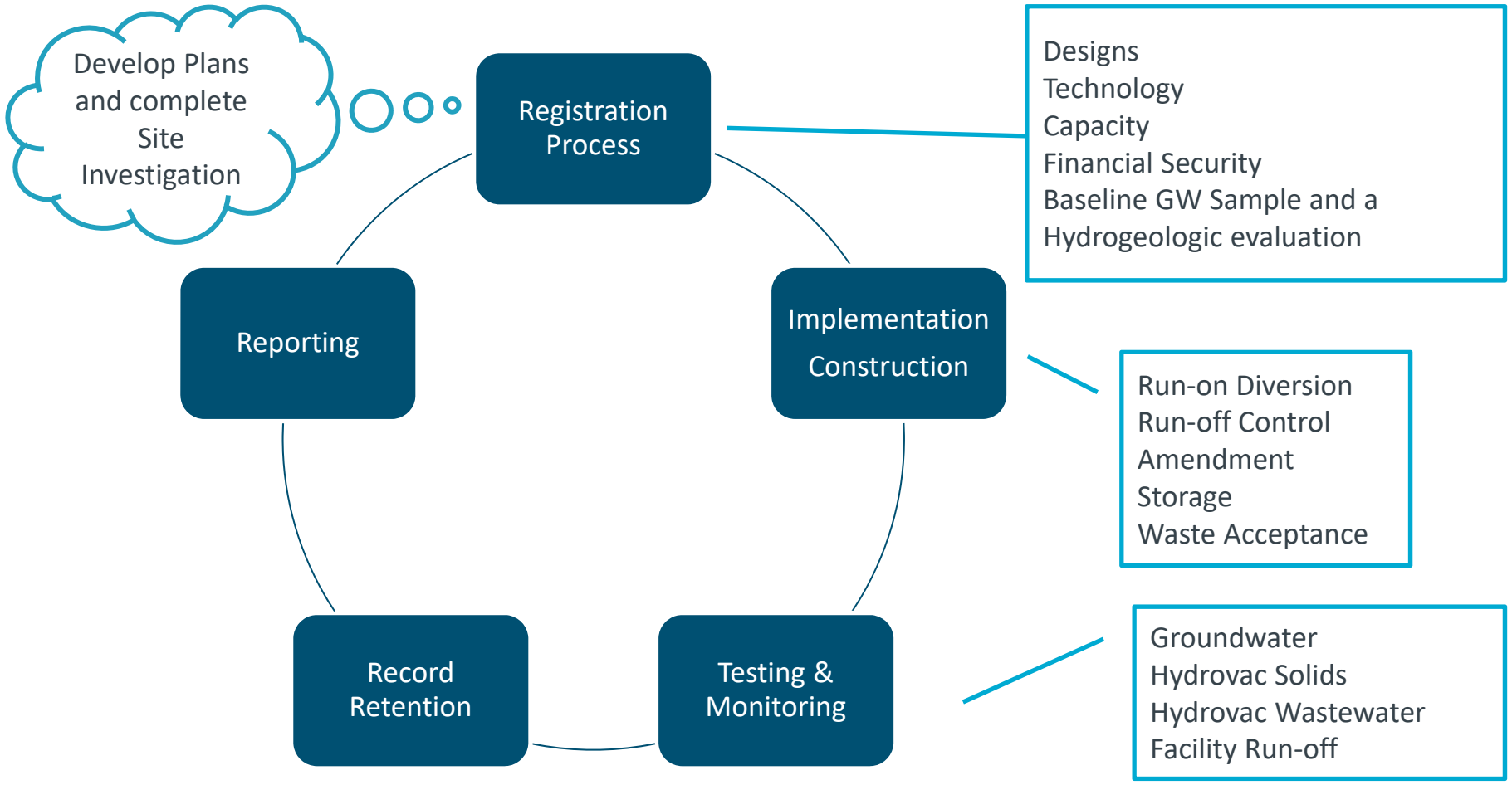
- Storage Site – removed
- Mobile (on-site) - removed
- Reuse Liquids – no change
- Re-use Solids
  - Land Use references are now the most stringent of:
  - residential and agricultural.

This allows for unrestricted use, unlike an EPEA approval.

