



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

Your file - Votre référence
2AM-BOS---- & 2AM-DOH1323

July 18, 2018

Our file - Notre référence
CIDM#1223311

Richard Dwyer
Manager of Licensing
Nunavut Water Board
Gjoa Haven, NU X0B 1J0

Re: Crown-Indigenous Relations and Northern Affairs Canada's reply to TMAC Resources Inc.'s June 19, 2018 responses for their water licence applications 2AM-BOS---- and 2AM-DOH1323 amendment #2 for Phase 2 of the Hope Bay Project

Dear Mr. Dwyer,

During the technical meeting for the above mentioned applications, TMAC Resources Inc. (TMAC) made commitments to respond to several of Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) questions and recommendations.

CIRNAC Water Resources appreciates the opportunity to review the applicant's response and we are providing comments for the Nunavut Water Board's consideration. Comments have been provided pursuant to the Department's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Commitment 1 - INAC-Rec-16 - Scope of all licences for Hope Bay Project

CIRNAC was seeking clarification on how the new and amended licences would overlap with the 4 existing licences in the Hope Bay Belt.

2BE-HOP1222: This licence covers regional surface exploration throughout the Hope Bay Belt. We understand that TMAC would like this licence to remain unchanged and CIRNAC has no concerns regarding the exploration licence.

2BB-BOS1727: This licence covers surface exploration in a smaller area, contained within the 2BE-HOP1222 footprint, as well as a bulk sample at Boston. We understand that TMAC would like this licence to remain unchanged. They have emphasized that it is

important that regional exploration continue in the Boston Area under this licence in the event a 2AM-BOS production licence is issued. It is not clear why this exploration work could not be done under the 2BE-HOP1222 exploration licence.

As noted by TMAC, there is some physical overlap between the existing 2BB-BOS1727 licence and the proposed 2AM-BOS---- licence, in particular the vent raise and airstrip. If two licences were to be issued for different infrastructure at the same location, very careful consideration would have to be given to reclamation requirements.

Presently, CIRNAC does not see the necessity for keeping the 2BB-BOS1727 licence if, following their bulk sample, TMAC decide to enter operations at Boston using a potential 2AM-BOS---- licence.

2BB-MAE1727: This licence covers bulk samples from the Madrid North and Madrid South sites. TMAC has explained that, should they decide to proceed with Phase 2, they would like all infrastructure under the 2BB-MAE1727 licence to be incorporated into amendment #2 of the 2AM-DOH1323 licence. CIRNAC would also prefer if the scope of licence 2BB-MAE1727 were incorporated into an amended type A, but has questions about how this could be done effectively.

The site layout at Madrid South¹ proposed under the Phase 2 amendments is very similar to what is permitted by the 2BB-MAE1727 licence², so it is simple to see how these infrastructure could be transferred over. In contrast, the site layout at Madrid North³ proposed under the Phase 2 amendment is located to the south east of what is permitted by the 2BB-MAE1727⁴ licence. Incorporating this infrastructure into an amended type A would result in two rock piles, two ore piles, two contact water ponds, and two fuel storage facilities at the Madrid North Site. This has not been considered in our reclamation cost estimate.

2AM-DOH1323 amendment #2: This amendment would incorporate Madrid North and Madrid South Mines under the present Doris Licence, as well as the Madrid-Boston all weather road. TMAC has specified the decision to proceed to Phase 2 is not finalized. If Phase 2 is licensed, TMAC proposes to issue a notice to construct Phase 2, should they decide to go ahead.

¹ Figure 3, P5-18, Hope Bay Project: Madrid South Infrastructure Preliminary Design, SRK Consulting (Canada) Inc., November 30, 2017

² Figure 2, Water Management Plan : Madrid Advanced Exploration Program, North & South Bulk Samples, SRK Consulting (Canada) Inc., December 2014.

³ Figure 3, P5-18, Hope Bay Project: Madrid North Infrastructure Preliminary Design, SRK Consulting (Canada) Inc., November 30, 2017, Water Management Plan : Madrid Advanced Exploration Program, North & South Bulk Samples, SRK Consulting (Canada) Inc. December 2014.

⁴ Figure 1, Water Management Plan : Madrid Advanced Exploration Program, North & South Bulk Samples, SRK Consulting (Canada) Inc. December 2014.

CIRNAC will review TMAC's proposed draft amendments, which they have may submit next week.

