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15 – ECONOMIC DEVELOPMENT AND BUSINESS SECTOR

15.1 INTRODUCTION

The Economic Development and Business Sector VC concerns the potential effects of the Project on economic development, indicated by growth in Gross Domestic Product (GDP), opportunities for regional businesses and by government revenues. The Project will require substantial amounts of staff, contracted employment, and procured goods and services in order to meet the demands of construction, operations, decommissioning, and closure. Effects are considered for all residents of the Local Study Area and Regional Study Area, including First Nations. Economic issues and proposed management measures are also considered. Supplementary information to support this section is provided in Appendix 13A.

15.1.1 Regional Setting

The Project is a proposed Open Pit mine located approximately 300 kilometres (km) northwest of Whitehorse, Yukon Territory on Crown land that is administered by the Government of Yukon. The Project site is located within the Selkirk First Nation traditional territory. The Project will require construction of a road access, including upgrades to the existing Freegold Road and construction of the Freegold Road Extension: sections of the Freegold Road Extension will be on land that falls within the Selkirk First Nation and Little Salmon/Carmacks First Nation traditional territories. The Freegold Road Extension and proposed Freegold Road Upgrade will extend for approximately 200 km southeast from the Project to the village of Carmacks.

15.1.2 Rationale for VC Selection

The Economic Development and Business Sector VC was selected after consideration of the information and issues communicated by the public, Aboriginal groups, local communities, and government stakeholders during the engagement process conducted in support of this Proposal. This VC and specific indicators were also selected based on professional judgement and experience in conducting environmental effects assessments for similar projects.

Economic Development is important to consider. It represents a means to raise the livelihood of residents of the region and it has the capacity to fund public services associated with human development and social progress. The effect on the Business Sector is highlighted because it represents a direct and tangible form of regional participation in the long-term benefits arising from the Project. This section of the Proposal assesses the potential effects of the Project on these conditions that could affect the economic development of the local communities and Yukon as a whole. The key indicators selected for this assessment are: Economic Growth; Business Opportunities; and Government Revenues.

15.2 ASSESSMENT BOUNDARIES

15.2.1 Local Study Area (LSA)

The LSA for socio-economic VCs, which includes Economic Development, is defined in Section 13.2.1 (Figure 13.2-1).

15.2.2 Regional Study Area (RSA)

The RSA for socio-economic VCs, which includes Economic Development, is defined in Section 13.2.2 (Figure 13.2-1).

15.2.3 Temporal Boundaries

The temporal boundaries for the effects assessment is defined in Section 5.2 of the Proposal as the life of the Project. Details on activities associated with the construction, operation, closure and decommissioning, and post-closure phases of the Project are provided in Section 4.

15.3 BASELINE CONDITIONS

Yukon's economy has consistently grown over the past nine years, with a peak growth of 8.7% in 2008. In 2011 the economy reported a growth of 5.6% over the previous year, more than double the national growth rate of 2.6%, but fell to less than 1% for 2013. The forecast for 2014 is for a return to rapid expansion, with Yukon economy growing at a rate of 8.8% due to increased mineral production, mining development expenditures, and large capital projects planned for the year. The recent temporary closure of some Yukon mining operations and the delay of construction of one mine due to softening commodity prices have tempered this outlook in the short-term. This section focuses on growth sectors for the economy; traditional industries such as trapping and outfitting, small in GDP effects but of great social importance to Yukon, are discussed in Sections 18 (Cultural Continuity) and 19 (Land Use).

Yukon's mineral sector is forecasted to continue to be a primary economic contributor (in 2012, mining accounted for 23% of Yukon's GDP) despite softening mid-year mineral prices that resulted in lower exploration and development expenditures and production values. The major metals produced by the mining industry in Yukon include lead, gold, silver, copper, and zinc. All of these metals have seen declines in prices since historic highs in 2011 (Table 15.3-1) ranging from approximately -13% for lead to -36% for silver. This fall in prices can be re-framed, however, as a re-adjustment to long-term trends and that current prices are similar or higher to those seen in 2010, at least for precious metals. Annual mineral production is forecasted for 2013 at \$450 million to \$500 million, down slightly from the \$510 million posted in 2012 (Government of Yukon 2013a).

Table 15.3-1 Commodity Prices for Major Yukon Mining Metals

Metal	2010 Average Price (\$USD)	2011 Average Price (\$USD)	September 2013 Average Price (\$USD)	% Change (2011-2013)	% Change (2010-2013)
Copper (mt)	7534.80	8,828.20	7,159.30	-18.9	-5.0
Lead (mt)	21.48	24.01	20.85	-13.2	-2.9
Zinc (mt)	21.61	21.94	18.47	-15.8	-14.5
Silver (toz)	20.15	35.22	22.56	-35.9	12.0
Gold (toz)	1,224.70	1,569.20	1,348.60	-14.1	10.1

Source: World Bank, 2013.

The volatility of the mining industry has had implications for Yukon based on its significant contribution to the economy. When the mining industry is experiencing a decline, the whole economy tends to suffer, with increased unemployment and some population loss. The future of the mining industry in Yukon will continue to be uncertain and will depend upon metal values, domestic and international demand, and on the corporate decisions of mining companies. A considerable amount of time and money has been invested in infrastructure and exploration in Yukon, which should assist in attracting future mining activity to Yukon, and this will have an effect on Whitehorse's economy.

Many of the businesses that provide services to the mining industry are headquartered in Whitehorse. Whitehorse-based businesses and services related to the mining industry include a number of contracting

companies, heavy equipment sales and rentals, and transportation and logistics services (Whitehorse Chamber of Commerce 2013). Some services and organizations related to the mining industry are described in the annual Yukon Mining and Exploration Directory (Yukon Chamber of Mines 2013). Services offered include the following:

- Communications, catering, and camp services;
- Reconnaissance, surveying, and mapping;
- Drilling and heavy equipment operations;
- Engineering, environmental, and geological consulting;
- Construction and contracting;
- Trucking and hauling;
- Mine development contracting;
- Aboriginal and community engagement consulting;
- Expediting, logistics, and transportation; and
- Mining inspections.

In 2010, the Yukon Bureau of Statistics surveyed over 3,000 Yukon businesses that operated in Yukon and compiled information about their industry, employees, revenue level, and other relevant information. Out of the approximately 3,000 businesses surveyed, 173 (6%) worked in the mining and oil and gas extraction industries, while 454 (15%) worked in the construction industry. The construction industry had the second greatest number of businesses after the Professional, Scientifics, and Technical Services industry. This category includes businesses such as legal, accounting, engineering, and consulting services.