Waste Control

- Earth - no changes
- Inert – no changes
- Reclamation – no changes

- Dispose – looking at options to remove as a definition (the Act already provides a definition)


Develop Plans and complete Site Investigation
Registration Process
Designs
Technology
Capacity
Financial Security
Baseline GW Sample and a Hydrogeologic evaluation
Implementation Construction
Run-on Diversion
Run-off Control
Amendment
Storage
Waste Acceptance
Testing & Monitoring
Groundwater
Hydrovac Solids
Hydrovac Wastewater
Facility Run-off
Record Retention
Reporting

Registration Process

Facility Design and Specifications (detail in Section 4)

- Technology information
- Chemicals/Amendments
- Design Capacity (Dimensions & Volume in meters)
- Minimum containment (tank, bin, ½ meter clay liner for solids, 1 meter clay liner for retention pond and liquids, alternative materials)

Registration Process

Facility Design and Specifications

- Run-on and run-off control systems
- Groundwater monitoring
  - Baseline testing
  - Hydrogeologic evaluation
- Site Plan (include topography, nearby developments, cross-section of working surfaces and ponds)

Registration Process

Soil Conservation Plan (detail in Section 5)

- Background sample of soil quality
- Plans to conserve on site topsoil and subsoil, including:
  - this material is required to remain on-site,
  - away from the active area,
  - topsoil and subsoils piles are separate, and
  - away from other stockpiles to prevent admixing.
- Mapping showing the locations and volumes of each stockpile

Registration Process

Operations plan (detail in Section 6)

1. Acceptance criteria
2. Inspection procedures
3. Site Security
4. Inspecting of working surfaces
5. Testing and Wastewater management
6. Waste Disposal Procedures
7. Emergency Response Plan
8. Reporting plan

New Components to Operational limits

Waste Limitations

- Hazardous Waste
- DOW Waste (regulated by AER)
- Biomedical
- Radioactive and CNCS regulated
- Explosives
- NORM waste
- Car wash waste
- Industrial sump waste
- Biosolids, Septage** (Does not include soil contaminated hydrovac around municipal sewer lines, add special handling)
- MSW
- Drilling waste (regulated by AER)
- Waste containing Sulphur
- Waste containing Asbestos

Registration Process

Groundwater Monitoring Plan (details in Section 7)

- Baseline water Sample
- A plan to collect 2 samples each year for four years (8 samples)
- A plan to develop Groundwater Control Limits
    - statistical analysis to calculate the standard deviation and the mean for naturally occurring parameters.
    - upper control limit is 3 standard deviations from mean
- A plan to sample annually, once control limits established
- Outline a groundwater response plan

Construction and Facility Components

See Facility Design Plans and Specifications (registered and authorized)

- Construct to Design Capacity
- Ensure containment
- Run-on and run-off control systems

Operational Obligations

- Operations Plan (registered and authorized)
  - Waste Acceptance
  - Waste Rejections
- Signage
- Reporting
- Testing Methods (see Section 11)

COP - Components

Groundwater Quality Monitoring (Section 12)

1. Implement GW monitoring Program (as submitted)
2. Groundwater and Well protection
3. GW well repair - Repair, Replace, Decommission (within two years)
4. Recordkeeping
    1. Purging and sampling,
    2. Elevation of GW,
    3. Temperature,
    4. pH and
    5. EC

Any remediation would also trigger reporting.

Important Components to the Code

1. Hydrovac Wastewater (Section 13)
    1. Sampling 250 cubic meters for release or use
2. Run-off (Section14)
    1. Batch sample – prior to release
3. Hydrovac Solids (section 15)
    1. Sampling 250 cubic meters for use

Important Components to the Code

Run-off, Hydrovac Wastewater, Hydrovac Solids limits

Must not: use, offer, give away, trade or sell unless

- Meets outlined criteria (see Schedule C and Schedule E)
  - Hydrovac Solids
- does not contain any additives that do not pass toxicity test (such as Microtox)

Reporting and Record Keeping (5 years)

- Annual reports
- Public Complaint(s)
- GW Monitoring
- Inspection and Maintenance Records
- Contravention(s)
- Analytical and volume reporting as required (section 12, 13, 14, 15)
- Release reporting

Final Closure - Site Restoration

- **Plan** - Within 6 months of the last day on which a hydrovac facility accepts waste, submit to the Director, in writing, a final closure **plan**.
  - The Director review for deficiencies, if none, authorizes the plan and then implementation occurs.
  - Closure Implementation timelines are included in the plan.
- **Report** - The facility must submit the final closure **report** to the Director within 6 months of the facility completing the final closure as referred to in the above authorized plan.

Next Steps

July 12, 2021 is the Last Day for Comments

Email comments to:
AEP.WasteRegulation@gov.ab.ca

Questions?