

Shell Canada Limited (Shell)

**Pierre River Mine Project
and
Jackpine Mine Expansion Project**

Socio-Economic Impact Assessment (SEIA) Review

Prepared for:

Fort McKay Industry Relations Corporation

By:

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1 Executive Summary

“The identity of the Fort McKay people is rooted in time and place to the land. Since time immemorial we have roamed this land, lived from this land, and been part of this land. To separate us from this land would be to split our very identity in two” (FMTA 1983: 1).”¹

Shell Canada Limited (Shell) has applied for two large oil sands development projects – the Jackpine Mine Expansion and the Pierre River Mine. These two projects represent a significant footprint on the land and by Shell’s own admission expand the northern edge of the mineable oil sands area north into relatively undisturbed areas.

“[in 2008] Within a 20 mile radius of the Band Administration offices there are eight operators and 40% of the land is directly disturbed (more than 49,000 ha). As well, most of the remaining land within this area is fragmented by linear disturbances such as seismic lines and roads.”² The developments proposed by Shell would add additional disturbance making it even more difficult for the residents of Fort McKay to maintain their traditional culture.

In Shell’s 2005 Sustainability – Annual report they state, “We believe in giving back to the communities where we operate, and we invest time, energy and funds to help build stronger communities. We direct our national community investments to three core areas: education, environment and employee volunteers. We also support not-for-profit organizations in communities near our major facilities and exploration interests, as well as initiatives that benefit our Aboriginal neighbours.” While Fort McKay has a positive working relationship with Shell and they have provided support for community initiatives, these two projects represent a significant new assault on the community.

The Fort McKay Industry Relations Corporation (IRC) has adopted the “Guidelines and Principles for Social Impact Assessment” from the International Association for Impact Assessment (IAIA 2003). These guidelines and principles provide the framework from which the social impacts of these developments have been identified.

¹ Fort McKay Tribal Administration (now known as the Band Administration). 1983. *From Where We Stand*. p. 1.

² Fort McKay Specific Cultural Heritage Assessment Baseline: Pre-Development (1964) to Current (2008) (CHA Baseline) Fort McKay IRC 2009a. p.15. Disturbance areas calculated by Stantec Inc., based on a disturbance layer from Golder (2009) p. 22.

Four significant areas of concern are identified in this review:

1. Fly-in, fly-out program
Air traffic volume, noise, management and safety; and questions about transporting workers from the airstrip to the camp are of concern to Fort McKay and need to be clarified and addressed.
2. Community perception of risk
Risk perception, is defined as people's judgments and assessment of hazards or danger that might pose immediate or long-term threats to their health and well-being. To the community members of Fort McKay their perception of reality is that risk from Shell's activities is high and trust is low.
3. Cultural Fragility
The people of Fort McKay believe that it has been the large scale taking up of lands by industrial development since the 1960's, the associated air and water pollution, and the influx on non-aboriginal people to the region that have had the most significant effects on their culture.
4. Cumulative Effects
For a people that are intrinsically linked to the land, the community is concerned about the cumulative effects of extensive industrial development. People believe that the lands can never be returned to the way they were and that there will be profound intergenerational effects on the sustainability of their culture and way of life.

2 Introduction

Shell is seeking approval for two projects: the Pierre River Mine (PRM) and the expansion of the Jackpine Mine (JME).

The PRM project is a new development that will involve:

- establishing the mine operations on Lease 9 with some additional facility construction activities on other leases;
- building site access infrastructure;
- constructing ore handling, conditioning and bitumen extraction facilities and a high-temperature froth treatment facility at the Pierre River Mine site; and
- constructing a new raw water intake facility, constructing a new external tailings disposal area (ETDA) at the boundary of Lease 17 and Lease 351 to accommodate the initial volume of tailings produced.

The project facilities will be located in a single plant site area in the northeastern corner of Lease 9. Other facilities will include administration buildings, mine offices and utilities and infrastructure. PRM is about 35 km north of Fort McKay on the west side of the Athabasca River.

The JME project will involve:

- expanding the Jackpine mine – Phase 1 area on the eastern part of Lease 13 and extending mining activities to additional northern leases;
- constructing ore handling, conditioning and bitumen extraction facilities and a high-temperature froth treatment facility at the Jackpine mine – Phase 1 site;
- constructing a cogeneration plant at the Jackpine mine – Phase 1 site and adding new or augmenting existing utility systems; and
- constructing a new external tailings disposal area (the North ETDA) at the southern end of Lease 88 to accommodate the additional volume of tailings produced.

The expansion of ore preparation, extraction, tailings disposal, utilities and froth treatment facilities will be located at the Jackpine mine. The project is located approximately 10 km east of Fort McKay on the east side of the Athabasca River.

The technical review team has reviewed the Shell PRM and JME Projects' SEA on behalf of the community of Fort McKay Industry Relations Corporation (IRC) which represents the community of Fort McKay (including the First Nation and Métis). This review was completed by Molstad and Anderson Consultants Inc.

The Environmental Impact Assessment (EIA) was reviewed by the Fort McKay IRC Technical Review Team (2009). Where appropriate, linkages to the EIA review are noted.

To enable ease of tracking issues we have numbered issues and their associated recommendations. These recommendations are also presented in a summary table with Fort McKay's key concerns. The category column of the table indicates the potential path forward to address issues. Categories are as follows:

- Agreement – a suggested activity such as mitigation or monitoring that Fort McKay may want to consider in their Agreement negotiation with Shell;
- Regulatory – a suggestion that Fort McKay may want to recommend to the regulators (e.g. potential approval or license condition, assessment approach);
- Response – a deficiency or question for which Fort McKay may want to request a response or additional information from Shell.

Quotes are identified by italics.

2.1 Review and Validation of Key Issues

This review has included examination of the following documents:

- Jackpine Mine Expansion & Pierre River Project, Project Descriptions and Environmental Impact Assessment, Shell Canada Limited, December 2007;
- Jackpine Mine Expansion & Pierre River Project, Environmental Impact Assessment Update, Shell Canada Limited, May 2008;
- Pierre River Project, Supplemental Information, Shell Canada Limited, May 2009
- Indicators Of Cultural Change (1960 to 2009): A Framework For Selecting Indicators Based On Cultural Values In Fort McKay, (ICC) Human Environment Group, June 2009; and
- Fort McKay Specific Cultural Heritage Assessment (CHA) Baseline: Pre-Development (1964) to Current (2008), Prepared by Fort McKay IRC, October, 2009a.

The Socio-economic assessment (SEA) prepared by Shell addresses the socio-economic impact of two projects: Jackpine Mine Expansion (JEMA) and Pierre River Mining Area (PRMA). For each of the key issues the assessment describes the impacts of the **Base Case**, which includes existing and approved projects; **Application Case**, which are the impacts of the Base Case plus the 2 proposed projects; and **Planned Development Case** which includes the cumulative impacts of the Application Case plus other projects that were disclosed 6 months before the application was filed (approximately June 2007).

