

Risking Ruin



**Shell's dangerous developments in the
Tar Sands, Arctic and Nigeria**

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The biggest trucks in the world are in the Alberta tar sands.

"Shell's plant is located directly on my father's hunting grounds and today, instead of feeding my family, these lands kill my community. Shell's plans to expand bitumen refining in an area already devastated by pollution is effectively a death sentence for our culture, lands and people."

- Ron Plain

This report is published by the Indigenous Environmental Network and Athabasca Chipewyan First Nation.



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Pembina Institute

Introduction

by Ben Amunwa

As economic austerity bites, major oil companies are making staggering profits. A high oil price in 2011 made Shell \$30.92 billion in annual net profits, equivalent to \$2 million per hour.¹ Chevron came close behind and despite numerous setbacks, BP made a cool \$25.7 billion. Most of these profits came from finding and extracting oil and gas. Yet the core activity of these companies is unsustainable. As profits soar, communities, the environment and the climate are paying an unreasonably high price.

This report raises key questions about Shell's planned expansion in the Canadian tar sands and the Alaskan Arctic. What are the costs to society and environment? Who bears the risks? Could the political and legal climate ultimately render these 'frontier oil' projects uneconomical?

These risks form part of a much wider picture of Shell's low health and safety standards, inadequate environmental management and underinvestment in the maintenance of infrastructure. All this contributes to a long history of global environmental devastation.

Nigeria, where Shell has operated for over 50 years, is a prime example. Oil spills have become an almost daily occurrence in the oil region of the Niger Delta. A 2011 UN report confirmed the horrifying extent of pollution in the minority Ogoni region of the Delta and estimated it could take 25 to 30 years to clean up. The UN condemned Shell for falling below its own operating standards and under-reporting pollution.² A London lawsuit brought by 11,000 Nigerians from Bodo town, where a Shell pipeline caused two major spills in 2008-9, could raise substantial liabilities and reputational issues, particularly if the claim is widened to include thousands more in neighboring communities.

Shell's failure to mitigate its impacts is well illustrated in the village of Ejama-Ebubu, where a Shell pipeline became damaged in 1970, causing a major spill. Oil washed into the surrounding creeks and rivers and destroyed 85,000 square meters of farmland. The soil was caked in crude oil and caught fire, leaving a thick crust of burnt tar. Over 42 years later, after multiple spills and clean-up attempts, the land remains destroyed. The contamination has outlasted generations, as

average life expectancy in the Niger Delta region is only around 43 years.³

Shell is deeply invested in the world's dirtiest and riskiest fuels. Both tar sands and Nigerian oil have lifecycle carbon emissions substantially higher than other fossil fuels.⁴ In 2012 Shell is planning to invest further billions in Nigeria, and the Canadian tar sands.⁵ Furthermore, in summer 2012, Shell is planning to start deepwater drilling in the fragile Arctic, off the coast of Alaska, yet the company has no proven method of cleaning up oil spills in Arctic conditions, and drilling threatens the traditional livelihoods of the Inupiat people. Like BP, Shell has recently ditched its investments in solar, wind and hydro energy to pursue controversial investments in biofuels.⁶

In terms of its social responsibility, Shell's global operations have been linked to conflict and widespread human rights abuses. In Syria, Shell supported President Assad's regime with over \$55 million during government crackdowns in the summer of 2011.⁷ Shell continued drilling and exporting Syrian crude oil throughout the first year of the popular uprising. It was only after a swell of global outrage and Western oil sanctions that Shell was forced to withdraw from Syria on the 2nd December 2011.

In Nigeria, Shell has been charged with complicity in human rights abuses for over two decades. Shell provided transportation and payments to government forces who committed crimes against humanity in the Ogoni region, the subject of a case before the US Supreme Court this year. Between 2000 to 2010, Shell continued to fund government crackdowns in the Niger Delta. The company made routine payments to armed militant groups, exacerbating conflicts that in one case led to the complete destruction of Rumuekpe town where at least 60 people were reported killed.

There is growing international recognition by investors and fund managers that the impacts of oil extraction outweigh the benefits. In 2010 the Dow Jones Sustainability Index excluded Shell following concerns about the company's global operations and pollution in Nigeria.⁸ The Norway Government Pension Fund is currently investigating Shell's record of oil spills in Nigeria and may divest its substantial share holding. Most recently, German bank WestLB announced it would not invest in any company drilling in the Arctic because the "risks and costs are simply too high".⁹

Shell's impacts expose the company to both

reputational damage and political risk, including litigation from First Nations communities in Canada who have filed lawsuits concerning Shell's violations of their constitutional rights. Shell faces thousands of claims related to oil spills in Nigeria and this trend is likely to continue.

In fact, in many cases, Shell acts like it is above the law. Since 2005, Shell has refused to comply with a Federal High Court order¹⁰ to end gas flaring in the Iwherekann community in Nigeria and is avoiding payment of \$1.5 billion in compensation to the Delta's Ijaw ethnic group for decades of pollution.¹¹ Flexing its legal muscles, Shell recently obtained an injunction pre-emptively banning Greenpeace USA from coming within 500 meters of its Arctic drilling vessels.¹²

Shell may be able to delay proceedings and evade penalties, but this will not prevent the company from accumulating embedded risks and liabilities. As the Ogoni writer and activist Ken Saro-Wiwa told the tribunal that sentenced him to death in 1995, sooner or later, Shell would have to answer for "the ecological war the company has waged".

The US administration's rejection of the Keystone XL tar sands pipeline has shown that social and political opposition to the tar sands has the potential to influence major investment decisions. Alert to this vulnerability, the oil industry is trying to restore its public image through greenwashing advertisements, cultural sponsorship, political donations, and attempts to re-brand tar sands as "ethical oil".

