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December 20, 2006

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Subject: Cost Estimate of Remaining Decommissioning and Reclamation Liabilities at Brewery Creek Mine as of September 30, 2006

Executive Summary

SteveJan Consultants Inc. (SJCI) has prepared an updated liability cost estimate for the Brewery Creek Mine located near the town of Dawson City in the Yukon Territory. The report was commissioned by the Department of Environment of the Yukon Government. The update is based on a site inspection by the author on August 29, 2006 and work completed to the end of third quarter of 2006. This follows earlier liability estimates as of September 2005, June 2004 and September 2003, all undertaken by SJCI.

The mine is owned by Alexco Resource Corporation, previously Viceroy Minerals Corporation. Mining operations at the site ceased in 2000 with gold recovery continuing until the end of 2001. Decommissioning and reclamation activities began in mid 2002. With the end of the summer of 2006 work period, significant progress has been achieved since mine closure. However, a number of tasks remain for 2007, with longer-term monitoring and maintenance of the site expected to last for an additional 12 year period to the end of 2018.

The updated cost estimate as of September 30, 2006 is \$1,775,000 versus \$2,018,000 in December 2005 (SJCI 2006) and \$2,779,000 as of September 2004 (SJCI 2004a).

An outstanding closure liability estimate as of September 2005 prepared by SRK was \$1,424,000 (SRK 2006). An updated liability estimate as of September 2006 is pending.

A meeting was held between the parties on March 28, 2006 to compare the two consultants' reports and arrive at a consensus concerning current liability at the site as of the end of 2005. The previous SJCI report (2006) provided several changes based on that meeting that reduced the GY cost estimate by \$337,000 (versus an earlier draft report by SJCI). The Alexco cost estimate rose by some \$13,000 between the January 2006 draft report and the March 2006 final report (SRK

2006). Shortly thereafter, both parties agreed that no adjustment to security would be made, as another adjustment would be made in several months after the next site inspection and liability cost estimate reports were prepared.

The following table outlines the most current liability estimate for the site broken down into eight cost centers as previously utilized in evaluating the decommissioning and reclamation liabilities at the site. A ninth cost center provides for mitigative contingencies.

Summary of Remaining Costs

| Cost Center | September 2006 SJCI Liability Cost Estimate | December 2005 SJCI Liability Cost Estimate | September 2005 SRK Liability Cost Estimate |
|--|---|--|--|
| Mine Area Reclamation | \$249,905 | \$259,452 | \$135,258 |
| Site Facilities Removal and Reclamation | \$168,225 | \$212,888 | \$140,851 |
| Leach Pad Detoxification | \$0 | \$0 | \$0 |
| Manpower – next year | \$115,425 | \$73,425 | \$92,813 |
| General Services & Administration (GS&A) – next year | \$87,800 | \$110,400 | \$0 |
| Process Water Treatment | \$10,500 | \$12,500 | \$0 |
| Leach Pad Reclamation | \$55,143 | \$58,978 | \$53,142 |
| Post-Closure Monitoring | \$485,415 | \$547,250 | \$551,720 |
| Sub-total | \$1,172,413 | 1,117,408 | \$973,784 |
| Contingencies on above | \$166,144 | \$157,518 | \$110,904 |
| Mitigative Contingencies | \$436,225 | \$742,850 | \$339,407 |
| Total | \$1,774,782 | \$2,017,783 | \$1,424,096 |

The three reports compared above include:

- SJCI September 2006 Liability Cost Estimate - the latest estimate based on a site inspection on August 29, 2006 and subsequent information, as presented in this report;
- SJCI December 2005 Liability Cost Estimate - the previous cost estimate report based on a site inspection on September 12, 2005; and
- SRK Liability Cost Estimate for September 2005 - cost estimate numbers from their September 2005 site inspection and resultant closure liability report (SRK 2006).

Overall, the estimate of site closure liability has dropped by \$243,000 over the past year (i.e., September 2006 versus September 2005). The reduction is mainly due to the removal of the provision by YG for enhanced monitoring of the Blue Waste Rock Storage Area, continued removal of site facilities, equipment and materials and reclamation of those areas, reduced General Services & Administration costs, reduced costs for continued availability of the BTC and due to one more year of post-closure monitoring and BTC operation having passed. Only the projected manpower cost has risen from the previous year as more accurate information from Alexco was incorporated into the report.

However, work remains in establishing sustainable vegetation over significant portions of the minesite especially those that have suffered erosion damage and dieback of vegetation partially due to droughts over the past few years since various seeding and fertilizing campaigns have been undertaken.

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1. Introduction

Steve Januszewski of SteveJan Consultants Inc. (SJCI) has prepared this cost estimate based on acceptance of an SJCI Proposal dated August 30, 2005 to Ms. Heather Jirousek, Program Advisor-Water Resources, of the Environmental Programs Group, Department of Environment (DOE) of the Government of the Yukon (GY). This revised cost estimate considers remaining decommissioning and reclamation liabilities at the Brewery Creek mine site as of September 30, 2006.

Section 2 provides an overview of the Background and Methodology utilized in the preparation of this report. Section 3 begins with a summary of the remaining liabilities and compares them to those identified as of a year earlier. It then lists remaining liability estimates for all mine areas. Section 4 presents the Conclusions and Recommendations.

2. Background & Methodology

2.1 Background

The Brewery Creek Mine is currently owned by Alexco Resource Corp (Alexco). The site was previously owned by Viceroy Minerals Corp (VMC).

SJCI has prepared several reports for GY on issues relating to the decommissioning of the Brewery Creek Mine site commencing in late 2003. The work has included:

- A Liability Cost Estimate of the Brewery Creek Mine as of December 31, 2005 in a report dated May 29, 2006 (SJCI 2006b) with a follow-up discounted liability reduction schedule prepared in a prepared by SJCI and submitted to YG in July 2006 (SJCI 2006a). The report and spreadsheet included adjustments following a meeting with Brewery Creek company staff and their consultant Daryl Hockley of SRK and the Yukon Government and their consultant (the author) of SJCI in which differences in the estimates prepared by SRK and SJCI were discussed. However, no agreement was reached and it was decided to leave resolving the differences until the next annual inspection and liability cost estimate update due in late 2006;
- A Liability Cost Estimate of the Brewery Creek Mine as of September 23, 2004 in a report dated Dec 17, 2004. The revised report included adjustments to the report following a meeting with Brewery Creek company staff and their consultant Daryl Hockley of SRK and the Yukon Government with their consultant Steve Januszewski of SJCI in which differences in the estimates prepared by SRK and SJCI were discussed and agreement reached on remaining tasks and their liabilities;
- A Liability Cost Estimate of the Brewery Creek Mine as of June 15, 2004 utilizing a September 2003 Liability Cost Estimate of the site by Steffen, Robertson and Kirsten (Canada) Inc. (SRK 2003) updated with observations from a tour of the site on the above date, supplemented by progress information from GY. The report was issued by SJCI on July 16, 2004; and
- A Liability Cost Estimate for the Brewery Creek Mine as of September 2003. This date coincided with the date used by SRK on behalf of the proponent, Viceroy Minerals Corporation's (VMC) submission in November 2003. The estimate for GY provided by SJCI included a provision for risk and a suggested Liability Reduction Schedule for the site for the years 2004-2018. The report was issued by SJCI on July 9, 2004.

