

Government of the Northwest Territories

Jay Project

Public Hearing Presentation
Yellowknife, September 14, 2015

Presentation Outline

- ▶ Introduction
- ▶ Socio–Economics
- ▶ Air Quality

Introduction

- ▶ Content of the presentation is a reflection of the technical report submitted on Jul 31, 2015
- ▶ GNWT staff here today are available to answer questions about socio-economics, heritage resources and air quality
 - GNWT has no outstanding concerns about heritage resources

The Government of the Northwest Territories

Public Hearing Presentation – Socio-Economics

**Dominion Diamond Ekati Corporation Jay Project
Environmental Assessment
EA1314-01**

**Yellowknife, NT
September 14th, 2015**

Socio-Economics

Socio-Economic Components

- ▶ Employment
- ▶ Training
- ▶ Health and Well Being

Socio-Economic Monitoring

Conclusion

Socio-Economic Components

- ▶ *Employment* – effect of the Jay Project on employment is of high magnitude and of significant benefit in maintaining northern employment
- ▶ *Training* – demand for labour force training will be of a lower magnitude as the majority of the Jay Project's workforce will transition from the existing Ekati Mine allowing for the transfer of these skills

Socio-Economic Components

- ▶ ***Health and Well being***– It is not anticipated that the Jay Project will result in additional health and well-being concerns; health and well-being will continue to be addressed through DDEC's commitments, Ekati SEA and a collaborative effort between GNWT and DDEC

Employment

Jay Project will fall under the Operations Phase of the Ekati SEA

Employment commitments in the SEA

- Operations phase employment:
 - 62% northern resident employment, of that, 50% will be Aboriginal residents
- Priority hiring for Aboriginal and NWT Residents

GNWT continues to support NWT Resident employment

Training

Ongoing dialogue and collaboration with Dominion has identified building capacity in the NWT workforce is of high priority

- ▶ 74 northern apprentices have gained employment through training at the Ekati mine.
- ▶ ECE is responsive to the training needs identified by the community.

Health and Well-Being

- ▶ While the Department does not anticipate impacts arising from the Jay Project, the Department is confident potential impacts will be mitigated through the existing Ekati SEA.

HSS Commitments and Actions Under the SEA

- ▶ The Department of Health and Social Services (HSS) monitors 14 indicators linked to health and wellness
- ▶ The Department reports on these indicators annually in the Communities and Diamonds Report;
- ▶ HSS has partnered with Dominion on several initiatives as part of an ongoing commitment to address health and well being:
 - ▶ Working on Wellness (WOW)
 - ▶ BETTER

Socio-Economic Monitoring

GNWT socio-economic programs and services are delivered on a territory-wide basis

Programs and services adapt to emerging needs of communities and residents

GNWT monitors and reports on socio-economic indicators in all impacted NWT communities

Conclusion

Socio-economic impacts from the Jay Project will be addressed through:

- ▶ Dominion Diamonds Ekati Corporation's commitments
- ▶ The Ekati Socio-Economic Agreement

Overall, the Jay Project provides positive impacts in areas such as employment. Through Dominion's commitments and the SEA, which provides a framework for collaborative monitoring and mitigation, the GNWT has not identified any likely significant adverse socio-economic impacts associated with the project.

The Government of the Northwest Territories Environment and Natural Resources

Public Hearing Presentation – Environmental Protection
Division

Dominion Diamond Ekati Corporation Jay Project
Environmental Assessment
EA1314-01

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Atmospheric Environment

Presentation Outline:

- Includes GNWT's technical report and DDEC's response:
 - Ambient Air Quality
 - Adaptive Management Response Plan triggering criteria
 - Waste Incineration Emissions
 - Stack testing reporting,
 - Adaptive management,
 - Re-stack testing

Atmospheric Environment – Ambient Air Quality

- ▶ Predicted air emissions of NO₂, PM_{2.5} & TSP in exceedance of the NWT Ambient Air Quality Standards
- ▶ DDEC has committed to implementing an adaptive management response plan (AMRP)
- ▶ Current proposed trigger criteria could result in additional or prolonged exceedances of air pollutant standards
- ▶ **ENR recommended DDEC modify AMRP trigger criteria**
- ▶ **DDEC committed to this recommendation**

