United States Environmental Toxics Policies: Violating the Human Rights and Threatening the Survival of Indigenous Peoples
April 21, 2012

Submitted to the United Nations Special Rapporteur on the Rights of Indigenous Peoples by the International Indian Treaty Council, an Indigenous NGO in General Consultative Status to the UN Economic and Social Council, and the North-South Indigenous Network Against Pesticides, the Indigenous Women’s Environmental and Reproductive Health Initiative and the Native Village of Savoonga, St. Lawrence Island, Alaska

“From a traditional perspective, the health of our Peoples cannot be separated from the health of our environment, the practice of our spirituality and the expression of our inherent right to self-determination, upon which the mental, physical and social health of our communities is based.”
--- Faith Gemmill, Gwich’in, Arctic Village Alaska

A. Introduction

In the United States (US), American Indians, Alaskan and Hawaiian Natives and First Nations continue to suffer from discriminatory policies, decisions and practices by the US government, corporations and courts. “Third party” economic interests often take precedence over human rights, undermining Treaty rights, traditional cultures, and sovereignty over lands and natural resources, and proliferating toxic exposure in local communities.

Rural indigenous communities in and outside the US suffer from toxic contamination carried out or permitted by the US government. These include commercial agri-business, military activities and extractive industries imposed on their lands. In most cases they are not informed about the known dangers couched in the “acceptable risk” and “risk assessment” models upon which US environmental policies and permitting processes are based. They have never agreed to this exposure or had access to challenge policy-makers or corporations producing this contamination. Their rights to health, reproductive justice, food security, self-determination, free, prior and informed consent and in some cases their right to life itself, have been severely undermined as a result. These rights are affirmed in the United Nations (UN) Declaration on the Rights of Indigenous Peoples as well as other international standards to which the US is obligated.

Of ongoing concern to Indigenous Peoples are the fundamental human rights violations and environmental racism inherent in current US policies and practices and the lack of government oversight regarding corporate responsibility. A glaring and ongoing example is the production, storage, and export to other countries of toxics, especially pesticides, by the US that are banned for use in the US itself due to their known dangerous health effects.
Many pesticides fall into the category of contaminants known as Persistent Organic Pollutants, “POPs,” which are bio accumulative and travel through the environment and food chain. In Alaska, subsistence foods as well as mother’s breast milk in Indigenous Arctic communities are now highly contaminated, endangering the health and cultures of communities located far from the original contamination sources. US laws and policies allowing production and export of banned pesticides and other chemicals, Indigenous Peoples and communities both in and outside the US are seriously harmed. Their human rights to health, subsistence and free prior and informed consent, among others, are being violated.

B. Specific Human Rights impacts on Indigenous Women, Girls, Children and Unborn Generations

“The protection of our health, lands, resources including air and water, languages, cultures, traditional foods and subsistence, sovereignty and self-determination, and the transmission of our traditional knowledge and teachings to our future generations are inherent and inalienable human rights. These rights are affirmed in the UN Declaration on the Rights of Indigenous Peoples and other international standards, and must be upheld, respected and fully implemented.”


“States shall take measures, in conjunction with indigenous peoples, to ensure that indigenous women and children enjoy the full protection and guarantees against all forms of violence and discrimination.”

--- Article 22, para. 2, UN Declaration on the Rights of Indigenous Peoples

The severe and ongoing human rights violations caused by environmental toxics to Indigenous women, girls, unborn generations and Indigenous Peoples as a whole will be outlined later in this report. These toxics include pesticides and other POPs, as well as heavy metals and chemicals produced by extractive industries (coal, oil, tar sands etc.), military installations and weapons testing, waste dumping and incineration, industrial processes, all phases of uranium mining, milling and waste storage.

The production, use, dumping, and general proliferation of environmental toxics adversely effect the collective and individual rights of Indigenous Peoples, Indigenous women and children specifically, to free, prior and informed consent, health, well-being, culture, development, food and subsistence, life and security of person. The lack of accountability by corporations and States results in devastating health impacts the continued release of environmental toxics into the environment.

US policies permit industry to knowingly produce, release, store, transport, export and dump hazardous chemicals that impair the endocrine and immune systems, adversely affect neurodevelopment and reproduction, and cause diseases including all forms of cancer with few consequences. This is an egregious example of impunity. Unlike infectious diseases, environmental contaminants that cause disease and death are either deliberately released into the environment specifically because they are toxic to living things (i.e. pesticides), or they are a result of manufacturing from industrial or military processes that are judged by States and corporations to pose an “acceptable risk” as compared to their purported economic or military “benefits” to society as a whole. The State and corporations deny “provable” impacts despite the clear evidence that these environmental toxics cause a range of serious, well documented health impacts, including harm to reproduction, health and fetal development which disproportionately affect Indigenous women.

Since the US Environmental Protection Agency (EPA) is not required to inspect emissions from factories manufacturing chemicals “for export only” under current laws such as FIFRA, many workers and
community members may be exposed to highly toxic substances without their knowledge, in violation of a number of human rights.

Indigenous Peoples live in some of the most remote areas in the US and around the world: the deserts, mountains, forests and Arctic tundra. Indigenous families subsist off the land and waters through farming, herding, hunting, fishing and gathering for their main food supplies. Indigenous women have a central role in food gathering and preparation and in a range of traditional cultural practices inextricably linked to the natural environment. These everyday practices increase their exposure, making them particularly vulnerable to absorbing environmental contaminants. This increasingly affects their health, livelihoods and reproductive capacities as well as their right and responsibility to pass on traditional cultural knowledge and practices to future generations.

The particular health effects of toxic contaminants on Indigenous women are well documented, and are further affirmed through a range of testimonies from the communities most affected, some of which have been included in this submission. Multiple studies confirm that alarmingly high levels of toxics are found in Indigenous women’s breast milk, placental cord blood, blood serum and body fat. Devastating impacts on maternal health include sterility, reproductive system cancers, decreased lactation and the inability to produce healthy children. Research also demonstrates the link between chemical exposures and intellectual and neurological development of children, impacting their ability to retain and pass on culture, ceremonies, stories, language, songs -- a primary concern of Indigenous women.

The Indigenous Women’s Environmental Justice and Reproductive Health Initiative was launched in 2009 in response to increasing concerns regarding the damaging effects reported from many communities not only caused by pesticides, but by a range of other environmental toxics. These include ongoing impacts on the health and human rights of Indigenous women, children and future generations caused by mercury emissions from legacy mines and coal-fired power plants, uranium mining and milling, toxic and military waste dumping and other sources of environmental toxics on the reproductive health of women, babies, young children and future generations.

These impacts were addressed at the 1st International Indigenous Women’s Environmental and Reproductive Health Symposium in Alamo, California June 30-July 1, 2010. The “Declaration for Health, Life and Defense of Our Land, Rights and Future Generations” (enclosed) was developed and adopted by consensus by Symposium participants and presented as a Conference Room Paper (CPR) to the 10th session of the UN Permanent Forum on Indigenous Issues in May 2011. It affirmed the human rights in the UN Declaration and called upon States to ensure that the unique experiences and concerns of Indigenous women are incorporated in government policies addressing environmental toxics.

The Declaration summarized the health impacts of environmental toxics as follows:

“Indigenous Peoples, and in particular women and children, are suffering the detrimental, devastating, multi-generational and deadly impacts of environmental toxins and contaminants that were unheard of in our communities prior to industrialization, including:

- Contamination of mothers’ breast milk at 4 to 12 times the levels found in the mother’s body tissue in some Indigenous communities;
- Elevated levels of contaminants such as POPs and heavy metals in infant cord blood;
- Disproportionate levels of reproductive system cancers of the breasts, ovaries, uterus, prostate and testicles, including in young people;
• Increasing numbers of miscarriages and stillbirths, and;
• High levels of sterility and infertility in contaminated communities.\(^1\)

In addition, the Symposium addressed the unique cultural rights violations affecting Indigenous women. The participants also called a second International Symposium that will take place April 27th – 29th in Chickaloon Village, Alaska. We are gratified that the UN Rapporteur on the Rights of Indigenous Peoples will be able to visit the Symposium and hear the concerns of the Indigenous women regarding the human rights impacts of US policies and practices that affect their reproductive health rights and the well-being of their Peoples on the tribal, local, state, national and international levels.