This current report considers reclamation efforts undertaken by Alexco from the end of 2005 through to the end of December 2006. It provides a breakdown of remaining closure components based on the same headings as were used in the previous reports and the 2001 *Decommissioning and Reclamation Plan* by VMC, for ease of comparison.

This report is based on information available to the author at the time of its preparation. It has been produced for the Yukon Government by SteveJan Consultants Inc. SJCI accepts no liability for its use by any other party.

2.2 Methodology

The report provides a liability cost estimate update as of September 30, 2006 based significantly on an August 29, 2006 joint site inspection undertaken by the author, Mr. Kevin McDonnell of Yukon Government Department of Environment and Mr. Dylan MacGregor of SRK accompanied by Mr. Brad Thrall of Alexco Resources.

The previous report estimated liability as of the end of 2005. Thus a time span of only 9 months is covered by this report. The change to September 30, 2006 was made so as to be more consistent with previous SJCI and SRK reports, and based on the site visit being undertaken in the late summer/early fall, and in this case in late August.

In this report, the decommissioning and reclamation plan is broken down to nine sub-sections with individual tasks below them. The first eight include the various aspects of the site and components for consideration. The ninth area incorporates additional Mitigative Contingencies, and is discussed later in this section.

The nine areas include:

1. Mine Area Reclamation
2. Site Facilities Removal and Reclamation
3. Leach Pad Detoxification (considered complete)
4. Manpower-2006
5. General Services and Administration
6. Process Water Treatment
7. Leach Pad Reclamation
8. Post Closure Monitoring and Maintenance
9. Mitigative Contingencies

Considerations in preparing the updated liability cost estimate included:

- Information collected from the company to the end of September 2006 including the 2005 Annual Water License Report and several monthly monitoring reports from 2006;
- Current status of the site based on a visual inspection by the author and others conducted on August 29, 2006;
- Previous liability cost estimate reports on the site by SJCI and SRK. The general format of the cost tables and information in the first 2003 SRK report (2003) was utilized again, as they were generally accepted by GY in previous reviews of closure liability by SJCI. Percent completion of individual items was adjusted, as required based on progress reclaiming the site over the past year;
- The report makes use of contractors' costs rather than in-house Alexco costs. Unit costs for equipment are based on previously agreed to unit costs provided in SRK's report with a 5%

cost of living allowance adjustment for 2006 to unit costs used in the previous year's report. This follows a 5% increase in the previous 2005 report to incorporate the annual average rate increase in the 2003-2004 edition of "The Blue Book" by the B.C. Road Builders and Heavy Construction Association and authorized by the Government of British Columbia. The cost increases are reflective of cost of living allowance adjustments. However, it does not consider the recent boom in construction Canada wide causing some contractors prices to have risen significantly higher (especially in larger centers and areas with significant economic development). A provision has been made to include an overall adjustment of 5% to cover inflation on the other items to acknowledge the effect of inflation since the first cost estimate reports were prepared some 3 years ago;

- The report does not provide additional costs that would fall to GY should Alexco become insolvent and the government take on the task of managing the site and continuing the reclamation and decommissioning work. A considerable sum of additional monies would be required, although this is outside the normal scope of evaluating closure liability costs for a mine;
- A discounted value for the remaining (future years) tasks required to complete the decommissioning and reclamation program is not provided;
- Detailed cost tables in Section 3 include only those components with work remaining to be done. Completed tasks are not shown;
- No credit is given for re-sale or salvage values of equipment and structures from the site, as is the norm in most mine closure liability cost estimates. The bulk of structures and equipment removal has already been completed and thus the value on assets remaining on the site is limited;
- The report incorporates a contingency for uncertainties in the costs to undertake and complete the tasks specified in this report;
- The report also includes a Mitigative Contingency estimate for additional remedial actions that may be required as they are considered "possible", based on discussions with GY Energy Mines and Resources (EMR) and Department of Environment staff and considering their role as the lead regulator agency overseeing the minesite;
- Other changes from previous cost estimates are described in specific subsections of this report in Section 3.

3. Decommissioning and Reclamation Liabilities

The summarized results of this report are provided in Table 1, below. The Table also includes a comparison to the SJCI and SRK reports assessing the site as of a year earlier in December 2005.

Table 1
Summary of Remaining Costs

| Cost Center | September 2006 SJCI Liability Cost Estimate ¹ | September 2005 SJCI Liability Cost Estimate ² | September 2005 SRK Liability Cost Estimate ³ |
|---|--|--|---|
| Mine Area Reclamation | \$249,905 | \$259,452 | \$155,258 |
| Site Facilities Removal and Reclamation | \$168,225 | \$212,888 | \$138,351 |
| Leach Pad Detoxification | \$0 | \$0 | \$0 |
| Manpower – 2006 | \$115,425 | \$73,425 | \$141,750 |
| General Services & Administration (GS&A) – 2006 | \$87,800 | \$110,400 | \$0 |
| Process Water Treatment | \$10,500 | \$12,500 | \$0 |
| Leach Pad Reclamation | \$55,143 | \$58,978 | \$53,142 |
| Post-Closure Monitoring | \$485,415 | \$547,250 | \$471,120 |
| Sub-total | \$1,172,413 | 1,117,408 | \$959,621 |
| Contingencies on above | \$166,144 | \$157,517 | \$111,488 |
| Mitigative Contingencies | \$436,225 | \$742,850 | \$339,407 |
| Total | \$1,774,782 | \$2,017,783 | \$1,410,516 |

Notes:

- 1 Cost for each cost center includes a contingency factor, as shown in Table 2, below
2. SJCI, 2006a
3. SRK, 2006

The remainder of this section outlines the cost estimates in the various areas of the mine decommissioning and reclamation plan as of December 31, 2005.

An estimation of the contingency factors for each of the cost centers is provided, as shown in the table below. All of the costs contain uncertainties due to the level of detail in this report. The contingency factor used was generally between 10 and 25% depending on the uncertainty of the cost estimates in the opinion of the author. No contingency was added for the Mitigative Contingency items.