Shell has presented the view that population growth is the single biggest factor that drives all other social impacts.

Since submitting its SEA in 2007 significant changes in the economic environment have occurred and Shell has indicated that their accelerated project scenario is no longer applicable and some timelines for the projects have been modified. Additionally, Shell has indicated that the socio-economic data has not been updated, or included with supplemental information.

Fort McKay has agreed with Shell to conduct a Fort McKay Specific Assessment as a pilot project, which includes:

- an Environmental Specific Assessment, Prepared by Fort McKay IRC, October, 2009c; and,
- a Cultural Heritage Assessment (CHA) that consists of three main reports:
 - Indicators Of Cultural Change (ICC) (1960 to 2009): A Framework For Selecting Indicators Based On Cultural Values In Fort McKay, Human Environment Group, June 2009;
 - Fort McKay Specific Cultural Heritage Assessment (CHA) Baseline: Pre-Development (1964) to Current (2008), Prepared by Fort McKay IRC, October 2009a; and
 - Project-specific Cultural Heritage Assessment (CHA) related to Shell's Jackpine Mine Expansion and Pierre River Mine Projects, Prepared by Fort McKay IRC, October 2009b.

These assessments have assisted Fort McKay to determine how the community and its members will be affected by oil sands development in general as well as these projects. Parallel to this assessment we are also providing this technical review of the socio-economic impacts of the Shell projects, which will assist in detailing the community's specific concerns and any proposed mitigation options.

Feedback from community members at the March 11, 2009 meeting with Shell has been incorporated into this review. The reviewers also consulted with the IRC Director, Community Development Coordinator and the Fort McKay First Nation Administrator to review socio-economic issues and concerns in July 2009.

The IRC has reviewed the key concerns and recommendations of this review prior to its submission.

Once mitigation has been identified and agreed upon by the parties, it will be discussed and validated at Elder's, community members and trapper's meetings

3 Context for the Review

3.1 Risk Perception

Risk perception, is defined as people's judgments and assessment of hazards or danger that might pose immediate or long-term threats to their health and well-being. Several theories have been developed to explain why different people make different estimates of the dangerousness of risks.

A considerable body of research demonstrates that lay people use a different set of criteria than experts for evaluating risk.³ Specific factors that influence public risk perception include:

- **Control** - the ability of the individual or society to control the risk.
- **Catastrophic potential** - the possibility of fatalities or ill effects grouped in time and space as an epidemic.
- **Dread** - the fear of the possibility of serious delayed effects, such as cancer. Dread is related to catastrophic potential, but the impact does not necessarily need to be grouped in time or space.
- **Familiarity** - the degree of familiarity lay people have with risk.
- **Equity** - the equal distribution of risks and benefits throughout society.
- **Level of knowledge** - the general understanding lay people have with the process or activity posing the risk.
- **Voluntariness** of exposure.
- **Effects on children and future generations** - concerns about possible delayed effects on humans and the environment posed by the risk.
- **Clarity of benefits** - represents the awareness and understanding of the benefits provided by the activity posing the risk.
- **Media** attention.
- **Trust** in organizations or institutions.

The public also tends to be more concerned about the unknown effects of risky activities such as significantly negative consequences irrespective of the 'low probability'; what the 'experts' do not know; and why they cannot agree.

³ Slovic, Paul, Baruch Fischhoff, Sarah Lichtenstein. "Why Study Risk Perception?" Risk Analysis 2(2) (1982): 83-93.

This perception of risk can have negative health effects as described in the CHA Baseline (Fort McKay IRC 2009a, p. 31); *“Generally speaking, health risk perception of an individual, family, or community revolves around their belief of how they are being exposed to industrial pollution – how often and at what levels and whether they believe their health will be affected. This perceived risk may be higher than the more objective risk obtained from a conventional health risk assessment. This perceived risk increases stress within the individual, family or Community; and may influence behaviour of the individual, family or community group⁴. Both of these outcomes will influence health as well as cause behavioural changes. For Community members in Fort McKay, perceived pollution had caused overall concern about the safety and quality of air they breathe, the water they drink and the food they consume. As well, perceived pollution has, in part, changed the way Community members interact with the land at a variety of levels.”*

While Fort McKay enjoys a fairly positive relationship with Shell this is primarily related to the absence of specific incidents/mishaps. Generally, the community does not trust industry and does not differentiate the impacts from one specific project to the next. Many believe that once approvals are granted “industry” does not follow through on its promises and there is no means to address emerging concerns. The Fort McKay First Nation traditional knowledge report for the Jackpine Mine Expansion and Pierre River Mine Environmental Impact Assessment 5 states, *“FMFN participants feel powerless to effect change with respect to industry development in traditionally used areas and on their traplines”* and *“They (industry) are trying to sneak up on us. They know what they are going to do they just don’t tell us.”*

To the community members of Fort McKay their perception of reality is that risk from industrial development is high and trust is low.

3.2 Community Health Effect Stressors

The CHA identifies a number of stressors that affect the culture of the community (HEG 2009, Fort McKay IRC 2009a, Fort McKay IRC 2009b). They are: loss of land, pollution, decreased access to the land, the wage economy and increased regional population. A number of these stressors are similar to stressors that affect the social, health and well-being of individuals and the community.

⁴How perceived risk may affect a Community can be illustrated by considering a local industry which has periodic odorous emissions. Even assuming that the odorous emission has no acute or chronic health effect other than a nuisance odour, the periodic smell acts as a constant reminder that the environment is not pristine and that some degree of pollution is occurring.

⁵Fort McKay First Nation Traditional Knowledge Report: Jackpine Mine Expansion and Pierre River Mine Environmental Impact Assessment, in Pierre River Mine Supplemental information, Part 2 Supplements, Appendix A, Shell 2009, PDF p. 1290. Report prepared by FMA Heritage Resources Consultants Inc. Prepared for Fort McKay Industry Relations Corporation on behalf of Shell Canada.

Determining the health effects of stressors upon the community is a complex matter with many potential known and unknown factors. In light of these complex interactions we believe that a precautionary approach must be taken.

Air Quality/Emissions

Two issues of concern relate to air quality: (1) almost daily exposure to odours, and (2) inadequate controls and management of cumulative emissions.

Emissions associated with industrial activities are generally well below levels that have direct toxic effects and are therefore often referred to as nuisance odours. However, because these unwanted odours are present in and around homes and cannot be avoided, they cause distress to many and adversely affect quality of life in the community. Because Fort McKay is regularly exposed to a variety of chemicals and odours their frequent occurrence and perpetual threat is a serious community health concern.

Fort McKay's Specific Environmental Assessment of Air Quality (Fort McKay IRC 2009c; Section 2.4) concludes that currently, odours from oil sands operations significantly affect the quality of life in the Community and the use and enjoyment of activities on its Traditional Lands. The assessment also found that the Base Case, Application Case (about 10% increase from Base Case), and PDC (5 to 30% depending on the averaging period and the type of compound), all result in increased odour frequency.