Yet no amount of re-branding can change the fact that Canada's tar sands are dirty, dangerous and extracted by multinationals with a track record of pollution and human rights abuses across the globe. And no amount of arts sponsorship can hide the mess created in Nigeria, nor the lack of a viable plan to clean up a spill in the vulnerable Arctic.

It is time for Shell to end its risky activities around the world.

"Shell is deeply invested in the world's dirtiest and riskiest fuels. There is growing international recognition by investors and fund managers that the impacts of oil extraction outweigh the benefits."

This report makes the following recommendations:



Shell should

- » Make the right to free, prior and informed consent (FPIC) of Indigenous peoples a condition of all new project decisions.
- » Cancel plans to drill in the Arctic Ocean as a large spill would do untold damage to the local ecosystem and communities dependent on a subsistence lifestyle.
- » Replace its aged pipelines and facilities in Nigeria, clean up existing pollution, adequately compensate local residents and halt the harmful practice of gas flaring.
- » Address the grievances of Indigenous communities in relation to existing tar sands developments before moving forward with applications for the expansion or development of new projects in the region.
- » Identify and address the human health and accumulative impacts of its projects on local communities, drawing on independent expertise, guidance and best practice



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1. Slow industrial genocide

Shell in the tar sands

by Eriel Tchekwie Deranger and Dave Vasey

The tar sands gigaproject is the largest industrial project on Mother Earth¹³ and has been termed 'a slow industrial genocide' by First Nations¹⁴ communities downstream from operations. Shell is one of the largest players in the tar sands, producing approximately 276,000 barrels per day (bpd), or roughly 20% of total exports from Alberta, through the Athabasca Oil Sands Project (AOSP).¹⁵ Since start-up in 2003, the AOSP holds 'regulatory approvals' to extract 470,000 bpd and refine 290,000 bpd of tar sands in Alberta.¹⁶ Currently, Shell is seeking to expand AOSP's production to a 770,000 bpd extraction and 690,000 refining capacity, aiming for full operation by 2015.

The fate of the area surrounding the Athabasca River and its people stands in the crosshairs of Shell's plans to aggressively expand oil extraction from the tar sands deposits in the region. Shell's tar sands extraction to date has made families sick, polluted the land and water, and eroded a traditional way of life that has been practiced for generations. This year, Shell is hoping to 'break soil' on the Jackpine Mine 100,000 bpd expansion. However, public pressure and sustained resistance from downstream First Nations to AOSP projects is impacting the viability of Shell's operations in Alberta, further delaying project approvals.

Community resistance to Shell has damaged its reputation with both shareholders and the public. There are currently a series of legal proceedings related to tar sands developments launched by First Nations that could impact the viability of Shell's current and future operation plans. Shell has already faced shareholder resolutions demanding greater clarity over the risk of tar sands investments. 2012 also marks the International Finance Corporation's (IFC) implementation of a new Sustainability Framework that outlines a new requirement that clients obtain free, prior and informed consent (FPIC) from Indigenous communities relating to new developments. Shell has not applied this standard in any of its global operations.

a. What are the tar sands?

The tar sands (or oil sands as the industry prefers to call them) underlie 140,000 km² of Alberta's boreal forest, an area approximately the size of the entire state of New York. These deposits of bitumen (a mixture of sand, clay and heavy crude oil) give Canada the third largest oil reserves in the world, eclipsed only by Saudi Arabia and Venezuela. Currently, the tar sands produce about 1.5 million barrels of crude oil each day. The majority (97%) of this oil is exported to the U.S. In the next decade, if the government and industry get their way, production is expected to double, and will reach 5 million barrels of crude oil each day by 2030.¹⁷

The tar sands are extremely carbon-intensive to extract, and are Canada's fastest-growing source of greenhouse gas emissions. In 2008, tar sands operations produced 37.2 megatonnes of greenhouse gases, an increase of 121% between 1990 and 2008. Planned growth indicates a near tripling of emissions between 2008 and 2020, to a projected 108 megatonnes.¹⁸ Because there is so much carbon locked up in the tar sands, respected climate scientist James Hansen has said that if we carry on with extraction and expansion plans it will be "game over" for the climate.¹⁹ Research from Oxford University suggests that burning the Canadian tar sands alone would take us 14% of the way to the climate point of no return²⁰

"Shell is one of the largest players in the tar sands, producing 276,000 barrels per day, or roughly 20% of total exports from Alberta. Shell's tar sands extraction has made families sick, polluted the land and water, and eroded a traditional way of life that has been practiced for generations."

There are two main extraction methods to separate the crude oil from the bitumen: surface mining

and *in situ*. In 2010, surface mining accounted for 52% of tar sands extraction. However, 80% of tar sands deposits are accessible only by *in situ*, whose production rates are expected to surpass mining by 2017.²¹

b. Shell's surface mining operations in Alberta

Shell currently operates the AOSP, consisting of the Albian Sands Mine, Muskeg River Mine, Jackpine Mine and the Scotford Upgrader. Surface mining operations occur when tar sands are located within 100m of the ground surface. First, the 'overburden' (the industry's term for the boreal forest) is removed by clearcutting, then the bitumen is stripped and transported using 'heavy hauler' trucks (over 3 stories high) to industrial "cookers" where steam and chemicals separate the heavy crude from the bitumen. Currently, each barrel of oil from surface mining requires 2-4 barrels of freshwater and produces about 1.5 barrels of toxic waste. This waste is held in 'tailings ponds', which in 2010 covered 176 km², holding 830 billion liters of toxic waste.²² Each day, 11 million liters of waste leaks into the Athabasca River from tar sands operations, representing approximately 4 billion liters of contamination each year.²³