Table 2
Contingencies included in Liability Cost Estimate by Cost Center

| Cost Center | Sept. 2006 Cost Estimate | Contingency Factors (%) | Contingency Factors (\$) | Total Area Cost Estimate |
|---|-----------------------------|----------------------------|-----------------------------|-----------------------------|
| Mine Area Reclamation | 249,905 | 20% | 49,981 | 299,885 |
| Site Facilities Removal & Reclamation | 168,225 | 20% | 33,645 | 201,870 |
| Leach Pad Detoxification | 0 | N/A | 0 | 0 |
| Manpower – 2007 | 115,425 | 10% | 11,543 | 126,968 |
| General Services & Administration (GS&A) – 2007 | 87,800 | 10% | 8,780 | 96,580 |
| Process Water Treatment | 10,500 | 25% | 2,625 | 13,125 |
| Leach Pad Reclamation | 55,143 | 20% | 11,029 | 66,172 |
| Post-Closure Monitoring | 485,415 | 10% | 48,542 | 533,957 |
| Mitigative Contingencies | 436,225 | 0% | - | 436,225 |
| Total | \$1,608,638 | | \$166,144 | \$1,774,782 |

A number of individual tasks may or may not have been completed as per the decommissioning and reclamation plan, based on information collected by the author during the August 2006 site visit. For the 2006 update the status of only one item, the annual geo-technical inspection was unknown at the time of the writing of this report. However, since then Brad Thrall of Alexco (verbal communication, 2006) has stated to the author that the inspection was not completed. Mr. Thrall stated it will be undertaken in 2007, possibly as early as the spring.

Table 3
Liability Cost Items of Uncertain Status

| Description | Status Accepted for this Report | Report Section Reference | Comments |
|---------------------------------|---------------------------------|--------------------------|---|
| Annual geo-technical inspection | Not Completed | 3.1 | Annual geo-tech review was not done during Aug06 site visit by SRK nor afterward. |

3.1 Mine Area Reclamation

Reclamation work appears to have been limited in 2006 and in 2005, after an aggressive summer season in 2004.

A number of additional areas require revegetation maintenance with supplemental seed and fertilizer or in some cases just fertilizer. This includes a number of areas suggested for attention in the last cost estimate report by SJCI (2006). Many areas appear to have had only one application of a seed/fertilizer mix. There appears to have been significant dieback and in some cases this has led to weakened physical stability as evidenced by increased erosion gulleys and slides of materials into open pits, adjacent to haul road, etc. Natural invasion of native species is occurring, albeit slowly.

Records from Alexco show that a total area of 81 ha received seed and/or fertilizer in 2006, at the same low application rate (25 kg/ha seed, 300kg/ha fertilizer) that was recommended in their Decommissioning and Reclamation Plan (VMC 2003). The records of 2006 applications were received after the site visit and therefore could not be checked for success on the ground. Alexco's 2005 Annual Water License Report shows that 35 ha received seed/fertilizer and erosion control work in 2005. The DRP states that some 180 ha were seeded and fertilized initially in 2002-2003.

Areas receiving the largest seeding and fertilizing attention in 2006 included the edge of the haul road in the Blue-Lucky areas (25ha), Blue Waste Rock Storage Area (6ha), North Golden silt stockpile (6ha) and Lower Fosters (5 ha). The sum of these areas (41ha) accounts for over half of the areas covered in 2006 (81ha).

For a number of the areas, 2006 saw its first application (e.g., Moosehead & main haul road side slopes) whereas in other areas where revegetation has previously been undertaken the seeding and fertilizing was limited to bare areas. The work undertaken in 2006 has been considered in this report.

Photographs of several previous mine areas as of August 2006 are provided in Appendix A.

And a statement from the SJCI report from 2004, still applies:

Significant work has been undertaken in reclaiming mine areas in 2004. However, a number of areas have not been completed, or have over-steepened slopes that require further re-grading. In addition, several areas require total area seeding and fertilizing, and a number of areas required maintenance seeding and fertilizing due to poor take to date. This is not uncommon, but must be considered by VMC as only one application of seed and fertilizer mix rarely restores an area to required standards. It is up to VMC to demonstrate self-sustaining vegetation, that will also stabilize surfaces against the effects of long-term erosion and that is consistent with surrounding areas, is in place.

A cost for mobilization and demobilization of several pieces of equipment will be required to complete the remaining work in this area. The equipment will consist of at least a bulldozer, haul truck, backhoe, front-end loader, and seeding/fertilizing equipment. The equipment sizing utilized in this cost estimate report is several sizes smaller than the mine utilized during operation. The equipment should be as small as possible so as to minimize disturbances to revegetated areas (especially the main haul road) while traveling across the site to gain access to outlying areas requiring work.

Remaining cost items under the Mine Area Reclamation area include:

- Mob & Demob of several pieces of equipment and operators for remaining work;
- Ultimate removal of remaining ½ of warehouse/maintenance shop building;
- Erosion repairs estimated at 5% of original reclaimed areas including Canadian, Upper & Lower Fosters, Pacific and Moosehead, 10% of Blue WRSA and Open Pit, Lucky, South and North Golden, and 15% of Kokanee;
- Re-seed and fertilize significant portions of many areas previously seeded, including 25% of Canadian, Lower Fosters and Moosehead, 50% of South & North Golden, Lucky, Upper Fosters, Pacific, Blue Open Pit and Kokanee and 75% of Blue WRSA;
- Complete work on decommissioning the haul road;
- Ultimate scarification, re-contouring and seeding of the perimeter roads including the mine access road. For the main access road this will likely consist of reclaiming half the road width and leaving the center portion for ongoing use for ATV access for monitoring and subsequent land uses, as well as removing culverts and restoring creeks;
- Haul road slopes and side berms require minor (5%) re-sloping, and mechanized broadcast seeding and fertilizing (20% of area) and complete (50%) hand broadcast seeding of outlying areas; and
- In 2005, a Revegetation and Metals Uptake Assessment report was commissioned (Laberge 2006a) and included in Alexco's 2005 Annual Water License Report for the Brewery Creek Mine. The report outlines recommendations for follow-up work in both areas. A provision for the costs to implement the recommendations and undertake repeat surveys is included in the report.

A provision has been provided for an additional year's worth of active reclamation work to be undertaken in 2008, after the specified work is undertaken in 2007. The 2008 work would consist of 25% of the erosion repair work and 100% of the total area covered with seed/fertilizer in 2007. This maintenance is required to help establish sustainable stability and vegetation in the mine areas until such time as natural invasion can become more fully established.

Table 4 lists the individual components and an estimate of remaining work and costs by mine area.