Despite air monitoring and some air quality studies that have been undertaken many community residents do not trust the findings and continue to suspect that industry purposely releases emissions after hours and that these emissions are affecting their health.

Also, see the discussion and recommendations regarding odorous emissions in the EIA Review (Section 3.7, specifically Recommendations 7, 8, 10 and 11).

Noise

At the present there are minimal manifest noise impacts associated with regional development. Industrial developments are now within sight of the community and as the amount of traffic, industrial equipment, blasting, air cannons and air traffic grows the residents of Fort McKay are becoming more concerned about the loss of their peace and quiet environs. The cumulative impact of noise from various mining operations (present and future) continues to be an issue of concern for Fort McKay.

PRM is expected to begin mid 2015 and run until the end of 2021 with anticipated workforce peaks of 2200 and 3000 workers at 2017 and 2020 respectively. JME

is expected to begin mid 2012 to 2015 with a peak workforce of 3000 in 2014.⁶ Shell plans to use the Albian Sands Aerodrome to transport its construction workers. This fly-in fly-out plan raises concerns regarding air traffic noise and safety.

See Sections 3.5 and 3.6 in the EIA review for further comments on noise. Also of concern is noise that affects wildlife. This issue is discussed in the EIA review Section 10.5.6.

Traffic

Fort McKay is concerned about the increased volumes of traffic on Highway 63N and the ability of residents to safely get to and from Fort McMurray for school, appointments and shopping. Concerns relate to the condition of the road with the high heavy traffic volumes, congestion and unsafe driving (speed, drinking, etc).

The Application (Shell 2007) states, *“traffic on Highway 63 between Fort McMurray and Suncor has increased from an estimated 6570 vehicle movements per day in 2000 to 13,930 in 2006”* (pg 8-263) and further acknowledges Fort McKay’s concerns (pg 8-265).

Shell states, *“Using current and forecasted bitumen production volumes of facilities that use Highway 63 between Syncrude and the Fort McKay turnoff as a proxy for anticipated traffic increases, suggest that traffic on Highway 63 between Syncrude and the Fort McKay turnoff may more than double by 2012 from 2007 levels. Traffic volumes are expected to reduce after 2012 as construction activities that use that stretch of highway are reduced in intensity. However, future traffic volumes will be influenced by changing tendencies for construction and operations worker transportation to oil sands project sites. As more projects are planned for remote locations in excess of two-hour commute from Fort McMurray, more companies will likely consider flying in their construction and operations workforce directly to the project sites. This approach to worker transportation is primarily driven by concerns for worker safety.”*

Shell’s proposed mitigation of this concern is the Albian Sands Aerodrome, a construction camp, using the Albian Sands Village and other unspecified management measures. Air traffic volume, noise, management and safety and questions about transporting workers from the airstrip to the camp are of concern to Fort McKay and need to be clarified and addressed.

Safety and Security

A number of issues of concern in Fort McKay relate to safety and security including unknown/unwanted “visitors” in the community; proximity of camps,

⁶ Shell EIA Update, May 2008, p139

increased access and availability of drugs and alcohol, increased pressure on families and individuals resulting in destructive behaviour, traffic, policing services, etc.

Fort McKay would prefer permanent workers to live and raise their families in the municipality as opposed to flying in and out and/or temporarily living in the area. Many transient people do not demonstrate responsibility for their actions or invest in the community. As well they typically are not included in the municipal census that helps with attaining much needed funds for infrastructure and services.

Water

One of Fort McKay's key concerns is the amount of water in the Athabasca River. The tributary removals, diversions, water withdrawals, closed circuiting, process-water seepage and pit lake creation are among the water-related concerns for the Pierre River Mine project along the west side of the Athabasca River. The relatively undisturbed Pierre River alone supports Arctic grayling (ranked as threatened), northern pike, burbot, redbelly dace (ranked as sensitive), spoonhead sculpin (ranked as may be at risk) and 12 other fish species. Cutting off inflows (and fish access) to the Athabasca River by this and all other projects compounds the deficit (especially during low flow periods) and contributes to future water quantity and aquatic resources issues for the entire region. These cumulative losses ultimately affect fish habitat and Fort McKay community members who rely on the Athabasca River and its tributaries for many traditional uses.

For the Jackpine Mine Expansion Project, the development plans will impact the Muskeg River and Kearl Lake. These two water bodies are important for the community of Fort McKay any impacts to them are a concern. The proposed plans include removal of a 21 km stretch of the Muskeg River and disturbance of a 223 km². The diversion of four creeks into Kearl Lake in 2012 will increase water levels, such that an emergency spillway and two outlet structures are required for the lake. The natural outflow, Muskeg Creek will no longer exist. In 2033, a perimeter dyke will be constructed along the periphery of Kearl Lake and Imperial's Compensation Lake to prevent flooding of Shell's project areas.

Concerns about the diminishing levels of water through out the traditional lands include decreasing muskeg areas, lower creek water levels, and increased drying of the land. These occurrences cause considerable anxiety about the quantity of water in the rivers and lakes and the impact that water level has on fish populations. Community members are also concerned with seepage from tailings ponds into ground water, which could adversely affect vegetation and surface water.

Also, see the Fort McKay Specific Environmental Assessment Sections 3 to 5 (Fort McKay IRC 2009c) and EIA review Sections 4.0 (Groundwater), 5.0 (Water

Quality and Aquatic Health) and Section 6 (Fish and Fish Habitat) for further comments and recommendations regarding water quality and quantity, fish habitat loss and seepage.

Housing

Although First Nation construction plans over the past several years have addressed the housing needs of First Nation residents, there remains a critical shortage of housing for the Métis residents of the community. A number of sub-standard houses require replacement and ongoing maintenance/repairs is an issue. Five Métis homes are currently condemned. The Métis have a plan to construct 20 new units over the next 5 years.

Access to Traditional Lands

Today, oil sands development is the largest use of land for heavy industrial purposes within the Fort McKay traditional territory. Six open pit mines exist within 20 miles of Fort McKay; and more than 20 companies hold mineral leases within the territory. As Fort McKay's *Healing the Earth Strategy* (2004) describes, "oil sand projects have been approved to the north, south, east and west sides of the community. Fort McKay is literally overwhelmed trying to effectively deal with development, being surrounded by oil sands, pipelines, forestry and other industrial activities that have taken up ...[the] most intensely used area of Fort McKay's traditional lands".⁷

The PRM and JME remove land from Fort McKay's traditional territory and negatively impact access of Fort McKay residents to their traditional lands. Fort McKay members find it increasingly difficult to access undisturbed lands and the natural resources that are necessary to pursue their traditional activities as guaranteed under Treaty 8 and s. 35 of the Constitution of Canada. By losing access, the community loses more than high quality, inexpensive food. The culture is linked to the land. When community members cannot go to the land, they lose their language, their stories, their family histories, and their traditional skills and knowledge.