2AM-BOS----: This licence would cover production at the Boston Site. CIRNAC will review TMAC's proposed draft licence, which they have may submit next week.

Commitment 2 - INAC-Rec-11 - Hydrodynamic model changes following changes to water treatment plant effluent quality for arsenic

CIRNAC has reviewed the memo provided updating the arsenic predictions in the hydrodynamic mixing model for Aimaokatalok Lake. The update used a water treatment plant effluent concentration of 0.1 mg/L, which is more realistically attainable given the technologies proposed for the treatment plant.

We agree with the conclusions of the memo; that even though the model indicates some periods where arsenic concentrations are above the CCME guideline for the protection of aquatic life at a single modelling point 100 m from the outfall, their short duration does not likely create a threat for aquatic life. Moreover, as stated in the conclusion the Aquatic Effects Monitoring Plan will be used to assess actual impacts.

Commitment 3 - INAC-Rec-2, 4, 5, 6 & 9 - Potential failure modes and long term maintenance requirements following closure

CIRNAC has reviewed the Closure Design and Performance Uncertainties Table provided. The list of potential failure modes discussed is extensive. We will not be incorporating long-term maintenance costs in our reclamation estimate.

Commitment 4 - INAC-Rec-3 - Arsenic loading under potential geomembrane failure post-closure at Boston Tailings Management Area

CIRNAC has reviewed the memo estimating the arsenic loading to Aimaokatalok Lake once 10% of the geomembrane liner has degraded following closure. We note that the loading would not increase arsenic concentrations to a level at which they would likely negatively impact waters.

Commitment 5 - INAC-Rec-15 - Impact of saline water spill on tundra

CIRNAC recommendation 15 was to fill in a gap in the analysis of potential project impacts. The memo provided adequately fulfils the recommendation and includes a discussion of mitigation measures.

Commitment 6 - INAC-Rec-19 - Transport of Madrid mine water

CIRNAC has reviewed the updated Groundwater Management Plan submitted and notes that it includes references to the transport of Madrid mine water by trucks as recommended.

CIRNAC also has one outstanding commitment, which is to provide comments on the updated reclamation cost estimate provided by TMAC in April 2018. Please see the attached memorandum with our response. We suggest having a teleconference between ourselves and TMAC to speak about the remaining differences, and will be in touch with them with proposed timing.

Please do not hesitate to contact me at 867-975-3876 or sarah.forte@canada.ca for any additional information.

Regards,

Sarah Forté
Water Management Specialist

To:
Sarah Forte
Indigenous and Northern Affairs
Canada – Nunavut Region

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From:
Charles Gravelle, M.Sc.E., P.Eng.

ENVIRONMENT

Date:
July 18, 2018

ARCADIS Project No.:
702774-000

Subject:
Update to RECLAIM Estimates
Review of TMAC/SRK Response to INAC Recommendations Regarding
Boston and Doris-Madrid Closure and Reclamation Costs

Provided herein is an update to the Arcadis RECLAIM quantum of security estimate and discussion of the differences between the latest TMAC estimate. The latest version of the Arcadis estimate is based on comments and notes provided by SRK Consulting (SRK), on behalf of TMAC Resources Inc. (TMAC) in their review of the INAC Recommendations #21 received March 29, 2018 regarding the quantum of security estimates prepared by Arcadis Canada Inc. on behalf of Indigenous and Northern Affairs Canada (INAC) for the Boston and Doris-Madrid Mine Sites.

For ease of understanding the two sites will be addressed under separate headers.

Boston Mine Site

Table 1 herein summarizes the quantum of security estimates for INAC March 2018, INAC June 2018 and TMAC April 2018 with the difference between the latest versions of the respective estimates presented in the right-hand column.

On the basis of the recent April 2018 evaluation completed by SRK the updated security amount proposed by TMAC would be \$36,712,621 which is \$4,281,548 less than the \$40,994,169 proposed by Arcadis. In general, the major cost differences relate to differing opinions regarding the following:

1. The period of time the site would be under interim care and maintenance (1.5 vs 3 years) equating to a cost difference of \$2,357,043.
2. The cost related to mobilization of the workforce (travel time) equating to \$326,495.
3. The monitoring period post-closure (10 vs 25 years) equating to a cost difference of \$220,400
4. Engineering and Project Management costs equating to \$611,584 on aggregate (note both parties have assigned 5% for these tasks however SRK has used an older direct cost amount to include in its Project Management estimate).
5. Contingency equating to \$520,511 however this is a function of the direct costs for which the same percentage of direct costs has been used by both parties..

