



JAY PROJECT

YELLOWKNIVES DENE FIRST NATION

TECHNICAL REPORT RESPONSES

August 2015

Table of Contents

1	INTRODUCTION	1-1
2	RECOMMENDATION AND RESPONSE	2-1
2.1	Caribou: Cumulative Impact Predictions	2-1
2.1.1	Recommendation 1	2-1
2.1.2	Response 1	2-1
2.1.2.1	Jay Haul Road Route Selection	2-2
2.1.2.2	Additional Mitigation Measures	2-3
2.1.2.3	Esker Crossing	2-3
2.1.2.4	ZOI Collaborative Research With Incorporation of Traditional Knowledge	2-4
2.2	Caribou: Compensatory Mitigation.....	2-5
2.2.1	Recommendation 2.....	2-5
2.2.2	Response 2.....	2-5
2.3	Caribou: Zone of Influence.....	2-7
2.3.1	Recommendation 3.....	2-7
2.3.2	Response 3.....	2-7
2.4	Air Quality and Dust Management	2-7
2.4.1	Recommendation 4.....	2-7
2.4.2	Response 4.....	2-7
2.5	Surface and Mine-Water Management.....	2-8
2.5.1	Recommendation 5.....	2-8
2.5.2	Response 5.....	2-8
2.6	Community Wellness	2-9
2.6.1	Recommendation 6.....	2-9
2.6.2	Response 6.....	2-9
3	REFERENCES	3-1



Abbreviations

Abbreviation	Definition
AQEMMP	Air Quality and Emissions Monitoring and Management Plan
CRMP	Caribou Road Mitigation Plan
DAR	Developer's Assessment Report
Dominion Diamond	Dominion Diamond Ekati Corporation
Ekati Mine	Ekati Diamond Mine
GNWT	Government of Northwest Territories
IBA	Impact Benefit Agreement
IEMA	Independent Environmental Monitoring Agency
IR	information request
MVEIRB	Mackenzie Valley Environmental Impact Review Board
NWT	Northwest Territories
Project	Jay Project
SEA	Socio-Economic Agreement
WCB	Worker's Compensation Board
WEMP	Wildlife Effects Monitoring Plan
YKDFN	Yellowknives Dene First Nation
ZOI	zone of influence

Units of Measure

Unit	Definition
%	percent
km	kilometre



1 INTRODUCTION

Dominion Diamond submitted a Developer's Assessment Report (DAR) to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) in November 2014. Following completion of the DAR, Dominion Diamond submitted Round 1 and Round 2 information request responses (April 7, 2015 and July 3, 2015, respectively), and attended Technical Sessions hosted by MVEIRB in Yellowknife between April 21 and 24, 2015, to address regulator and parties' questions and concerns in regard to the Jay Project (Project) and the DAR.

On July 31, 2015, Yellowknives Dene First Nation (YKDFN) submitted their technical report to MVEIRB for the Project outlining recommendations on remaining topics of concern. This report provides responses to those recommendations outlined in the YKDFN technical report (YKDFN 2015), with the intent of clarifying these remaining topics as the Project moves into the MVEIRB Hearings Phase.



2 RECOMMENDATION AND RESPONSE

2.1 Caribou: Cumulative Impact Predictions

2.1.1 Recommendation 1

YKDFN recommends that the Review Board make a determination that the Jay project would have a significant adverse cumulative impact on caribou. Therefore, YKDFN supports the following measures:

1. DDEC shall be subject to measures aimed at minimizing adverse effects on caribou, not limited to:
 - a. Selection of the Jay haul road route that minimizes disturbance to high quality caribou habitat (PR#305 DAR-IEMA-IR-28 and PR#256 Anne Gunn's proposed routing)
 - b. Additional mitigation to reduce effects of haul truck and other traffic on caribou; such as, more aggressive dust management; more precautionary traffic management to reduce sensory disturbance.
 - c. Devise and implement a lower impact esker crossing via alternate crossing site, one way traffic, buried power lines and other approaches.
2. Conduct collaborative research with other mine operators to deepen understanding of the true zone of influence (ZOI) created by mining and exploratory activities. The results of this research will be reported annually to all interested parties as part of DDEC's annual report under its Wildlife Effects Monitoring Program. The research program should be developed within a year of the acceptance date of the Measures by Responsible Ministers. Implementation of research results to reduce ZOI should take place within five years, and DDEC will also commit to applying these results to the existing Ekati Mine.
3. Consult and incorporate tradition knowledge (TK) based recommendations as part research into caribou behaviour.