Shell's tailings ponds cover 23 km² and contain millions of liters of toxic waste.²⁴ In 2010, Shell reported 208 spills, totalling 6 thousand tonnes of tailings in its global operations – this figure excludes all reported spills under 100 kilograms.²⁵ In October 2010, Shell excavated the surface of a limestone cap rock at the Muskeg River mine above a highly saline aquifer, causing a major underground tailings spill to occur. Over one year and approximately 8 million m³ later, Cell 2A in Shell's Muskeg River Mine was still being filled with water from the initial rupture, water that is poisonous to terrestrial ecosystems. Spills from surface mining operations are particularly concerning, as the already high levels of arsenic, cadmium, lead and nickel found in tailings ponds have increased by 30% over the past four years according to Environment Canada.²⁶

These toxins are known carcinogens and leaks have had devastating impacts on human and ecological health. In 2006, an unexpectedly high rate of rare cancers were reported in the community of Fort Chipewyan, located downstream from Shell operations. In 2008, Alberta Health confirmed a

30% rise in the number of cancers between 1995 and 2006. This study, however, lacks appropriate data and is considered a conservative estimate by many residents.²⁷

Community profile:

Athabasca Chipewyan First Nation

'Our whole way of life is in jeopardy'

The Athabasca Chipewyan First Nation (ACFN) are Denesuline Peoples and signatories to Treaty No. 8, protected by section 35 of the 1982 Canadian Constitution Act, and the United Nations Declaration on the Rights of Indigenous Peoples. ACFN's traditional lands are located in the Lower Athabasca and North West Saskatchewan, within the Peace-Athabasca Delta, a globally significant UNESCO World Heritage Site and one of the world's last remaining intact freshwater deltas. Many community members are based in the town of Fort Chipewyan, Alberta's oldest settlement, which dates back to 1788.

Since time immemorial and long before ACFN entered into Treaty, Denesuline Peoples of this region have lived subsistence lifestyles, providing for their families and community from the abundant resources found in their territory.



Rose Deranger Desjarlais is a cancer survivor from the community of Fort Chipewyan. She believes her time working in the tar sands industry led to her cancer

ACFN Denesuline Peoples have an intricate relationship with Mother Earth that keeps their physical, mental, emotional, and spiritual well-being in balance. This relationship includes customary practices that entail the care of Mother Earth, along with the ability for economic development and survival: the very essence of Denesuline culture and identity. But families, the community, and ACFN's traditional culture are now under threat from irresponsible and dangerous tar sands extraction by Shell.

ACFN families, like many Canadian families, want to preserve their cultural heritage and lands for their children and future generations. This includes traditions such as hunting, fishing and trapping - traditions that

depend on ensuring the land and its wildlife remain healthy and vibrant. Today, youth and children hold the key to ACFN's future. Culture camps with Elders, drum groups and sports clubs provide opportunities to learn about Dene heritage. However, industrialization of traditional lands is making them harder to access, making it difficult for the children today to teach the children of tomorrow.

Shell has proposed plans to aggressively expand its current tar sands operations with a 100,000 bpd expansion of the Jackpine Mine project and a newly-proposed 200,000 bpd Pierre River Mine project on the Athabasca River, located directly within the ACFN's traditional lands. The proposed projects would more than double Shell's production, producing upward of 600,000 bpd, and would be developed with adjacent wet tailings, which require additional withdrawals of water from the Athabasca River - a sacred waterway for the people of ACFN. In addition, the Pierre River Mine project is proposed in a pristine region of the Peace-Athabasca Delta and would adversely impact critical habitat for species at risk, traditional lands, and the ecology of the fragile and globally-significant Delta that ACFN people are reliant on.

The applications put forward by Shell have failed to address traditional land use rights of Indigenous communities in the area. The Athabasca Chipewyan First Nation recently submitted a joint response to the application, outlining Shell's failure to assess impacts, and infringement of legal rights.

ACFN Elders and community organizations have fought to protect these lands and their cultural heritage through government/industry hearings, legal proceedings and education campaigns, which have attracted international attention, as well as challenged the narrative of 'ethical oil'.

Eriel Deranger, a band member of the Athabasca Chipewyan First Nation, notes, "The industrialization of ACFN's traditional territory has thrust us to the forefront of the tar sands controversy. Tar sands projects are being promoted on ACFN traditional lands at a pace that is both irresponsible and irreparably destructive. Throughout a vast tract of our traditional territory the ecology is being completely altered and destroyed, leading to the erosion of my people's culture and way of life. People in the community of Fort Chipewyan are genuinely afraid our food and water sources are contaminated, resulting in a fear of eating traditional foods and eroding the continuation of our cultural and subsistence lifestyles. Our whole tradition and way of life is now in jeopardy."

c. Shell's in situ operations in Canada

In situ operations occur when tar sands deposits are located 100m under the ground or deeper. There are two main technologies for *in situ*: SAGD (Steam Assisted Gravity Drainage) and CSS (Cyclic Steam Simulation). Both technologies inject steam directly into the ground to separate the crude oil from bitumen, which is then pumped to the surface for processing.

In situ requires approximately 5 barrels of water for each barrel of oil produced, drawing largely from groundwater sources. Industry and government promote *in situ* as having less impact on lands. However, when a full life-cycle assessment of land disturbance is considered (including roads, pipelines and land fragmentation), *in situ* is projected to disturb 6,500 km² of land in Alberta compared to 4,800 km² for surface

mining methods.²⁸ Each barrel of oil produces about 0.4 barrels of waste. Generally, this waste is not treated and instead injected into the ground.²⁹ Both First Nations and farmers in the Cold Lake region adjacent to *in situ* operations have reported mysterious ponds smelling heavily of chemicals and oil after operations began.³⁰

Currently, Shell operates *in situ* projects in both the Peace River and Cold Lake regions through the Peace River Complex (12,500 bpd), Cliffdale Battery operation (27,000 bpd), Seal Battery operation (23,000 bpd and Orion Complex (20,000 bpd).