C. US Government Policies on Toxics Violate the Human Rights of Indigenous Peoples

In the US, Tribal Nations and Governments have a unique legal and political relationship with the United States. This includes obligations related the US’ Trust and Treaty obligations to Indian Nations, the US statement of support for the UN Declaration on the Rights of Indigenous Peoples, US ratification of a number of human rights Conventions and Covenants and pertinent recommendations of International Treaty Monitoring Bodies and human rights review processes.

The US Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) violate human rights and fail to protect human health. These laws promote the indiscriminate production, use, and disposal of pesticides and other industrial chemicals and allow chemical corporations to keep the ingredients in their products secret. The US laws also do not require that chemical manufacturers demonstrate that their products are safe. Today, there are more than 80,000 chemicals on the market which have never been fully assessed for their effects on health and the environment.

Indigenous Peoples, in particular women and children, suffer the detrimental, devastating, multi-generational and deadly impacts of chemical contaminants that were unheard of in their communities prior to industrialization. These chemicals poison the food web and many are associated with serious adverse health effects including involuntary infertility, premature births, birth defects, learning and developmental disorders, and cancers. Indigenous Peoples suffer disproportionate body burdens of these chemicals as well as inordinately high levels of birth defects, premature births, miscarriages, developmental disabilities, and cancers. Current US Toxics Laws and policies such as TSCA and FIFRA fail to protect the human right to health of Indigenous communities against the multiple, cumulative, and synergistic effects of toxic chemicals.

In 2007 IITC worked for a resolution which was passed by consensus of the National Congress of American Indians (NCAI, enclosed) representing over 250 US federally-recognized Tribal Governments addressing the impacts on US Tribal communities’ traditional foods, health and subsistence practices of the US current toxic policies and laws which permit the manufacture and export of banned pesticides and other toxic chemicals which then travel through the environment and food chain to affect Indigenous communities in the Arctic areas of Alaska in particular. This resolution called for the US to take specific actions including a change of policy and a congressional hearing to investigate

the impacts on US tribal communities and amending legislation to prohibit this practice. It also highlighted in human rights violations resulting from this practice:

“WHEREAS, the production, export and unmonitored use of banned, prohibited and dangerous toxics including pesticides violates a range of human rights for Indigenous Peoples around the world including the Rights of the Child, Right to Health, Food Security, Development Life, Physical Integrity, Free Prior Informed Consent, Cultural Rights, the Right to be Free from all Forms of Racism and Racial Discrimination and the Right of All Peoples not to be Deprived of Their Own Means of Subsistence.”  

D. The UN Declaration on the Rights of Indigenous Peoples: Free, Prior and Informed Consent and other rights relevant to US Policies on Toxics

A central factor of the proliferation of environmental toxics is the conscious and deliberate nature of their production, marketing, export, permitting and release by corporations and State agencies despite their well-known and well documented risks and impacts. Identifying the disproportionate and often devastating impacts on Indigenous women as "environmental violence" for which the US and the corporations it licenses can be held accountable is a new concept.

States, including the US, continue to resist mainstreaming human rights into national law and international environmental standard-setting processes. This may be directly related to their resistance to consider accountability mechanisms for the egregious and ongoing violations of human rights resulting from the deliberate production, sale and use of toxic substances with well-known and well-documented harmful effects on human health and development.

On September 13th 2007, history was made when the UN General Assembly adopted the UN Declaration on the Rights of Indigenous Peoples, with only 4 votes in opposition, including the US. On December 16th 2010, history was made again, when President Obama, after a year of “review” announced that the US would become the last of these 4 countries to change its position and support the Declaration.

The Declaration now provides a universal framework for recognizing Indigenous Peoples’ rights including lands rights, treaties, cultural rights and free prior and informed consent in the US which are very applicable and relevant with regards to policies on toxic chemical use. However, while welcoming the announcement, the IITC also expressed strong disappointment with the limitations the US placed on its support. The “Announcement of US Support for the UN Declaration on the Rights of Indigenous Peoples” also distributed December 16, 2010, contains a number of qualifications which call into question the US government’s intention to fully recognize and implement many of the key rights contained in the Declaration.

Several references are made to implementation of rights in accordance with existing federal laws and policies. Of particular concern is the statement that the US plans to recognize “a new and distinct international concept of self-determination specific to indigenous peoples. ...” different from the

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2 National Congress of American Indians Resolution #DEN-07-050, “Impacts on the Contamination of Subsistence Food Resources, Health, Human Rights and Development of Tribes and Indigenous Communities

existing right of self-determination in international law. This interpretation by the US has no basis in the actual text of the Declaration or the principles of international human rights standards which uphold non-discrimination and equal rights. In both the preamble and Article 3, the Declaration defines Self-determination, which is inextricably linked in practice to FPIC for Indigenous Peoples, as consistent with the right as recognized for “All Peoples” in international law.

The statement also presented the US interpretation of the Right to Free Prior and Informed Consent contained in many provisions of the Declaration as a “right to consultation,” a much more limited and diminished standard. This directly contradicts the text itself as well as a number of other international standards to which the US is accountable. These are some of the very same qualifications that the US attempted, unsuccessfully, to include in the actual text of the Declaration during the many years of negotiations in Geneva. The UN Declaration on the Rights of Indigenous Peoples is an international standard adopted overwhelmingly by the UN General Assembly which constitutes “the minimum standards for the survival, dignity and well-being of the indigenous peoples of the world.” The inherent rights it recognizes cannot be subject to selective redrafting or new interpretations by the US or any other state attempting to redefine or limit the inherent rights it recognizes. It also can’t be limited by narrow interpretations subject to existing federal laws and policies which violate the human rights of Indigenous Peoples.

**The Right to Free, Prior and Informed Consent (FPIC)** is an integral aspect of the Precautionary Principle which has been accepted in international policy related to toxic chemicals (i.e. in Stockholm Convention) but is still not an official aspect of US toxics laws (i.e. TSCA and FIFRA) and their application "on the ground." The admitted lack of compliance in US federal law with the precautionary principle is one reason that the US government has given for its failure to date ratify the Stockholm Convention.

The Obama Administration’s announcement of support for the Declaration provides a new framework for challenging the fundamental framework of US and EPA toxics policies based on “risk assessment,” “risk management” and “acceptable risk,” which serves the needs of chemical companies but not of Indigenous communities in and outside the US. Indigenous Peoples’ rights as affirmed in the UN Declaration (which is now federal policy) provide an important point of departure for promotion of the “precautionary principle” based on FPIC for impacted communities and Peoples.

**Article 29 of the UN Declaration states:**

1. Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.

2. States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.

3. States shall also take effective measures to ensure, as needed, that programmes for monitoring, maintaining and restoring the health of indigenous peoples, as developed and implemented by the peoples affected by such materials, are duly implemented.

In light of this and other provisions of the UN Declaration, Indigenous Peoples call upon the US government to reassess its position on its qualifications and to express its full support for all of the
Declaration’s provisions including the essential right to FPIC regarding disposal of hazardous materials in their lands and territories.

The UN Declaration on the Rights of Indigenous Peoples in its preamble also affirms the principle of non-discrimination as well as the rights of Indigenous People to maintain their traditional economic, cultural and subsistence activities, protect their health and exercise free prior informed consent regarding decisions and activities affecting them, including the release of environmental toxics in their lands. These rights are also directly threatened and violated, both on an individual and collective level, by US policies and corporate activities which promote, allow and impose unsustainable economic development, including resource extraction and industrial agriculture.

A number of Preambular paragraphs and Articles of the UN Declaration on the Rights of Indigenous Peoples directly address the rights of Indigenous Peoples, and Indigenous women, as well as State obligations to take both preventative and restorative action regarding environmental contaminants. These include:

- Article 3 – Right to Self-Determination
- Article 7 – the Right to Life, physical and mental integrity and the security of person; right to live as distinct Peoples
- Article 8 – Right to not be subjected to destruction of culture
- Article 13 – Right to revitalize, use, develop and transmit histories, languages and oral traditions to future generations
- Article 19 – Free Prior and Informed Consent regarding legislative and administrative measures by states
- Article 20 – Right to be secure in subsistence and development
- Article 21 – Right to the improvement of their economic and social conditions, including, inter alia, health
- Article 22 – Attention to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities
- Article 24 – Right to the highest attainable standard of health and the conservation of vital plants and animals
- Article 25 – Right to maintain spiritual relationships to land and resources for future generations
- Article 26 – Right to traditional lands, territories and resources
- Article 29 – Right to conservation and protection of the environment and productive capacity of lands, territories and resources; right to free prior and informed consent regarding hazardous materials and the obligations of States to take action to restore the health of the Indigenous Peoples affected
- Article 31 – Right to maintain, control, protect and develop cultural heritage, traditional knowledge and cultural expressions including genetic resources, seeds and medicines
- Article 32 – Right to determine and develop priorities and strategies for development including the right to free, prior and informed consent
- Article 37 – Treaty Rights
- Article 42 – Obligation for implementation and follow-up by States and UN agencies and processes

Additional relevant standards to which the US is also obligated which are now underscored and further clarified by the UNDRIP include:
1) The International Covenant on Civil and Political Rights (ICCPR)

Article 27 of the ICCPR states:

“In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with other members of the group, to enjoy their own culture, to profess and practice their own religion, or to use their own language.”