Table 1 – Summary of 2018 Security Estimates for Boston Mine

CAPITAL COSTS	COMPONENT NAME	INAC COST March 2018	INAC COST June 2018	TMAC PROPOSED COSTS	PROPOSED COST DIFFERENCE
OPEN PIT		\$ -	\$ -	\$ -	\$ -
UNDERGROUND MINE		\$ 63,094	\$ 63,094	\$ 62,427	\$ 667
TAILINGS FACILITY		\$ 15,267,745	\$ 15,267,745	\$ 15,266,954	\$ 791
ROCK PILE		\$ 73,985	\$ 73,985	\$ 71,969	\$ 2,016
BUILDINGS AND EQUIPMENT	Boston Mine	\$ 6,144,260	\$ 5,421,040	\$ 5,344,932	\$ 76,108
CHEMICALS AND CONTAMINATED SOIL MANAGEMENT		\$ 636,123	\$ 636,123	\$ 473,245	\$ 162,878
SURFACE AND GROUNDWATER MANAGEMENT		\$ 46,772	\$ 46,772	\$ 43,717	\$ 3,055
INTERIM CARE AND MAINTENANCE		\$ 4,786,320	\$ 4,786,320	\$ 2,429,277	\$ 2,357,043
Incorrectly included task				\$ -	
SUBTOTAL: Capital Costs		\$ 27,018,299	\$ 26,295,079	\$ 23,692,521	\$2,602,558
INDIRECT COSTS		INAC COST March 2018	INAC COST June 2018	TMAC PROPOSED COSTS	PROPOSED COST DIFFERENCE
MOBILIZATION/DEMOBILIZATION		\$ 5,464,605	\$ 5,464,605	\$ 5,138,110	\$ 326,495
POST-CLOSURE MONITORING AND MAINTENANCE		\$ 1,345,961	\$ 1,345,961	\$ 1,125,561	\$ 220,400
ENGINEERING	5%	\$ 1,350,915	\$ 1,314,754	\$ 1,184,626	\$ 130,128
PROJECT MANAGEMENT	5%	\$ 1,350,915	\$ 1,314,754	\$ 833,298	\$ 481,456
HEALTH AND SAFETY PLANS/MONITORING & QA/QC	0%	\$ -	\$ -	\$ -	\$ -
BONDING/INSURANCE	0%	\$ -	\$ -	\$ -	\$ -
CONTINGENCY	20%	\$ 5,403,660	\$ 5,259,016	\$ 4,738,505	\$ 520,511
MARKET PRICE FACTOR ADJUSTMENT	0%	\$ -	\$ -		\$ -
SUBTOTAL: Indirect Costs		\$ 14,916,056	\$ 14,699,090	\$ 13,020,100	\$1,678,990
TOTAL COSTS		\$41,934,355	\$40,994,169	\$36,712,621	\$4,281,548

The other main cost differences relate to interpretation of the reclamation work and the appropriateness of certain unit rates, material quantities or work elements. The major differences relate to:

1. Building and Equipment demolitions and reclamation works equating to \$76,108
2. Chemical and Contaminated Soil Management works equating to \$162,878.

More detail is provided under Capital Cost and Indirect Cost headers.

Boston Capital (Direct) Costs

Underground Mine

No material difference between the two estimates.

Tailings Facility

No material difference between the two estimates.

Rock Pile

No material difference between the two estimates.

Buildings and Equipment

The major difference in security between the SRK and Arcadis estimates relate to three cost items:

1. The transfer of material from the Process Facility to the on-site landfill;
2. The removal and transfer of containment liner material; and
3. The grading of developed areas across the mine site.

Under Item 1 the volume of material in the March 2018 Arcadis estimate to be transferred from the Process Facility to the landfill is 207,145 m³. Upon review of the SRK April 2018 estimate the amount of debris to be loaded and hauled has been amended to 5% of the demolition volume provided by SRK. This equates to a volume of 9940m³. The unit rate for the containerization and transfer has also been amended to include \$10.23 for containerization and \$3.26. While Arcadis has reduced the overall quantity of material from the previous March 2018 estimate it remains higher than the SRK estimate. It is the opinion of Arcadis that the volume of material generated from the demolition works is understated in the SRK estimate.