"Throughout a vast tract of our traditional territory the ecology is being completely altered and destroyed. People in the community of Fort Chipewyan are genuinely afraid our food and water sources are contaminated, resulting in a fear of eating traditional foods and eroding the continuation of our cultural and subsistence lifestyles."

Community profile:

Lubicon Cree First Nation

'Toxic emissions, water contamination and the decimation of the boreal forest'

Melina Laboucan-Massimo, Greenpeace Climate and Energy Campaigner and member of the Lubicon Cree First Nation observes, "While open pit mines are visually horrifying, the *in situ* method of extraction is far more carbon-intensive, water-intensive, and energy-intensive. *In situ* completely fragments



Melina Laboucan-Massimo

the boreal forest in Canada, which is one of the largest terrestrial carbon sinks in the world. Local communities are continually bearing the brunt of the detrimental effects of Shell's tar sands projects whether it be from toxic emissions, water contamination or the complete fragmentation and decimation of the boreal forest. Tar sands development is completely altering our homelands and destroying the very foundation of who we are as Indigenous peoples."

The Peace River complex, Shell's largest *in situ* project, has received heavy criticism from local communities, who report chronic emission concerns and impacts on lands. In February, 2011, Shell confirmed a sour gas leak at the Peace River complex after residents up to 40 km away reported smells of rotten eggs. The plant was unable to control the vent for 52 minutes.³¹

d. Shaky legal ground with Indigenous peoples

Today, the legal basis for Canada's tar sands developments rests on shaky foundations. The Government of Canada holds a unique legal relationship with Aboriginal (First Nation, Métis and Inuit) Peoples. In the past, Aboriginal Rights were largely ignored in development projects. However, over the past 30 years Canadian courts have recognized a 'nation to nation' relationship between Aboriginal peoples and the Canadian state. Moreover, they have ruled against the state several times in cases where Aboriginal Rights were undermined or ignored.

In 1973, the Supreme Court of Canada ruled in *Calder vs. British Columbia*, that Aboriginal peoples in Canada held title to the lands of North America

prior to the colonization period. The case had huge ramifications for Canada as any lands not clearly ceded through Treaties could be legally considered Aboriginal and not Crown land,³² representing huge areas in the North, Ontario, Quebec, East Coast and almost all of British Columbia. The precedent set an important context for Aboriginal peoples: that the Crown would have to negotiate and settle outstanding land claims.

In 1982, following the *Calder* case, the Canadian government ratified Section 35 of the Canadian Charter of Rights and Freedoms (contained within the Constitution Act), which states, "The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed." Legally applied, Section 35 has meant that there is a duty for government to both consult Aboriginal peoples on development projects and accommodate their concerns. Subsequent cases, including *Mikisew Cree First Nation vs. Canada* have demonstrated that Aboriginal peoples have two types of rights: substantive rights (to hunt, fish, trap or harvest) and procedural rights (the right to be honorably consulted). In recent years, Canadian courts have not hesitated to implement injunctions to halt development when questions of consultation were brought forth.³³ Moreover, the courts have indicated that meaningful consultation requires more than simply informing communities that a project will be developed.

Jurisdictional issues between the provincial and federal governments further complicate consultation processes. In 1930, the federal government transferred responsibilities for natural resource management to provinces under the Natural Resources Transfer Agreements. Essentially, the provinces would be responsible for setting many environmental and development policies. Each province and the federal government have a duty to consult with and accommodate Aboriginal concerns when they make decisions that could impact Aboriginal and Treaty rights. In practice, Alberta has delegated much of its responsibility to industry.

The government of Alberta has traditionally held little regard for consulting Aboriginal peoples on development projects. However, the Federal and Supreme Court have overturned several provincial decisions, in order to ensure the protection of Aboriginal Rights. In fact, governments have delegated most of their duty to companies like Shell, who have no legal or historical obligation

to protect Aboriginal Rights, and whose profit margins could be affected if consultation indicated that certain developments should not proceed.

e. Legal complications for Shell in the tar sands

Shell is now facing serious material risks to its current and proposed projects in the tar sands, due to legal proceedings that are setting precedents on Indigenous rights and resource extraction, and Shell's failures to meet agreements in their tar sands operations. First Nations communities have filed legal proceedings against tar sands operations naming Shell, which could ultimately impact the viability of Shell's current and future operation plans. More legal conflicts could arise in 2012 due to the IFC's implementation of new criteria requiring clients of Equator Principle banks to obtain the free, prior and informed consent of Indigenous communities impacted by mining projects.³⁴

In 2008, the Athabasca Chipewyan First Nation (ACFN) named Shell in a suit filed against the provincial government of Alberta over a lack of consultation. Shockingly, the court of appeal ruled that a government post on an obscure website constituted consultation, rather than face-to-face (or rather, nation to nation) discussion. The decision was controversial, as it ignored both technological divides and good faith negotiations on behalf of the government of Canada.

In 2009, Shell breached signed commitments with the government of Alberta to reduce carbon emissions for the Jackpine and Muskeg River mines and Ecojustice took Shell's breach to the Alberta Court of Appeal. When Shell failed to implement lower carbon emissions, the Alberta courts shockingly instructed regulators to ignore the breach. Alberta courts have now dismissed the Ecojustice case. However, the ruling has prompted both politicians and Alberta residents to demand an overhaul of regulatory approval processes in Alberta.