2.1.2 Response 1

All factors were formally assessed and considered in the determination of significance. Further, at MVEIRB's request, the effects of the Project were incorporated into a population model created for the Bathurst herd (Adequacy Review Item 8.8 response DAR-MVEIRB-15). The population model parameters were selected to examine the maximum potential effects of all human-related development on the Bathurst herd. Despite the application of maximum effects, the conclusion of the population modelling was that additional energetic costs from changes in movement and behaviour associated with the Project and other developments were not expected to decrease population resilience and increase the risk to the viability of the Bathurst herd at any phase of the population cycle. The negative trend in Bathurst herd population growth associated with the current estimates of vital rates for reference conditions were predicted to be similar with and without the development-related cumulative changes in habitat quantity and quality, and caribou behaviour and energetics. That finding was consistent with Adamczewski et al. (2009) who indicated that effects from the previous and existing mines are limited and unlikely a major contributing factor in the recent decline of the Bathurst caribou herd.



2.1.2.1 Jay Haul Road Route Selection

Dominion Diamond has identified the Jay Road route and design that minimizes the effect on barren-ground caribou. Dominion Diamond's work has included engagement with members of all of the Impact Benefit Agreement (IBA) groups including aerial reconnaissance and on-land engagement to gather input on the most appropriate route for the Jay Road. In this recommended Measure, YKDFN has expressed a desire to minimize the disturbance footprint of the Jay Road on high quality caribou habitat. As discussed in DAR Section 12.6.2 the direct loss of habitat is not considered to pose a risk to the assessment endpoint for barren ground caribou. Additionally, the historic caribou trail map on which Anne Gunn proposed Alternative 4 for the Jay Road is a map of the density of observed caribou trails (not habitat quality), which is not the sole or primary driver for selection of the best road route for the Project. In Round 1 information request (IR) response to DAR-IEMA-IR-28 it was noted that methods for identifying caribou trails from aerial photographs and later used for trail distribution mapping were not able to distinguish between historic caribou trails and trails that are actively in use. The density of caribou trails is also limited by detectability from aerial photographs and field observations. Dominion Diamond has provided a thorough analysis of road routes (including Alternative 4) that integrates all of the relevant information.

As part of the Round 1 IRs, Independent Environmental Monitoring Agency (IEMA; DAR-IEMA-IR-28) requested that the preferred Jay Road alternative meet a different objective:

“DDEC should re-evaluate the Jay road options and demonstrate that from a caribou movement perspective that the route selected has the least potential to disturb caribou movement through the project.”

Dominion Diamond considers this to be a more relevant request than recommended Measure 1 in the YKDFN Technical Report (YKDFN 2015). Disturbance to caribou movement was addressed in DAR Section 12.6.2. The area of the Jay Road is recognized as a historic migration route for the Bathurst caribou herd; the main caribou migration route in the Project area runs northwest-to-southeast towards the Narrows. All alternatives for the Jay Road, including Alternative 4 (the Anne Gunn route), must run in an approximately east-west direction to connect the Misery Road to the Jay Pit. As such, all alternatives for the Jay Road cross the main caribou migration path in the area and traffic on the road will affect caribou similarly under all alternatives. Beyond traffic, the other factor contributing to the barrier effect of the Jay Road is the physical structure of the road. A detailed alternatives analysis was conducted on all Jay Road alternatives (Technical Sessions Undertaking Request Response DAR-MVEIRB-UT-02) and the selected alternative for the Jay Road crosses the least amount of the esker and requires the least amount of road to be constructed with safety berms, which present obstacles to caribou crossing.

Alternative 4 also has two very significant downsides. First, it has a steep maximum grade that may not be technically feasible for large payload haul trucks to climb. Reducing haul truck payload would increase the frequency of haul truck traffic, an undesirable outcome. Second, it passes through the Misery Camp, increasing potential concerns for Health and Safety and traffic management. There is no corresponding reduction in risk to caribou that would offset these negative aspects of Alternative 4.

Dominion Diamond has indicated that the main portion of the Jay Road (i.e., roughly between King Pond Dam and the junction with the Jay North Road, a distance of 2.8 kilometres [km]) will be constructed with caribou crossings. However, no caribou crossings will be constructed where raised safety berms are required or where portions of the pipeline will require visual inspection (i.e., joints, valves, vents, and



drains). Dominion Diamond will continue to engage with our Impact Benefit Agreement (IBA) communities and other people affected by the Project to receive input regarding the design of the caribou crossings for the Jay Road. This input will be incorporated into the final detailed design of the Jay Road. Once roads are constructed, it is anticipated that as part of annual visits of community members to the Ekati Mine and for monitoring the effectiveness of the caribou crossings will be reviewed, and if necessary, modifications can be implemented. This procedure is currently in place for the Ekati Mine and would be continued for the Project.