The vast majority of the businesses that conducted business in Yukon were located within Yukon (92% or 2,792 businesses), while the remaining 8% (247 businesses and 919 employees) had main offices located outside Yukon. Within Yukon, most of the businesses and employees were located in Whitehorse. Whitehorse businesses accounted for 72% (2,182) of all businesses surveyed and 80% (10,259) of all employees. Carmacks and Pelly Crossing reported fewer businesses; Carmacks reported 18 businesses and 65 employees, while Pelly Crossing reported only 8 businesses and 13 employees (Yukon Bureau of Statistics 2011).

The Government of Yukon estimates its 2013-14 budget expenditures at \$1.1 billion, less than projected revenues of \$1.2 billion, for a surplus of \$73 million. Taxes and general revenue raised by the Government of Yukon will only account for \$151 million, or 12.6% of revenue. Most revenue (\$979 million, or 81%) will come from transfers from the Government of Canada. Of the revenue that was raised by the territorial government, most (61%) came from individual and corporate income taxes. The size of the Yukon budget has doubled over the last decade in order to fund rapid growth in services and infrastructure. The largest budget item is health and social services at \$348 million (31% of expenditures), followed by community and transportation at \$252 million (22% of expenditures), and education at \$188 million (17% of expenditures) (Government of Yukon 2013b).

The fiscal relationship between the Government of Yukon and the Government of Canada with regard to resource revenue sharing is changing, with more revenue being retained by the federal government. Prior to August 2012, Yukon's grant from the federal government was reduced by a dollar for each extra dollar received in mining revenue over \$3 million annually; currently fees from lands, mines, and forestry are forecasted to exceed this amount by about \$30,000 in the 2013 to 2014 period. Since August 2012, however, the cap has been raised to \$6 million and Yukon has a future option to keep 50% of all resource revenues, which the Government of Yukon

calculates to be to the territory's fiscal advantage once resource revenues exceed \$12 million annually (Government of Yukon 2012).

15.4 PROJECT-SPECIFIC EFFECTS

15.4.1 Project Interactions and Potential Effects

Table 15.4-1 identifies potential interactions between specific Project components and activities (see Section 4) and the Economic Development and Business Sector VC. The identified interactions warrant further analysis because they may result in positive or negative effects on the economic development and business sector during the Project life. Resulting potential effects are evaluated and described in subsequent sections.

Project components that may directly or indirectly affect the Economic Development and Business Sector VC during the mine construction, operations, and closure and decommissioning phases include:

- Contracted Employment;
- Mine Staffing;
- The Freegold Road Upgrade; and
- Mine Development.

These four Project components and activities are identified as having potential effects on economic development through their effects on economic growth, business opportunities, and government revenue within the LSA and RSA.

Contracted Employment

There will be considerable business opportunities for regional firms providing goods and services to the Project, particularly during the construction and Operation Phases. Expenditures on supplies and services will result in indirect employment and earned income, and the spending of earned income will lead to additional induced economic growth, income, and government revenue. These indirect and induced effects are caused by the direct effects and affect the same economic indicators, thus are analyzed together in this section.

Mine Staffing

Mine staffing was identified because the income earned by Project workers will contribute directly and indirectly to Yukon's GDP, employment levels, and taxes paid to all levels of government. The Project economic growth effects will depend on whether Project-related jobs are filled by residents or non-residents, and on whether non-residents relocate to the RSA or commute to work.

Freegold Road Extension and Upgrade

The Project includes upgrading the existing 83 km Freegold Road and construction of the Freegold Road Extension for approximately 120 km southeast from the Project to the existing Freegold Road, which extends to the village of Carmacks. This component was identified because the upgrade and creation of infrastructure has the potential to reduce the capital costs associated with the development of the numerous mineral claim blocks staked proximate to the extension. The extension will be a private road, in which use is carefully controlled by the responsible party. Any other use of the road will require permission of the company, as well as Yukon Government and the two First Nation governments whose territory through which the road extends. Some projects may have right of access that pre-dates this road.

Mine Development

The Project is forecasted to pay royalties and production-related taxes to the federal and territorial governments as a cost of production.

Potential Project effects are outlined in Table 15.4-1.

Table 15.4-1 Potential Interactions between the Project and Economic Development and the Business Sector

Project Components and Activities	Project Phase¹ (C, O, DC, PC)	Potential Interaction (Y/N)	Mechanism of Interaction (or Rationale for No Interaction)
Accommodations (Construction and Mine Staffing)	C, O, DC	No	No specific interaction with this socio-economic VC
Aggregate Sources / Borrow Sites	C	No	No specific interaction with this socio-economic VC
Airstrip and Airstrip Access Road	C, O, DC	No	No specific interaction with this socio-economic VC
Ancillary Buildings (Explosives Storage, Security Shed, Truck Shop, etc.)	C, O	No	No specific interaction with this socio-economic VC
Concentrate Transport and Loading	O	No	No specific interaction with this socio-economic VC
Concrete Batch Plant Operation	C, O	No	No specific interaction with this socio-economic VC
Contracted Employment	C, O, DC	Yes	Project purchases of goods and services would contribute to the Yukon economy in terms of increasing its GDP and territorial employment
Contracted Employment	C, O, DC	Yes	Project purchases of goods and services will create contract and business opportunities across Yukon
Contracted Employment	C, O, DC	Yes	Direct and indirect taxes by Project, contractors and individuals will positively contribute to the Yukon tax revenues
Cyclone Sand Plant	C, O	No	No specific interaction with this socio-economic VC
Dismantling of Facilities	DC	No	No specific interaction with this socio-economic VC
Diversion of Canadian Creek	C, O	No	No specific interaction with this socio-economic VC
Drilling and Blasting	C, O	No	No specific interaction with this socio-economic VC
Fish Habitat Compensation Construction	C, O	No	No specific interaction with this socio-economic VC
Freegold Road Extension	C, O, DC	No	No specific interaction with this socio-economic VC, as it will be private and access controlled; potential industrial users will be restricted