Also see Section 9 – Disturbance and Access in the Fort McKay Specific Environmental Assessment (Fort McKay IRC 2009c) and Section 13 of the EIA Review for further comments on access.

Encroaching Non-Aboriginal Population

As access increases to an area where there previously was none, there is an increase in hunting and angling pressures, as well as noise disturbance resulting in reductions in wildlife and fish populations. As ground disturbance increases with more vehicular traffic (both road and off-road), sensitive landscapes are

⁷ CHA Baseline (Fort McKay IRC 2009a, p. 13)

affected, successful reclamation of clearings becomes more difficult, and opportunities for introduction and establishment of invasive species occur. In addition, improved access often results in land uses that can create issues related to littering, vandalism of property, and forest fire.

The SEIA states, "...population forecast generally exhibits a slow growth after 2010, reaching 86,000 people by 2018." Shell also indicates that there will be structural shifts in the oil sands industry that will tend to reduce the population impact on Fort McMurray. Of keen interest to Fort McKay is the emergence of operations camps for those facilities located outside a daily commuting distance from Fort McMurray.

Fort McKay is also concerned about non-aboriginal recreational access to its traditional lands through such activities as hunters, big game outfitters, cottage owners, etc.

Access to Services

Timely access to needed services such as health care, day care, social services and education is a concern of Fort McKay residents. Distance, road safety, availability of services and cultural appropriateness often negatively impacts satisfaction with regional services. To date, Fort McKay has not seen any mitigation of this situation despite government commitments to enhance infrastructure in the region or through the efforts of the Oil Sands Developers Group.

Lifestyle Choices

The CHA Baseline (Fort McKay IRC 2009a, p.15) states that, "*While most societies experience continuous social change in response to economic, ecological and technological changes, researchers studying the effect that large scale development has on Indigenous cultures suggest that where such change is rapid and largely out of the control of those affected, the effect is to erode confidence in a community's ability to control its own destiny (Erikson and Vescey, 1980:159)*

This is reflected in 'cultural stress', a term used to describe a condition that results from the erosion of integrity of cultural systems and which manifests as psychological, physical, emotional, and/or spiritual health disorders. Cultural stress is described in the Report of the Royal Commission on Aboriginal Peoples – Volume 3: Gathering Strength (2006) as:

"a factor negatively affecting the well-being of First Nations people and communities throughout Canada. ... In cultures under stress, the smooth operation of society and the sense life makes to its members can be

seriously impaired. Culturally transmitted norms that once provided meaning and guided individual behaviour become ineffectual as rules for living or sustaining relationships, and the rules themselves fall into disrepute. People lose confidence in what they know and in their own value as human beings. They may feel abandoned and bewildered and unsure about whether their lives have any real meaning or purpose.”

Fort McKay residents, like other residents in the region have benefited from the increased economic opportunities in the region. However, there remain a number of Fort McKay residents who do not enjoy the economic prosperity of the region, and the community as a whole is significantly adversely affected by the social and economic effects of development. Like other populations that find themselves in a boom wage economy lifestyle choices significantly affect health and well being. These choices can include substance use and abuse, addictive behaviours such as gambling, abusive relationships, sedentary lifestyles and inadequate diet.

Recommendations:

- a. Shell provide information to address community concerns related to the fly-in fly-out program, air traffic volume, noise, management and safety and questions about transporting workers from the airstrip to the camp.

4 Socio-Economic Impact Review

Fort McKay has adopted the, “International Guidelines and Principles for Social Impact Assessment” (IAIA 2003) to review industrial development projects. This section discusses each principle and the impacts upon the community.

4.1 Terms of Reference and Consultation

No where else in North America is there the impact upon a community from resource development as exists in Fort McKay. Shell has made a reasonable effort to identify key social and economic information related to Fort McKay in its original SEIA document of 2007 and Shell’s agreement to conduct a Fort McKay Specific Cultural Heritage Assessment (CHA) has provided more pertinent information with which to assess the impacts on the culture of Community of Fort McKay from these two projects.

In its 2005 Sustainable Development Report Shell states, *“Our stakeholders grant us our social license to operate and grow. We understand that securing that social license is made possible through our ongoing practice of listening and*

responding. This enables us to engage with neighbours and stakeholders so we can learn from their experiences, concerns and ideas. These often turn into actions that we can investigate further and implement. We look for ways to engage with our stakeholders through community open houses, sustainable development (SD) workshops, our SD report stakeholder review panel, our climate change advisory panel and through our community investments.”

To date Fort McKay has enjoyed a good working relationship with Shell and Shell has maintained an active and visible presence in the community.

Recommendations:

Given the Community's general distrust and perception of perpetual risk from development, Fort McKay may want to request that Shell maintain ongoing collaboration by:

- b. stating how it plans to assist and work with other developers in mitigating the cumulative social and economic impacts of the project on Fort McKay; and
- c. describing how it will work with Fort McKay so that the community benefits in an ongoing way from the projects.

4.2 Precautionary Principle

Principle:

In order to protect the environment, a concept which includes peoples' ways of life and the integrity of their communities, the precautionary approach shall be applied. Where there are threats or potential threats of serious social impact, lack of full certainty about those threats should not be used as a reason for approving the planned intervention or not requiring the implementation of mitigation measures and stringent monitoring.

Impact:

The CHA Baseline (Fort McKay IRC 2009a, p. 38) states, “Activities related to mine development are key stressors. These include initial muskeg drainage, overburden dewatering and basal aquifer depressurizing, changes to natural drainage patterns, close-circuit operations during mining, closure drainage systems and pit lakes at the reclamation stage. A complicating factor is the sheer number of existing and approved mines in the area. These include Albian Sands Muskeg River Mine and Expansion, Shell Jackpine Mine – Phase 1, Syncrude Aurora North and South mines and Imperial Oil Kearl Lake Project. Timing of various activities in each mine becomes a factor in cumulative effects.”

For a people that are intrinsically linked to the land, the community is concerned about the cumulative effects the extensive industrial development will have upon

the inter-generational effects on the sustainability of its culture and way of life. People believe that the lands can never be returned to the way they were and that there will be profound effects on the sustainability of their culture and way of life. Future generations may not have the opportunity to experience the land in the same way as their grandparents did and a connection to the past will be lost. These two additional large projects simply add to the cumulative effect upon the integrity of this fragile community. The precautionary principle must be the underlying principle when assessing the stressors, effects and interaction of factors upon a society and culture.

This particular application represents a significant addition to the landscape and it will unquestionably impact the people of Fort McKay.

Recommendations:

- d. Fort McKay may want to request that Shell express a concrete commitment to the cultural preservation of the community.