The selected alternative for the Jay Road (Alternative 3) is consistent with the minimization of the barrier effect of the Jay Road to caribou movement and migration, a key element of the Caribou Road Mitigation Plan (CRMP) for the Jay Project (Dominion Diamond 2015a), which was informed by substantial engagement with communities.

2.1.2.2 Additional Mitigation Measures

The CRMP developed by Dominion Diamond (2015a) describes the mitigation and monitoring for the Jay and Misery roads with respect to caribou. Dominion Diamond hosted two workshops (in May and June 2015) to receive suggestions on earlier versions of the CRMP, and the current version (Dominion Diamond 2015a) includes revisions based on those workshops. Based on the framework of adaptive management, it is important to note that the CRMP will evolve through time. The CRMP is included as an Appendix in the Conceptual Wildlife Effects Monitoring Plan (WEMP) (Dominion Diamond 2015b).

The objectives of the CRMP include:

- avoiding and minimizing (reducing) the risk of caribou and other wildlife mortalities from traffic;
- avoiding and minimizing the barrier effect of the Jay and Misery roads (and other Ekati Mine roads) to caribou movement and migration; and,
- limiting the effect of sensory disturbance from roads and traffic on caribou behaviour.

Dust is caused by vehicles driving on roads, mitigation and monitoring of dust is addressed in the Conceptual Air Quality and Emissions Monitoring and Management Plan (AQEMMP) for the Jay Project (Dominion Diamond 2015c). Mitigation to control dust at the Ekati Mine has included watering and applying dust suppressant to the roads. More detail regarding dust mitigation and monitoring can be found in the Ekati Mine Air Quality Management and Monitoring Program (Section 1.3 and 3.5 of ERM [2015]), and the conceptual AQEMMP for the Jay Project (Section 2.4), and Section 4.1.6 of the WEMP.

2.1.2.3 Esker Crossing

This Recommended Measure was previously addressed in the Round 1 IR response DAR-IEMA-IR-43.

The location where the road crosses the esker has been selected to minimize disturbance by selecting a portion of the esker with a natural depression and where the width of the esker is narrow. The total length of the esker cut is approximately 80 metres (m). Community engagement was conducted to aid in the selection of the most appropriate location to cross the esker. This included numerous visits to the esker. Community members who visited the esker were in general agreement that having the road cross at this location was most appropriate.

As noted in the response regarding the Jay Road Route Selection above, the concerns regarding the Jay Road do not arise from loss of habitat (including esker habitat) but from the potential of the road and traffic to function as a barrier to caribou movement, in this case along the esker. Under all road alternatives, the same amount of traffic will cross the esker. In accordance with Worker's Compensation Board of the Northwest Territories and Nunavut (WCB NWT and NU) Mine Health and Safety Regulations (1995), for two-way haul traffic, the minimum operating road width is required to be three times the width of the widest truck that will operate on the road. The maximum operating width of the haul traffic that will operate on the Jay Road is anticipated to be 8.3 metres (m), which corresponds to an operating width of 25 m for two-way traffic, and the total base width would be 37.4 m. In particular, due to the short summer construction season, having two-way traffic through the esker crossing is necessary from a traffic management and safety perspective.

For comparison purposes, if the road were to be built as a single lane through the esker, the minimum operating road width would be twice the operating width of the widest truck, which corresponds to 16.6 m, and the total base width of the excavation would be 29.1 m. This would reduce the width of the esker cut by 8.3 m (width of a haul truck), but would not be practical or safe from an operating standpoint. Furthermore, as described above, the same amount of traffic would be present along the Jay Road. Advice from community members has also been utilized in the development of the closure and restoration for the plan for the esker, at the completion of the Project. Esker material excavated during construction of the road crossing will be stockpiled and retained for use during closure. During closure, the power line and pipelines along the Jay Road will be removed; once road access to the dike is no longer required, natural drainage patterns around the esker will be re-established, and the natural grades of the esker will be re-established. Stockpiled esker material will be used to dress the re-graded esker.