General Comment 23 of the Human Rights Committee is meant to serve as guidance to the States in their compliance with Article 27:

“With regard to the exercise of the cultural rights protected under article 27, the Committee observes that culture manifests itself in many forms, including a particular way of life associated with the use of land resources, especially in the case of Indigenous Peoples. That right may include such traditional activities as fishing or hunting, and the right to live in reserves protected by law. The enjoyment of those rights may require positive legal measures of protection and measures to ensure the effective participation of members of minority communities in decisions that affect them.”

2) The International Covenant on Civil and Political Rights

“...In no case may a people be deprived of its own means of subsistence.” -- Article 1, ICCPR

The Rights to Health and Culture for Indigenous Peoples are closely linked to the Right to Food and Subsistence. It is well documented that environmental toxins have a serious impact on traditional foods, creating a false and forced choice for Indigenous Peoples, in particular, pregnant and nursing mothers. They are often forced to choose between the cultural and nutritional value of their traditional foods and subsistence way of life, and the health and development of their unborn children, as well as their ability to have children at all.

In 1997 the UN Rapporteur on the Right to Food, Jean Zeigler responded to a submission by the IITC on behalf of Indigenous Tribes and Peoples in Northern California addressing mercury contamination and St. Lawrence Island, Alaska regarding military toxics and the impacts of this contamination on their traditional subsistence foods.

“The Special Rapporteur believes that the contamination of indigenous peoples’ land and water affecting their livelihood (traditional fishing) may contribute to a violation of the Government’s obligation to respect the right to food.”

3) The International Convention on the Elimination of All Forms of Racial Discrimination and the UN Committee on the Elimination of Racial Discrimination (CERD)

Of particular relevance to the human rights framework pertaining to the theme and concerns of Indigenous Peoples in the US regarding environmental contaminates is General Recommendation No.

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4 General Recommendation No. 23, the rights of minorities (article 27), CCPR/C/21/Rev.1/Add.5, 08/04/1994
5 UN Special Rapporteur on the Right to Food Jean Ziegler, report to the 4th session of the UN Human Rights Council [A/HRC/4/30/Add.1, 18 May 2007]
General recommendation XXIII, Paragraph 4 states as follows:

4. The Committee calls in particular upon States parties to:

(c) Provide indigenous peoples with conditions allowing for a sustainable economic and social development compatible with their cultural characteristics;

(d) Ensure that members of indigenous peoples have equal rights in respect of effective participation in public life and that no decisions directly relating to their rights and interests are taken without their informed consent.

(e) Ensure that indigenous communities can exercise their rights to practice and revitalize their cultural traditions and customs and to preserve and to practice their languages.

4) **The Universal Declaration of Human Rights** (1948) firmly establishes that health and well-being are human rights, and also recognizes that “Motherhood and childhood are entitled to special care and assistance”.

5) One of the objectives for the Plan of Action for the 2nd International Decade the World’s Indigenous Peoples adopted by the UN General Assembly in January 2005 is “promoting full and effective participation of indigenous peoples in decisions which directly or indirectly affect their lifestyles, traditional lands and territories, their cultural integrity as indigenous peoples with collective rights or any other aspect of their lives, considering the principle of free, prior and informed consent”. This objective is of direct relevance in challenging activities related to environmental contamination which violate Indigenous Peoples’ human rights, and provides a framework and criteria by which effective solutions and responses can be developed in full partnership with Indigenous Peoples.

6) **Nation to Nation Treaties between States and Indigenous Nations** and the consensual relationships they are based on, if honored, respected and put into practice by all Parties, can be the foundation and model for respectful partnerships addressing this and a range of other issues. This is true, in particular, when there is an urgent need for joint and or/shared decision-making in order to correct current injustices, respond to critical violations and redress historic and ongoing wrongs.

The following and other preambular paragraphs, along with Articles 3, 18, 19, 27, 28, 32, 37 and 40, inter alia, of the UN Declaration on the Rights of Indigenous Peoples make important contributions to a human rights framework incorporating Treaty rights and relationships based on FPIC and full participation in decision-making:

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6 CERD, the Treaty Monitoring Body for the International Convention on the Elimination of All Forms of Racial Discrimination, ICERD, adopted August 18th, 2007

7 Article 25
“Considering also those treaties, agreements and other constructive arrangements, and the relationship they represent, are the basis for a strengthened partnership between indigenous peoples and States”

Indigenous Peoples have also affirmed the “Treaty Right to Health” as a legally binding and sacred obligation of the Colonial governments which entered into Treaties with Indigenous Nations.

E. Holding the US and US-based Corporations Accountable for Human Rights Violations Outside the US

“The agrochemical industry is valued at over $42 billion and operates with impunity while, according to the World Bank over 355,000 people die from pesticide poisoning every year.”

US policies and laws as well as International Conventions allowing banned pesticides to be manufactured and exported by US based corporations are immoral and wrong, and violate the human rights of the impacted Indigenous communities where they are applied without their free, prior and informed consent, and also where they travel as a result of global transport. As Mme. Ouachi-Veseley stated in her report to the Commission of Human Rights, “[i]n particular, the right to life, the right to health, the right to found a family, the right to a private life are most commonly violated by the effects of pesticide use.”

Conclusions holding the US accountable for the human rights impacts on Indigenous Peoples in other countries of corporations it licenses were reached by the UN Committee on the Elimination of Racial Discrimination in its Concluding Observations for the periodic review of the US which took place in February 2008. For that CERD review of the US, the IITC coordinated submission of a joint Indigenous Peoples shadow report which included testimony and documentation addressing the human rights impact of the production and export of toxic pesticides, including tons of pesticides banned for use in the US due to ample proof of severe health impacts including cancers and birth defects.

In response, the CERD issued the following recommendation to the US, following up on a similar recommendation to the Canadian government during its periodic review the previous year (March 2007):

“30. The Committee notes with concern the reports of adverse effects of economic activities connected with the exploitation of natural resources in countries outside the United States by transnational corporations registered in the State party on the right to land, health, living environment and the way of life of indigenous peoples living in these regions.

In light of article 2, paragraph 1 (d), and 5 (e) of the Convention and of its general recommendation no. 23 (1997) on the rights of indigenous peoples, the Committee encourages the State party to take appropriate legislative or administrative measures to prevent acts of transnational corporations registered in the State party which negatively impact on the enjoyment of rights of indigenous peoples in territories outside the United States. In particular, the Committee recommends that the State party explore ways to hold transnational corporations registered in the United States accountable. The Committee

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8 Pesticides Action Network North America, January 10th, 2012
requests the State party to include in its next periodic report information on the effects of activities of transnational corporations registered in the United States on indigenous peoples abroad and on any measures taken in this regard.”

The IITC Shadow report submitted to the CERD for the US review specifically documented the export of banned pesticides by the US to Mexico. The issue of Mexico’s continuing import and use of dangerous and banned pesticides and their use in agricultural area of Mexico as impacting Indigenous communities (Yaqui and Huichol) was also submitted by IITC and addressed in the recommendations of the UPR review of Mexico by the UN Human Rights Council in September 2008.

Clearly, US policies and laws as well as International Conventions allowing banned pesticides to be manufactured and exported by US based corporations are immoral and wrong, and violate the human rights of the impacted Indigenous communities where they are applied without their free, prior and informed consent, and also where they travel as a result of global transport. As Mme. Ouachi-Veseley stated in her report to the Commission of Human Rights, “[i]n particular, the right to life, the right to health, the right to found a family, the right to a private life are most commonly violated by the effects of pesticide use.”