For Item 2 the unit rate for the decommissioning of the containment liners remains as presented in the Arcadis estimate (\$0.57/m² compared to \$0.17/m² used by SRK) to reflect that more effort is required to remove and cut down the liner. The rate of \$0.57/m² is derived from adding the cost unit C.3.01 to C.2.10 (rounded down to \$0.40).

The SRK estimate for regrading developed areas is based on the use of a grader whereas the Arcadis estimate assumes a dozer will be used to complete the work. On the basis of past experience, the equipment fleet mobilized to site for restoration works generally does not include a grader. It is for this reason the Arcadis estimate uses the higher dozer-based rate. The rate has, however, been lowered from \$1.23 to \$0.95 reflective of the lower RECLAIM unit cost for grading work.

The balance of the difference relates to how Arcadis assigned loading and haulage costs for demolition debris removal and the costs associated with the clean-up of work areas.

There has been a material drop in the value of the Arcadis security estimate for the work items under this task. A total of \$723,220 has been removed from the overall security amount to account for items that had been double counted within the various work items or where higher unit rates had been previously used. Pursuant to Arcadis' review of the April 2018 TMAC estimates the unit rates used by Arcadis have been reduced in the June 2018 RECLAIM estimate.

Chemicals and Contaminated Soil Management

The main difference between the SRK and Arcadis estimates (\$162,878) relates to the \$100,000 assigned by Arcadis for the completion of a Phase II ESA. It is the opinion of Arcadis that this work would be required by INAC in order to complete/confirm any Remedial Action Planning and tendering of reclamation/remediation works going forward upon abandonment of the mine property. The inclusion of a Phase II ESA cost is consistent with INAC policy in this regard.

The other main difference in cost between the two estimates relates to the relocation of Mega bags of impacted soil into the underground works. It is not clear to Arcadis why the higher unit rate of \$15.37/m³ would not be applied to all soils scheduled to go underground. The cost of moving material above ground, prior to the underground, is minimal relative to the overall cost of executing this task as the cost of moving underground is significant slower and as such should be appropriately reflected in the security estimate.

It is the opinion of Arcadis that the reclamation work under this task is appropriately assigned.

Surface and Ground Water Management

No material difference between the two estimates.

Interim Care and Maintenance

This task is the primary difference in security between the SRK and Arcadis estimates and it is simply a function of the time period assisted by the respective consultants. Arcadis has assumed a three-year period while SRK is using 1.5 years. Arcadis is not proposing a change in the security estimate for this task.

Boston Indirect Costs

Mobilization/Demobilization

The prime difference in security relates to the Arcadis estimate accounting for travel time by the workers assigned to the reclamation project under a separate stand-alone activity. SRK states that the cost for this is included in the charge rates for staff. Arcadis cannot confirm this and as such recommend keeping the cost in the security estimate.

Post-Closure Monitoring and Maintenance

The difference in security relates to the duration of the post-closure monitoring. The time period assigned by Arcadis is representative of the work that will be required on this particular site and is consistent with how post-closure costs have been assigned for other mine properties in Nunavut. It is Arcadis' opinion that the security amount set aside for this task should remain as reported.

Engineering Costs

Both SRK and Arcadis have assigned a 5% of direct cost for this task. The difference in security is directly related to the difference in direct costs between the two estimates.

Project Management

Given the phase of the mine development the use of 5% of direct costs is not unreasonable and consistent with other security estimates done for mine sites in Nunavut.

Health and Safety Plans/Monitoring/QA/QC & Bonding

Arcadis has considered these costs as part of Project Management and no change is required. SRK has also assigned no cost for these tasks.

Contingency

Both Arcadis and SRK have assigned a 20% of direct cost for this task. The security difference is directly linked to the direct cost for the task. No change required.

Summary

The updated RECLAIM estimate prepared by Arcadis is provided in Attachment A. The light orange cells identify items within the RECLAIM estimate that have changed from the previous March 2018 Arcadis version of the security estimate. The Excel version provides additional comments to the right of the respective task item tables.

Doris – Madrid Mine

Table 2 herein summarizes the quantum of security estimates for INAC March 2018, INAC June 2018 and TMAC April 2018 with the difference between the latest versions of the respective estimates presented in the right-hand column.