In 2010, both the Duncan and Horse Lake First Nations were granted intervenor status in the Supreme Court of Canada case of the Carrier Sekani and Rio Tinto, dealing with issues of Canada's energy regulators and Indigenous consultation.³⁵ The Duncan First Nation asserts they were not properly consulted about the

impacts of the Peace River *in situ* complex, located on its traditional territory. The community reports massive losses of wildlife and habitat fragmentation. Therefore, Duncan opposes Shell's Carmon Creek expansion project, which would increase *in situ* production in the area tenfold.³⁶

In September 2011, ACFN filed suit suing Shell Canada for breach of terms of agreements made in 2003 and 2006 regarding the company's existing tar sands mines. The agreements were meant to ensure Shell would provide measures to lessen the impact of these mines on ACFN. Shell has not honored these agreements with ACFN, leaving many commitments outstanding, which allow Shell's operations to continue threatening the environment and the constitutionally protected rights of the people of ACFN.³⁷

Chief Allan Adam states "ACFN is drawing the line, and taking a strong stand against Shell projects and the rapid development of our traditional lands without regard for our treaty rights, cultural survival or the devastating environmental impacts. ACFN wants no further developments without our consent until Shell is brought to justice and our broader concerns about the cumulative impacts of development in the region are addressed and implemented into the assessment process."

f. Expansion plans: high costs and growing opposition

Shell is uniquely vulnerable to market fluctuations, as 30% of its oil resources are classified as 'unconventional' (such as tar sands and oil shale), requiring a consistently high oil price to remain viable. Shell has already canceled some of its expansion plans, with CEO Peter Voser acknowledging in 2010 that the costs in the tar sands are making investment there less attractive.

In situ production costs currently sit between \$65 and \$95 per barrel. It is expected that, with inflation, labor and increased technological requirements, the price will rise to \$100 per barrel within a few years. These types of costs are highly unsustainable both ecologically and economically. Energy analysts CERA have identified that oil prices above \$120 - \$150 per barrel would further collapse the global economy 'into a demand-destroying recession'.³⁸

Furthermore, Shell's current price per barrel does not include proper land reclamation costs,

although the company claims to be committed to 'starting large-scale reclamation of our mined areas'.³⁹ It is so far unclear whether such a task is even possible, but if it is, the costs could prove astronomical. In 2011 the Pembina Institute reported that, Syncrude has paid \$46,282 per acre to reclaim a 659-acre upland site and has targeted \$375,939 per acre for a current experimental project to reclaim a wetland. Therefore, without even accounting for mining and *in situ* land reclamation, the cost of reclaiming just Shell's 23 km³ of tailings ponds back to its original landscape could be between \$228 million and \$1.9 billion.

Community resistance with allies in Canada, the U.S. and Europe has created a new wave of awareness about Shell's impact on Alberta's lands. During Shell's 2010 AGM, Co-operative Asset Management and 141 other institutional and individual shareholders raised "concerns for the long-term success of the company arising from the risks associated with oil sands." 11% of Shell shareholders supported a resolution asking Shell to publish details of the environmental, social and financial risks associated with its tar sands developments. While the resolution was not binding, many shareholders are now asking questions about the economic, social and environmental sustainability of tar sands projects.

Public opinion is shifting and communities are gaining increased support from allies and the public. Just a few years ago, people in Canada, U.S. and Europe heard little to nothing about the Canadian tar sands. Today, the tar sands have become a topic of national and international discussion as stories of human rights abuses such as cancer epidemics in the community of Fort Chipewyan, massive wildlife losses related to toxic contamination, environmental degradation and increased vocal resistance from impacted communities have shattered the 'everything is fine' myth propagated by the Canadian and Alberta governments. A poll conducted in 2010 found that 50% of Canadian citizens believe the risks involved with tar sands projects outweighed the benefits.⁴⁰ Clearly, Shell will need to account not only to Canadian Courts, but to the Canadian public.



Shell's Scotford upgrader, which processes crude bitumen into a range of synthetic crude oils

Community profile:

Aamjiwnaang First Nation

'The first step towards extinction'

Tar sands impacts extend, through pipelines and refineries, to communities across North America. Aamjiwnaang First Nation, located approximately 300 km southwest of Toronto on the shores of Lake Huron, has been termed by the National Geographic Society 'the most polluted place on Earth' and by the World Health Organization as 'the most polluted in Canada'.⁴¹ Aamjiwnaang is located next to 'Chemical Valley', a cluster of 62 chemical, pharmaceutical, oil and gas processing facilities, within 50 km of the reserve. In 2005, the National Pollutant Release Inventory estimated that the 46 Canadian facilities in Chemical Valley released 130 million kg of toxic pollutants into the air, 60% of which landed within 5 km of the reserve.⁴²



Chemical Valley, which borders Aamjiwnaang on the right of the photograph

Shell operates a 72,000 bpd refinery approximately 4 km from Aamjiwnaang and releases approximately 14 million kg of chemical contaminants into the air each year.⁴³ The aging refinery ranks as Ontario's 10th worst air polluter. It processes tar sands crude, which is

carried to the plant through the infamous Enbridge 6B pipeline that in 2010 ruptured near Kalamazoo, Michigan spilling 840,000 barrels.

The cumulative health impacts of Chemical Valley on Aamjiwnaang have been severe. In 2005, Mackenzie et al. reported in the journal *Environmental Health Perspectives* that the community was experiencing abnormal birth rates of 2 females for every male born.⁴⁴ Aamjiwnaang is the first community documented globally to display evidence of endocrine disruption of such an extreme nature. Moreover, community monitoring has reported that 40% of the population require inhalers to breathe, 39% of women have experienced miscarriage and 22% of children have asthma, compared to 8.2% for the surrounding Lambton county population.⁴⁵

Ron Plain, community member of Aamjiwnaang First Nation, observes, "Birth ratios of 2 girls to 1 boy is the first step towards extinction. The lands these companies operate upon were stolen from my community and turned into a toxic wasteland without our consent or consultation. Shell's plant is located directly on my father's hunting grounds and today, instead of feeding my family these lands kill my community. Shell's plans to expand bitumen refining in an area already devastated by pollution is effectively a death sentence for our culture, lands and people."