Table 4
Mine Area Reclamation – Remaining Activities

| Area and Individual Components (% Remaining as of Sep 03 ¹) | SRK Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept. 2006 (status Sep05, if different) | Estimated Remaining Cost as of Sept. 30, 2006 |
|--|--|---|---|
| <u>Mobilization / Demobilization (Contractor Equipment)</u> Mob/Demob for remaining work | | | \$22,050 \$22,050 |
| <u>Canadian Open Pit</u> 2006 erosion repairs (5%) 2007 seeding & fertilizing (25%) | \$5,153 | 5% 25% | \$5,821 \$4,812 \$1,009 |
| <u>Blue Open Pit</u> 2006 erosion repairs (5%) 2007 seeding & fertilizing (25%) | \$2,753 | 10% 50% | \$6,764 \$5,133 \$1,631 |
| <u>Blue WRSA</u> 2006 erosion repairs (5%), 2007 seeding & fertilizing (25%) ARD study (100%) | \$20,386 | 10% 75% (was 50%) 0% | \$15,058 \$11,552 \$3,506 \$0 |
| <u>Kokanee Open Pit</u> 2006 erosion repairs (15%), 2007 seeding & fertilizing (40%) | \$16,437 | 15% 50% (was 75%) | \$13,982 \$10,266 \$3,715 |
| <u>North Golden Open Pit</u> 2006 erosion repairs (15%) 2007 seeding & fertilizing (40%) | \$30,286 | 10% (was 5%) 50% | \$6,966 \$4,492 \$2,474 |
| <u>South Golden Pit</u> 2006 erosion repairs (5%) 2007 seeding & fertilizing (25%) | \$782 | 10% 50% | \$1,766 \$1,462 \$304 |
| <u>Lucky Open Pit</u> 2006 erosion repairs (15%) 2007 seeding & fertilizing (25%) Covered in Mitigative Contingencies: -backfill sinkholes, stabilize slope in pit -Stabilize slump area in road-unload some additional material | \$29,217 | 10% (was 5%) 50% 50% (was 50%) 100% | \$3,585 \$1,711 \$1,874 \$0 \$0 |
| <u>Upper Fosters</u> 2006 erosion repairs (5%) 2007 seeding & fertilizing (25%) | \$2,062 | 5% 50% | \$2,734 \$1,925 \$809 |
| <u>Lower Fosters</u> Broadcast seed/fertilize (100%) 2006 erosion repairs (5%); 2007 seeding & fertilizing (25%) | \$4,193 | 0% (was 100%) 5% 25% | \$2,442 \$1,954 \$488 |
| <u>Pacific Open Pit & Silt Borrow Area</u> sediment control works-road swale & rip-rapped channel, 2006 erosion repairs (5%); 2007 seeding & fertilizing (25%) | \$11,986 | 0% (was 100%) 5% 50% | \$9,520 0 \$6,951 \$2,569 |

Table 4
Mine Area Reclamation – Remaining Activities (continued)

| Area and Individual Components (% Remaining as of Sep 03 ¹) | SRK Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept 2006 (status Sep05, if different) | Estimated Remaining Cost as of Sept. 30, 2006 |
|--|--|--|---|
| <u>Moosehead Open Pit</u> 2006 erosion repairs (5%); Decommission haul road (100%); 2007 seeding & fertilizing (25%) | \$36,743 | 5% 0% (was 25%) 25% | \$4,901 \$1,604 - |
| <u>Perimeter Roads (11 km total: main access road (7km) & other roads)</u> Scarify & Re-contour (100%) Broadcast seed / fertilize 16.5 ha (100%) (SRK estimate used) 2007 seeding and fertilizing (10%) Restoring creek crossings along main access road | \$60,840 | 100% 100% 10% 100% (was 0%) | \$78,957 \$63,882 \$8,250 \$825 \$6,000 |
| <u>Re-Slope Haulroad Slopes & Side Berms (excl. Lucky area)</u> Backhoe over-steepened slopes (75%) Broadcast seed / fertilize-mechanized (100%) Broadcast seed / fertilize-hand (100%) | \$60,371 | 5% 20% 50% | \$5,081 \$2,269 \$221 \$2,591 |
| <u>Main Haul Road</u> Remove Six Culverts (95%) | \$232,345 | 0% | \$- - |
| Additional year (2008) of erosion repairs & seeding / fertilizing equal to that identified above ² Erosion repairs; Seeding and Fertilizing | | | \$38,279 \$12,966 \$25,313 |
| Follow-up to Studies: Revegetation Assessment-implement recommendations, conduct another re-survey; Metal Uptake Study - implement recommendations, & re-survey | \$10,000 | 100% (was 0%) 100% (was 0%) | \$32,000 \$10,000 \$22,000 |
| Total | \$538,894 | | \$249,905 |

Notes

1 based on SRK 2003, Tables 5 & 6 and SJCI 2004c

2 Cost is equivalent to that provided in table for all individual areas for 1) erosion repairs and mntce to 25% of yr1 (2007) area, and 2) seeding and fertilizing of 100% of yr1 area.

3.2 Site Facilities Removal and Reclamation

Some of the remaining items include:

- Half of the main warehouse and shop building that continues to be used, as required;
- The Exploration office and core logging facility;
- Some piping still remains consisting of 100% of the land application piping;
- The general site area requires re-grading/scarifying, capping with growth media, and revegetation;
- A small quantity of drummed materials remain in the camp/laydown area adjacent to the mine site entrance;

- In September 2005, a contaminated soil survey of the site was conducted by Access Consulting (Access 2006). It recommended establishing a land treatment farm (LTF) in the main equipment area to supplement the one in place at the Oil Storage Area, as well as on-going fertilization and tilling of the two LTFs to speed hydrocarbon degradation. This method may or may not be effective due to the cold climate of the site. On-going monitoring results will be required to determine performance. If unsuccessful, removal of the material to an off-site licensed hazardous materials landfill will be required;
- The same report also surveyed metal levels in site soils. It identified areas with metals in soils exceeding CSR guidelines but for which pre-mining sampling indicated natural exceedances. Several metals were also elevated at sites that had no historical/baseline sampling results. The report did not include any additional sampling in its list of recommendations;
- The sewage septic system for the remaining office/warehouse/ shop area is still available for use and will require decommissioning;
- The final cleanup of the materials in the Camp Area boneyard is effectively completed with the exception of a stockpile of drummed materials. In addition, a small area comprising the explorations building and core shacks remains;
- A provision has been added equivalent to the estimated cost for the eventual removal of the effluent and heap treatment systems. This includes the existing treatment ponds, piping and pond contents. The treatment ponds remain effectively unaltered since operations. The second (Barren) process pond has been partially filled with a mixture of materials to enable it to operate as a Biological Treatment Cell (BTC). The costs for decommissioning the treatment and process ponds had previously been estimated at \$75,000 (SJCI 2004b) but over the summers of 2004 and 2005 a number of the components have been removed. The current estimate is \$52,500, unchanged from last year. Provision for this future cost should remain in place until the end of the 5 year period BTC treatment period proposed to last until 2008 when it is estimated the system will no longer be required and the facilities can be decommissioned and the area permanently reclaimed.
- All of the items remaining to be undertaken have had a 5% inflation adjustment added, as was utilized throughout the report.