Research suggests that effects from power lines are minor when compared to active roads (Berger et al. 2000; Reimers et al. 2000, 2007; Vistnes et al. 2008). Qualitative analysis predicted that the presence of the power lines should result in negligible changes to caribou movements and distribution relative to increased traffic on the Misery and Jay roads; rather it is the potential adverse effects of increased traffic on Misery and Jay roads that are recognized as the focus of concern. Burying the power line through the esker cut would require substantive extra work to bring the (high-voltage) cables to the ground, encase them in a protective conduit, and elevate them again. The loss of ability for safety inspection on that portion of the high-voltage cables would introduce unnecessary operational and safety risks, for no apparent environmental benefit.

The location where the road crosses the esker has been selected to minimize disturbance by selecting a portion of the esker with a natural depression and where the width of the esker is narrow. The total length of the esker cut is approximately 80 m. Community engagement was conducted to aid in the selection of the most appropriate location to cross the esker. This included visits to the esker. Community members who visited the esker were in general agreement that having the road cross at this location was most appropriate.

2.1.2.4 *ZOI Collaborative Research With Incorporation of Traditional Knowledge*

The ZOI represents a combination of direct (physical footprint) and indirect (noise, dust, viewscape and other sensory disturbances) effects around the Project that changes the behaviour and occurrence of



caribou. A formal research program as proposed would likely not be effective. To identify proportional effects attributable to specific factors (mechanisms) would require an experimental process with the reduction of some but not other factors; a problematic solution when many of the factors have the same cause. Mining activities and traffic along the haul roads each generate noise, dust, light, vibration, and changes to the viewscape simultaneously. These factors are collectively and effectively accounted for through use of a ZOI.

In this Recommended Measure, YKDFN recommends a collaboration among mine operators and Government of the Northwest Territories (GNWT). Dominion Diamond does not agree that it is our responsibility to develop such a collaboration of independent research on ZOIs. Such a group already exists (i.e., ZOI Technical Task Group) and ZOI monitoring at the Ekati Mine (inclusive of the Project) will be guided by the recommendations of the ZOI Task Group, which is led by the GNWT, Environment and Natural Resources (ENR). This is the appropriate group to provide such recommendations. Dominion Diamond will also consider feedback from communities, monitoring agencies and other people affected by the Project through ongoing engagement activities and participation in wildlife monitoring workshops.

Dominion Diamond has partnered with the Canada Centre for Remote Sensing (Natural Resources Canada) on their SMART program on the effects of development on the Bathurst caribou herd, which includes ZOI assessment. Monitoring and mitigation are described in the WEMP (Dominion Diamond 2015b) and the CRMP for the Jay Project (Dominion Diamond 2015a). The WEMP and CRMP are in accordance with the measures on collaboration and ZOI-related actions of Recommendations #7 and #8 of the GNWT (2015).

2.2 Caribou: Compensatory Mitigation

2.2.1 Recommendation 2

YKDFN posits that the proponent can take specific and measureable actions to off-set the adverse impact of the Jay Project on caribou. For example, DDEC could increase efforts towards the timely reclamation of sites no longer in use; such as, Old Camp, Fox waste rock piles and pit, and Cell B of the Long Lake Containment Facility). Finally, DDEC should exercise caution with respect to timing and phasing of any further exploration or development in the regions until such time as the Bathurst caribou population recovers to more robust levels. YKDFN supports the following measure.

1. DDEC should be required to prepare a Compensatory Mitigation plan for caribou, so as to facilitate caribou herd recovery. Specifically, the plan's objectives should target quantifiable objectives, such as: reductions in energy loss, increased calving rates, increase calf survival rates. The plan should be developed with input from interested parties. The plan should be prepared by DDEC and circulated to affected Aboriginal governments, the GNWT, and the Wek'eezhii Renewable Resources Board within one year of acceptance of the Report of Environmental Assessment

2.2.2 Response 2

Dominion Diamond does not agree that there is a need for offsetting. As presented in the response to the Round 1 information request to DAR-MVEIRB-IR-90, adverse effects from a project should be mitigated following a standard mitigation hierarchy (IFC 2012; BBOP 2015). The hierarchy is, in order of priority:

- avoidance;



- minimization;
- reclamation; and,
- offsetting.

Effects that are avoided entirely or are minimized yield a reduction in the residual effects of a project prior to implementing reclamation or offsetting. The Project will use mitigation to avoid, minimize, and reclaim adverse effects associated with the effects pathways (see WEMP, Appendix D, Dominion Diamond 2015b). The results presented in the DAR indicate that there are no significant adverse effects from the Project, and no offset mitigation has been proposed. Further, there is no regulatory requirement, guideline or precedent in the NWT for offsetting residual adverse effects to caribou and other wildlife, and any changes to the parameters of interest to YKDFN from offsetting the effects from the Project will not be measurable.