In 2006, Shell applied to build a 200,000 bpd refinery in Chemical Valley to process tar sands crude. In 2008 it scrapped the plans, citing capital costs. Yet, it is expected that the volume of tar sands crude processed in Chemical Valley will increase with the proposed reversal of flow through Enbridge's number 9 pipeline. Moreover, Shell has received support from the highest levels of government to revitalize plans for a refinery in Chemical Valley with the delay of the Keystone XL pipeline.⁴⁶



Eriel Tchekwie Deranger

is a Dene Indigenous activist and member of the Athabasca Chipewyan First Nation (ACFN). ACFN is ground zero for tar sands extraction in Alberta. Eriel is currently working for her First Nation leadership as a campaign and communication coordinator, challenging Shell's current and proposed tar sands projects.



Dave Vasey

is an Environmental Justice activist from Ontario, Canada. He holds a Masters in Environmental Studies from York University and has been working on issues related to tar sands since 2008. Dave has campaigned with several groups, including the Rainforest Action Network, the Indigenous Environmental Network and Environmental Justice Toronto.

2. Oil on icy waters

Shell in the Arctic

by Faith Gemmill

“As a mother and a grandmother, I am concerned that the Arctic Inupiat whaling culture is at risk because Shell insists on rushing ahead with offshore oil plans. The government, in helping the industry drill for oil at all costs, is disregarding the future of the Arctic people. The Arctic community revolves around the whaling way of life; there is not one facet of time in the Arctic that does not concern the catching of the whale. This level of industrial activity in the Beaufort and Chukchi threatens the endangered bowhead whale. Considering the movement of the ocean ice, there is too big a risk that an oil spill will occur, therefore creating a risk of destroying the Inupiat culture”

- Doreen Simmonds, Inupiat from Barrow, Alaska

a. Imminent threats to the Arctic Ocean and ecosystem

Shell has been the most aggressive company seeking to drill the pristine Arctic Ocean for offshore oil development. As the largest leaseholder in Beaufort and Chukchi Sea waters off the north coast of Alaska, Shell is pressing hard to gain the final approvals it needs to drill the first outer-continental shelf (OCS) wells in decades this



The giant Trans-Alaska Pipeline, which runs 800 miles from the Arctic Ocean to Valdez for export to the US market



Endangered polar bears depend on the Chukchi and Beaufort Seas to survive. A spill in this environment would be catastrophic.

summer: up to four wells in the Chukchi Sea and two in the Beaufort Sea, rising to a dozen by 2013.

Shell plans to use a 514-foot-long drill ship, Noble Discoverer, in the Chukchi, and a 25-year old drilling rig, the Kulluk, in the Beaufort Sea just off the Arctic National Wildlife Refuge coast. Dozens of support vessels and aircraft would patrol both seas, emitting tons of pollutants - including greenhouse gases and black carbon - into the air, and risking oil spills. A major spill in the Arctic Ocean would be impossible to clean up and could have enormous consequences for the region's communities and ecosystems.

The Arctic Ocean's Beaufort Sea provides critical habitat for polar bears, walruses, seals, migratory birds, threatened spectacled and Steller's eiders and the endangered bowhead whale. In this vulnerable and harsh environment, spilled oil will concentrate in restricted open water such as the leads and breathing holes where marine mammals surface and birds congregate, and along the sensitive coasts. The Arctic National Wildlife Refuge, adjoins the eastern portion of the Beaufort Sea in the United States,.

Oil leasing in the Arctic waters of the Chukchi Sea threatens critical spring migration route for

bowhead and beluga whales, important feeding areas for gray whales and Pacific walrus, staging and molting areas for migratory birds, polar bear and walrus habitats, and Cape Krusenstern National Preserve. An offshore spill, as well as routine development, also risks harming Kasegaluk Lagoon, a significant beluga whale calving and migratory bird staging area.

b. Subsistence for the Inupiat people

Alaska Native coastal communities have depended on marine subsistence resources since time immemorial. The Beaufort and Chukchi Sea are critical to the Inupiat subsistence lifestyle, yet vital resources are at risk from pollution, noise disturbance and spills.

Indigenous peoples have always viewed human rights and a healthy environment as fundamentally linked. The careful management and protection of the Arctic environment is a requirement for the enjoyment of Alaska Native human rights, particularly as they relate to the “subsistence” or “traditional” economy. Indigenous peoples of Alaska have long fought for recognition of subsistence as a basic inherent fundamental human right.

Existing international law already states that “... In no case may a people be deprived of its own means of subsistence.” This right is recognized and affirmed by UN member states.⁴⁷

The term “subsistence” may not mean much to many, but to Alaska Natives it is about their rights, culture, livelihood and survival. Alaska Native communities are largely remote and usually only accessible by small plane. Some communities that are located along riverways may be accessed by

boat in the summer. Few communities are located on the highway system. There are no large grocery stores in communities. The cost of freight is so high that a subsistence livelihood has become essential. For communities, subsistence is more than hunting and fishing. Many cultural values are passed from one generation to the next when the subsistence harvest of traditional foods take place. These traditional teachings are vital to maintain the connection of this generation to their ancestral ways. Alaska Native federally recognized tribes, conservation and Native organizations have consistently raised objections to the shortsighted OCS energy plans which will severely impede the Inupiat subsistence way of life.