A breakdown of the components in this section is provided in Table 5.

Table 5
Site Facilities Removal and Reclamation – Remaining Activities

| Area and Individual Components % Remaining (as of Sep 03 by SRK 2003, Table 7) | SRK Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept06 (status Sept05, if different) | Estimated Remaining Cost as of Sept. 30, 2006 |
|---|--|--|--|
| Warehouse/Maintenance Shop Building (100%) | \$102,867 | 50% | \$58,070 |
| Exploration Office & Core Logging Facility (100%) | \$9,372 | 100% | \$10,333 |
| ADR Plant Building (100%), S&F remains | \$121,348 | <1% | \$1,034 |
| Assay Lab Building (100%) | \$41,545 | 0% | \$0 |
| Limo Silo (100%) | \$18,430 | 0% | \$0 |
| ADR Plant Fresh Water Tank (100%) | \$9,066 | 0% | \$0 |
| Laura Creek Pumphouse (100%) | \$14, 874 | 0% (was 4%) | \$0 |
| Surface Piping (100%) | \$26,280 | 0% (was 10%) | \$0 |
| Removal of Land App. Piping | \$4,800 | 100% | \$5,513 |
| General Site Re-grading / GM Placement/Runoff & Erosion Control | \$59,626 | | \$20,698 |
| -site re-grading (100%) | | 25% | \$1,819 |
| -Haul & place soil cover (100%) | | 25% | \$4,823 |
| -Revegetation (100%) ¹ | | 100% | \$2,855 |
| Culvert crossings-remove & re-slope (100%) | | 30% (was 60%) | \$5,600 |
| Runoff ditches (100%) | | 30% (was 60%) | \$5,600 |
| Removing Remaining Hydrocarbon Products from Boneyard | \$7,000 | 10% (was 33%) | \$1,000 |
| Shipment of Remaining Drummed Materials in Boneyard & BTC Area | \$10,500 | 20% (was 33%) | \$2,000 |
| Land Treatment Farming of Hydrocarbon Contaminated Soils-Main Equipment Area - yet to be done, on-going maintenance to both (100%) | \$7,120 | 50% (was 100%) | \$5,887 |
| Close-out 3 Sewage Septic Systems | \$3,250 | 33% | \$1,191 |
| Cleanup Site Boneyard (100%) | \$3,000 | 0% (was 33%) | \$0 |
| Close out Site Landfill (100%) | \$12,426 | 0% (was 25%) | \$0 |
| Site Contamination Survey (not included in SRK 2003) – follow-up to one done in 2005 | \$15,000 | 0% | \$10,000 |
| Process & Effluent Treatment System Ponds Rehabilitation (not included in SRK 2003) | \$50,000 | 100% | \$52,500 |
| Total | \$696,829² | | \$ 168,225 |

Notes:

- 1 Revegetation cost was reduced from \$1000/ha down to \$500/ha in last years report. This is a more appropriate price for applying a seed and fertilizer mix using a broadcast seeder over generally flat terrain;
- 2 Individual numbers do not add up to total at bottom as items that were no longer applicable in Sept 2005 were not provided cells with \$0 value, for simplicity. Refer to SJCI report 2004a and 2004b for full details

3.3 Leach Pad Detoxification

No elements were considered remaining as of September 2006, as was the condition in the previous report.

3.4 2007 Manpower

The author understands the site had part time coverage in 2005 from January to mid-April and October to December, with 2 people being one site for the entire period of May to September. Based on this additional information and observations of manpower during the site visit of August 29, 2006, an estimate is provided in Table 6, below.

It was estimated that:

- A site manager will likely spend an estimated 4 days per month (or 20% of full-time) over the course of the year for a variety of tasks that has not been charged out to specific tasks;
- A Reclamation Supervisor would be overseeing the day-to-day work on site through the active summer season when the bulk of remaining mine area work should be completed;
- An Environmental Sampler/Caretaker will be required during the entire summer as well as to undertake off-season site security sweeps, water quality sampling, surveying, administering some final removal of assets any scrap or waste materials from the site, etc.;
- An equipment operator will be required to undertake the required erosion repairs and other work involving heavy equipment, during the summer season;
- Additional resources are included in Section 3.6 that apply until such time as direct discharge of heap effluent becomes the sole discharge method for waters from the heap.

Manpower charges for 2008 should drop significantly if proposed work for 2007 is undertaken.

Table 6
2007 Manpower Projection

| Staff Member (based on SRK 2003, Table 9) | Salary \$/Annum | Time Requirement | 2007 Cost |
|---|----------------------------------|---|------------------|
| Site Manager (B. Thrall) | \$120,000 | 4 days/mo (20% of full-time) | 24,000 |
| Process Manager/Engineer | \$84,000 | - | |
| Reclamation Supervisor | \$54,000 | Full-time for 5 summer months | 22,500 |
| Environmental Sampler/Site Caretaker | \$48,000 | Full-time for 5mo in summer & 1 mos. total for other 7 mos. | 24,000 |
| Equipment Operator | \$60,000 | Full-time for 5 summer months at 50% of time | 15,000 |
| Subtotal | | | 85,500 |
| Salary Burden at 35% | | | 29,925 |
| Total | | | \$115,425 |

3.5 General Services and Administration - 2007

Site services have been significantly wound down. It is also anticipated that there will be minimal coverage required in 2007. No camp operations have been included in this cost report as all staff will be based out of Dawson City.

The general services and administration cost center includes estimates of costs for 2007 as provided in Table 7. They include costs associated with tasks such not shown in the individual work areas such as the operation of the BTC (shown in Tables 9 & 10).