The offsetting plan requested by YKDFN is to provide measurable reductions in energy loss and positive changes in calf production and survival. The residual effects from the Project are expected to contribute little to the cumulative effects on barren-ground caribou energy loss, calf production and survival. The incremental decrease in fecundity from the Project is predicted to be 0.3% (Section 12.4.2.3.2 of the DAR). The cumulative effects analysis shows that natural factors (such as population cycles and insect harassment) remain the determining factors in caribou energetics, abundance and distribution. Direct habitat loss from the residual physical footprint of the Project (e.g., Waste Rock Storage Areas) is less than 0.1% of the seasonal ranges of the Bathurst herd. Physical disturbance from previous and existing developments has had little, if any, ecologically measurable influence on the carrying capacity of the seasonal ranges (less than 2% cumulative direct habitat loss). The population modelling completed for MVEIRB-IR-15 (Adequacy Review Item 8.8) demonstrates that the Bathurst herd's ability to increase is dependent on caribou vital rates and is not prevented by cumulative effects of development disturbance.

Importantly, all of the analyses used a precautionary approach to predict maximum effects and manage uncertainty; hence, most ecological effects are likely to be considerably smaller than those presented in the assessment making them less likely to be measurable. The ability to measure change in an ecological effect is determined by natural variance in the parameter of interest, desired confidence level, desired power of the test, effect size, and sample size. The natural variances in calf production and survival are large and the ecological effect sizes of those parameters associated with the Project are small. No offset mitigation is likely to yield changes that can be confidently and powerfully measured as different from natural variation in energetics, survival and productivity.

In their Technical Report, YKDFN cites the Caribou Mitigation and Monitoring Plan for Peace River Coal's Roman Mine (Stantec 2012). The effect of concern with the Roman Mine is the amount and condition of habitat in the range of a caribou herd where 24% to 27% of seasonal ranges have been affected by development and where linear corridors are 30% above threshold values (Stantec 2012, p. 6). Offsetting for the Roman Mine Project consists of securing habitat against future development and a cash payment for other activities (Stantec 2012, p. 25). The importance of habitat loss in the Roman Mine Project, and the associated ease of measurement of offset habitat create the possibility of offsetting in the Roman Mine example. The importance of habitat loss and ease of measurement are not the case for the Jay

Project where the concerns are difficult to measure: energetic costs and the related survival and productivity effects of the Project. The Roman Mine is not a good comparison for the Jay Project.

Effective mitigation through avoidance, minimization, and reclamation removes the need for offsetting the effects of the Project.

2.3 Caribou: Zone of Influence

2.3.1 Recommendation 3

YKDFN supports the following recommendation.

1. To obtain information needed to prevent significant adverse impact to caribou, DDEC shall analyze estimates to ZOI distances and magnitude from the 2009 and 2012 aerial survey data from the combined Ekati-Diavik study area using the new R code analysis. These estimates should be reported within the 2015 Wildlife Effects Monitoring Program report.

2.3.2 Response 3

To assist in evaluating alternative methods for refining assessments of the ZOIs of developments on barren-ground caribou, Dominion Diamond agrees with the recommendation and will analyze the ZOI distance and magnitude from the 2009 and 2012 aerial survey data as requested and will present the results in its 2015 Wildlife Effects Monitoring Program report. Dominion Diamond will work with IEMA and the ZOI Technical Task Group to evaluate the analytical methods and their results. Dominion Diamond has also partnered with the Canada Centre for Remote Sensing (Natural Resources Canada) on their SMART program on the effects of development on the Bathurst caribou herd, which includes ZOI assessment.

2.4 Air Quality and Dust Management

2.4.1 Recommendation 4

YKDFN has two primary recommendations.

1. The GNWT should develop strong, enforceable emission and air quality standards as soon as possible.
2. DDEC should continue to actively pursue more effective dust suppression strategies such as the application of more effective dust suppressants on road surface and appropriate triggers and responsive management strategies.

2.4.2 Response 4

1. This recommendation is not directed to Dominion Diamond; as such, a response is not provided as part of this document.
2. Dominion Diamond is committed to ongoing evaluation and improvement of dust suppression at the Ekati Mine. Dust suppression has been used as a mechanism to mitigate the effects of fugitive dust at the Ekati Mine since the commencement of mining in 1998. Various methods of dust suppression are used at the Ekati Mine including DL-10 in areas of high traffic (haul roads), road watering in areas

around waterbodies, water crossings and around main camp, and EK-35 on the runway as approved by Boeing for use with planes.