Proposed Arctic drilling is not consistent with a recent report from top scientists at the U.S. Geological Survey, which confirmed that there is enough important missing information about the Arctic’s unique marine environment that it presents a ‘major constraint to a defensible scientific framework for critical Arctic decision making.’ What’s more, if an oil spill were to happen in the Arctic’s extreme, remote conditions, there is no proven method and almost no resources available to clean it up. This fact has been affirmed by US Administration officials themselves. To quote former Bureau of Ocean Energy Management, Regulation and Enforcement Director Michael Bromwich, ‘spill response is a question.’ Similarly, Admiral Robert Papp, the top officer at the U.S. Coast Guard, recently told Congress that if the Deepwater Horizon disaster ‘were to happen off the North Slope of Alaska, we’d have nothing. We’re starting from ground zero today.’

Why is Shell willing to risk such a devastating spill in Arctic waters, which they cannot clean up? Why are shareholders of Shell willing to allow the company to take such an enormous risk with their money?



Faith Gemmill

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She is the executive director of REDOIL (Resisting Environmental Destruction on Indigenous Lands) which addresses the disproportionate impacts of the fossil fuel industry on Alaska Native sovereignty and self-determination, subsistence, human and ecological health and climate change, and is demanding a moratorium on any new fossil fuel development in and near Indigenous lands.

3. Decades of destruction

Shell in Nigeria

by Nnimmo Bassey

Shell is the foremost operator in the oil and gas sector in Nigeria. Indeed, when it got a license to explore and exploit petroleum resources in Nigeria in 1937, the entire Nigerian nation constituted its concession. Over the years, the company has built a solid reputation of being foremost, not in the span and breadth of its operations but in the abridgement of rights, including environmental pollution that could be termed ecocide.

Creeks, rivers and streams are constantly polluted by oil spills from aged pipelines and faulty equipment. Routine gas flares, illegal since 1984, pump toxic elements into the atmosphere, choking and poisoning the impoverished local people.

a. Spills don't hide: the case of Ogoni

The release of the Assessment of the Environment of Ogoniland by the United Nations Environment Programme (UNEP) on 4 August 2011 marked a crucial turning point in the degradation history of the Niger Delta. The report is a scorecard on Shell's activities in Nigeria and reminds the world about the company's ignoble role not just in the decimation of the Ogoni environment but in the massive human rights abuses in the territory that culminated in the execution of Ken Saro-Wiwa and other Ogoni leaders – Sunday Dobe, Nordu Eawo, Daniel Gbooko, Paul Levera, Felix Nuate, Baribor Bera, Barinem Kiobel and John Kpuine on 10 November 1995.

UNEP affirmed that pollution is widespread and not merely occasional in Ogoniland, reporting that all water bodies in Ogoniland are polluted with hydrocarbons. Hydrocarbons reached groundwater at 41 sites and in one place the groundwater that

“The oil mogul thrives on double standards in its operations in Nigeria. Shell ought to be sanctioned and its license revoked for flouting the laws of the land.”



An illegal Shell gas flare, at Rumuekpe, Rivers State, Nigeria.

serves local wells was found to have a layer of up to 8cm of oil on it.

The report also revealed that benzene, a known carcinogen, is found in drinking water at a level 900 times above WHO standards. Benzene was also found in some air samples in the area. Generally, hydrocarbons were found at levels 1000 times above Nigerian drinking water standards. UNEP warned that most of the people in Ogoni have been exposed to chronic oil pollution throughout their lives, with soils polluted with hydrocarbons up to a depth of 5 meters in 49 observed places.

The report also confirmed that Shell failed to meet the minimum requirements of the Environmental Guidelines and Standards for the Petroleum Industries in Nigeria, failed to operate according to international standards and failed even to meet its own minimum operational standards. These all show that the oil mogul thrives on double standards in its operations in Ogoniland and, it bears saying, all its areas of operation in Nigeria. Shell ought to be sanctioned and its license revoked for flouting the laws of the land.

b. ‘Transparency’ vs. reality

Shell would like us to believe it has now turned over a new leaf. In its Sustainability Report 2011, Shell's chief executive, Peter Voser, makes the following declaration: “We believe transparency

in our operations helps build trust. In Nigeria, for example, the Shell Petroleum Development Company (SPDC) launched a website in 2011 that enables people to track details of oil spills at its facilities, whether from operations or due to sabotage or theft, and how it deals with them.⁴⁸ But these transparency claims require interrogation.

The major spill that Shell reported in 2011 occurred at its offshore Bonga Floating Production, Storage and Offloading (FPSO) platform. The spill occurred on 20 December 2011 and Shell made eight updates⁴⁹, but provided no definitive independent report on the cause of the incident. The report ought to have been issued after a team of stakeholders including Shell, government agencies



A bridge too far - women take direct action, blocking access to Shell's operations at Gbebiri, Bayelsa State, Nigeria.

and community representatives would have made a Joint Inspection Visit (JIV) to the site of the incident. So far, no such report has been seen in public.

The Bonga FPSO is situated about 120 kilometers offshore and floats on one kilometer deep ocean water. The deepwater facility is susceptible to high risks, as ocean waves and other events can easily result in catastrophic incidents - comparable to BP's Macondo field platform that exploded in April 2010 in the Gulf of Mexico.

The Bonga spill occurred while a vessel was being loaded with crude oil. As it happened, the operators were busy pumping crude oil into the ocean rather than into the vessel. Shell deployed chemical dispersants in fighting the spill. There has been no word as to what those chemicals were and what impacts they may have on the ocean ecosystem and the food chain.