Atmospheric Environment – Ambient Air Quality

Action Level	DDEC Proposed Triggering Criteria for NO ₂ , PM _{2.5} & TSP	GNWT Recommended Triggering Criteria for NO ₂ , PM _{2.5} & TSP
1 st Action Level (no action required)	Concentrations less than 80% of the applicable ambient air quality standard AND less than +20% year to year change	1) Concentrations below 80% of the applicable air quality standard –OR– 2) Less than 10% year to year change increase in concentrations AND above 50% of the applicable air quality standard
2 nd Action Level (internal review required)	Concentrations less than 80% of the applicable ambient air quality standard AND +20% year to year change	1) Concentrations between 80% & 90% of the applicable air quality standard –OR– 2) 10% – 20% year to year change increase in concentrations AND above 50% of the applicable air quality standard
3 rd Action Level (external review required)	Concentrations above 80% of the applicable ambient air quality standard AND more than +10% year to year change	1) Concentrations above 90% of the applicable air quality standard –OR– 2) More than 20% change increase year to year in concentrations AND above 50% of the applicable air quality standard

Atmospheric Environment – Waste Incineration Emissions

- Incineration proposed as primary waste management method
- Improper incineration of waste can generate toxic air emissions that are then deposited to land and water (persistent and bioaccumulative)
- Formation and release of dioxins & furans are the greatest concern
 - Dioxins & furans have been slated for virtual elimination in Canada under CEPA, 1999
- Studies link incinerator air emissions to adverse environmental impacts



Atmospheric Environment – Waste Incineration Emissions

- DDEC has committed to comprehensive waste management practices & routine incinerator stack testing
- Prior to the technical report, there was no commitment to adhere to specific reporting timeframes, response planning and re-testing if compliance to CWS is not achieved
- Adaptive management must be carried out in a timely manner to prevent significant adverse impacts to local soil and sediment quality
- DDEC responded with commitments to address the above concerns, however, GNWT feels there are still some outstanding issues

Atmospheric Environment – Waste Incineration Emissions

- GNWT recommended a measure covering the following :
 - Part #1) Timely submission of stack test reports
 - Part #2) Implement mitigative measures if stack test fails
 - Part #3) Restack test to verify compliance to CWS
- DDEC has committed to components of the recommended measure
- GNWT has outstanding concerns

Atmospheric Environment – Waste Incineration Emissions

GNWT Recommended Measure:

Part #1) Timely submission of stack test reports

GNWT's Recommended Measure	DDEC Response to Recommended Measure
<i>"DDEC must submit any waste incinerator stack test results to ENR and EC within 45 days of completing a stack test."</i>	<i>"Dominion Diamond agrees to submit any waste incinerator stack test results to GNWT Environment and Natural Resources (ENR) and Environment Canada (EC)"</i> <i>"The incinerator stack test results will be submitted to ENR and EC within 45 days of receipt of the results from the contracted tested laboratory, unless events beyond Dominion Diamond's control prevent it"</i>
➤ GNWT maintains its original recommended measure	

Atmospheric Environment – Waste Incineration Emissions

GNWT Recommended Measure:

Part #2) Implement mitigative measures if stack test fails

GNWT's Recommended Measure	DDEC Response to Recommended Measure
<i>"In the event of a failed stack test, DDEC must develop and submit to ENR and EC an Adaptive Management Response Plan (AMRP) within 90 days of the failed stack test. The AMRP should contain an assessment of the incinerator operations and management that would have contributed to the failed stack test, and methods to improve/rectify them. DDEC should implement these methods immediately upon submission of the AMRP."</i>	<i>"In the event of a failed stack test, Dominion Diamond will develop and submit to ENR and EC an AMRP within 90 days of the receipt of the results indicating a failed stack test. The AMRP will contain an assessment of the incinerator operations and management likely to have contributed to the failed stack test, and a plan for further investigation or direct rectification of an identified source. Dominion Diamond will implement the AMRP immediately upon submission."</i>

- **GNWT accepts DDEC's commitment, given that stack test results are submitted to ENR & EC within 45 days of the stack test (measure part #1).**

Atmospheric Environment – Waste Incineration Emissions

GNWT Recommended Measure:

Part #3) Restack test to verify compliance to CWS

GNWT's Recommended Measure	DDEC Response to Recommended Measure
<i>"DDEC will re-stack test the incinerators within 6 months of the initial failed stack test. The second stack test will verify the effectiveness of the adaptive management response measures and compliance to the CWS. All stack tests must be conducted in accordance with national standards, and include detailed documentation to demonstrate that representative composition and batch size of waste were used during the testing process. Exemptions for the second stack test may occur based on a review conducted by ENR, in consultation with EC."</i>	<i>"In the event of a failed stack test, Dominion Diamond will complete a follow-up stack test at a frequency determined to be appropriate through the AMRP until the test is passed. The stack tests will verify the effectiveness of the adaptive management response measures and compliance to the CWS. All stack tests will be conducted in accordance with national standards, and will include detailed documentation to demonstrate that representative composition and batch size of waste were used during the testing process."</i>

➤ **GNWT maintains its original recommended measure**