Project Components and Activities	Project Phase¹ (C, O, DC, PC)	Potential Interaction (Y/N)	Mechanism of Interaction (or Rationale for No Interaction)
Freegold Road Upgrade	C, O, DC	Yes	Improved access may increase use for a range of local use. The road already services exploration and placer mining activities. Increases in these activities may occur, but are not expected to be significant. Additional business opportunities related to exploration activities and potential for development of other major Projects
Fuel Storage and Distribution System	C, O	No	No specific interaction with this socio-economic VC
Gold Extraction Plant / Oxide Ore Processing	C	No	No specific interaction with this socio-economic VC
Ground Preparation Activities (e.g., cut, fill, grub, etc.)	C, O	No	No specific interaction with this socio-economic VC
Hazardous Materials Storage, Transport, and Disposal	C, O	No	No specific interaction with this socio-economic VC
Heap Leach Facility	C, O	No	No specific interaction with this socio-economic VC
Heap Leach Pad	C, O	No	No specific interaction with this socio-economic VC
Laydown Areas	C, O	No	No specific interaction with this socio-economic VC
LNG Transport to Site	C, O	No	No specific interaction with this socio-economic VC
Main and Supplemental Power Plant (Gas Turbine and Diesel)	C, O	No	No specific interaction with this socio-economic VC
Maximum Disturbance Area	C, O, DC	No	No specific interaction with this socio-economic VC
Mine Development	C, O, DC	Yes	During operations Project will pay royalties and corporate taxes to the Government of Yukon
Mine Staffing	C, O, DC	Yes	Project workforce demands would contribute to the Yukon economy in terms of increasing its GDP and employment
Mine Staffing	C, O, DC	Yes	Re-spending by households of additional income derived directly or indirectly from mine employment will increase economic activity and businesses
Mine Staffing	C, O, DC	Yes	Additional direct and indirect taxes paid by Project employees will increase government revenues
On-site Equipment and Vehicle Use	C, O, DC	No	No specific interaction with this socio-economic VC
Open Pit Mining	C, O	No	No specific interaction with this socio-economic VC
Ore Conveyors	C, O	No	No specific interaction with this socio-economic VC
Ore Crushing	C, O	No	No specific interaction with this socio-economic VC
Ore Hauling	C, O	No	No specific interaction with this socio-economic VC
Ore Stockpiles	C, O	No	No specific interaction with this socio-economic VC
Processing Facilities for Sulphide Ore	O	No	No specific interaction with this socio-economic VC

Project Components and Activities	Project Phase ¹ (C, O, DC, PC)	Potential Interaction (Y/N)	Mechanism of Interaction (or Rationale for No Interaction)
Reagent Storage and Distribution	C, O	No	No specific interaction with this socio-economic VC
Site Reclamation / Re-Vegetation	O, DC	No	No specific interaction with this socio-economic VC
Site Security and Fencing	C, O, DC	No	No specific interaction with this socio-economic VC
Surface Water Management (Contact Water)	C, O, DC	No	No specific interaction with this socio-economic VC
Surface Water Management (Non-Contact Water)	C, O, DC	No	No specific interaction with this socio-economic VC
Tailings Management Facility	C, O, DC	No	No specific interaction with this socio-economic VC
Topsoil Stockpiles	C, O	No	No specific interaction with this socio-economic VC
Traffic (Equipment and Materials to Site)	C, O, DC	No	No specific interaction with this socio-economic VC
Waste Management: Garbage and Sewage Waste Facilities	C, O	No	No specific interaction with this socio-economic VC
Wasterock and Overburden Disposal	C, O	No	No specific interaction with this socio-economic VC
Water Supply	C, O, DC, PC	No	No specific interaction with this socio-economic VC

Note:

1. C (Construction), O (Operation), CD (Closure and Decommissioning) and PC (Post-Closure) represent the Project phases when the potential interaction between the Project and valued component is anticipated to occur.
2. Potential mechanism(s) of interaction between the Project components and activities and the valued component are carried forward into the assessment by characterizing the potential effect(s).

15.4.1.1 Potential Project Effects on Economic Development and Business Sector

Project interactions concerning income and employment arising from the Project are evaluated in Section 13.3.1. Changes to economic growth, business opportunities and government revenues resulting from anticipated interactions as described above in Table 15.4-1 are evaluated and described in this section of the Proposal.

The assessment of economic effects, in terms of quantitative estimates of economic growth and some elements of government revenue, is based on MNP's Economic Impact Report (MNP LLP 2013). Estimates of economic impacts in this report were derived from Statistics Canada's 2008 Input/Output (I-O) Model using estimates of future operational and capital spending. The Casino Project economic impact report assumptions and approaches were selected in cooperation with CMC representatives using expenditure information provided by CMC.

The Statistics Canada I-O Model has some inherent limitations. One of these is that changes in industrial structure and linkages since 2008 are not reflected in the modelling results. This also means that any changes in the technology of producing goods and services, input patterns, and relative prices since 2008 are not reflected in the impact estimates. This is of particular concern in Yukon, where 2008 mining activities did not operate at the scale of the Project and thus may not be representative of its effects.

Another limitation is that I-O models are static models in which dynamic changes over time are not explicitly represented. Although I-O models estimate the effects on major economic variables, they do not calculate the amount of time required for the propagation of all effects. Despite these limitations, I-O models are widely used to quantify the potential effects of proposed projects on provincial and national economic activity and employment.

Potential Effects on Economic Growth

The quantitative measure used to assess economic growth is growth in GDP. During the approximate 4-year construction phase, the Project is expected to require a total of \$2.5 billion in capital expenditures, including \$332 million in infrastructure costs (power plant, access road, and airstrip) and \$1,566 million in direct costs. Included in these infrastructure costs is the cost of extending the Freegold Road, estimated at \$99 million. Over the 22-year LOM, sustaining capital expenditures of \$361.7 million are anticipated. The operations of the Project are expected to affect Yukon's economy through expenditures on goods and services and the creation of employment opportunities. Revenue from the sale of minerals from the Project is forecasted at \$25.1 billion over 22 years at a cash production cost of \$11.4 billion (M3, 2013).

The construction of the Project is expected to require capital expenditures that will affect the regional economy, not only directly but through indirect and induced effects. These spin-off effects (Table 15.4-2) are related to the purchase of goods and services needed to construct and operate the Project (indirect effects) and the expenditures of direct and indirect labour income on consumer goods and services (induced effects). MNP's analysis of the economic impact of the Project estimates that construction of the mine would lead to a \$363 million increase in Yukon's GDP over a 4-year period, of which \$261 million would arise from direct expenditures. Effects on employment and income are described in Section 13.4.

Table 15.4-2 Projected Construction Effects of the Project to Yukon

Total Impacts	Output¹ (\$ millions)	GDP² (\$ millions)
Direct	576	261
Indirect and Induced	204	102
Total	779	363

Notes:

¹Total gross value of goods and services measured by the price paid to the producer. This is the broadest measure of economic activity.

²Additional value of a good or service over the cost of inputs used to produce it from the previous stage of production. Also refers as value-added or net output.

Totals may not add up due to rounding.

Source: MNP, 2013

Project operations are expected to affect Yukon's economy through expenditures on goods and services, the creation of employment opportunities, and the generation of tax revenues for local, territorial, and federal governments. Casino Mining Corporation estimates that approximately 69% of operational spending will occur in Yukon. Using that percentage, together with projected annual operational spending data provided by CMC, MNP (2013) estimates annual GDP generated in Yukon by the operation of the Project at \$274 million, equivalent to 10.3% of Yukon's 2011 nominal GDP of \$2.7 billion. These results are summarized in Table 15.4-3.