Table 7
2007 General Services & Administration

| Category (based on SRK 2006, Table 10) | Area Total | Monthly Costs (\$) | | | | | | | | | | | |
|---|-----------------|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Misc. operating supplies | 0 | | | | | | | | | | | | |
| Insurance | 6000 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Freight | 6000 | 0 | 0 | 0 | 0 | 500 | 500 | 1000 | 1000 | 1000 | 1000 | 500 | 500 |
| Propane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Water supply | 1000 | 0 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 200 | 0 | 0 | 0 |
| Access road maintenance | 12000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| General site grounds | 9000 | 500 | 500 | 500 | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 500 | 500 |
| Waste disposal | 2000 | 0 | 0 | 0 | 500 | 0 | 500 | 0 | 500 | 0 | 500 | 0 | 0 |
| Light vehicle costs | 10000 | 250 | 250 | 250 | 250 | 1500 | 1500 | 1500 | 1500 | 1500 | 1000 | 250 | 250 |
| Travel and lodging | 11000 | 500 | 500 | 500 | 500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 500 | 500 |
| Sat. phone, 2way radios | 3600 | 100 | 100 | 100 | 100 | 500 | 500 | 500 | 500 | 500 | 200 | 100 | 100 |
| Office equipment lease/rent | 1800 | 100 | 100 | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 100 | 100 | 100 |
| Building maintenance | 6000 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Safety supplies | 700 | 0 | 0 | 0 | 0 | 200 | 100 | 100 | 100 | 100 | 100 | 0 | 0 |
| Office supplies | 700 | 0 | 0 | 0 | 0 | 200 | 100 | 100 | 100 | 100 | 100 | 0 | 0 |
| Crew rotations & transportation | 3000 | 0 | 0 | 0 | 0 | 500 | 500 | 500 | 500 | 500 | 500 | 0 | 0 |
| Staff housing (in-town) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Camp operations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 | 0 | 0 | 0 | 0 |
| Legal | 12000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Electrical Power | 3000 | 0 | 0 | 0 | 0 | 500 | 500 | 500 | 500 | 500 | 500 | 0 | 0 |
| Total | \$87,800 | | | | | | | | | | | | |

3.6 Process and Effluent Water Treatment

In 2004, a biological treatment cell (BTC) system was installed in the heap process water treatment ponds. The first pond would act as a surge pond for incoming waters from the heap. The second pond would be reconfigured to operate as a BTC and the third pond would be used as a settling pond for final polishing prior to effluent discharge to the environment. It is understood the system seen minimal operation to date. Due to reduced influent loadings into the system and the limited time in operation, the effectiveness of the removal has not been confirmed.

Land application was another method of heap effluent treatment, which was utilized, in recent years including a short period in the summer of 2004. In late 2004, it was decided no future land application would be anticipated with the BTC system in place, based on discussions between VMC and GY.

The 2005 Annual Report for the Brewery Creek Mine includes monitoring data from the system.

Costs for preparation of a process water treatment system are provided in Table 8.

Table 8
Process Water Treatment *

| Area and Individual Components % Remaining (based on SRK 2003, Table 12) | SRK Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept06 (status Sept05, if different) | Estimated Remaining Cost as of Sep. 30, 2006 |
|--|--|---|---|
| Water treatment / land application | \$58,000 | N/A | \$0 |
| BTC Construction | \$235,000 | 0% | \$0 |
| BTC commissioning / de-bugging (not included in SRK 2004) | \$0 | 20% | \$10,500 |
| System to separate heap seepage from runoff flows (included in Leach Pad Reclamation) | - | 100% | \$0 |
| Total | \$293,000 | | \$10,500 |

* based on SJCI 2004c, Appendix A

Process and heap effluent treatment ponds are still in place. The cost for future removal and satisfactory reclamation of these facilities and their contents remains. The cost provision for this is covered in Section 3.2 - Site Facilities Removal and Reclamation.

The following considerations were included in preparing cost estimates for General Services and Administration (GS&A) and for BTC operation:

- Annual summer program of water treatment prior to discharge;
- No employees stay on site. Personnel will commute back and forth daily from nearby towns and hamlets;
- Half-time use of an operator/technician during the summer months;
- Use of a contract trades person for a number of tasks including electrical, plumbing, mechanical, etc. estimated to be 25% of full-time during the five summer months

Annual GS&A costs for the BTC system will be incurred until direct discharge becomes a permanent heap effluent discharge method. These costs are shown in Tables 9, below.

Table 9
General Services & Administration Until Direct Discharge of Heap Effluent-Annual Costs

| Category (based on SRK 2003, Table 11) | Area Total | Monthly Costs (\$) | | | | | | | | | | | |
|--|-----------------|--------------------|-----|-----|-----|------|------|------|------|------|-----|-----|-----|
| | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| <u>General Service& Admin</u> | | | | | | | | | | | | | |
| Misc. operating supplies | 1,750 | 0 | 0 | 0 | 0 | 250 | 500 | 250 | 250 | 250 | 250 | 0 | 0 |
| Insurance | 1,200 | 0 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 200 | 200 | 0 | 0 |
| Freight | 500 | 0 | 0 | 0 | 0 | 250 | 0 | 0 | 0 | 0 | 250 | 0 | 0 |
| Propane | 1,000 | 0 | 0 | 0 | 250 | 250 | 0 | 0 | 0 | 250 | 250 | 0 | 0 |
| Water supply | 1,200 | 0 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 200 | 200 | 0 | 0 |
| BTC access road maintenance/winter snowmachine | 3,400 | 200 | 200 | 200 | 200 | 400 | 400 | 400 | 400 | 400 | 200 | 200 | 200 |
| Light vehicle costs | 2,500 | 0 | 0 | 0 | 0 | 500 | 500 | 500 | 500 | 500 | 0 | 0 | 0 |
| Electrical power | 1,200 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 200 | 200 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| <u>Labour (incl Salary Burden)</u> | | | | | | | | | | | | | |
| Operator/Technician/Sampler (50% of \$4K/mo) | 10,000 | 0 | 0 | 0 | 0 | 2000 | 2000 | 2000 | 2000 | 2000 | 0 | 0 | 0 |
| Contract Trades Person (25% of \$5K/mo) | 6,250 | 0 | 0 | 0 | 0 | 1250 | 1250 | 1250 | 1250 | 1250 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| Total | \$29,000 | | | | | | | | | | | | |

Operating costs for heap effluent (process water) treatment through the BTC system are presented in Table 10.

Table 10
Process Water Treatment – Annual Operating Costs

| Category (based on SRK 2003 Table 12) | Area Total | Monthly Costs | | | | | |
|--|-----------------|---------------|---------|---------|---------|---------|---------|
| | | Apr | May | Jun | Jul | Aug | Sept |
| Outside assays | \$8,000 | \$0 | \$1,600 | \$1,600 | \$1,600 | \$1,600 | \$1,600 |
| Piping & fittings | \$9,000 | \$0 | \$2,000 | \$2,000 | \$2,000 | \$2,000 | \$1,000 |
| Reagents/ Chemicals | \$1,000 | \$0 | \$200 | \$200 | \$200 | \$200 | \$200 |
| Misc. maintenance supplies | \$2,500 | \$0 | \$500 | \$500 | \$500 | \$500 | \$500 |
| Misc. operating supplies | \$3,750 | \$0 | \$750 | \$750 | \$750 | \$750 | \$750 |
| Fuels / Lubes | \$2,500 | \$0 | \$500 | \$500 | \$500 | \$500 | \$500 |
| Pumping | \$2,500 | \$0 | \$500 | \$500 | \$500 | \$500 | \$500 |
| Total | \$29,250 | | | | | | |

However, utilization of the BTC for heap effluent treatment is considered a mitigative contingency measure, and thus costing is not provided in this section. Costs for it are provided in Section 3.9, Mitigative Contingencies.