Shell claims that 40,000 barrels were dumped into the ocean before it stemmed the flow. With

a history of underestimates, that figure is not to be trusted. A test case of Shell's transparency claim is the spills at Bodo in Ogoni, which occurred in 2008/2009. While Shell says that a mere 1,640 barrels of crude were spilled, Amnesty International puts the figure at between 103,000 and 311,000 barrels. An expert, Prof Richard Steiner, estimates the volumes of crude spilled at between 250,000 and 350,000 barrels.⁵⁰ In a lawsuit filed by the local community against Shell, the figure put forward is 600,000 barrels.⁵¹

Another example of Shell's lack of transparency in Nigeria is the question of how much oil is being extracted daily. Audits by the Nigerian Extractive Industries Transparency Initiative (NEITI) reveal that Shell and other oil operators in Nigeria do not provide the Nigerian State with information as to the actual volume of crude oil or gas pumped out of the wells in the oil fields of the Niger Delta. Thus when Nigeria is said to produce between 2.4 million to 2.6 million barrels of crude oil a day,⁵² that figure represents the volume of crude oil officially accounted for at the distribution points. What happens between the wells and the distribution points is sheer mystery.

Figures put forward for daily crude oil losses in Nigeria range from 130,000 barrels to 300,000 barrels a day.⁵³ The highest estimate is one that says that as much as is officially accounted for may actually be stolen on a daily basis.⁵⁴ With this level of opacity, it is quaint for Shell to claim any level of transparency in the Nigerian oil and gas sector.

Stopping this yawning black hole should be easy through the installation of meters by which independent measurements can be made, but resistance has been reported; "There are allegations that high-level official corruption, reportedly involving top government officials and some expatriate oil workers that work in concert with their Nigerian counterparts who compromise themselves for financial gratification, are central to the problem."⁵⁵

c. Gas flares, carbon pollution and political control

According to the World Bank, gas flaring decreased in 2009 in Nigeria from 21.3 billion cubic meters to 15.2 billion cubic meters. Shell however admits that in 2010 its flares went up 33% over its 2009 figure.

Shell claims to have reduced its carbon emissions to 6.1 million tonnes of CO₂ equivalent, and that

non-routine flaring at upstream facilities accounted for 35 per cent of its gas flaring in 2011 while the remaining 65 per cent was flared due to lack of equipment to capture the gas produced with oil. It added the untenable claim that in Nigeria “the security situation and lack of government funding has previously slowed progress on projects to capture the gas.”⁵⁶ Yet Shell has in the past asserted that it flares gas because doing so became standard industry practice from the early years of oil extraction due to lack of domestic demand for the gas. We note that security concerns do not stop Shell from extracting crude oil. It only stops them from stopping routine gas flaring.

Meanwhile, Shell is actively blocking reform in the oil and gas sector. When the Nigerian government broached the idea of a new oil sector bill, Shell’s then Vice-President for Sub-Saharan Africa, Ann Pickard, warned that the oil company would not accept any law that is against the interest of the company.⁵⁷ WikiLeaks subsequently revealed that Shell had intelligence to share on militant activities as well as on business competition in the Niger Delta. The leaked cables also revealed that Shell knows how leaky the Nigerian government is. Shell’s Pickard is quoted as saying to the US ambassador that “the GON [government of Nigeria] had forgotten that Shell had seconded people to all the relevant ministries and that Shell consequently had access to everything that was being done in those ministries.”



A Shell crude oil spill at Ikarama, Bayelsa State, Nigeria.

At the time of writing, a former Shell director sits as the Minister of Petroleum in Nigeria. Shell may not need small fries to snoop and scan pages from that Ministry’s bulging filing cabinets. It may not have to rely on low-level officials with tape recorders concealed in pens, tie clips, belt buckles, eyeglasses or cufflinks to record meetings and send transcripts to them. Now it may have copies of whatever document it wants forwarded directly as a matter of routine.⁵⁸

d. Spilling and Running

Shell’s spilling spree has not let up. At the same time the company is engaging in sales of its oil acreages in the Western Niger Delta area. Oil watchers wonder whether the company may be trying to divert attention from the real issue of the consequences of the environmental degradation that it has caused in the area.

The company has opted to move into deeper offshore drilling where there would be less oversight so that it can pollute without having to contend with watchful local communities. Some analysts have speculated that companies such as Shell are indicating that they may one day quit the Nigerian fields altogether and do not wish to be saddled with liabilities.

In the meantime, the sales of the fields will not reduce the central role of Shell in Nigeria’s oil fields. Shell owns the crude handling facilities, and so would still be some kind of landlord, standing at the crude evacuation gate and reaping the benefits because the crude handling tariff is a crucial part of an operator’s economics. The company is simply moving into a new level of exploitation where smaller companies take the flack while it continues to profit.

The regime of pillage and destruction goes on. Nothing has changed, except for the language and layout of Shell’s websites. A visit to Nigeria’s impacted communities reveal that they are now little more than empty shells of their former selves.



Nnimmo Bassey

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Shell should:

- » Make the right to free, prior and informed consent (FPIC) of Indigenous peoples a condition of all new project decisions.
- » Cancel plans to drill in the Arctic Ocean as a large spill would do untold damage to the local ecosystem and communities dependent on a subsistence lifestyle.
- » Replace its aged pipelines and facilities in Nigeria, clean up existing pollution, adequately compensate local residents and halt the harmful practice of gas flaring.
- » Address the grievances of Indigenous communities in relation to existing tar sands developments before moving forward with applications for the expansion or development of new projects in the region.
- » Identify and address the human health and accumulative impacts of its projects on local communities, drawing on independent expertise, guidance and best practice

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Ben Powless

Though some Indigenous communities in Alberta have been portrayed as supporting the tar sands industry, being often the only source of employment, many are challenging that view. The second annual “Healing Walk” in 2011 brought together a number of people from Indigenous and non-Indigenous communities, expressing a plea for the healing of Mother Earth.