Table 15.4-3 Projected Annual Operations Effects of the Project to Yukon

Total Impacts	Output¹ (\$ millions)	GDP² (\$ millions)
Direct	307	232
Indirect and Induced	36	42
Total	342	274

Notes:

¹Total gross value of goods and services measured by the price paid to the producer. This is the broadest measure of economic activity

²Additional value of a good or service over the cost of inputs used to produce it from the previous stage of production. Also refers as value-added or net output.

Totals may not add up due to rounding.

Source: MNP, 2013

As mentioned above, the Project includes upgrading the existing Freegold Road (83 km) and construction of the Freegold Road Extension (120 km) for a total of approximately 200 km southeast from the Project to the village of Carmacks. This infrastructure has the potential to reduce the capital costs associated with the development of the numerous mineral claim blocks staked proximate to the existing road and the extension. The relationship between the Freegold Road to existing claims is addressed in the Land Use Baseline (Appendix 19A). Even with reduced exploration budgets, activities in advanced exploration (defined as having more than \$1 million in expenditures) in the 2012 season, within 100 km of the road extension included the Boulevard, Coffee, Mariposa, and Betty gold projects. In addition, several early stage exploration projects were carried out and many claims exist that were explored in the region in 2011 (Yukon Geological Survey 2013). Future developers of these properties could reduce the necessary capital costs of construction by some proportion of the \$99 million expenditure already made as part of the Project. The spin-off effects of infrastructure investment are uncertain and depend on many other factors outside this analysis, but it is reasonable to expect that the infrastructure investments associated with the Project have the potential to facilitate future projects with noticeable effects on the regional economy

Potential Effects on Business Opportunities

As mentioned above, during the approximate 4-year construction phase, the Project is expected to require a total of \$2.5 billion in capital expenditures, including \$332 million in infrastructure costs and \$1,566 million in direct costs. Over the 22-year LOM, sustaining capital expenditures of \$361.7 million are anticipated. The operations of the Project are expected to affect Yukon's economy through expenditures on goods and services, helping to diversify the economic base of the LSA and RSA during the construction and Operation Phases. It will strengthen economic development performance by creating new opportunities for contractors and companies supplying goods and services to construction contractors and the mine when it is in operation. In absolute terms, Whitehorse will be the largest beneficiary because it is the service centre for the RSA, and its supplier and contractor base is best equipped to serve the mine. Companies in rural communities within the RSA do not have the capacity to bid for major service contracts with the Project but, with support in the structure of procurement processes and policies, could service size-appropriate contracts that, given the small populations of these communities, would have a larger relative impact for local residents.

The extent to which business opportunities translates into economic development benefits depends on general economic conditions, the investment climate, and the competitiveness of local suppliers. The estimated capital cost expenditures in the RSA are shown in Table 15.4-4. Where possible these expenditures will be met by local purchasing going to local businesses by the Project. Companies in the RSA are expected to supply \$565.9 million in goods and supplies over the 4-year period. This spending will be distributed between numerous construction,

contracting, supply, and service companies, mostly from Whitehorse and among First Nations. Employment effects of these expenditures are detailed in Section 13.

Table 15.4-4 Estimated Capital Cost Disbursements in Yukon

Disbursement	Expenditures in Yukon (\$ millions)
Direct	
Plant Equipment	12.6
Material	45.9
Labour	99.7
Subcontract	32.0
Construction Equipment	14.4
Total Indirect Costs	1.0
Camp Operating Cost	27.2
Construction Power	2.7
EPCM	
Management and Accounting	0.8
Engineering	6.3
Project Services	2.6
Project Controls	2.0
Construction Management	57.8
Fixed Fee	0.0
Vendor Commissioning and Other	0.0
Construction Start-up spares	0.1
Power Plant	41.8
Main Access Road	88.9
Airstrip	21.5
Freight	13.9
Mining Equipment Cost	29.5
Mine Development	46.7
Construction Camp Purchase	14.0
Total Contracted Cost	561.3

Source: M3, 2013

During the Operation Phase, total operating expenditures spent in the RSA are estimated to be \$306.6 million annually. Expenditures by category are shown in Table 15.4-5.

Table 15.4-5 Estimated Annual Operating Cost Expended in Yukon, Typical Year

	Expended in Yukon (Typical Year) (\$ millions)
Mining Operations	
Drilling	7.9
Blasting	14.9
Loading	8.7
Hauling	61.2
Roads and Dumps	22.1
Mining Services	9.4
Mining Administration	4.6
Subtotal Mining	128.7
Concentrator	
Primary Crushing and Stockpile Feed	10.6
Grinding, Classification and Pebble Crushing	65.3
Flotation and Regrind	41.5
Concentrate Thickening and Filtration	5.5
Tailings, Dewatering and Disposal	14.0
Fresh Water/Plant Water	-1.8
Flotation Reagents	0.7
Ancillary Services	2.6
Subtotal Concentrator	138.4
Heap Leach and CIL	25.7
Supporting Facilities	13.7
Annual Mine and Plant Operating Expenditures	306.6

Source: M3, 2013

In total, 68.6% of operating expenditures are expected to be made within the RSA.

During operations, procurement, and contracting will follow a transparent process that requires reporting of local content both by CMC and its contractors. The most likely candidates for local content include:

- Trucking and other transportation;
- Air transportation;
- Consulting services;
- Hospitality and travel services;
- Medical services;
- Services to employees;
- Road and tire services;
- Equipment supplies and maintenance;

- Communications; and
- Human resource and employment services.

Potential Project effects on business opportunities in the LSA can result from the expansion of existing businesses, the creation of new businesses or the attraction of outside businesses into the region.

Potential Effects on Government Revenue

Revenue from the sale of minerals from the Project are forecasted at \$25.1 billion over 22 years at a cash production cost of \$11.4 billion. The Feasibility Study for the Project forecasts tax payments arising from the mine over the construction and Operation Phases. Annual results detailed in the study are shown in Table 15.4-6. Over the construction phase, total government revenue paid by CMC averages \$7.0 million annually (not including 2016), from Yukon mining royalties (on pre-production revenue). Over the Operation Phase, total government revenue from the project averages \$219.1 million annually, mostly through corporate taxes (\$130.8 million annually) and Yukon royalties (averaging \$88.2 million annually). Taxes raised by the Yukon government average \$153.6 million annually while taxes raised by the Federal government average \$65.4 million. These figures do not reflect the amounts ultimately retained by the respective governments, since these amounts are adjusted in accordance with agreements between the Federal and Yukon governments (e.g., through the Territorial Formula Funding and Resources Revenue Sharing agreements).