One of the principles of effective air quality management is that of continuous improvement. Dominion Diamond is committed to ongoing investigation of appropriate and effective dust suppressants. Dominion Diamond has implemented a pilot project looking at alternatives to the use of DL-10 on haul roads at the Ekati Mine. The investigation of the effectiveness of the dust suppression actions proposed for the Project will be based on an analysis of past dustfall measurements at the Ekati Mine and responsive management strategies. Dustfall measurements are not solely influenced by the dust suppression effectiveness, but they are also influenced by other factors such as changes in precipitation, wind speed, levels of mine activities and mine traffic, and the time in the year when ground conditions are appropriate for the application of dust suppressants. There is also a lack of regulatory criteria for dustfall specifically for the protection of wildlife and wildlife habitat. Dominion Diamond will continue to work with the regulators and other parties in future revisions of the AQEMMP prior to the construction of the Project.

2.5 Surface and Mine-Water Management

2.5.1 Recommendation 5

YKDFN would like to see further steps be taken to ensure that there is appropriate monitoring of the state of meromixis in pit lakes. YKDFN would also like to see an improved plan for the monitoring of the integrity of permafrost surrounding the pit lakes where meromixis exists. Likewise, YKDFN recommends that a more detailed adaptive management plan that details timelines and specific measures that will be taken if there is failure to establish and/or maintain meromixis in the proposed pit lakes.

YKDFN supports the following measure.

1. To prevent a significant adverse impact to water quality, DDEC shall develop and submit to the Wek'ëezhii Land and Water board, for approval, a revised Water Management Plan for the Jay Project within two year of initiating de-watering operations of the Jay pit. The plan should include:
 - a. Identification of specific surface and minewater management contingencies including capacities (in terms of effluent volumes and mine production as expressed in operating days);
 - b. Design, construction and implementation timing for each identified surface and mine water management contingency option;
 - c. Detailed monitoring of water quality and quantity to enable early detection of success or failure; and
 - d. Associated adaptive management trigger thresholds for implementation of contingencies.

2.5.2 Response 5

Dominion Diamond accepts the recommendation that a revised mine water management plan be submitted to the Wek'ëezhii Land and Water Board; we anticipate this will be a requirement of the Water Licence. As requested in this recommendation (items *a* through *d* listed above), this detailed plan submitted for approval with the Water Licence application will include details of contingencies, monitoring and evaluation, adaptive management trigger thresholds, and timelines for implementation. Details of the



final structure and content of this plan, and the timing of its submission, will be ratified as part of the Wek'èezhìi Land and Water Board permitting process.

Within the DAR, Dominion Diamond presented a mine water management plan for the Project (Section 3.5.4; Appendix 3A; summarized in Section 8.3). This plan was developed to minimize potential impacts to the receiving environment through optimization of minewater collection and storage, monitoring of runoff water and minewater before release to the environment, and isolation of minewater under freshwater caps in the mined-out Misery and Jay pits.

2.6 Community Wellness

2.6.1 Recommendation 6

YKDFN reiterates that there is significant public concern over the continued decrease in community wellness. In response, YKDFN wants the following.

1. Serious commitments from DDEC to meet obligations under the Socio-Economic Agreement (SEA).
2. Inclusion in annual meetings with DDEM and the GNWT regarding the SEA.
3. Written reports on progress against benchmarks and obligations laid out in the SEA.

2.6.2 Response 6

Response to Item 1:

The Socio-Economic Agreement (SEA) for the Ekati Mine outlines both economic (i.e., employment, procurement, and contracting) and social commitments for the operator (i.e., Dominion Diamond) and the GNWT. Operator commitments are more heavily focused on the economic aspects of the Ekati Mine, including employment, procurement, and contracting targets. The commitments of the GNWT are more focused on the social situation in the territory, and in communities most influenced by the Ekati Mine. The Ekati SEA identifies this GNWT commitment to monitor and report on social indicators in communities in Section 5.2 (Social Issues: GNWT Commitments). This commitment is similar to commitments in other Socio-Economic Agreements in the NWT.