On the basis of the recent April 2018 evaluation completed by SRK the updated security amount proposed by TMAC would be \$61,174,597 which is \$10,111,151 less than the \$71,285,748 proposed by Arcadis (as derived in the June 2018 version of the RECLAIM estimate). In general, the major cost differences relate to differing opinions regarding the following:

1. The difference in material quantities and/or unit rates for reclamation works \$1,071,350.
2. The period of time the site would be under interim care and maintenance (1.5 vs 3 years) equating to a cost difference of \$4,100,691.
3. The cost related to mobilization of the workforce (travel time) equating to \$437,208.
4. The monitoring period post-closure (10 vs 25 years) equating to a cost difference of \$3,003,725.
5. Engineering and Project Management costs equating to \$559,773 are a function of the direct costs for which the same percentage of direct costs has been used by both parties for both Project Management and Engineering.

6. Contingency equating to \$1,018,408 however this is a function of the direct costs for which the same percentage of direct costs has been used by both parties.

Table 2 – Summary of 2018 Security Estimates for Doris-Madrid Mines

CAPTIAL COSTS	COMPONENT NAME	INAC COST March 2018	INAC COST June 2018	TMAC PROPOSED COSTS April 2018	PROPOSED COST DIFFERENCE
OPEN PIT		\$0	\$0	\$0	\$0
UNDERGROUND MINE	Doris-Madrid	\$329,785	\$312,868	\$303,826	\$9,042
TAILINGS FACILITY	Doris-Madrid Mines	\$20,481,445	\$18,850,158	\$18,851,737	-\$1,579
ROCK PILE	Doris-Madrid	\$290,126	\$290,126	\$189,067	\$101,059
BUILDINGS AND EQUIPMENT	Doris-Madrid	\$14,598,548	\$13,677,653	\$13,335,404	\$342,249
CHEMICALS AND CONTAMINATED SOIL MANAGEMENT		\$3,610,542	\$3,181,811	\$2,565,126	\$616,685
SURFACE AND GROUNDWATER MANAGEMENT		\$660,059	\$660,059	\$656,165	\$3,894
INTERIM CARE AND MAINTENANCE		\$7,119,300	\$7,199,300	\$3,098,609	\$4,100,691
	SUBTOTAL: Capital Costs	\$47,089,803	\$44,091,974	\$38,999,934	\$5,092,040
INDIRECT COSTS		INAC COST March 2018	INAC COST June 2018	TMAC PROPOSED COSTS April 2018	PROPOSED COST DIFFERENCE
MOBILIZATION/DEMobilIZATION		\$9,805,516	\$9,615,306	\$9,178,098	\$437,208
POST-CLOSURE MONITORING AND MAINTENANCE		\$4,350,877	\$4,350,877	\$1,347,152	\$3,003,725
ENGINEERING	5%	\$2,354,490	\$2,204,599	\$1,949,997	\$254,602
PROJECT MANAGEMENT	5%	\$2,354,390	\$2,204,599	\$1,899,428	\$305,171
HEALTH AND SAFETY PLANS/MONITORING & Q	0%	\$0	\$0	\$0	\$0
BONDING/INSURANCE	0%	\$0	\$0	\$0	\$0
CONTINGENCY	20%	\$9,417,961	\$8,818,395	\$7,799,987	\$1,018,408
MARKET PRICE FACTOR ADJUSTMENT	0%	\$0	\$0	\$0	\$0
	SUBTOTAL: Indirect Costs	\$28,283,333	\$27,193,774	\$22,174,662	\$5,019,112
TOTAL COSTS		\$75,373,136	\$71,285,748	\$61,174,596	\$10,111,152

The other main cost differences relate to interpretation of the reclamation work and the appropriateness of certain unit rates, material quantities or work elements for work associated with tasks under the RECLAIM headers Rock Pile, Chemicals, and Buildings & Equipment. The value of the differences are:

1. Rock Pile work equates to \$101,059.
2. Building and Equipment demolitions and reclamation works equating to \$342,249
3. Chemical and Contaminated Soil Management works equating to \$616,685.

More detail is provided under Capital Cost and Indirect Cost headers.

Doris-Madrid Capital (Direct) Costs

Underground Mine

No material difference between the two estimates.

Tailings Facility

No material difference between the two estimates.

Rock Pile

The difference in security (\$101,059) is related to the difference in the unit rates used by SRK and Arcadis to derive the grading costs for the overburden and laydown areas at the respective mine sites. SRK has applied a new rate of \$0.24/m² compared to the RECLAIM rate used by Arcadis for this work (\$0.95/m²). Given that the work will likely be done using a dozer and not a grader then the higher rate is considered more appropriate given the equipment fleet that would be used to complete the work under an abandonment scenario.

A reduction in the security estimate for this task is not considered appropriate.