Table 15.4-6 Forecasted Government Revenue from Project, 2017-2041

Phase	Year	Project Revenue (000's)	Government Revenue (\$ 000's)					
			Yukon Gold Royalty	Yukon Mining Royalty	Yukon Corporate Tax (15%)	Total Yukon Revenue	Federal Corporate Tax	Total Government Revenue
Construction	2017	24,843	680	0	0	680	0	680
	2018	134,361	3,484	6,993	0	10,477	0	10,477
	2019	129,442	3,364	6,395	0	9,759	0	9,759
	Average	96,215	2,509	4,463	0	6,972	0	6,972
Operations	2020	1,301,711	31,771	54,341	0	86,112	0	86,112
	2021	1,782,639	42,490	98,135	66,485	207,110	66,485	273,594
	2022	1,691,881	40,684	87,904	115,933	244,521	115,933	360,453
	2023	1,449,556	35,182	60,185	91,368	186,735	91,368	278,102
	2024	1,236,406	30,446	38,707	98,116	167,269	98,116	265,384
	2025	1,279,213	31,527	44,484	98,894	174,905	98,894	273,799
	2026	1,314,348	31,997	61,008	97,535	190,540	97,535	288,074
	2027	1,334,014	31,723	90,383	97,164	219,270	97,164	316,433
	2028	1,338,572	31,852	90,939	84,042	206,833	84,042	290,875
	2029	1,240,554	29,363	79,084	84,139	192,586	84,139	276,724
	2030	1,255,087	29,699	78,744	78,988	187,431	78,988	266,418
	2031	1,183,392	28,306	73,693	77,676	179,675	77,676	257,350
	2032	1,168,891	27,954	72,267	71,620	171,841	71,620	243,460
	2033	1,135,909	27,084	67,413	63,994	158,491	63,994	222,485
	2034	1,039,724	24,918	59,210	41,475	125,603	41,475	167,078
	2035	799,289	19,290	38,367	52,503	110,160	52,503	162,662
	2036	858,258	20,634	48,497	76,061	145,192	76,061	221,253
	2037	1,023,065	24,375	70,617	47,233	142,225	47,233	189,457
	2038	757,845	18,193	42,899	37,259	98,351	37,259	135,609
	2039	637,959	15,352	33,704	39,699	88,755	39,699	128,454
2040	660,991	15,792	36,715	18,901	71,408	18,901	90,308	
2041	353,057	8,400	17,034	0	25,434	0	25,434	
Average	1,129,198	27,138	61,106	65,413	153,656	65,413	219,069	

Source: M3, 2013

Taxes and royalties based on income depend on the price of the underlying resource. This is the case with both the Yukon Mining Royalty and Corporate Taxes. Fluctuations in commodity prices can have noticeable effects on government revenue. Moreover, effective corporate tax rates may be lower than statutory rates (CMC 2013). The Project will also generate Government revenues from the taxation of direct, indirect, and induced economic activity supported by the mine expenditures. Using the projected construction costs and the related assumptions, MNP (2013) estimates that construction will generate \$22 million in revenues to the Government of Yukon, of which \$16 million will be derived from direct expenditures (mainly through Personal Income Tax and Corporate Income Tax) (Table 15.4-7).

Table 15.4-7 Projected Construction Effects of the Project on Taxes on Economic Activity

Phase	Output (\$ millions)	Federal Tax (\$ millions)	Yukon Territorial and Provincial Tax (\$ millions)	Other Tax (\$ millions)
Direct	576	24	16	5
Indirect and Induced	204	10	6	2
Total	779	33	22	7

Source: MNP, 2013

The operations of the Project also affect Yukon's economy through the generation of tax revenues from direct, indirect, and induced economic activity. Using estimated operational spending data provided by CMC (and assuming 69% of this spending occurs in Yukon), the economic impact report estimates that the Project would generate \$25 million in annual tax revenues to the Government of Yukon (Table 15.4-8).

Table 15.4-8 Projected Annual Operations Effects of the Project on Taxes on Economic Activity

Phase	Output (\$ millions)	Federal Tax (\$ millions)	Yukon Territorial and Provincial Tax (\$ millions)	Other Tax (\$ millions)
Direct	307	16	22	1
Indirect and Induced	36	3	3	0.20
Total	342	20	25	1

Source: MNP, 2013

The economic impact model of projected tax revenues does not consider whether revenue raised by the Government of Yukon will be retained or reduced by offsets with the federal government. For the purpose of this assessment it is assumed that off-set calculations will not change as a result of Project revenue.

The total impact on government revenue estimated for the Project is shown in Table 15.4-9. Potential effects of the Project on the VC are summarized in Table 15.4-10.

Table 15.4-9 Projected Total Effects of the Project on Government Revenue

		Government Revenue (Average Annual Revenue, \$ Millions)							
		Yukon Royalty	Yukon CMC Corporate Tax	Yukon Direct and Indirect Taxes	Total Yukon Government Revenue	Federal CMC Corporate Tax	Other Federal Taxes	Total Federal Revenue	Total Government Revenue
Construction	2017-2019	7.0	0.0	7.3	14.3	0.0	11.0	11.0	25.3
Operations	2020-2041	88.2	65.4	25.0	178.7	65.4	20.0	85.4	264.1

Table 15.4-10 Potential Effects of the Project

Mechanism of Interaction	Key Indicator(s) ¹	Project Phase ² (C, O, DC, PC)	Potential Effect	Direction (Adverse/Beneficial)
Project purchases of goods and services	Economic Growth	C, O, DC	Project purchases of goods and services would increase Yukon GDP and employment	Beneficial
Project workforce demands	Economic Growth	C, O, DC	Project workforce demands would increase Yukon GDP and employment	Beneficial
Improved access along Freegold Road.	Economic Growth	C, O, DC	Increased use of the Freegold Road may occur, particularly for recreational purposes, as the improved alignment will make travel on this public portion of the road easier and safer.	Beneficial
Re-spending by households of additional income derived directly or indirectly from the mine employment	Economic Growth; Business Opportunities	C, O, DC	Re-spending by households of additional income that has been derived directly or indirectly from the mine employment will increase economic activity and businesses	Beneficial
Project purchases of goods and	Business Opportunities	C, O, DC	Proposed Project purchases will create contract and business opportunities across Yukon	Beneficial

Mechanism of Interaction	Key Indicator(s) ¹	Project Phase ² (C, O, DC, PC)	Potential Effect	Direction (Adverse/Beneficial)
Direct and indirect taxes by Project, contractors and	Government Revenues	C, O, DC	Direct and indirect taxes by Project, contractors and individuals will positively contribute to the Yukon tax revenues	Beneficial
Project will pay royalties and corporate taxes to the Government of Yukon	Government Revenues	O	During operations Project will pay royalties / Yukon Mining Tax to Yukon, resulting in increased Government revenue	Beneficial
Additional direct and indirect taxes paid by Project	Government Revenues	C, O, DC	Additional direct and indirect taxes paid by Project employees will increase government revenues	Beneficial

Note:

- Key indicators are defined as measurable parameters or attributes to qualitatively or quantitatively evaluate the potential effect.
- C (Construction), O (Operation), CD (Closure and Decommissioning) and PC (Post-Closure) represent the Project phases when the potential interaction between the Project and valued component is anticipated to occur.

