Case Study in Brownfield Redevelopment: From Legacy Landfill to New Home Stadium of the Fighting Fishermen

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History

Landfill Background

Project Background

Community Partnership

- Close and Cap Landfill
- New Sports complex for school district
- Possible new revenue source for school district
- Existing football field can be redeveloped as hospital campus expansion

1965 - Opened

1978 - Uncontrolled leachate discharge, DEQ requires closure

Closure Permit issued in 1986

Transfer Station built in 1985

Landfill Background

City of Astoria
Astoria School District
Recology Western Oregon
Columbia Memorial Hospital
Young's Bay
Project Site
Cove
Cove
4-Party Agreement

- Each party is a signer to the agreement
- Defined relationships between parties and expected outcomes (36 pages)
  - Costs
  - Property transfers/leases
  - Warranties
  - Deed restrictions

Project Funding

- $1,445,000 Remediation
- $6,041,000 Athletic Complex Dev.

- Columbia Memorial Hospital
  - $6,250,000
- City of Astoria
  - $795,000
- Astoria School District
  - $200,000
- Recology Western Oregon
  - $141,000
- Oregon Dept. of Env. Quality
  - $100,000

Design Considerations

1. Settlement of the landfill;
2. Capping of the landfill;
3. Landfill gas collection;
4. Subsurface water flow;
5. Stormwater runoff collection/conveyance;
6. Minimize disruption in the operation of the Transfer Station.

Settlement of the Landfill

- Rock Surcharge
  - 20,000 cy
  - Placed in three stages
  - Two months min
  - VIDEO LINK

Capping of the Landfill

- Closure required by DEQ:
  - 30” minimum compacted clay soil cap
  - 2% minimum overland slopes
- Cover systems for development
  - Asphalt pavement & gravel
  - LLDPE under field
  - HDPE under buildings
  - PVC liner in ditches
Capping of the Landfill

Landfill Gas Collection

Methane Controls in Buildings

Stormwater Controls
Before (March 2014)

Communicate with reviewing agencies early and often.

Public/Private Partnerships

Learned from other landfill redevelopments.

Need to educate our clients about the reality of obstacles during brownfield redevelopment.

Lessons Learned
Ribbon Cutting

Thank You

Questions?

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