Buildings and Equipment

Further to an overall reduction in the previously completed Arcadis RECLAIM estimate to remove elements of work which had been double counted or additional clarification was provided by SRK on the nature of the work, the main difference between the SRK and Arcadis estimates (\$342,249) is associated with the following work items:

1. Grading of the Quarry 3 landfill prior to the placement of the cover material will be required but does not appear to have been covered by SRK in their estimate. The value of the work using the unit rate for slope grading is \$88,555.
2. General site grading at Doris is not covered by SRK in their estimate which equates to \$56,580.
3. Costs associated with the removal of liner materials from Doris Run-off berm, Sedimentation/Pollution Control Pond, Reagent Pads Storage Areas, Waste Management Landfarm and Primary Vent Raise plus Tanks Farms at Doris and Roberts Bay are deemed to require more effort than \$0.17/m² proposed by SRK. Arcadis recommends the rate of \$0.57/m² remain for this work. The value of work above what has been carried by SRK is \$21,483.

The balance of the difference relates to how Arcadis assigned loading and haulage costs for demolition debris removal and the costs associated with the clean-up of work areas.

There has been a significant drop in the value of the Arcadis security estimate for the work items under this task \$920,895 to account for items that had been double counted under the Chemicals work items or higher unit rates had been previously used but pursuant to a review of the April 2018 TMAC estimate we have reduced the unit rates in the June 2018 RECLAIM estimate.

Chemicals and Contaminated Soil Management

Further to an overall reduction in the previously completed Arcadis RECLAIM estimate to remove elements of work which had been double counted or additional clarification was provided by SRK on the

nature of the work, the main difference between the SRK and Arcadis estimates (\$616,685) is associated with the following work items:

1. The disposal of waste oil (difference equal to \$132,684) is a function of the costs assigned by the respective parties. We cannot accept a cost of \$0.02/L for the recovery, haulage and disposal of the residual fuel in the respective tanks. Arcadis recommends that the rate used in the Arcadis estimate remain as stated.
2. The completion of a Phase II ESA (\$150,000 difference between estimates) to INAC standards as part of the reclamation works post-abandonment. Arcadis recommends this amount not change.
3. The off-site disposal of PHC impacted soils (estimate value of \$312,180) was included in the reclamation plan but not costed by SRK. Arcadis recommends this amount not change as it cannot be predicted that all PHC impacted soil will be placed underground prior to the portal being sealed.

Surface and Ground Water Management

No material difference between the two estimates.

Interim Care and Maintenance

This task is the primary difference in security between the SRK and Arcadis estimates and it is simply a function of the time period assisted by the respective consultants. Arcadis has assumed a three-year period while SRK is using 1.5 years. A change in the INAC security estimate for this task is not being considered appropriate at this time subject to confirmation by INAC.

Doris- Madrid Indirect Costs

Mobilization/Demobilization

The prime difference in security relates to the Arcadis estimate accounting for travel time by the workers assigned to the reclamation project under a separate stand-alone activity. SRK states that the cost for this is included in the charge rates for staff. Arcadis cannot confirm this and as such recommends keeping the travel time cost in the security estimate.

Arcadis has accepted SRK suggestions that the daily camp costs for the Doris/Madrid sites be reduced from \$110 down to \$100 per person-day equating to a reduction of \$190,208. This change has been included in the June 2018 RECLAIM estimate.

Post-Closure Monitoring and Maintenance

The difference in security relates to the duration of the post-closure monitoring. The time period assigned by Arcadis is representative of the work that will be required on this particular site and is consistent with

how post-closure costs have been assigned for other mine properties in Nunavut. It is Arcadis' opinion that the security amount set aside for this task should remain as reported.

Engineering Costs & Project Management

Both SRK and Arcadis have assigned a 5% of direct cost for this task. The difference in security is directly related to the difference in direct costs between the two estimates.

Health and Safety Plans/Monitoring/QA/QC & Bonding

Arcadis has considered these costs as part of Project Management and no change is required. SRK has also assigned no cost for these tasks.

Contingency

Both Arcadis and SRK have assigned a 20% of direct cost for this task. The security difference is directly linked to the direct cost for the task. No change required.

Summary

The updated RECLAIM estimate prepared by Arcadis is provided in Attachment B. The light orange cells identify items within the RECLAIM estimate that have changed from the previous March 2018 Arcadis version of the security estimate. The Excel version provides additional comments to the right of the respective task item tables.