Dominion Diamond is committed to hiring, contracting, and procuring from Northern and Northern Aboriginal sources. There are, however, barriers to achieving the targets set out in the SEA. Dominion Diamond has identified a number of strategies to address these barriers, and is committed to continued evaluation of procurement and human resources procedures and systems to maximize Northern and Northern Aboriginal involvement with the Ekati Mine. A detailed breakdown of all of Dominion Diamond's existing strategies for removing barriers to employment of and procurement from Northerners can be found in the adequacy review response, the responses to information requests (e.g., DAR-LKDFN-IR-18, DAR-MVEIRB-IR-009, DAR-MVEIRB-IR-010, DAR-NSMA-IR-24, DAR-NSMA-IR-25, DAR-NSMA-IR-29, DAR-Tł'ichô-IR-08, DAR-Tł'ichô-IR-11, DAR-YKDFN-IR-08), and the transcripts from the April 2015 technical sessions. These strategies have, to date, had a positive influence on the performance of the Ekati Mine against the targets identified in the SEA (Dominion Diamond 2014).



In addition to the existing employment, procurement, and contracting strategies noted above, Dominion Diamond intends to undertake the following measures in an effort to continually improve the Company's SEA performance:

- Where the previous operator of the Ekati Mine had an application process that only permitted online applications, Dominion Diamond has reverted back to allowing individuals to submit applications via fax or in-person submission.
- To further improve both the link with, and the number of applicants from communities, Dominion Diamond is working in partnership with key communities in support of Community Liaisons, whose responsibility will be to assist community members in pre-employment readiness and applying for employment at the Ekati Mine.

In terms of Dominion Diamond's SEA-mandated commitments as related to social issues in the NWT, Dominion Diamond will continue to work with the GNWT and with communities to identify social issues affecting Northerners, and to determine how the Company may best respond to both specific issues that may arise associated with the Project, and to more general social issues in communities that are not necessarily attributable to the Ekati Mine. Existing methods of evaluating the social situation of employees and communities include:

- Stay surveys designed to identify both issues faced by employees, and positive aspects of their employment, which encourages their retention.
- Exit interviews to identify the reasons employees leave the Mine, including outside social factors.
- Community liaisons with a mandate to assess not only the labour force capability in communities, but also to identify issues faced by the community, and ways that Dominion Diamond can address these issues, either through employment-related measures, or through community contributions.
- Annual meetings with Impact Benefit Agreement (IBA) communities to assess, among other topics, social issues faced by the community, and the effective implementation of the IBAs.
- In conjunction with the GNWT, rolling out the annual SEA Report to key communities with a view to communicate achievements and obstacles, and to obtain community feedback.
- Working with the Employee and Family Assistance Program provider to obtain general statistics on reasons for visits/requests for support to determine what issues employees and their families face.

In addition to these existing strategies, Dominion Diamond intends to implement the following measures to improve the evaluation of the social situation of employees, and in communities:

- Obtaining feedback from the new Community Liaisons in key communities to determine what social barriers may be impacting work readiness or eligibility for employment at the Ekati Mine.
- Having further discussions with the GNWT about additional programming that may be warranted based on feedback obtained from the above-noted sources of information, and through existing and new government-sponsored programming such as the recent Skills 4 Success initiative. This initiative



has been led by the GNWT and includes information on skills availability within communities and barriers to successful employment.

- Working with the IBA representatives in each community to identify community and IBA-specific issues, and to determine what support Dominion Diamond can provide to assist in addressing these issues.

Response to Item 2:

Dominion Diamond does not agree with the recommendation, as these meetings are confidential to the signatories of the SEA. However, Dominion Diamond is open to continued engagement with communities regarding the improvement of the transparency of discussions with the GNWT on matters pertaining to the Ekati Mine SEA, and on the reporting of SEA implementation. Dominion Diamond has committed to working with the GNWT to share minutes from meetings regarding the SEA, as appropriate, except where proprietary or confidential information is concerned. Dominion Diamond will also discuss other ways to improve transparency with the GNWT.

Response to Item 3:

Dominion Diamond's annual SEA Report outlines the Company's performance in terms of the priority (i.e., Northerners, Northern Aboriginals, and women) hiring, contracting, and procurement targets outlined in the SEA. The SEA report also reports on other topics covered in the SEA itself, including apprenticeships, scholarships, and training programs, community development contributions to Traditional Knowledge programming, and wellness initiatives (Dominion Diamond 2014).