See also the Project-specific Cultural Heritage Assessment (Fort McKay IRC 2009b) and Section 13.7 (Traditional Knowledge and Traditional Land Use Key Concerns and Recommendation) of the EIA review.

4.3 Uncertainty Principle

Principle:

It must be recognized that our knowledge of the social world and of social processes is incomplete and that social knowledge can never be fully complete because the social environment and the processes affecting it are changing constantly, and vary from place to place and over time.

Impact:

The people of Fort McKay believe that it has been the large scale taking up of lands by industrial development since the 1960's, the associated air and water pollution, the influx on non-aboriginal people to the region, and the shift from a mixed economy to a predominantly wage based economy that has had the most significant effect on their culture.

"We have been taken from our way of life and put into a "white" way of life. Industry didn't start it, but has made it more."⁸

Fort McKay Community Workshop September 2008

⁸ ICC (HEG 2009, p. 2)

The community judges the acceptability of the Shell project based on risk factors such as catastrophic potential, control, level of knowledge, effects on children and future generations and most importantly upon their experiences over the past number of years that have occurred in the region.

While preparing the local emergency response plan one of the concerns expressed was for the long term stability of existing tailings pond dykes. The recent announcement that the Federal government's Standing Committee on Environment and Sustainable Development will investigate issues of seepage into the Athabasca River and the stability of dykes add to the uncertainty that community resident's experience. Fort McKay is concerned about the proposal for two more tailings ponds in the region, particularly when no tailings ponds to date have been reclaimed.

Shell states that it plans to fill the Pierre River Mine External Tailings Disposal Area (ETDA) by 2029 and cap and reclaim it by 2049 when the ETDA will be capped and reclaimed. For the JME, Shell states that its closure plans are to be integrated with those for the Syncrude Aurora South Mine to the south and east, and the Imperial Oil Resources Ventures Kearl Oil Sands Project to the east. Fort McKay community members are disappointed with reclamation efforts in the region to date and many feel that the land will never be restored. Twenty and forty years represent a life-time to many. Approximately 43% of the community is under the age of 24⁹ and most of these young people will not be able to experience the traditional land taken up by these two projects before they become Elders.

Social stressors such as ever increasing numbers of non-Aboriginal people on their traditional lands, increased traffic, the effects of shift work on family life and impacts on traditions and culture add to this uncertainty. The absence of any effort by government or industry to address the cumulative effects of "one more small footprint" on the land simply ignores the rights and interests of Fort McKay residents.

Recommendations:

We recommend that Shell:

- e. present a plan to address the degree of uncertainty experienced by the community in relation to future expansions, cumulative effects and reclamation;
- f. present its emergency response plan to the community and its technical advisors regarding the management of tailings and dykes, and potential breaches; and.

⁹ Statistics Canada (community profile 2006)

- g. Shell and/or Alberta Environment should be required to notify or forward all Environmental Protection Order notifications to Fort McKay IRC or its designated technical representative.

4.4 Intragenerational Equity

Principle:

The benefits from the range of planned interventions should address the needs of all, and the social impacts should not fall disproportionately on certain groups of the population, in particular children and women, the disabled and the socially excluded, certain generations or certain regions.

Impact:

This principle assesses the degree to which a development unequally impacts a certain segment of the community. The analysis of intragenerational equity should clearly identify who will win and who will lose, and emphasize vulnerability of under-represented groups. While Fort McKay benefits from employment and business opportunities; many do not. Statistics Canada (2006 Community Profiles) states that 200 out of 250 eligible workers in Fort McKay are in the work force (reflecting 20% unemployment).

The negative social impacts of stressors, loss of culture and language and inadequate social/community services affect Fort McKay disproportionately within the region. The 2007 Shell SEA shows that couple families, single-parent families and non-family person's incomes in Fort McKay are slightly above provincial averages. However when compared to Fort McMurray incomes they are 64%, 68% and 60% less respectively. Given that Fort McKay residents must live in and support their families in the Fort McMurray area the comparison to Fort McMurray income is more realistic. Statistics Canada (2006 Community Profiles) shows that the median income of a person 15 years or older in 2005 in the Regional Municipality of Wood Buffalo had a median income of \$43,920 while the median income in Fort McKay was \$16,832 (38% lower). In any scenario it is clear that Fort McKay residents do not enjoy economic prosperity to the same degree as their urban neighbours.

Shell's social performance report states, *"In 2006, labour shortages, especially in the skilled trades, played a major role in our educational funding. We announced a six-year \$12 million investment in post-secondary education to support the development of Canada's and Shell Canada's future workforce This included the largest single community investment in our history, \$3 million to Edmonton's Northern Alberta Institute of Technology Shell Manufacturing Centre, which provides training for the petroleum and manufacturing industries. We also*

established grants, bursaries and entrance scholarships for students pursuing apprenticeship and technical training.”

Shell needs to do more to upgrade, develop and promote Aboriginal employees within its local operations.

Recommendations:

We recommend that Shell identify strategies to:

- h. develop programs for increased employment and advancement of Fort McKay residents; and
- i. provide information on the success of its education, training, and career development and promotion initiatives as they relate to Fort McKay residents on a regular basis. Typically industry replies that unless a person self-identifies as an Aboriginal person they cannot disclose this information. Fort McKay should simply request that any employee with a Fort McKay postal code be identified in this count and description of programs.

4.5 Intergenerational Equity

Principle:

Development activities or planned interventions should be managed so that the needs of the present generation are met without compromising the ability of future generations to meet their own needs.

Impact:

This principle considers the ability of the current generation to benefit from development without compromising the ability of future generations to meet their own needs.

The CHA Baseline (Fort McKay IRC 2009a, p. 36) states, *“The key point is that the problem facing Fort McKay is not one of the availability or non-availability of wage employment per se but rather of maintaining the flexibility within our Indian economy for the varying requirements of our population....Many prefer seasonal wage labour so as not to interfere with hunting, trapping, fishing and gathering. This is not to say that some individuals will not want full time wage employment, but still others want to get whatever cash they require by trapping and living from what the land provides on a full time basis. But you will appreciate that this is our decision and responsibility to provide for the varying preferences of our population so as to achieve our plans of ... development.*

“Our largest problem is not jobs, but rather creating the conditions under which our own economy can recover the flexibility lost from past resource development encroachment within our territory so that we can implement our model of ... development. This is the only way we can see to escape the fall from the cliff: that is, to maintain our Indian economy and to decide on its mix.” FMTA 1983: pages 193-194

Issues of reclamation, preservation of culture and the opportunity of future generations to access the land and engage in traditional pursuits if they chose to do so are central to intergenerational equity of Fort McKay.