15.4.2 Identification of Mitigation Measures and Potential Residual Effects

Effects on the LSA and RSA Economic Development and Business Sector VC are considered to be beneficial. Expenditures on Project construction and operations will require labour, goods, and services, much of which will be procured from Yukon sources and will have a positive effect on territorial GDP, government revenues, and regional businesses.

Substantive business opportunities will be available for businesses based in the LSA. Project infrastructure investments will provide the basis for future developments, which will bolster economic growth. Casino Mining Corporation will enhance these beneficial effects by:

- Implementing a procurement process that gives priority to suppliers from the RSA, where economically practical, and in particular rural communities within the LSA;
- Implementing a procurement process that gives priority to contractors who hire local/regional residents to the greatest extent practical;
- Implementing a procurement process that manages contract components to meet the capabilities of LSA entrepreneurs;
- Encouraging joint ventures between Aboriginal businesses and other regional businesses in the procurement process;
- Requiring cultural awareness training for employees and contractors;
- Monitoring Project socio-economic effects and adapting management measures where required;
- Partnering with First Nation communities and their development corporations to access additional funding for training;
- Support for non-mining training and entrepreneurial initiatives; and

- Coordinating use of transportation infrastructure with exploration companies and other tenure holders.

Given their already beneficial effects, direct enhancement measures on government revenue-related effects are not contemplated. However, efforts to maximize regional involvement in contracting and procurement as well as efforts to maximize the workforce resident in the RSA will all have indirect effects of increasing government revenue.

Mitigation measures are summarized and paired to Project effects in Table 15.4-11. Effects are sorted into the three categories of economic growth, business opportunities, and government revenue.

Table 15.4-11 Proposed Mitigation Measures and Potential Residual Effects for the Economic Development and Business Sector VC

Potential Effect	Project Phase ¹ (C, O, DC, PC)	Direction	Proposed Mitigation (or Enhancement) Measure ²	Predicted Effectiveness	Residual Effect
Economic Growth					
Project purchases of goods and services would increase Yukon GDP and employment	C, O, DC	Beneficial	Contractors would be encouraged to hire local/regional residents to the extent practical.	High	Yes
Project workforce demands would increase Yukon GDP and employment	C, O, DC	Beneficial	CMC would seek to recruit local/regional/territorial residents to the extent practical (Section 14 Employment and Income).	High	Yes
Increased use of the Freegold Road may occur, particularly for recreational purposes, as the improved alignment will make travel on this public portion of the road easier and safer.	C, O, DC	Beneficial	Local community members may enjoy enhanced access to recreational opportunities along this section of the road.	Medium	Yes

Potential Effect	Project Phase ¹ (C, O, DC, PC)	Direction	Proposed Mitigation (or Enhancement) Measure ²	Predicted Effectiveness	Residual Effect
Re-spending by households of additional income that has been derived directly or indirectly from the mine employment will increase economic activity and businesses	C, O, DC	Beneficial	CMC would use local and regional suppliers when these suppliers can provide products and services at competitive prices and timeframes. The proponent would seek to recruit local/regional/territorial residents to the extent practical.	High	Yes
Business Opportunities					
Proposed Project purchases will create contract and business opportunities across Yukon	C, O, DC	Beneficial	CMC would use local and regional suppliers when these suppliers can provide products and services at competitive prices and timeframes.	Medium	Yes
Government Revenue					
Direct and indirect taxes by Project, contractors and individuals will positively contribute to the Yukon tax revenues	C, O, DC	Beneficial	CMC would use local and regional suppliers when these suppliers can provide products and services at competitive prices and timeframes. The proponent would seek to recruit local/regional/territorial residents to the extent practical.	Medium	Yes
During operations Project will pay royalties / Yukon Mining Tax to Yukon resulting in increased Government revenue	O	Beneficial	None	N/A	Yes

Potential Effect	Project Phase ¹ (C, O, DC, PC)	Direction	Proposed Mitigation (or Enhancement) Measure ²	Predicted Effectiveness	Residual Effect
Additional direct and indirect taxes paid by Project employees will increase government revenues	C, O, DC	Beneficial	CMC would use local and regional suppliers when these suppliers can provide products and services at competitive prices and timeframes; the proponent would seek to recruit local and/or regional/territorial residents to the extent practical.	High	Yes

Notes

1. C (Construction), O (Operation), CD (Decommissioning and Closure) and PC (Post-Closure) represent the Project phases when the potential interaction between the Project and valued component is anticipated to occur.
2. For beneficial potential effects, opportunities, where possible, to enhance potential environmental and socio-economic benefits are included as proposed enhancement measures.

15.4.3 Significance of Residual Effects

The criteria used to discuss residual effects are discussed in detail in Section 5, Assessment Methods and Frameworks. Table 15.4-12 outlines the seven criteria used to assess significance for the Economic Development and Business Sector VC.

Table 15.4-12 Determining Significance of Residual Effects for the Economic Development and Business Sector VC

Criteria	Rating	VC Specific Definitions
Direction	Adverse	Long term trend of the residual effect.
	Beneficial	
Magnitude	Low	Effect that occurs might or might not be detectable, but is within the normal range of variability
	Medium	Effect is unlikely to pose a serious risk or benefit to the VC or to represent a management challenge
	High	Effect is likely to pose a serious risk or benefit to the selected VC and, if negative, represents a management challenge
Geographical Extent	Localized	Within the identified Regional Study Area
	Widespread	Outside the identified Regional Study Area
Duration	Short Term	Effect is limited to the construction period
	Long Term	Throughout operations, decommissioning and closures
	Permanent	Effects measureable Post-Closure
Frequency	Infrequent	Effects occur occasionally
	Frequent	Effects occur often or continuously
Reversibility	Reversible	Effect will return to baseline condition after operations, decommissioning and closure
	Irreversible	Effect is persistent after operations, decommissioning and closure
Context	Low Resilience	Effects operate outside of regional experience and represent a challenge to local socio-economic management institutions
	High Resilience	Effects are familiar to local socio-economic management institutions
Probability of Occurrence	Low	Effects are unusual under similar circumstances and are not expected to occur with this Project
	Moderate	Effects have a reasonable risk of occurring under similar circumstances or there is not currently sufficient information to assess probability
	High	Effects have consistently occurred under similar circumstances and are expected to occur with this Project

The significance of potential residual effects from the Project on the Economic Development and Business Sector VC are summarized in Table 15.4-13.