Dominion Diamond is currently in the process of evaluating the reporting tool in terms of its utility as a means for communicating SEA performance to communities, the GNWT, and the broader public. While Dominion Diamond has already improved upon the SEA reporting procedures, the Company is committed to continual evaluation and improvement. Some steps taken to date to improve the reporting process for the 2014 SEA report, or subsequent reports, include:

- Transitioning to a new Human Resources tracking system that provides better reporting capabilities than the previous system.
- Listing of traditional and non-traditional roles to allow for greater understanding of the statistics being reported.
- Developing and rolling-out of Contractor Employment Statistics Procedure, which will ensure that contractors comply with the SEA requirement to report on Aboriginal and Northern hire statistics.
- Holding key contractors responsible for monthly reporting of employment and procurement statistics, to more accurately report on monthly achievement relative to SEA commitments.
- Reviewing, updating, and reporting the skill levels associated with current positions at the Mine.
- Implementing internal processes to track employee career progression, and reporting on Dominion Diamond's achievement in promoting and progressing its Northern and Northern Aboriginal employees.



Since the purchase of the Ekati Mine in 2013, Dominion Diamond has started tracking information not previously tracked by BHP which will allow for more in-depth reporting of workforce and procurement information in the future.



3 REFERENCES

- Adamczewski, J., J. Boulanger, B. Croft, D. Cluff, B. Elkin, J. Nishi, A. Kelly, A. D'Hont, and C. Nicholson. 2009. Decline in the Bathurst Caribou Herd 2006-2009: A Technical Evaluation of Field Data and Modeling. DRAFT Technical Report December 2009. Government of the Northwest Territories.
- BBOP (Business and Biodiversity Offset Programme). 2015. Mitigation Hierarchy. Available at: http://bbop.forest-trends.org/pages/mitigation_hierarchy. Accessed February 4, 2015.
- Berger R, Martinez I, Wisener M. 2000. Analysis of GPS Relocation Data (1995-1999) for the Owl Lake Woodland Caribou – Report to Manitoba Hydro, Manitoba Conservation, Pine Falls Paper Company, Manitoba Model Forest and Time to Respect Earth's Ecosystems. 88 pp + appendices.
- Dominion Diamond (Dominion Diamond Ekati Corporation). 2014. 2013 Socio-Economic Agreement Report. Available at: <http://ddcorp.ca/docs/default-source/default-document-library/dd-2013-sea-report-03nov14.pdf>. Accessed August 5, 2015.
- Dominion Diamond. 2015a. Caribou Road Mitigation Plan for the Jay Project Draft Version 3. Submitted to the Mackenzie Valley Environmental Impact Review Board, Yellowknife, NWT, July 31, 2015.
- Dominion Diamond. 2015b. Conceptual Wildlife Effects Monitoring Plan for the Jay Project. Submitted to the Mackenzie Valley Environmental Impact Review Board, Yellowknife, NWT, July 31, 2015.
- Dominion Diamond. 2015c. Conceptual Air Quality and Emissions Monitoring and Management Plan for the Jay Project. Submitted to the Mackenzie Valley Environmental Impact Review Board, Yellowknife, NWT, June 1, 2015.
- ERM (ERM Consultants Ltd). 2015. Ekati Diamond Mine: 2014 Air Quality Monitoring Program. Prepared for Dominion Diamond Ekati Corporation by ERM Consultants Canada Ltd.: Yellowknife, Northwest Territories.
- IFC (International Finance Corporation). 2012. Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. January 12, 2012.
- GNWT (Government of the Northwest Territories). 2015. Technical Report for the Dominion Diamond Ekati Corporation Jay Project EA1314-01. Submitted to the Mackenzie valley Environmental Impact Review Board, July 2015. Yellowknife, NWT, Canada.
- Reimers E, Dahle B, Eftestøl S, Colman JE, Gaare E. 2007. Effects of a power line on migration and range use of wild reindeer. *Biol Conserv* 134: 484-494.
- Reimers E, Flydal K, Stenseth R. 2000. High Voltage Power Lines and Their Effect on Reindeer: A Research Programme in Progress. *Polar Res*:75-82.
- Stantec. 2012. Caribou Mitigation and Monitoring Plan. Roman Mine. Prepared for Peace River Coal Inc. 71 pp. July 16, 2012.
- Vistnes I, Nellemann C. 2008. The matter of spatial and temporal scales: a review of reindeer and caribou response to human activity. *Polar Biol* 31:399-407.



WCB NWT and NU (Worker's Compensation Board of the NWT and Nunavut). 1995. Consolidation of Mine Health and Safety Regulations R-125, 1995. Available at:
<http://www.wscn.nt.ca/YourWSCC/Resources/Documents/Mines%20Health%20and%20Safety/Regus/NUMineRegulations.pdf>.

YKDFN (Yellowknives Dene First Nation). 2015. Technical Report, Jay Project, EA1314-01. Submitted to the Mackenzie Valley Environmental Impact Review Board, August 2015. Yellowknife, NWT, Canada.