On December 3rd 2011, 27 years later after the Bhopal disaster caused by the release of toxic pesticides from the Union Carbide factory in Bhopal India killed over 25,000 people, the Permanent Peoples Tribunal convened in Bangalore, India with an international panel of 5 judges. Based on testimonies and statements about health and other human rights violations caused by pesticides from communities around the world, including Indigenous communities from Alaska, Mexico, Peru and elsewhere, the Tribunal delivered a scathing indictment of the pesticide industry. It focused on the “Big 6” agrochemical giants, the Multi-national Corporations (MNC’s) Monsanto, Syngenta, Dow, DuPont, Bayer, and BASF (Dow bought Union Carbide in 2001).

Blame for the agrochemical industry’s human rights abuses was also assigned to the three States where these corporations are headquartered—the US, Switzerland, and Germany. As stated in the PPT’s findings, these countries “failed to comply with their internationally accepted responsibility to promote and protect human rights, especially of vulnerable populations.”

Other findings included:

“The Tribunal makes the following declaration of responsibility for the six indicted MNCs and three Governments in particular and further also declares the responsibilities of all States, international organizations, UN Specialist Agencies, all other institutions of global governance.”

“As concerns the indicted six corporations (BASF, BAYER, DOW CHEMICAL, DUPONT, MONSANTO

10 Concluding Observations of the UN Committee on the Elimination of Racial Discrimination, United States of America [CERD/C/USA/CO/6 May 8th 2008]

The Tribunal finds on all evidence presented before it the six MNCs responsible for gross, widespread and systematic violations of the right to health and life, economic, social and cultural rights, as well as of civil and political rights, and women and children’s’ rights.

The Tribunal also finds these corporations responsible for their systematic conduct resulting in violation of indigenous peoples’ human rights and other entitlements.

AS CONCERNS THE UNITED STATES AND OTHER INDICTED STATES:

“The United States of America (USA), the Swiss Confederation (Switzerland) and the Federal Republic of Germany (Germany) have failed to comply with their internationally accepted responsibility to promote and protect human rights, especially of vulnerable populations and their specific customary and treaty obligations in the sphere of environment protection...”

F. Global Transport of Persistent Organic Pollutants (POPs) and Impacts on Arctic Indigenous Peoples

Persistent organic pollutants (POPs) are long-lasting pesticides and industrial chemicals that bioaccumulate through the food web, are capable of long-range transport and are toxic to humans and wildlife. The highly toxic organochlorine (OC) pesticides DDT, toxaphene, chlordane, endosulfan, and lindane, and other POPs such as PCBs have been found in human and animal tissue as well as human breast milk in the Arctic at levels several times higher than in the rest of the world. The levels keep rising long after certain of these substances have been banned. For instance, even though DDT agricultural uses have been banned for 30 years in the US, it is still accumulating in the Arctic in peregrine falcons, orcas, and human beings.

Through a well-known process known as “global distillation,” POPs travel northward and bioaccumulate in high quantities in the bodies of fish, marine mammals and other components of the traditional diets of the Indigenous Peoples in the Arctic. Prevailing ocean and wind currents bring contaminants to the Arctic where they are subsequently trapped by the cold climate. This process is often referred to as the “grasshopper effect,” as chemicals repeatedly evaporate and condense while in their journey toward the Arctic. The Arctic is known as the ultimate sink because these contaminants concentrate in the cold environment and fat-based food web.

The Arctic is home to approximately half a million Indigenous Peoples, who face significant cultural, food security/subsistence and human health threats from global contaminants combined with climate change. The cost of store-bought food is almost six times higher for the same products in rural Alaska compared to other US states and the loss of subsistence foods causes an unbearable economic and nutritional hardship for Arctic Indigenous Peoples. It also undermines cultural practices handed down through generations, as Indigenous communities of the north are reliant on a traditional diet of foods from the land and ocean for their physical, cultural, and spiritual sustenance.

In a 2010 study, researchers found levels of PCBs in the traditional foods of the Yupik people of St. Lawrence Island at 200-400 times the levels considered safe for consumption, particularly in the

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12 DRAFT FINDINGS AND RECOMMENDATIONS, PERMANENT PEOPLE’S TRIBUNAL ON AGROCHEMICAL TRANSNATIONAL CORPORATIONS, Bangalore, India, 3-6 December 2011

rendered oils that are so vital for survival in the cold Arctic environment. Levels of OC pesticides such as DDT, chlordane and endosulfan have been increasing in the Arctic. DDT in people is higher in the Arctic than in the rest of the world. PCB levels are 8 to 12 times higher than in the “lower 48 states” of the US and Chlordane levels are 8 to 10 times higher in the people of St. Lawrence Island. Yupik women of the Yukon-Kuskokwim Delta region of Alaska have the highest levels of the POPs chemicals known as PBDEs (polybrominated diphenyl ethers) used as flame retardants in furniture, mattresses and electronics.\textsuperscript{14}

POPs chemicals are causing changes in the very DNA of the people living in these areas, which has implications related to intergenerational health effects. The health impacts of POPs on Indigenous Peoples are well documented on St. Lawrence Island. Much of the contamination by PCBs and other POPs is attributed to past and present US military base operations\textsuperscript{15,16}. However, POPs pesticides also continue to build up in Indigenous Peoples’ and animals’ bodies as these chemicals move northward.

Specific impacts on women, children and maternal health are well documented. Disparities of health problems in the Alaskan Arctic include high levels of birth defects and neonatal deaths among Alaska Native infants that cannot be explained by the usual risk factors of maternal use of tobacco or alcohol. Data from the Alaska Birth Defects registry shows that the prevalence of birth defects in Alaska is twice as high as in the US as a whole and that Alaska Native infants have twice the risk of birth defects as white infants born in Alaska. Mothers residing in villages with high hazard ranking are 43% more likely to have a low birth weight baby, 45% more likely to give birth prematurely and more likely to have babies afflicted with intrauterine growth retardation.\textsuperscript{17}

Comparing levels of various persistent organic pollutants (POPs) reported by the US Centers for Disease Control (CDC) for youth between the ages of 12 and 19 years old, the geometric mean of several congeners was significantly higher than the reported CDC 90th percentile. This suggests continued higher than acceptable exposures and body burdens in Indigenous communities either through diet or other sources. Of five women tested from Czechoslovakia, Kenya, Mexico, Philippines and Alaska, levels of pesticides and the industrial chemicals PBDEs (polybrominated diphenyl ethers—used as flame retardants in furniture, mattresses and electronics) were highest in the breast milk of a Yupik woman from Arctic Alaska (see charts below).\textsuperscript{18}

\begin{footnotesize}
\begin{enumerate}
\item Alaska Community Action on Toxics. 2009. Persistent Organic Pollutants in the Arctic: a report for the delegates of the fourth conference of parties of the Stockholm Convention: \url{http://www.akaction.org/Publications_FactSheets_and_Video.htm}
\item Henifin, Kai A. 2007. Toxic Politics at 64N, 171W: Addressing Military Contaminants on St. Lawrence Island. (Graduate thesis) \url{http://ir.library.oregonstate.edu/dspace/bitstream/1957/4531/1/Henifin_Thesis_Revised.pdf}
\item Commonweal. 2009. Report: Monitoring Mother Earth by Monitoring Mother’s Milk. \url{www.ipen.org}.
\end{enumerate}
\end{footnotesize}
Contamination of human milk in Arctic mothers by POPs has been documented at levels considered unsafe. Impacted Indigenous Peoples have stated that they consider the contamination of breast milk as a clear human rights violation, making the most nutritious food for infants poisonous and contaminated in the pursuit of profit. Indigenous women continue to strongly encourage breastfeeding for a number of nutritional, spiritual, social, cultural, health and economic reasons. However they demand an immediate halt to all activities which cause it to be contaminated.

In 1991, the US joined several other Arctic States in adopting the Arctic Environmental Protection Strategy (AEPS). The AEPS addresses the monitoring, assessment, protection, and conservation of the Arctic zone. The US and the other signing countries made a commitment to, among other things, “monitor the levels of, and assess the effects of, anthropogenic pollutants in all components of the Arctic environment” and “take preventive and other measures directly or through competent international organizations regarding marine pollution in the Arctic irrespective of origin.”

In a statement made to US officials of the Environmental Protection Agency, St. Lawrence Island tribal leaders asserted: “The Indigenous Arctic peoples are suffering the most from these chemicals because the chemicals – DDT, endosulfan, lindane, perfluorinated compounds and toxic flame retardants, to name a few—are long lasting, and drift North on wind and water currents from where they are applied in the Southern latitudes. That means these chemicals are also in our traditional foods and affecting our health and the health of our children.”


