

AE Associated Engineering

Regional District of Kitimat-Stikine Overall Solid Waste Mgt. Summary

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Landfills in the RDKS

- RDKS operates several landfills:
 - Thornhill
 - Rosswood
 - Hazelton
 - Kitwanga
 - Meziadin Junction
 - Iskut

Landfills in the RDKS

- Municipally Owned and Operated landfills:
 - City of Terrace (on Kalum Lake Road)
 - District of Kitimat (off highway, N. of Kitimat)
 - District of Stewart
 - Dease Lake (Ministry of Transportation)
- First Nations Landfills to which RDKS contributes:
 - New Aiyansh (Gittlakdamix)
 - Telegraph Creek (Tahltan)

Landfill Locations

Landfill Operator

- **Regional District of Kitimat-Stikine**
 - Iskut
 - Meziadin
 - Kitwanga
 - Rosswood
 - Hazelton
 - Thornhill
 - Forceman Ridge
- **Ministry of Transportation**
 - Dease Lake
- **First Nations Municipal**
 - Telegraph Creek
 - Stewart
 - Aiyansh
 - City of Terrace
 - District of Kitimat
- **Closed Facilities**
 - Kopix Village
 - Gangole
 - Langley/Up
 - Iskut

Current Planning for RDKS landfills

- **Thornhill:**
 - Potential for additional capacity with lateral expansion and treatment upgrades
 - Intent is to close it and convert it to a transfer station
 - Contingent on the approval of a new landfill at Forceman Ridge (more later)

Thornhill LF Planning (cont'd)

- When/if it becomes a transfer station, there will also be a mandatory collection service
- This collection service is intended to include both garbage and recyclables
- Collection service would decrease vehicle traffic at the transfer station and new landfill

Current Planning for RDKS landfills

- **Rosswood:**
 - Located North of Terrace on road to Nass Valley
 - 25 yr Operation Plan done in 1999
 - Operating well, without issue
 - Has bear fence



Current Planning for RDKS landfills

- **Hazelton:**
 - Existing permitted site has limited expansion possibilities
 - Existing site has bear fence but no leachate collection or treatment
 - Monitoring shows no significant issues
 - Siting study resulted in plan to expand existing site
 - Expansion and upgrade (leachate collection and treatment) may cost in the order of \$2.5 million
 - Pending Ministry Approval contingent on continued First Nations consultation
 - More detail available (if needed)



Current Planning for RDKS landfills

- **Kitwanga:**
 - Site is filling rapidly under current filling plan and footprint
 - Could be expanded but with great difficulty
 - Planning is currently focused on closure and conversion to transfer station
 - Transfer station design contingent on destination landfill
 - Destination is not clear at this point (because of Hazelton landfill expansion issues)
 - Clarity required soon



Current Planning for RDKS landfills

- **Meziadin Junction:**
 - Sited as a result of 1995 Regional Solid Waste Mgt Plan (needed a LF in the area)
 - Commissioned in 2001
 - Large site, sized to accommodate the District of Stewart in the future, if required
 - Current cell is equipped with leachate collection and treatment
 - Equipped with a bear fence from Day 1
 - Seen as model Northern BC landfill by MoE.



Current planning for RDKS Landfills

- **Iskut:**
 - Very small landfill
 - Serves RDKS and local First Nations (fee for service agreement in place)
 - Recently established hours of operation (restricted access) with site attendant
 - Plans for bear fencing in 2009



Current Planning at First Nations LFs

- **Nass Valley – Gittlakdamix:**
 - Aiyansh LF serves the Nass Valley and has sufficient capacity for many years
 - RDKS contributes to its operation for off-reserve users
- **Telegraph Creek:**
 - Non-permitted site
 - Operated by the Tahltan Band
 - RDKS contributes to its operation for off-reserve users
 - Plans are re-emerging for finding a new site

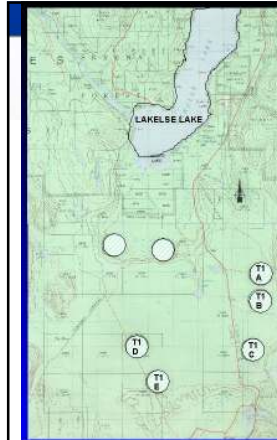


Forceman Ridge LF (proposed)

- This proposed LF is located south of Terrace, 1 km east of Onion Lake
- The site is a result of a study that was started in 1996
- Conceptual LF was proposed to MoE in 2002
- Efforts since then have mainly revolved around consultation with First Nations



Candidate Site Map



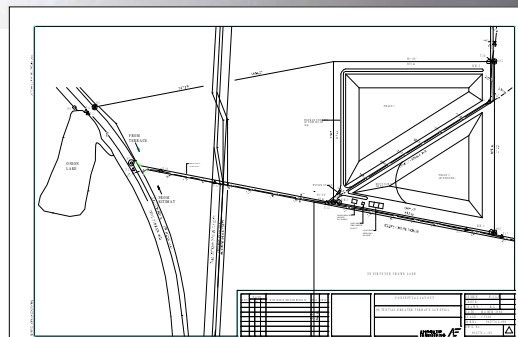
- There were also sites west of the airport
- The numbered sites were selected for test pitting after the initial site reconnaissance