Table 15.4-13 Significance of Residual Effects for the Economic Development and Business Sector VC

Residual Effect	Predicted Degree of Effect After Mitigation (or Enhancement) Measures ¹								Significance of Residual Effect
	Direction	Magnitude	Geographic Extent	Duration	Frequency	Reversibility	Context	Probability of Occurrence	
Economic Growth									
Project purchases would increase Yukon GDP and employment	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant
Project workforce demands would increase Yukon GDP and employment	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant
Increased access from Freegold Road Upgrade may provide opportunities for more exploration activities, which in turn will increase Yukon's GDP and employment	Beneficial	Medium	Localized	Long Term	Continuous	Reversible	High resilience	Moderate	Not Significant
Re-spending by households of additional income that has been derived directly or indirectly from the mine employment will increase economic activity and businesses	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant

Business Opportunities									
Proposed Project purchases will create contract and business opportunities across Yukon	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant
Government Revenue									
Direct and indirect taxes by Project, contractors and individuals will positively contribute to the Yukon tax revenues	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant
During operations Project will pay royalties/Yukon Mining Tax to Yukon	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant
Additional direct and indirect taxes paid by Project employees will increase government revenues	Beneficial	High	Localized	Long Term	Continuous	Reversible	High resilience	High	Significant

Note:

For beneficial potential effects, opportunities, where possible, to enhance potential environmental benefits are included as proposed enhancement measures.

15.4.4 Discussion of Significance

The significance of these effects is discussed by the three categories of effects (economic growth, business opportunities, and government revenue) in the following sections and summarized in Table 15.4-14. The direct effects of the Project on the Economic Development and Business Sector VC are significant, particularly relative to the size of the RSA's economy. Effects of new infrastructure, in particular the Freegold Road Upgrade and Extension, are not deemed to be significant given the uncertainty of the marginal effect of this infrastructure on other Actions.

Predictions of economic effects in terms of economic growth, business opportunities and government revenue were based on the financial model in the Project's Feasibility Study which is estimated to have a margin of error within the range of plus 15% to minus 10% (M3, 2013). Estimates directly based on feasibility data such as Project purchases of goods and services and payments of royalties to the Yukon government are thus given a high level of confidence. The Project's economic effects are estimated by MNP using the 2009 I-O economic

multipliers for the Yukon as provided by the Industry Accounts Division of Statistics Canada. These multipliers describe how a change in final demand for the output of one particular industry would affect economic activity in the entire territory. The structure of the mining industry in 2009 in Yukon may not be representative over the life of the Project, especially given its unique scale compared to other mining activities in the region. In addition, smaller regions increase the possibility of data errors within the tables which can increase the margin of error to the predictions. The combined effect of these sources of error is likely to increase the margin of error above plus or minus 15% and thus require a moderate level of confidence. The effect of the Freegold Road Upgrade is considered to have a moderate level of confidence because of the lack of data on the cost-benefit considerations of contingent exploration activities.

Table 15.4-14 Summary of Residual Effects for the Economic Development and Business Sector VC

Potential Residual Effect	Direction	Significance	Level of Confidence (Low, Moderate, High)
Economic Growth			
Project purchases of goods and services would increase the Yukon GDP and employment	Beneficial	Significant	High
Project workforce demands would increase Yukon GDP and employment	Beneficial	Significant	Moderate
Increased access from Freegold Road Upgrade may provide opportunities for more exploration activities, which in turn will increase Yukon's GDP and employment	Beneficial	Not Significant	High
Re-spending by households of additional income that has been derived directly or indirectly from the mine employment will increase economic activity and businesses	Beneficial	Significant	Moderate
Project purchases (contracting opportunities) would contribute to the Yukon economy in terms of increasing its GDP and employment	Beneficial	Significant	High
Business Opportunities			
Proposed Project purchases will create contract and business opportunities across the Yukon	Beneficial	Significant	Moderate
Improved access from Freegold Road Upgrade may provide additional business opportunities related to exploration activities and potential for development of other major Actions	Beneficial	Not Significant	Moderate
Government Revenue			
Direct and indirect taxes by Project, contractors and individuals will positively contribute to the Yukon tax revenues	Beneficial	Significant	Moderate
During operations Project will pay royalties/Yukon Mining Tax to the Yukon	Beneficial	Significant	High
Additional direct and indirect taxes paid by Project employees will increase government revenues	Beneficial	Significant	Moderate

15.4.4.1 Discussion of Significance on Economic Growth

The magnitude of the Project's potential residual effect on economic growth is high. The 2012 estimate for mineral production across the RSA is \$600 million; average annual revenue for the Project is forecasted to be \$1.1 billion, providing what would amount to a 188% increase in Yukon's mineral production. The Project would create \$232 million in GDP from direct expenditures and \$274 million from total expenditures (including induced and indirect activities) on average annually over the Operation Phase. Yukon's 2011 GDP is estimated at \$2.4 billion; this would amount to a 9.7% increase from direct expenditures and an 11.4% increase from total expenditures (Yukon Economic Development 2013).

Potential residual effects on economic growth are expected to be localized to Yukon. Although economic benefits will spill over into other jurisdictions, these effects are not likely to be noticeable within the context of the larger economies of British Columbia and Alberta. They are expected to be continuous over both the construction and Operation Phases given the stability of pre-production operations activities. Effects are considered reversible since they depend on expenditures that will substantively end with the closure and decommissioning of the Project.

Yukon residents are familiar with the cyclical nature of the mining industry and these effects are expected to be manageable within the region's socio-economic context. In general, the effects on economic growth of the Project are expected to be significant.

The magnitudes of effects from the Freegold Road Upgrade are uncertain since they depend on the marginal impact of reduced infrastructure costs on activities for which little information on economic viability is available. If the road made the difference in the decision of whether a specific Action moved into production the effect could be of a high magnitude but even this is uncertain given the varying quality of mineral claims - the reduction in cost from the road is less likely to be the decisive factor for a major resource. The effect of improved transportation infrastructure is considered to be irreversible to the extent that the Freegold Road Upgrade is expected to persist. Overall, the effects of the road expansion and upgrade are not expected to be significant.

15.4.4.2 Discussion of Significance on Business Opportunities

The Project will present major opportunities for businesses and encourage the development of Whitehorse as an exploration and production mining hub in the region. This will result in a high magnitude of new opportunities for Yukon's business sector. In a typical year, the Project is expected to spend \$307 million in operating expenditures in the region. This is the same as the combined expenditures in 2011 of all of the exploration companies operating in Yukon. Exposure to the changing demands of mine production would let companies build new capabilities and expand into new areas, which in turn would help them service other activities in the mining sector (Yukon Economic Development 2013).

Effects on business opportunities are expected to be localized to Yukon. Although procurement and contracting will out of necessity spill over into other jurisdictions, these effects are not likely to be noticeable within the context of the larger economies of British Columbia and Alberta.