1) St. Lawrence Island, Alaska and the Arctic: US Military Contamination and Global Transport of Persistent Chemicals

The Yupik Indigenous People of St. Lawrence Island, Alaska, have been harmed and displaced by contamination from formerly used US military bases, with particular effects on women whose breast milk and adipose tissues concentrate chemical contaminants. The US military and Department of
Defense disposed of toxic waste on the Island, located in the Arctic Circle between Alaska and Russia, including massive amounts of fuels, solvents, PCBs, PAHs and, mirex (flame retardant), unexploded ordnance, and other persistent pollutants.

Annie Alowa, a respected elder and community health aide from the village of Savoonga, begin to raise concerns in the late 1970’s about the adverse health effects she attributed to contamination from the abandoned military site at Northeast Cape, including particular effects on women and children. These included miscarriages, cancer, low-birth weight, and other reproductive health problems. Cancer deaths among the people of St. Lawrence Island are nearly ten times higher than in the general population in Alaska. Contamination from the military sites, which were closed in 1972 but which the US government never removed or adequately cleaned up, continues to adversely affect the health and well being of the Islands’ Indigenous Peoples to this day.

As a result of its strategic importance to the US military during World War II and into present times, Alaska now has 700 formerly used defense sites (FUDS). Two of the most contaminated are located on St. Lawrence Island. The village of Gambell was used as a base for the military beginning in 1948. Hazardous wastes, military debris, unexploded ordnance and spills remain in the soil and groundwater beneath the village. The vulnerability of the drinking water source in Gambell is heightening due to increasing storm surges that accompany rapid climate warming. Northeast Cape is a former US Air Force Base and was also used as a “White Alice” site, part of a military communications network established during the Cold War. Northeast Cape is a traditional food gathering and hunting camp for the residents of Savoonga. A village at Northeast Cape was displaced.

The military installed and later abandoned major facilities at Northeast Cape and Gambell with little or no consideration for the impact on the Island’s residents. The Yupik People of St. Lawrence are doubly impacted because the Arctic has become a hemispheric sink for persistent chemicals that travel hundreds of miles into the region and accumulate in the bodies of wildlife and humans.

Hazardous chemicals from military waste sites combined with global transport of POPs to the north contaminate traditional subsistence foods, water supplies, medicinal and food plants (berries, herbs, greens, roots, etc.) that women use, gather and prepare, further exposing them in particular. This double source of toxic contamination undermines the health, cultural practices and development of the Yupik People of St. Lawrence Island, the reproductive health of Yupik women, and the right to survival of their future generations. This pattern is repeated in many other Arctic Indigenous communities.
Tribal members from the Villages of Savoonga and Gambell on St. Lawrence Island have levels of PCBs in their blood serum that are 6-9 times higher the average levels in people living in the continental US due to global transport, with discernibly higher PCB levels among the people who lived or worked at the military base at Northeast Cape. Community health researchers on the island have documented health outcomes of concern including cancers, thyroid disease, learning and developmental problems, diabetes, heart disease, and reproductive health problems. As stated by Dr. David Carpenter, Director of the Institute for Health and the Environment at the University at Albany: “The evidence that there are health hazards from exposures to PCBs in the range of 6-9 ppb is very strong, with disease outcomes ranging from cancer to neurobehavioral effects to endocrine disruption and immune suppression.”

Temperatures in the Arctic are warming 5-10 times faster than elsewhere in the world. These outcomes of climate change also cause more rapid dispersal of contaminants into freshwater and marine environments, affecting the health of fish and marine mammals that serve as the main traditional foods for Arctic and northern Indigenous Peoples. Atmospheric loading of contaminants to the ocean surface is increased as sea ice retreats.

2) California

“Indigenous women are life givers, life sustainers and culture holders. Our bodies are sacred places that must be protected, honored and kept free of harmful contaminants in order for the new generations of our Nations to be born strong and healthy.”

Data on health impacts of pesticides and the particular danger to maternal health and unborn generations is also well documented in other regions, including in “developed” countries. For example, results of a 12 year study by the University of California and other agencies of over 600 mothers and their children in the California’s Central Valley exposed to pesticides during pregnancy was published in December 2010. The study confirmed that that at age 2, the children of mothers who had the highest levels of organophosphate metabolites in their blood had the lowest levels of mental development in the group. They also had the most cases of pervasive developmental disorders. Prenatal exposure to pesticides has been consistently linked to ADHD and other developmental defects as well as cancers in children such as leukemia.

This work, led by University of California Public Health Professor Brenda Eskenazi, served as a model for a recently launched National Children’s Study by the National Institutes of Health (USA), which seeks to examine the effects of the environment on 100,000 children, tracking them from before birth until age 21. It is apparent that the continuing tragic impacts if pesticides on Indigenous women, girls, babies including coming generations is finally beginning to generate greater attention among scientists and policy makers.

Indigenous women in California and elsewhere have stressed the cultural effects of pesticides, which are closely related to health impacts of Indigenous women, and produce a double impact. Traditional cultural activities carried out specifically by Indigenous women, which include food gathering, preparation and production as well as the activities related to the creation of traditional cultural items

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20 “Study by the Center for Health Assessment of Mothers and Children of Salinas, a joint project of UC Berkeley, the Natividad Medical Center, Clinica de Salud Del Valle de Salinas and other community organizations, December 2010.
and art forms, create additional exposure to environmental toxins. The following testimony was presented by Monique Sonoquie, Chumash, of the Traditional California Indian Basket Weavers and Indigenous Youth Foundation at the Native Forum preceding the North America Indigenous Peoples preparatory session for 2010 UN Permanent Forum on Indigenous Issues, March 18th, 2011, in Arcata California:

“Pesticides are particularly dangerous to traditional native basket weavers. The Forest Service, Caltrans, governmental agencies, as well as the general public spray pesticides without thought to the natural environment, plants and animals, as well as those of us that work in the forests, parks, rivers, lakes, and oceans. Weavers are affected when gathering in areas sprayed with pesticides, we are constantly at risk as we breathe in, handle and ingest these toxins as we gather, weave and split reeds with our teeth. These pesticides also affect the life and quality of the plants, making them less bug resistant, more fragile, smaller and harder to find, as well as food sources for animals, and traditional medicines for practitioners”.

Indigenous women have also expressed concerns regarding the developmental and neurological impacts of neurotoxins such as mercury, many pesticides and industrial chemicals, on the long-term ability of Indigenous peoples to retain and pass on their complex cultural systems which include oral histories, stories, songs language and ceremonies to the next generations. This is a primary responsibility of Indigenous women for girls and young women throughout their learning years, and for young children of both sexes.

3) Akwesasne Mohawk

“We must never forget that it is at this most critical window of development in the mother’s womb, the child’s first environment and first relationship, where the embodied wealth of indigenous nations is determined.”21 ---Tekatsitsiakwa Katsi Cook, Akwesasne Mohawk: “Protecting the Child in the First Environment: Preconception Health to Save Native Future”: Journal of the National Museum of the American Indian, Winter, 2011

“On top of our basic genetic inheritance lies epigenetics, or those environmental influences that drive changes in the gene function of the developing fetus. Many external agents during critical windows of a child’s development, including maternal stress during pregnancy, maternal behaviors, exposures to toxic chemicals, radioactivity, cigarette smoke, diesel exhaust, heavy metals, and persistent organic pollutants like PCBs have lifelong effects on the child’s physical, mental and emotional health and well-being. These epigenetic effects and their “reprogramming” of our mammalian physical functions during fetal development and through the end of adolescence can persist across generations.”22

Exposure to chemicals can damage women’s reproductive health by causing structural malformations and disease, adversely affect reproductive tissues or cells, and interfere with the endocrine system. Exposure to chemicals is linked with impaired fertility and ability to carry a baby to term. Chemical exposures also confer a higher risk of cancers and disorders of women’s reproductive system.

Levels of contaminants found in breast milk demonstrate disproportionate effects in Indigenous communities. Human breast milk is a bioresource at the foundation of subsistence economies and traditional food ways of Indigenous communities. Biomonitoring of human breast milk has shown the ubiquity of persistent organic pollutants in the environment. One study noted that in the Akwesasne Mohawk population with lifetime exposures to consuming fish near contaminated sites, women produced breast milk with higher concentrations of PCBs; yet when later generations of Akwesasne Mohawk mothers heeded fish advisories and did not have such lifetime exposures, the breast milk concentrations of PCBs went down. Unfortunately, in many tribal jurisdictions, where subsistence foods provide an economic and healthy means to eat, and where other sources of food are less available and less desirable, tribal women may not have such a choice.

