Waste Management Services, Diamond Mines, NWT

BACKGROUND

KBL Environmental Ltd (KBL) has provided waste management services to the diamond mines since 2008. Initially KBL was retained by DeBeers – Snap Lake project to provide onsite technicians to package waste materials and organize the transportation of the hazardous and non-hazardous waste materials across the winter road and brokering waste to final end receiving facilities in Alberta. In 2009 KBL permitted and constructed the first hazardous waste receiving facility in Canada’s north. Shortly after facility commissioning the facility, Diavik Diamond mine entered into a term agreement with KBL for provision of hazardous waste management services followed by Ekati Diamond mine.

SCOPE OF WORK

In February 2011, through a performance driven procurement process, KBL was awarded a multi-year contract to provide waste management services at the Ekati mine site that transitioned into additional auxiliary services. KBL was able to initiate year-round shipment of various waste materials by leveraging backhauls for the mine which provided an economic advantage in addition to a decrease of liability associated with storing hazardous materials on site.

In February of 2012 KBL’s involvement with the Ekati mine site expanded as the mine retained the services of KBL to conduct a site wide audit of their waste management system. KBL collected and analyzed information and formulated a series of recommendations aimed at providing economic efficiencies in addition to recommendations aimed to promote health and safety initiatives. Upon completion of the audit, Ekati engaged KBL to generate a comprehensive site-specific Waste Management Plan and Incinerator Management Plan. These plans were generated to ensure compliant management of various waste streams and processes with an aim to protect employees health.
and safety while minimizing the mines impact to the environment.

In October 2012 KBL was awarded a contract to provide technical staffing services utilized to assist with the daily collection and management of the mines waste. The contract includes the provision of 2 experienced waste advisors and 4 incinerator operators. KBL is responsible for onsite waste collection, storage of the hazardous and non-hazardous waste materials, management of the incinerator operations, tracking and reporting incinerator input and output volumes, operation of the mines compost equipment in addition to arranging shipment and disposal of any material requiring shipment offsite.

**Project Challenges:**

Project challenges revolved primarily on logistically complex access due to narrow marine access windows, both for the transport of supplies to site and the removal of mine generated waste over several annual sealift events.

- Staffing remote mine site
- Not proper sorting and segregation
- Logistics
- training

**Project Success:**

Project success included training of mine employees in waste classification and segregation and incinerator operation. The ability to train personnel in proper waste segregation on site at the point of generation allowed for backhauling of different waste steams to multiple ports, maximizing efficiencies and resulting in decreased costs.

- Compliance/regulator interactions
- Economic efficiencies

**Project Team:**

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<tr>
<th>Name</th>
<th>Role</th>
<th>Responsibilities</th>
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<tbody>
<tr>
<td>John Oldfield</td>
<td>Project Director</td>
<td>Communications (meetings, emails letters, reports) with clients, 3rd party stakeholders and regulators</td>
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<tr>
<td>Jeff Bembridge</td>
<td>Project Manager</td>
<td>Execution and oversight of field activities, logistics and reporting</td>
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<tr>
<td>Carrie Vanderlinde</td>
<td>Human Resources</td>
<td>Staffing and logistical support</td>
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