3.7 Heap Leach Pad Reclamation

Work remains to complete the reclamation of the heap leach pad. Required tasks are outlined in Table 11, below.

The area of future heap leach cell Nos. 8-10 has been considered to have been amended with a layer of growth media, although this was not inspected during the site visit. In 2004, Alexco has

stated the area requires revegetation due to poor success when it was done several years ago, as was reported in the previous liability cost estimate report (SJCI 2004a).

A significant erosion gully has also formed along the toe of the slope on the bench that surrounds the perimeter of the heap, along the southwest corner of the facility, immediately east of the overflow pipes that run into the process ponds. Repairs to this area will be undertaken as part of the leach pad dike breaching.

There is also a depression atop the heap, which collects surface water and looks like a shallow pond from the air. The depression was assessed as part of the August 2006 site inspection. It was determined to be satisfactory to leave as-is as it is likely not an issue for the long term physical and chemical stability of the heap. Previously, a provision has been included for this work as one of the Mitigative Contingencies.

Table 11
Heap Leach Pad Reclamation – Remaining Items *

| Area and Individual Components -% Remaining (based on SRK 2003, Table 8) | SRK Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept06 (status Sept05, if different) | Estimated Remaining Cost as of Sept. 30, 2006 |
|---|--|---|---|
| Leach Pad Re-sloping and Drainage Ditches | | | |
| B'hoe work to put in ditches (100%) | \$6,336 | 100% | \$7,350 |
| Breach leach pad dike mat'l (100%) | \$12,610 | 100% | \$13,903 |
| Riprap/gravel in dike breach (100%) | \$2,500 | 100% | \$2,756 |
| Leach Pad Revegetation (Cells 1-7) | | | |
| Broadcast seed and fertilizer (25%) | \$6,056 | 25% | \$6,667 |
| Previously Planned Cells 8-10 | | | |
| Dozer to re-contour surface (100%) | \$17,927 | 0% | \$0 |
| Spread GM with dozer (100%) | \$36,447 | 0% | \$0 |
| Broadcast seed & fertilizer (100%) | \$6,912 | 50% (was 100%) | \$3,810 |
| 2006 Reclamation Repairs | | | |
| Erosion repairs with dozer (10%) | \$26,738 | 5% | \$15,181 |
| Broadcast seed & fertilizer (25%) | \$4,958 | 25% | \$5,466 |
| Total | \$120,484 | | \$55,143 |

* based on SRK 2003 and SJCI 2004

3.8 Post Closure Monitoring and Maintenance

A post-closure monitoring and maintenance program to the end of the year 2018 is anticipated. Costing includes site manpower, sample preparation, sample shipping, analyses and support, as well as geotechnical and reclamation inspections. Details have been provided in previous reports.

Table 12 shows the costing for the various components of the program:

- The first column lists the tasks as outlined in the previous SJCI reports (SJCI, 2004a & 2004b) that are based on the SRK report of November 2003. SJCI has previously included an adjustment in the cost estimate based on the input of other contributors in the review of the VMC Monitoring Program. This has included an additional \$30,000 for the basic monitoring program as provided by Mr. Gerry Whitley (Whitley, 2004) to GY;
- The second column shows the costs of the above elements;
- The third column provides an estimate of % of original work remaining to be done; and
- The fourth column provides the revised cost for the remaining liability.

The Whitley cost estimate (Whitley, 2004) for the 15 year provided was \$520,00 versus \$490,000 in Table 13 of their report (SRK Nov2003). SJCI has previously accepted the Whitley estimate for use in prior liability cost estimates. The \$30,000 difference between the SRK and Whitley estimates has been added to the proposed cost estimate, split evenly between the 15 years of the overall (post-closure) program.

Table 12
Post-Closure Monitoring and Maintenance

| Area and Individual Components - % Remaining (based on SRK 2003, Table 13) | SRK Nov03/ SJCI *Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept06 (status Sept05, if different) | Estimated Remaining Cost as of Sep. 30, 2006 |
|--|---|---|---|
| Environmental Monitoring (2006) | \$49,500 | 33% | \$17,325 |
| Environmental Monitoring (2005-2018, 14yrs total, 12 remaining) | \$440,500 | 86% (was 90%) | \$361,200 |
| Reclamation Maintenance (2004-2008, 5 years total, 2 remaining) | \$20,000 | 40% (was 60%) | \$8,400 |
| Inspections/Reporting/Other (2004-2018, 15 years total, 12 remaining) | \$75,000 | 80% (was 86%) | \$63,000 |
| Additional cost for env. monitoring as per Whitley costing (2004-2018) | \$30,000 | 80% (was 93%) | \$25,200 |
| Blue WRSA Instrumentation & monitoring (2004-2008)-Mit. Cont | \$0 | 100% | N/A |
| Heap Geochem/Physical Stability & Monitoring (2004-2008)-not yet undertaken | \$7,000 | 80% (was 100%) | \$6,090 |
| Laura Creek AMP monit. requirements (2004-2008) | \$10,000 | 40% (was 60%) | \$4,200 |
| TOTAL | \$632,000 | | \$485,415 |

* SJCI 2004b

3.9 Mitigative Contingencies

Mitigative Contingencies are required for items that are considered possible and may require mitigation, but are not included in the current plan. Four of the five areas of concern from the previous report still remain.

1. **Heap Effluent Treatment** - The BTC was constructed in 2004 and has had minimal operation to date. A cost breakdown for confirmation of system performance is provided in Section 3.6 of this report. This section provides monies for the operation of the BTC and general site services and administration related to this undertaking. A timeframe of 5 years of operation had originally been utilized, as a Mitigative Contingency. As of September 30, 2006, just over 2 years of that timeline still remain.
2. **Lucky Stabilization** - A portion of the slope adjacent to the access road into the Lucky Pit area may require stabilization. A portion of the material of concern was unloaded in 2004 and 2005 but has since then the bank has been undercut to permit construction of an access trail for exploration drills traveling to the Bohemian area. In addition, a number of areas of minor instability still remain on the elevated areas above the pit, although some

were patched in 2005, prior to that year’s site inspection. These areas may require some unloading, patching or minor re-contouring and then re-seeding and fertilizing of all of them. The provision remains unchanged from last year.