In a more recent study looking at body burdens of persistent organic pollutants in the Akwesasne Mohawk youth ages 17 to 21 years old, significantly higher levels of PCBs were found among individuals who were breastfed as infants, were first born, or had consumed local fish within the past year.

H. US Complicity: the Manufacture and Exportation of Banned Pesticides from the US to Mexico and others countries

"Just because something is not illegal, it may still be immoral. Allowing the export of products recognized to be harmful is immoral."

- UN Special Rapporteur on Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Ms. Fatma-Zohra Ouhachi-Vesely on her first country visit to the US, 2001

In 2001, the Special Rapporteur on Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Ms. Fatma-Zohra Ouhachi-Vesely visited the US. She found that the US allowed the manufacture and exportation of pesticides that were banned for use in the US to other, primarily developing, countries. She cited a report on the alarming levels of this exportation:

"United States Customs records reveal that 3.2 billion pounds of pesticide products were exported in 1997-2000, an average rate of 45 tons per hour. Nearly 65 million pounds of the exported pesticides were either forbidden or severely restricted in the United States [...]. In the 1997-1999 periods, shipments of banned products were found in Customs Records [...] 57 per cent of these products were shipped to a destination in the developing world. Nearly half of the remaining 43 per cent were shipped to ports in Belgium and the Netherlands. Though it is not possible to make a final determination from available data, it is likely that the final destinations of a large number of these shipments were also developing countries."

The same report further stated that:

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24 Fitzgerald et al. 1998.
“Between 1996-2000, the United States exported nearly 1.1 billion pounds of pesticides that have been identified as known or suspected carcinogens, an average rate of almost 16 tons per hour [...]”

These figures have particular importance in regard to girls and boys in developing countries. According to the International Labor Organization, 65 to 90 per cent of the children estimated to be working in Africa (80 million), Asia (152 million) and Latin America (17 million) are working in agriculture. Evidence that children have heightened susceptibility to the carcinogenic effects of pesticides has even greater significance for developing countries. There, children live and work in conditions that involve almost continuous exposure, ranging from contact in fields to contaminated water, pesticide-contaminated clothing, and storage of pesticides in homes.

A more recent report based on US Government Custom Service Records, “Pesticide Exports from U.S. Ports, 2001–2003” states that:

“Analysis of U.S. Custom Service records for 2001-2003 indicates that nearly 1.7 billion pounds of pesticide products were exported from U.S. ports, a rate >32 tons/hour. Exports included >27 million pounds of pesticides whose use is forbidden in the United States. WHO Class 1a and 1b pesticides were exported at an average rate of >16 tons/day. Pesticide exports included >500,000 pounds of known or suspected carcinogens, with most going to developing countries; pesticides associated with endocrine disruption were exported at an average rate of >100 tons/day.”

The UN Declaration on the Rights of Indigenous Peoples as well as CERD General Recommendation XXIII require Free Prior Informed Consent by Indigenous Peoples who are exposed and detrimentally affected by exposure these highly toxic substances. The IITC has received extensive documentation from many such communities, in particular in Mexico and Guatemala, affirming that this is, in fact, not the case.

During her visit to the US, Mme. Vesely met with government officials, reporting that "US officials told me that pesticides banned in the United States but exported cannot be regulated if there is a demand overseas, because of free-trade agreements." The Rapporteur, Ms. Vesely justifiably found that the US policy is based upon, among other unacceptable premises, “... on an untenable premise that pesticides deemed unacceptable for the residents and environment of the United States are somehow acceptable in other countries. Clearly, countries such as the US often choose to offer their citizens a higher degree of protection than they insure for others in other countries and fail to monitor the human rights impacts of this practice by US corporations. One of the most common reasons for doing so is to acknowledge different levels of economic and social development among States. However this disparity is difficult to justify in respect of pesticides found to be so dangerous that they are banned from sale or use.”

As one farm worker who is a member of a Yaqui community in Mexico expressed in a meeting with the US’s Environmental Protection Agency in the San Diego, California in 2001, commenting on the US’s policy of banning pesticides for use in the US but still permitting their production for export, “Why are the lives of our Yaqui children in Mexico worth less than the lives of your children here in the US?”

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27 Ibid
There are a great many difficulties in tracing the use abroad of banned pesticides manufactured in the US. In Mexico and Guatemala, for example, there is no labeling of origin or content of pesticides. They are given names like “Veloz” (speedy), or “Ninja” in Guatemala. As the Special Rapporteur pointed out, "Even if something is marked 'poison' it tends to be shipped in large amounts, and then transferred to smaller containers without proper labeling for local sale and use. And the people actually using the products often cannot read anyway."  

In an investigation conducted by the IITC in Sonora, Mexico, on Indigenous Yaqui ancestral lands received testimony from an indigenous agricultural worker who was told by the agricultural companies involved in aerial spraying to bury large pesticide canisters because they knew that the pesticide was banned. As stated above, many Yaqui family members, farm workers and midwives and mothers have presented testimonies about increasing levels of birth defects, cancers and deaths due to toxic exposure from indiscriminate aerial spraying, storage and use of highly toxic pesticides in communities and unsafe working conditions with no safely precautions or information about the dangers provided.

The export of banned and dangerous toxics from the “developed/industrialized” to the “developing” countries continues, with impacted Indigenous and other communities at the bottom end uniformed, sickened and killed. It should be noted with concern that the production and export of banned pesticides by the US is permitted under federal law (the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA) as well as under the International Rotterdam Convention, as long as the receiving country is informed of this status. Unfortunately no one informs the Indigenous communities “on the ground” who suffer grave human rights consequences.

I. Rio Yaqui, Sonora Mexico: Impacts on Yaqui Indian women’s, girl’s and future generations’ health and development

In 1997, Dr. Elizabeth Guillette, a scientist from the University of Arizona carried out a study of the health effects of industrial agricultural pesticides in the homelands of the Yaqui Indians in Sonora, Mexico, a few hours south of the US/Mexico border. Yaqui Indigenous communities in the agricultural areas have been exposed to frequent aerial and ground spraying of pesticides since the government’s implementation of the “Green Revolution” in the late 1940’s. For some, their only source of water is contaminated irrigation canals.

In addition to the impacts of pesticides sprayed from airplanes affecting the entire community, Yaqui farm workers who are not provided by growers with any protective gear in the fields. Workers unintentionally carry poisons home in pesticides-soaked clothing and skin, unknowingly spreading the contamination to their families. The maternal health of Yaqui women working in the fields or living nearby, or whose husbands bring the contamination home on their clothing, is particularly impacted. Dr. Guillette’s study documented the resulting high levels of pesticides found in the cord blood of newborns and in mother’s milk (see table below).

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Table 1: Mean concentrations in the cord blood at time of birth and in mothers milk one month post partum from women, Pueblo Yaqui, Sonora, Mexico. [Data from Garcia and Meza, 1991]

<table>
<thead>
<tr>
<th>Pesticide</th>
<th>Cord Blood (ppm)</th>
<th>Milk (ppm corrected for fat)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N 19</td>
<td>20</td>
</tr>
<tr>
<td>γ-HCH</td>
<td>0.030 ± 0.03</td>
<td>0.8599 ± 2.75</td>
</tr>
<tr>
<td>α-HCH</td>
<td>0</td>
<td>0.3791 ± 1.08</td>
</tr>
<tr>
<td>Lindane</td>
<td>0.084 ± 0.06</td>
<td>0.6710 ± 0.59*</td>
</tr>
<tr>
<td>p,p′-DDE</td>
<td>0.0039 ± 0.1</td>
<td>0.4432 ± 0.84</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>0</td>
<td>1.269 ± 1.65*</td>
</tr>
<tr>
<td>BHC</td>
<td>0.003 ± 0.002</td>
<td>0.6270 ± 0.66*</td>
</tr>
<tr>
<td>Aldrin</td>
<td>0</td>
<td>0.2363 ± 0.59*</td>
</tr>
<tr>
<td>Dieldrin</td>
<td>0.159 ± 0.12</td>
<td>0.0487 ± 0.08</td>
</tr>
<tr>
<td>Endrin</td>
<td>0.022 ± 0.02</td>
<td>0.5238 ± 1.1*</td>
</tr>
<tr>
<td>p,p′-DDE</td>
<td>0.03 ± 0.03</td>
<td>6.31 ± 5.9</td>
</tr>
<tr>
<td>γ-DDE</td>
<td>0.0434</td>
<td>6.52*</td>
</tr>
</tbody>
</table>