Recommendations:

Fort McKay may want to request that Shell articulate plans to:

- j. retain within their industrial development protected land that may still be accessible to the community;
- k. reclaim disturbed land to a diversity and capability commensurate with its predisturbed state and with an equivalent capability to support all of the resources that existed on the land prior to disturbance including the re-establishment of productive and healthy plant and animal environment, both on the land and in the water at a faster pace;
- l. provide conditions that allow resources stressed by industrial development to recover to their previous health and productivity through planning and protection of wildlife populations (e.g. access management; improved technology to minimize impacts on plant and animal communities) and human health;
- m. provide alternate and equivalent hunting, fishing, trapping and cultural resources and opportunities when traditionally used resources are lost due to development; and
- n. present to the community and its technical advisors results and plans for reclamation.

The Government of Alberta should:

- o. implement with Fort McKay a protected areas strategy.

See also the Section 9 - Disturbance and Access and Section 10 - Reclamation, of the Fort McKay Specific Environmental Assessment (Fort McKay IRC 2009c) and recommendations listed in Conservation and Reclamation (Section 12) and Traditional Land Use (Sections 13.7 to 13.9) reviews in the EIA Technical Review.

4.6 Recognition and Preservation of Diversity

Principle:

Communities and societies are not homogenous. They are demographically structured (age and gender), and they comprise different groups with various value systems and different skills. Special attention is needed to appreciate the existence of the social diversity that exists within communities and to understand what the unique requirements of special groups may be. Care must be taken to ensure that planned interventions do not lead to a loss of social diversity in a community or a diminishing of social cohesion.

Impact:

Fort McKay is a diverse community of different groups such as Cree, Chipewyan, Métis, non-Aboriginal people and like all communities it encompasses a wide range of values and needs. The industrial boom has forced people who can't afford to live in Fort McMurray to move back to Fort McKay and as the number of people living and moving through the community increases, people become more disconnected to each other. The needs, values and interests of Fort McKay today are evolving as the community grows and adapts.

Community planning and mitigation measures must maintain this social diversity and promote social cohesion. Inclusive and participative community development and engagement is essential if Shell is to contribute in a positive way to the well being of the community.

The community acknowledges Shell's commitment to rebuild the Elders/Day Care Centre, which provides a focal point for cultural activities and social cohesion within the community. As part of its commitment to a cultural and social plan with the community, Shell should ensure the ongoing program and operational support of this facility.

Recommendations:

Fort McKay may want to request that Shell:

- p. provide operational funding for the Elders/Day Care Centre for the next 10 years.

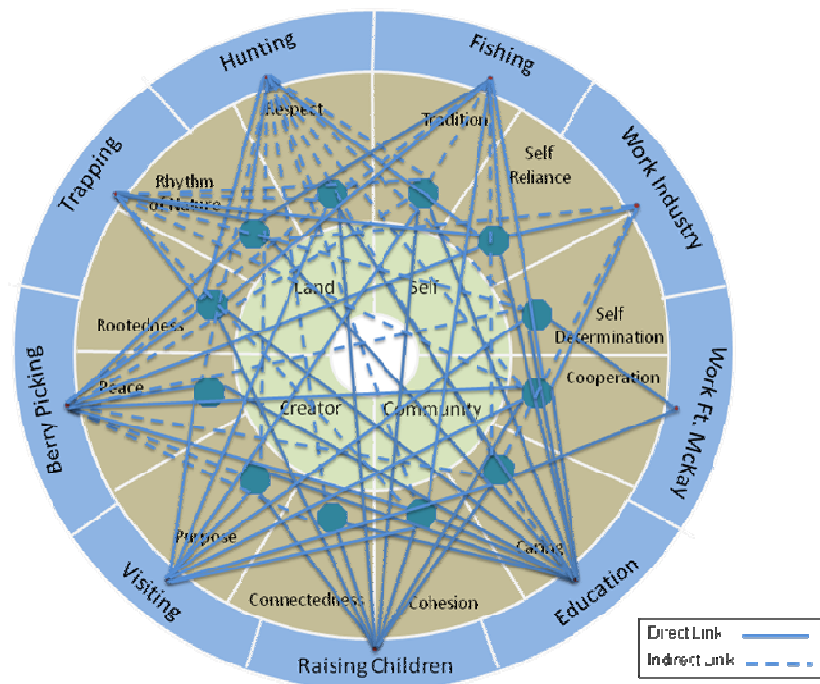
4.7 Internalization of Costs

Principle:

The full social and ecological costs of a planned intervention should be internalised through the use of economic and other instruments, that is, these costs should be considered as part of the costs of the intervention, and no intervention should be approved or regarded as cost-effective if it achieves this by the creation of hidden costs to current or future generations or the environment.

Impact:

Every development represents a trade-off of the negative and positive results, gains and losses. This SEIA highlights the many economic advantages to the Wood Buffalo Municipality, Alberta and Canada. While Fort McKay benefits from employment and business opportunities it is at an enormous cost to its culture and way of life. The following diagrams show how Fort McKay's way of life has been changed by industrial development.¹⁰



¹⁰ ICC (HEG 2009, p. 79)

Figure 11-1: Activity-Traditional Value Links – 1960

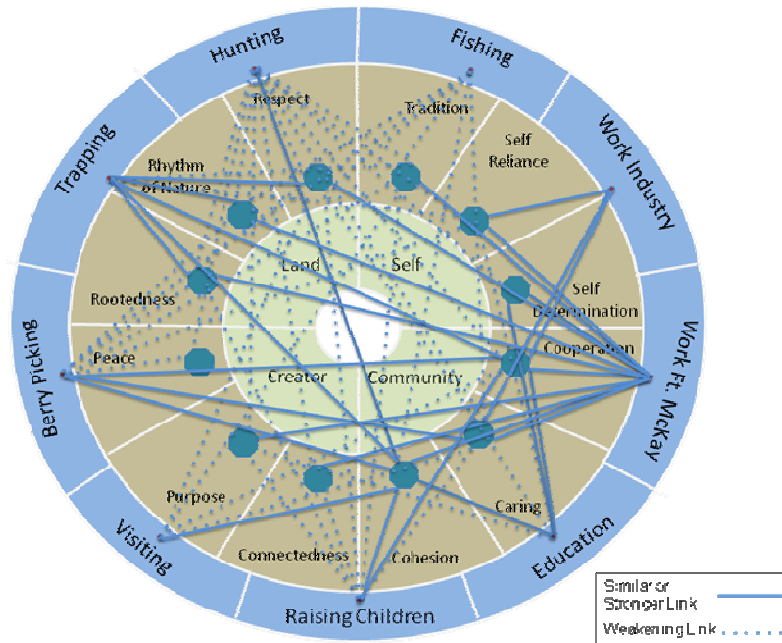


Figure 11-2: Activity-Traditional Value Links – 2008

By comparing the two figures, the weakening of most links from 1960 to 2008 becomes apparent. In reviewing these models, one community member suggested “these (models) show the way our culture is disintegrating – being pushed out by white culture” (Fort McKay Workshop June 2009).

The relative weights of the lines in these figures represent the perception of the community participants. In order to quantify or qualify the impacts on the links between stressors, activities and values it will be necessary to collect and analyze data on indicators selected by the community.