Proposed Forceman Ridge LF



Conceptual Site Design and Layout



Forceman Ridge (continued)

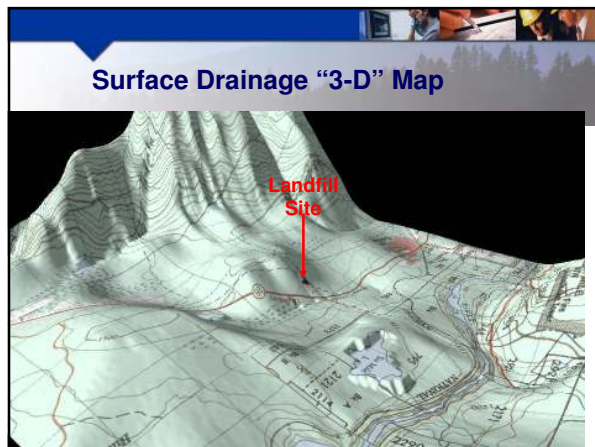
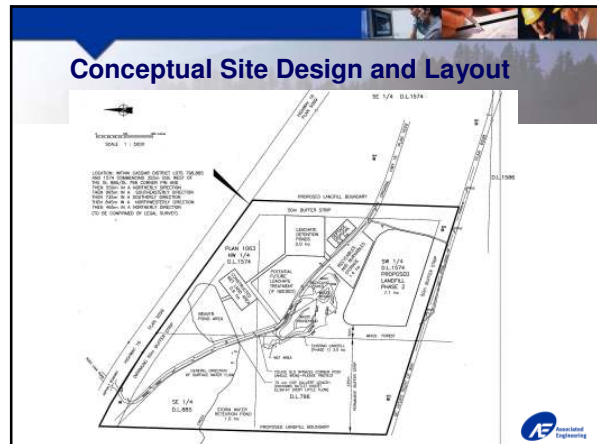
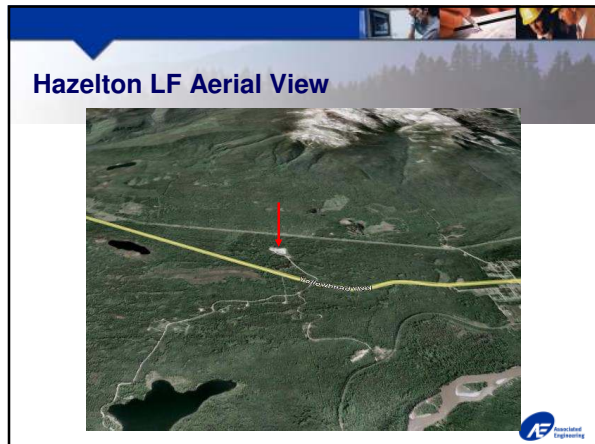
- Several environmental, archeological and geotechnical studies have been completed
- Several meetings with First Nations and MoE have been held
- MoE has issued Operational Certificate
- Detailed designed and monitoring program still required prior to construction
- Kitselas Band are currently appealing the OC
- MoE and RDKS are continuing to work with Kitselas in an attempt to come to some form of understanding prior to the June Appeal Board hearing



Hazelton Landfill Expansion

- Starting in 1996, several sites were considered for a replacement of the existing landfill
- None were better than expanding the existing site
- A proposal to expand the site was submitted to the MoE in 2000
- Ministry approval currently stalled- First Nations consultation on-going
- Looking for workable accommodation with First Nations





- ### Current Refuse Site function Finances
- Current LF budget approximately \$1 million per year
 - Funded out of Tax Requisitions from RDKS tax roll and First Nations contributions (per capita basis)(about \$170 K)
 - Some tipping fees collected (Thornhill, about \$20K per year)

- ### Current Finances (cont'd)
- Expenditures include:
 - Operating and maintaining the existing RDKS landfills
 - Contributions to the First Nations landfills
 - Landfill closure fund (about \$100K/yr)
 - Education and diversion programs
 - Planning

- ### Future Finances
- New Forceman LF will cost in the order of \$5 million to build
 - Expanded Hazelton will cost in the order of \$2.5 million
 - If current plans materialize, the refuse function budget will likely double to about \$2 Million/yr



Future Finances

- A draft cost recovery model was developed and submitted to the Board in 2003
- RDKS is working with the SW Advisory Committee to review this model
- Following the review, the revised model will be submitted to the Board for consideration and approval
- Will need to change the existing SW function bylaw to raise the funding ceiling
- Additional Board consultation will be required for:
 - Financial Plans/
 - Cost Apportionment/Recovery
 - Program implementation schedules