*All exceed FAO/OMS established limits

This study also found birth defects, learning and development disabilities, leukemia and other severe health problems in Yaqui children. Combined with personal testimonies from community members collected over years, it also provides strong and compelling evidence of the detrimental impacts of pesticide exposure on the development of exposed Yaqui children. The comparison of Yaqui children in the valley (where pesticide use is heavy) with Yaqui children in the foothills of the Sierra Madre Occidental mountains (where pesticide and insecticide use is minimal to none) showed dramatic differences in motor skills—eye-hand coordination and balance. It showed marked developmental differences included in cognitive skills which were observed in recall, simple problem solving and ability to draw simple stick figures of people:

![Diagram of children from different areas](image)

33 Ibid
Her study also found that Valley children had significantly less stamina and hand-eye coordination, poorer short-term memory and were less adept at drawing a person (right) than were children in the foothills (left) where traditional methods of intercropping control pests in gardens and insecticides are rarely used. 34

Of particular significance to the issues addressed at this EGM is a follow-up study carried out by Dr. Elizabeth Guillette et al examining impacts of in utero pesticides exposure on breast development among girls in Rio Yaqui Sonora Mexico, “Altered Breast Development in Young Girls from an Agricultural Environment” published in 2006. This second study was designed to test the hypothesis that abnormal breast development was caused by in utero exposure to agricultural chemicals with endocrine action. The principal difference between the two groups of girls studied was parental exposure to agricultural chemicals which are known to cause endocrine disruption in utero. The study noted that “Various pesticides, mainly organophosphates and organochlorines, were used extensively in the agricultural areas of the Yaqui Valley near the time of the girls’ birth (1992–1994), and many of these compounds are known to cross the placenta. A study of newborn children from the Yaqui Valley performed close to the period these children were conceived reported elevated pesticide levels, with cord blood values of lindane, heptachlor, benzene hexachloride, aldrin, and endrin all exceeding World Health Organization established limits (International Programme on Chemical Safety 2005).” 35

This study was carried through medical examinations (with parental permission) of 50 girls ages 8 – 10 and noted an accelerated rate of breast size development (fatty tissue) in the girls from the high-pesticide use agricultural (valley) areas where their mothers had been exposed to greater levels of pesticides during pregnancy as compared to the girls in the foothill regions where exposure was minimal. Of particular concern to the scientists was the relative lack of and/or abnormal mammary gland development noted in the girls from valley communities, which could have an impact on lactation (breast feeding) later in life as well as a potential links to breast cancer. This first-of-its-kind study (as per Dr. Guillette) examining the relationship between human breast development and environmental contaminants is a unique and alarming confirmation of the impacts of pesticides exposure on the health and development of Indigenous women and girls.

Since 2002, the IITC’s “North-South Indigenous Network against Pesticides Project” collected and submitted over 50 testimonies from Yaqui community members in Sonora Mexico documenting cancer and leukemia, other illnesses, birth defects and deaths including many from mothers, community midwives and healers (“curanderas”). These community testimonies have been submitted consistently to the UN Rapporteurs on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, the Right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Right to Food and Rights of Indigenous Peoples. However, this issue has yet to be addressed as a specific area for in depth investigation by any of the UN mandate holders.

Following are translations into English of two of the most recent testimonies submitted to IITC by Yaqui community mothers and a midwife addressing women’s and girl’s health impacts, which have not as yet been submitted to any other UN body:

34 Ibid
35 “Altered Breast Development in Young Girls from an Agricultural Environment” by Elizabeth A. Guillette, Craig Conard, Fernando Lares, Maria Guadalupe Aguilar, John McLachlan, and Louis J. Guillette Jr.
Mrs. Flor Reyna Osuna, (mother of the young woman)
Young woman, Flor Osuna García.
Jesús Gonzales, (midwife)
Interviewer: Francisco Villegas Paredes
DECEMBER 15, 2011.

Mrs. Flor Reyna, the mother of a young woman who was born with deformities. Currently the young woman is 30 years old and is 1.20 meters [3’11”] tall. She says that when her daughter was born, the child’s body was WATERY and JELLY-LIKE. The girl, due to her scant growth, is unable to move her legs. She can only move her arms. Her vital organs are atrophied. Studies conducted on her reveal that the girl developed deformities while in her mother’s womb.

The physicians, as an important conclusion of the studies conducted, consider that the young woman’s housing location, on the periphery of agricultural lands and exposed to spraying with agrochemicals, quickly leads to CONGENITAL DISEASES. Also, some biochemists specializing in clinical analysis have analyzed certain products. As a result they have reached important conclusions: mixtures of two or more chemicals applied in inhabited areas also lead to CANCERS.

The midwife, Jesús made the following comments: These deformities are the product of tumors produced by chemicals when young women are exposed to their application while working in the field without personal safety measures or other similar protection.

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Mrs. Xóchitl Valdés, (mother of the girl)
Girl: Mariana López Valdés
Interviewer: Francisco Villegas Paredes
DECEMBER 20, 2011.

The girl’s mother, Mrs. Mariana López Valdés stated that her pregnancy was very delicate. She was constantly going to the doctor. Even some midwives told her that her girl was not developing well. When the girl was born, she had deformities on her face, principally to her lips. She also stated that the girl’s grandfather, Mr. Manuel Valdés works in agriculture and would generally leave chemical residues behind at his house. Some doctors told him, based on studies conducted on the girl that the agro-chemicals are having a direct effect.

The contact she had with the residues while still young caused deformations to some parts of her body when she was a fetus. The girl is alive. She is 1 year 6 months old and her deformities are growing.

The testimonies of these Indigenous women translated from Yaqui into Spanish and then into English, are tragically typical in the highly-impacted Yaqui communities of Sonora Mexico.

It is clear is that the use toxic pesticides in these and other regions causes widespread suffering, injury and death, specifically impacting Indigenous women and girls on a level that constitutes “environmental violence” with a pattern of pervasive and brutal human rights violations that remain, by and large, unchallenged.
J. Challenges for Indigenous Peoples in the Right to Participate in International Decision Making about Environmental Toxics

1) The Stockholm Convention on Persistent Organic Pollutants

The Stockholm Convention was adopted by States from around the world in 2001 and entered into force in 2004 when 50 States had ratified it. Currently, the Convention includes 176 State parties that agree to work together toward global elimination of the world’s most dangerous chemicals. The US has not yet ratified the Convention.

The Preamble of the Convention recognizes the serious health concerns including “particular impacts upon women and children and, through them, upon future generations;” and that “Arctic ecosystems and indigenous communities are particularly at risk because of the biomagnification of persistent organic pollutants and that contamination of their traditional foods is a public health issue.” Because exposure to even low levels of POPs can harm human health and development, the Convention is strongly based on the Precautionary Principle.

However major challenges remain. The US based chemical industry remains a strong political force in this process, exerting constant and well-funded pressure on States to avoid or delay adding new chemicals. Despite the recognition of impacts on health of women, children and Indigenous Peoples in the Convention’s preamble, Human rights including the Rights of Indigenous Peoples most often take a back seat to industry concerns or are not addressed at all in the States’ deliberations. Also, there is no formal mechanism for the participation of Indigenous Peoples in the implementation of the Convention. This continues to be a key demand of Indigenous Peoples participating in this process, along with unqualified recognition of human rights.

In the closing statement of the Global Indigenous Peoples Caucus at the 2011 4th Conference of the Parties to the Stockholm Convention (April 6 – 10, 2011, Geneva), read by Traditional California Indian basket weaver Monique Sonoquie (Chumash) these ongoing concerns of women from impacted communities were emphasized:

“For Indigenous Peoples, the impacts of the production, export and use of dangerous toxics violates and threaten human rights protected under International Laws, norms and Conventions, including the UN Declaration on the Rights of Indigenous Peoples. Reproductive health and justice, which includes our right to bear and raise healthy children, also continue to be undermined for Indigenous Peoples living at the source of application as well as in Arctic communities, far from the original point of exposure. Indigenous Peoples reiterate our call for formal participation in this process so that we are able to work more effectively with the State parties for the realization of the Stockholm Convention’s goals.”