The people of Fort McKay believe industrial development is limiting their ability to carry out cultural activities within their traditional territory and that this is significantly affecting their collective and individual identity.

While the ICC (HEG 2009) and CHA Baseline (Fort McKay IRC 2009a) have provided a significant baseline of information regarding the cultural impacts upon Fort McKay, much more needs to be done to identify indicators, monitor impacts and identify strategies for cultural retention. The two reports identify additional steps and recommendations for further action.

Recommendations:

Fort McKay may want to request that Shell:

- q. contribute to the continuation of Fort McKay's cultural heritage assessment and monitoring.

See also the Project-specific CHA (Fort McKay IRC 2009b).

4.8 The Polluter Pays Principle

Principle:

The full costs of avoiding or compensating for social impacts should be borne by the proponent of the planned intervention.

Impact:

Social resilience can be described as the capacity of a community to absorb disturbance and reorganize while undergoing change so as to retain the same essential identity, structure, functions and feedback. The amount of change that a community can experience and still retain its essential identity is dependant upon the community's ability to self organize and its capability for learning and adapting. Social resilience is an important component of the circumstances under which individuals and social groups adapt to environmental change.

Where mitigation in the form of maintaining pre-disturbance levels of traditional foods or opportunities for pursuing livelihood and cultural activities is not possible or uncertain, Fort McKay's goal is to ensure that its activities can be maintained or they are provided in alternative forms. Options for accommodation strategies from the community's perspective may include enhancements to quality of life factors such as health, education, employment and recreation, protection for undisturbed portions of traditional territories, archaeological sites, graves, sacred places and culturally significant harvesting areas. It may include compensation, access management plans and co-management agreements.

Initiatives aimed at restoring the locus of control, strengthening social skills, and increasing knowledge and education address issues related to risk perception. Strengthening community institutions and developing resilience in youth through youth empowerment programs build strength of an entire community.

The two proposed projects will have a significant footprint upon Fort McKay's traditional lands and will significantly contribute to the cumulative social costs to the community.

Recommendations:

Fort McKay may want to request that Shell:

- r. contribute sufficient resources (financial, manpower and political) to assist Fort McKay in addressing longstanding issues such as Métis housing, access management plans, and strengthening community resilience.

4.9 The Prevention Principle

Principle:

It is generally preferable and cheaper in the long run to prevent negative social impacts and ecological damage from happening than having to restore or rectify damage after the event.

Impact:

Community stressors coupled with a perception of high risk and low trust levels are a recipe for considerable negative effect upon the well being of community members. Additionally, as shown by the CHA, Fort McKay is a fragile community that is in danger of losing its cultural identity.

Shell states in the Planned Dev Case- *“JME and PRM are estimated to account for approximately 24% and 3% of the increase in the number of school-aged children in 2015. Shell will continue to assess and support, where warranted, educational initiatives in the region.”*

Statistics Canada (community profile 2006) shows that 75 out of 95 Fort McKay youth (79%) between 15 and 24 years do not have a certificate, diploma or degree. The CHA Baseline says, *“Community members recognize the link between education, a good job and money in order to provide for themselves and their family. However, the element of money and need to purchase goods from a store in Fort McMurray have weakened their perception of and value of self-reliance.”* and *“Community members associate western education with power and the ability to decide how to make a living. “Get an education you can go anywhere” (Fort McKay Workshop, 2008).”* Reconciling the linkages between resilience, preservation of cultural self reliance and the education imperative are significant challenges for Fort McKay.

“The presence of industry has increased access to drugs and alcohol. The paved road, increased cash, the increased numbers on non-Aboriginal people living in work camps close to Fort McKay and other socio-economic factors associated with a boom–economy have increased access to illegal drugs and

alcohol. Parents dealing with their own issues have a hard time raising healthy children.”¹¹

Recommendations:

Fort McKay may want to request that Shell:

- s. continue to support community educational programs such E-Learning;
- t. contribute to funding toward ongoing development and monitoring of cultural indicators and a program for cultural retention; and
- u. provide additional funding to educational and social skills programs.

4.10 The Protection and Promotion of Health and Safety

Principle:

Health and safety are paramount. All planned interventions should be assessed for their health impacts and their accident risks, especially in terms of assessing and managing the risks from hazardous substances, technologies or processes, so that their harmful effects are minimized, including not bringing them into use or phasing them out as soon as possible. Health impacts cover the physical, mental and social wellbeing and safety of all people, paying particular attention to those groups of the population who are more vulnerable and more likely to be harmed, such as the economically deprived, indigenous groups, children and women, the elderly, the disabled, as well as to the population most exposed to risks arising from the planned intervention.

Impact:

Fort McKay is a community under siege from ever expanding industrial development and the expansion of Shell’s Jackpine Mine and development of another mine (Pierre River) represent one more encroachment. Multiple stressors, piled on top of negative perceptions, piled on top of a complete inability to control the loss of traditional land and culture serve to deepen community concerns about health and wellness.

At the March 11, 2008 Elders meeting the following comments were made:

- “We can’t see the air but the highway is killing us”
- “The roads are unsafe. That is what is killing us – we can see that, but we can’t “see what other things are killing us”.

¹¹ CHA Baseline, (Fort McKay IRC 2009a, p.88).

Responding to the community health needs involves addressing factors traditionally seen as outside of the health realm. In this approach Health Canada has adopted a population health model that is based on 12 determinants.¹² This model acknowledges an entire range of factors that determine health of a population in a region. These factors include: income and social status, social support networks, education, employment/working conditions, social environments, physical environments, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, gender and culture.

Shell states, “A number of projects in the Pre Development Case are working with the Northern Lights Health Region to develop the concept of remote health facilities to expand the capacity of the health system to deal with the impacts of continued growth.” On page 8-263 Shell (2007) also states that it will enter into mutual aid agreements to provide:

- advanced life support and ambulance support to Fort McKay, including transfers to Fort McMurray Hospital.
- responding to motor vehicle accidents on Highway 63; and
- responding to forest fire threats to Fort McKay.

As well, a mobile training facility will be purchased in 2008 to improve access to firefighter training in rural communities.”

Recommendations:

Shell should:

- v. proceed with development of mutual aid agreements and provide the community with information regarding eligibility, access and provision of such services to the community.
- w. renew their commitment to enhanced policing in Fort McKay for an additional three year period.

Also see the discussion and recommendations regarding an ecosystem approach in the Human Health Risk Assessment Review (Section 11.2 of the EIA review)

4.11 The Principle of Multisectoral Integration

Principle:

Social development requirements and the need to consider social issues should be properly integrated into all projects, policies, infrastructure programs and other planning activities.

¹² Public Health Agency of Canada; www.publichealth.gc.ca

Impact:

Shell has identified a number of Fort McKay's concerns regarding the social impact of its projects such as: traffic safety concerns, forest fire threats; and housing pressures.