3. **Blue Waste Rock Storage Area (BW RSA) Enhanced Geo-chemical instrumentation and monitoring** - An enhanced system as proposed by O’Kane Consultants (2004) has been included in previous liability cost estimate reports so as provide improved monitoring information and performance validation of cover performance and groundwater chemistry. The proposed mitigative contingency cost estimate of \$94,500 for this year’s report was dropped upon the request of YG after their review of the first draft version of this report. According to YG, its removal does not preclude the need or requirement of Alexco to install additional monitoring (and associated security increase) at a future date should data or sampling results indicate deteriorating performance of the cover and/or water quality.

4. **BW RSA Seepage** - A Risk Provision of \$281,925 has been included as an additional mitigative contingency due to the uncertainty of the performance of the cover constructed over the Blue waste rock storage area, based on discussions with GY. A provision was originally recommended in the SJCI report of July 9, 2004. A provision should remain in place until satisfactory performance can be demonstrated. The current liability estimate is based on a residual risk factor of 25% of the \$1.074M estimated cost to implement a replacement cover over the dump as was costed by SRK (2003). A revised timeline for winding down the contingency was introduced in the previous liability cost estimate report (SJCI 2006) and consists of:

| <u>Date</u> | <u>% of \$1.074M</u> |
|-------------|----------------------|
| 2005Q | 35% |
| 2006Q | 25% |
| 2007Q | 15% |
| 2008Q | 5% |
| 2009Q | 0% |

A 5% inflation figure has also added for the first time since the 2003 SRK report was issued.

5. **Perched pond atop Heap Leach Pad** – A pond had been discovered atop of the heap leach pad during the 2005 fall inspection. A \$10,000 provision was assigned for this mitigative contingency last year pending further assessment. The area was revisited in the August 2006 visit and determined to not be an issue to the physical or geochemical stability of the facility. This provision has been removed.

Table 13
Mitigative Contingencies *

| Area and Individual Components | SRK Estimated Remaining Subtotals Sept 2003 | Estimated % Remaining Sept06 | Estimated Remaining Cost as of Sept 30, 2006 |
|--|---|------------------------------|--|
| Heap BTC GS&A (2 years) @\$29,000/a (from Table 9); PW treatment (2 years) @\$29,250/a (from Table 10) | \$1,128,000 | 40% (was 60%) | \$116,500 ¹ |
| Lucky Dump stabilization | \$36,000 (SRK 2006) | 100% | \$37,800 |
| BWRSA enhanced geo-chem monitoring | | | 0 |
| Risk Provision Component for BWRSA (considered "very unlikely" in SRK 2003) | \$1,074,000 | 25% (was 35%) | \$281,925 |
| Total | | | \$436,225 |

Notes:

* based on SJCI 2004c, Appendix A

1 from Tables 9 and 10 (Section 3.6)

4. Conclusions and Recommendations

4.1 Conclusions

The revised liability cost estimate for the Brewery Creek mine site as of September 30, 2006 is \$1,774,782.

This number compares to \$2,017,783 as of September 30, 2005 and \$2,779,305 as of September 2004. It reflects the significant amount of work undertaken at the site by Alexco (and previous owner VMC) over the past several years, notably the summer of 2004.

The largest cost center is the cost for on-going post closure monitoring at \$534,000.

The liability estimate includes a sum of \$281,925 required by GY for a mitigative contingency for possible remedial measures related to the cover over the Blue Waste Rock Storage Area, down from the original \$400,000 original provision. A provision for enhanced instrumentation and monitoring of performance of the dump has been dropped by YG as improvements can be added at a later date, if considered necessary. The cost estimate also includes a provision for operation of the Biological Treatment Cell for a further 2 years. Overall, \$436,000 is being required as provision for mitigative contingencies, which is down significantly from the \$743,000 in the previous cost estimate report. GY continues to have a conservative risk tolerance as the regulatory agency responsible for the site, similar to that of other jurisdictions in Canada.

The remaining costs for Mine Area Reclamation have dropped slightly as some work was undertaken in 2006. However, additional remedial work is required.

Liabilities for the removal and reclamation of site facilities has dropped marginally, reflecting the fact that several structures still remain although some cleanup work was undertaken.

Manpower costs have increased significantly from the previous cost estimate report (\$127,000 versus \$64,000) as more accurate manpower numbers have been received from Alexco from the 2005 year and similar numbers were utilized in this report for the upcoming year.

Remaining general services and administration costs have dropped slightly.

Leach pad reclamation has not been completed and the liability cost estimate is similar to last year's.

4.2 Recommendations

It is recommended that Alexco:

- Renew efforts to meet the previous timeline of completing reclamation tasks as was seen in 2004 is required in 2007. It appears as though minimal work was undertaken in the area of mine area reclamation/revegetation in 2006, especially of identified areas. It is especially important to establish physical and chemical stability and sustainable vegetation for the long-term. Establishing sustainable vegetation may require several years of maintenance seeding and fertilizing;
- Complete remedial measures recommended in the Revegetation and Metal Uptake Assessment report by Laberge (2006) and then complete follow-up surveys;
- Include detailed monitoring information and interpretation of results in annual reports submitted by the company. These should be reviewed for compliance to stated plans and permits. For example nutrient addition and performance monitoring records should be provided for the hydrocarbon contaminated soil land treatment farm. Monitoring data should also be assessed for performance and trends and be reported in the report;

It is further recommended that Government of the Yukon:

- Monitor Alexco's progress in completing identified work tasks during the upcoming summer 2007 work season beginning early in the season. Significant progress should be possible to complete a number of the remaining tasks. This includes re-grading of several mine areas and site revegetation of a large portion of the site including re-fertilizing of large areas of the overall site as well as submission of as-built BTC drawings, site cleanup, etc; and
- On an on-going basis, regulatory staff should document information on the progress and satisfactory completion of each reclamation component as part of their inspection and report review efforts, so that this information can be incorporated into future site liability estimates.

SteveJan Consultants Inc.

Steve Januszewski, P. Eng.
Principal

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APPENDIX A

Photos From Aug. 29, 2006 Site Inspection



Plate 1: Entrance to Mining Area with Pacific Pit in distance



Plate 2: Land Treatment Farm in old Oil Storage Area



Plate 3: Surface of Blue WRSA lysimeter area



Plate 4: BTC Reagent Stockpile and treatment pond in background



Plate 5: Main Haul Road & upstream drainage swale by North Golden Area



Plate 6: Main Haul Road leading to Lucky Area



Plate 7: Floor of eastern end of Lucky Pit



Plate 8: Area atop Lucky Pit



Plate 9: North Golden Dump



Plate 10: Main Haul Road and dump adjacent to Kokanee Pit



Plate 11: Exploration building and outdoor core racks



Plate 12: Boneyard area