Effects on business opportunities will be continuous over both the construction and Operation Phases given the stability of pre-production operations activities. Effects are considered reversible since they depend on expenditures that will substantively end with the closure and decommissioning of the Project.

Yukon businesses are familiar with the cyclical nature of the mining industry and these effects are expected to be manageable within the region's socio-economic context.

In general, the effects on business opportunities of the Project are expected to be significant.

The magnitudes of effects from the Freegold Road Upgrade are uncertain since they depend on the marginal impact of reduced infrastructure costs on activities for which little information on economic viability is available. If the road made the difference in the decision of whether a specific Action moved into production the effect could be of a high magnitude but even this is uncertain given the varying quality of mineral claims - the reduction in cost from the road upgrade is less likely to be the decisive factor for a major resource. However, since many businesses service exploration companies, there is a variety of smaller scale uses for which they are likely to see some benefit. The effect of improved transportation infrastructure is considered to be irreversible to the extent that the road is expected to persist after closure. Overall effects from the road upgrade are not deemed to be significant.

15.4.4.3 Discussion of Significance on Government Revenue

The magnitude of the Project's effect on government revenue is very high. The Government of Yukon levies a net profit royalty on mineral production up to a maximum rate of 12% on output greater than \$35 million. To place the revenue generated by the Project into perspective, Table 15.4-15 shows the amount of Yukon mining royalties paid by other mines in the RSA over the period from 2007 to 2012. Revenue from the royalty peaked in 2009 at \$5.9 million solely from payments by the Minto Mine. In 2011, revenue was \$2.0 million, reflecting a reduction in the level of the tax. M3 estimates the annual amount of Yukon mining royalties paid by the Project over the Operation Phase to be \$88.2 million sustained over 22 years, roughly 7.4% of Yukon's total revenue in 2012. The Government of Yukon estimates that \$12 million in resource revenue would be enough to justify triggering their agreement with the federal government to retain 50% of resource revenues. As a consequence, the Project will generate government revenues sufficient to change the rate of return in terms of government revenue for resource activities across Yukon (Government of Yukon 2012; Government of Yukon 2013b). It should be noted, that because Minto is located on Selkirk First Nation settlement land, all of the royalties payable from the project flow directly to Selkirk.

Table 15.4-15 Yukon Mining Royalty Paid by Other RSA Activities, 2007-2012

Project	Owner	Annual Royalties (\$)					
		2007	2008	2009	2010	2011	2012
Minto Mine	Capstone Mining Corp.	0	1,503,491	5,917,904	3,806,550	1,680,398	391,661
Bellekeno Mine	Alexco Resources	N/A	N/A	N/A	0	351,525	372,588
Total		0	1,503,491	5,917,904	3,806,550	2,031,923	764,249

Source: Yukon Government – Energy, Mines and Resources, 2013

Casino Mining Corporation is estimated to pay \$65.4 million annually in corporate taxes to Yukon over the operational phase. In addition, it is estimated that the Government of Yukon would raise \$25 million annually from direct income taxation (personal income tax and corporate income tax on supplier industries) during the Operation Phase. Overall, Government of Yukon revenue from the Project is estimated at \$178.7 million annually over the Operation Phase, or 14.8% of Yukon's total revenue in 2012

Effects on government revenue are expected to be localized. Although the federal government will see an increase in government revenues, estimated at \$85.4 million annually over the operational life of the Project (not

including reduced federal offsets from mining revenue), these effects are not likely to be noticeable within the context of overall federal revenues of \$8.1 billion (MNP 2013; Department of Finance 2012).

Effects on government revenue will be continuous over the Operation Phase. Effects are considered reversible since they depend on expenditures that will substantively end with the closure and decommissioning of the Project. Although the magnitude of the effects are large, the Government of Yukon is familiar with managing high rates of economic growth and the cyclical nature of the mining industry, and these effects are expected to be manageable within the region's socio-economic context.

The effects on government revenue of the Project are expected to be significant.

15.5 CUMULATIVE EFFECTS ASSESSMENT (CEA)

15.5.1 Introduction

The assessment of potential effects of the Project on Economic Development and Business Sector VC in terms of economic growth, business opportunities, and government revenues found effects of construction and operations to be beneficial and thus these effects are not required to be carried forward into a CEA. Furthermore, the assessment of potential Project effects on this VC was conducted in the context of all past and existing economic activity, as well as forecasts of economic growth that take into consideration other proposed and anticipated development projects and activities. Consequently, the effects assessment of the proposed Project is inherently cumulative and therefore no further assessment of cumulative effects is practical or required.

15.5.2 Identification of other Activities Potentially Affecting the VC

The effects of the Project in terms of economic growth, business opportunities, and government revenues would be beneficial and thus these effects are not required to be carried forward into a CEA.

15.5.3 Interactions and Potential Cumulative Effects

The effects of the Project in terms of economic growth, business opportunities, and government revenues would be beneficial and thus these effects are not required to be carried forward into a CEA.

15.5.4 Additional Mitigation Measures and Potential Residual Cumulative Effects

As the effects of the Project in terms of economic growth, business opportunities, and government revenues would be beneficial and thus these effects are not carried forward into a CEA, no additional mitigation measures are required.

15.5.5 Significance of Residual Cumulative Effect

The residual cumulative effects of the Project on the economy, business opportunities, and government revenues are the same as the effects specific to the Project as stated in Section 17.3.

15.5.6 Discussion of Significance of Residual Cumulative Effects

The residual cumulative effects of the Project on the economy, business opportunities, and government revenues are the same as the effects specific to the Project as stated in Section 17.3 and their significance is discussed in Section 17.3.4.

15.6 SUMMARY AND CONCLUSIONS

The construction of the Project is expected to occur over four years and cost a total of \$2.5 billion in capital expenditures, increasing Yukon's GDP over that period by \$363 million. During the Operation Phase, the Project is expected to increase GDP by \$274 million, equivalent to 11.4% of Yukon's 2011 GDP of \$2.4 billion. Government revenues from the Project is forecasted to amount to \$219 million annually over the Operation Phase, of which \$61.1 million annually is expected to be raised through the Yukon Mining Tax. Revenues for the Government of Yukon are estimated to amount to 7.4% of Yukon's 2012 overall revenue. The magnitude of this increase in resource revenue would be sufficient to change the nature of the funding arrangement between the federal and territorial governments, allowing a greater share of resource revenues to be retained by the Government of Yukon. Residual effects on the economy post-operations would be limited to closure expenditures, which are of a relatively low magnitude and not expected to be noticeable, as well as ongoing economic returns from infrastructure investments made by CMC (notably the Freegold Road upgrade), human capital investments retained by workers (training and education), and returns from public investments funded by increased government revenue.