Shell has also been a significant contributor to Fort McKay community programs such as E-Learning and the Elders Centre.

Recommendations:

Fort McKay may want to request that Shell:

- x. maintain its current commitments to the community and support identified emerging issues and needs.

4.12 The Principle of Subsidiarity**Principle:**

Decision making power should be decentralised, with accountable decisions being made as close to an individual citizen as possible. In the context of SIA, this means decisions about the approval of planned interventions, or conditions under which they might operate, should be taken as close to the affected people as possible, with local people having an input into the approval and management processes.

Impact:

Meaningful participation is at the heart of ensuring an active and sustainable community that affords individuals fair treatment and an impartial share of the benefits of society. Guided by mutual respect, it is about influencing power structures to remove the barriers that prevent people from participating in the issues that affect their lives.

Fort McKay's historical and current occupancy or use of its traditional lands and understanding of the environment uniquely qualifies its members to contribute knowledge and expertise relevant to the protection, management, monitoring and mitigation of social, environmental and cultural impacts resulting from increased access and resource development. The community must have a meaningful role in such activities.

As early as the 1960s Fort McKay has recognized the importance of developing local governance capacity to deal with and interact with developers in the region.

Two local governments currently represent the community – the Fort McKay First Nation and the Métis Local #63. Both administrations require additional resources to build capacity.

Recommendations:

Fort McKay may want to request that Shell:

- y. provide support to strengthen the administrative capacity of the Fort McKay First Nation and the Métis Local #63.

5 Summary Table

	Key concern	Recommendation	Category*
3..2.a	Community Health Effect Stressors	<p>We recommend that Shell:</p> <ul style="list-style-type: none"> provide information to address community concerns regarding the fly-in fly-out program, air traffic volume, noise, management and safety and questions about transporting workers from the airstrip to the camp 	Agreement
4.1.b and c	Terms of reference and Consultation	<p>We recommend that Shell:</p> <ul style="list-style-type: none"> state how it plans to assist and work with other developers in mitigating the cumulative social and economic impacts of the project on Fort McKay; and describe how it will work with Fort McKay so that the community benefits in an ongoing way from the projects. 	Agreement
4.2.d	Precautionary Principle	<ul style="list-style-type: none"> Fort McKay may want to request that Shell express a concrete commitment to the cultural preservation of the community. 	Agreement
4.3.e, f and g	Uncertainty Principle	<ul style="list-style-type: none"> present a plan to address the degree of uncertainty experienced by the community in relation to future expansions, cumulative effects and reclamation; 	Agreement

	Key concern	Recommendation	Category*
		<ul style="list-style-type: none"> • present its emergency response plan to the community and its technical advisors regarding the management of tailings and dykes, and potential breaches; and. • Shell and/or Alberta Environment should be required to notify or forward all Environmental Protection Order notifications to Fort McKay IRC or its designated technical representative. 	Regulatory
4.4.h and i	Intragenerational Equity	<p>Fort McKay may want to request that Shell identify strategies to:</p> <ul style="list-style-type: none"> • develop programs for increased employment and advancement of Fort McKay residents; and • provide information on the success of its education, training, and career development and promotion initiatives as they relate to Fort McKay residents on a regular basis. 	Agreement
4.5 j,k,l,m ,n and	Intergenerational Equity	<p>Fort McKay may want to request that Shello articulate plans to:</p> <ul style="list-style-type: none"> • retain within their industrial development protected land 	Agreement

	Key concern	Recommendation	Category*
o		<p>that may still be accessible to the community;</p> <ul style="list-style-type: none"> • reclaim disturbed land to a diversity and capability commensurate with its predisturbed state and with an equivalent capability to support all of the resources that existed on the land prior to disturbance including the re-establishment of productive and healthy plant and animal environment, both on the land and in the water at a faster pace; • provide conditions that allow resources stressed by industrial development to recover to their previous health and productivity through planning and protection of wildlife populations (e.g. access management; improved technology to minimize impacts on plant and animal communities) and human health; • provide alternate and equivalent hunting, fishing, trapping and cultural resources and opportunities when traditionally used resources are lost due to development; and • present to the community and its technical advisors results and plans for reclamation. 	

	Key concern	Recommendation	Category*
		<p>The Government of Alberta should:</p> <ul style="list-style-type: none"> • implement with Fort McKay a protected areas strategy. 	Regulatory
4.6 p	Recognition and Preservation of Diversity	<p>Fort McKay may want to request that Shell:</p> <ul style="list-style-type: none"> • provide operational funding for the Elders/Day Care Centre for the next 10 years. 	Agreement
4.7 q	Internalization of Costs	<p>Fort McKay may want to request that Shell:</p> <ul style="list-style-type: none"> • contribute to the continuation of Fort McKay's cultural heritage assessment and monitoring. 	Agreement
4.8 r	The Polluter Pays Principle	<p>Fort McKay may want to request that Shell:</p> <ul style="list-style-type: none"> • contribute sufficient resources (financial, manpower and political) to assist Fort McKay in addressing longstanding issues such as Métis housing, access management plans, and strengthening community resilience. 	Agreement
4.9 s,t,u	The Prevention Principle	<p>Fort McKay may want to request that Shell:</p> <ul style="list-style-type: none"> • continue to support community educational programs such E-Learning; 	Agreement

	Key concern	Recommendation	Category*
		<ul style="list-style-type: none"> • contribute to funding toward ongoing development and monitoring of cultural indicators and a program for cultural retention; and • provide additional funding to educational and social skills programs 	
4.10 v,w	The Protection and Promotion of Health and Safety	<p>Shell should:</p> <ul style="list-style-type: none"> • proceed with development of mutual aid agreements and provide the community with information regarding eligibility, access and provision of such services to the community. • renew their commitment to enhanced policing in Fort McKay for an additional three year period 	Agreement
4.11 x	The Principle of Multisectoral Integration	<p>Fort McKay may want to request that Shell:</p> <ul style="list-style-type: none"> • maintain its current commitments to the community and support identified emerging issues and needs. 	Agreement
4.12 y	The Principle of Subsidiarity	<p>Fort McKay may want to request that Shell:</p> <ul style="list-style-type: none"> • provide support to strengthen the administrative capacity of the Fort McKay First Nation and the Métis Local #63 	Agreement

*Recommendation Categories:

Agreement - recommendation that Fort McKay consider this as an item to negotiate with Shell in their Agreement

Regulatory - recommendation that Fort McKay consider this an item to recommend to Alberta Environment or the ERCB (e.g., potential approval or license condition, assessment approach)

Response - recommendation that Fort McKay request a response from Shell providing clarification or more information as outlined

6 References

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Human Environment Group, June 2009. Indicators Of Cultural Change (1960 to 2009): A Framework For Selecting Indicators Based On Cultural Values In Fort McKay. Prepared for Fort McKay IRC.

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