2) The Rotterdam Convention

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade is an important tool to protect human health and the environment by controlling trade in hazardous chemicals and pesticides that meet the requirements of the

Convention. However, as with the Stockholm Convention, there is no formal mechanism for the participation of Indigenous Peoples or to address the human rights abuses caused by the export of hazardous substances when they are used in the lands and territories of Indigenous Peoples without their free prior and consent.

In fact, the Rotterdam Convention specifically allows for the export of pesticides and other chemicals that have been banned for use in the producing State as long as the receiving (importing) State is properly notified. There is no provision to ensure that Indigenous Peoples are afforded the right of Free Prior Informed Consent as stipulated by Article 29 of the UN Declaration of the Rights of Indigenous Peoples, CERD General Recommendations XXIII and other human rights standards. Also, there is no formal process for consideration by State parties of the widespread, brutal Human Rights impacts caused by this practice as have been documented in this paper, putting this UN Convention directly at odds with a number of existing UN human rights standards.

3. The United Nations Legally-Binding Instrument on Mercury
Mercury is highly toxic. Some levels of inorganic mercury are found in nature. Metallic mercury is used in batteries, thermometers and dental amalgams. The largest amounts of mercury are released into the environment by coal-fired power plants, paper milling, mining and other industrial processes. The most toxic form is “methylated mercury”, created when mercury is exposed to decaying plant matter, for example in marshes or lakes created by dams. This form of organic mercury “bio-accumulates” or builds up in the cells of fish and other animals, moving up the food chain in higher and higher concentrations. Humans are most commonly exposed by eating contaminated fish. Mercury contaminates our air, water, lands and traditional foods, in particular the fish upon which so many Indigenous communities depend, producing serious health impacts for persons of all ages. But the gravest danger is to the health and development of our children. Exposure to mercury impairs the neurological development of infants, babies and children, including those still in those mothers’ wombs.

In 2004, the US EPA estimated that over 600,000 babies born each year in the US may be at risk from neurological effects and learning disabilities as a result of prenatal exposure to mercury. Umbilical cord blood has been found to contain almost twice the level of mercury than that found in the mothers’ blood, further increasing the risks to our unborn generations. The most common exposure of humans to mercury is through eating contaminated fish, so children in Indigenous communities where fish are a primary traditional food source are at particularly high risk.

The Second Ministerial Meeting of the Arctic Council met in Barrow, Alaska in 2000. Participants were concerned about effects to human health and the environment of mercury and its impacts globally, particularly the Arctic. The Arctic Council asked Special Rapporteur on Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights to complete a global assessment of mercury to provide information for next steps. The UN Environment Programme (UNEP) released “Global Mercury Assessment” report in 2002. In summary the report acknowledged that mercury, due to its long-range transport, its ability to bioaccumulate in the environment, its persistence and its harm to human health and the environment, is of global concern. In 2009, UNEP agreed to negotiate a global, legally binding mercury-control Treaty. The Treaty was to be drafted in five “Intergovernmental Negotiating Committee” or INC meetings to begin in 2010 and to be completed in early 2013. The first three took place in Japan, Sweden and Kenya. The next session, INC 4, is scheduled in Uruguay in June 2012.
About two-thirds of the mercury released in the environment can be attributed to human activity. The largest source of global and US mercury pollution comes from burning fossil fuels, primarily coal. The second largest source appears to be artisanal and small-scale gold mining, as well as continued run offs from abandoned gold mines. Mercury can also be found in a number of products (batteries, dental fillings, cosmetics, etc.).

Mercury contamination is bound to the protein tissue rather than the fatty tissue, unlike contamination from POPs. Although mercury can travel far from the source, contamination is of particular concern for waterways that are near coal-fired power plants, waste dumps, pulp and paper mills, cement kilns, gold mines, sites of fossil fuel extraction for oil, coal and tar sands and chlor-alkali facilities.

Abandoned mercury and gold mines in areas such as California, South Dakota and Alaska continue to emit mercury. Current gold mining and processing taking place in many countries in Latin America, Asia and Africa as well as North America produce new mercury contamination. For example, in 2003, gold mining and processing at Placer Dome’s Cortez mine and Barrick’s Gold strike in Northern Nevada released 2435 pounds of mercury into the environment.

Methylmercury is known to affect the neurological system of both the developing as well as the adult brain. Prenatal exposure can cause irreversible damage to the developing nervous system resulting in reduced IQ, abnormal muscle tone and losses in motor function and attention. Heart disease and high blood pressure have also been associated with methylmercury consumption as well as damaged immune systems kidney damage and reproductive effects.

As a mother accumulates mercury in her body she can it on to her unborn child. Babies can be exposed by consuming breast milk with high levels of mercury. Indigenous Peoples that rely primarily on fish for their physical, economic and cultural survival are at highest risk. Umbilical cord blood has been found to contain almost twice the level of mercury than that found in the mothers’ blood, further increasing the risks to unborn generations.

Indigenous Women have taken a strong stand regarding the continued release of mercury into the international environment, the lack of political will by States to conduct effective cleanup of lands and waterways that are contaminated and the need for a strong international instrument on mercury guided by health and human rights concerns rather than priorities set by industry.

The “Indigenous Mothers against Mercury Open Letter to National, State and regional Policy- Makers”, was finalized on May 18th 2011 and has received over 1000 signatures from Indigenous mothers around the world. It reiterates the health impacts of mercury as a neurotoxin which most severely damages the developing fetus. It reminds policy makers that this represents “a violation of our human rights to health, cultural practices, Treaty rights, subsistence, Rights of the Child, and our Right to Free Prior and Informed Consent as recognized by the UN Declaration on the Rights of Indigenous Peoples and other international human rights instruments, norms and standards.”

K. RECOMMENDATIONS

In light of the information and concerns presented in this paper, we proposed that the Special Rapporteur make the following recommendation to the US which are essential to ensure the rights of Indigenous women and children regarding the impacts of environmental toxics known to be highly dangerous and US policies which allow their continued use, production, proliferation, export and dumping. These include support for relevant recommendations that have already emerged from a number of consensus documents and processes agreed to by Indigenous Peoples in response to the concerns raised in this submission:

1. That the United States eliminate the production and use of pesticides, industrial chemicals and toxic byproducts that disrupt the endocrine system, affect learning and neurological development, cause cancers and other illnesses, undermine women’s and maternal health, contaminate lands, waters and traditional food sources, cause harm to reproduction and affect any aspect of the health and development of our future generations.

2. That the United States take responsibility for effective and immediate clean-up of contaminated sites created by activities which it either permitted or approved, in collaboration and coordination with the impacted Indigenous Peoples, and provide redress and restitution to those who have been affected.

3. That the United States fully and effectively implement the UN Declaration on the Rights of Indigenous Peoples, including Article 29 re: State obligation to ensure free prior and informed consent regarding hazardous materials.

4. That the United States immediately halt the practice of exporting banned pesticides and other chemicals, and that the provisions in national laws which permit this practice without the free, prior and informed consent of the Indigenous Peoples and communities who may be impacted at the source of exposure as well as through global transport, be reviewed immediately and revised.

5. That the United States ensure that Human Rights principles and standards, including those affirmed in the UNDRIP, are incorporated and upheld in all international standard setting activities in which the US in involved addressing environment and development. These include, inter alia, the Rights to Health, Self-determination, Free Prior and Informed Consent, Food and Subsistence, Treaty Rights, Rights of Women and Children, Rights to traditional Land and Resources, and Right to Life.

6. That the United States put in place processes and mechanisms to ensure that its laws and policies regarding environmental contaminates and toxic substances incorporate full accountability to and implementation of human rights norms and standards with the full participation of Indigenous Peoples.

7. That the United States revise its position which interprets the right to “free prior and informed consent” as affirmed in the UNDRIP as the lesser, diminished process of “consultation”

8. Regarding the current process being carried out by UNEP for the development of a legally-binding International Treaty on Mercury, that the United States implement the recommendations proposed by the “Indigenous Mothers Against Mercury” open letter to “halt emissions of mercury into the environment from all sources, including the burning of coal, current and past gold mines and production and disposal of medical products that use mercury; to commit to thorough cleanup of sources of current contamination including legacy mine sites, working in full collaboration with Indigenous Peoples when their homelands, waters, sacred areas and subsistence foods have been impacted; to Ensure the full, formal and effective participation of Indigenous Peoples, including Indigenous women, in the
development of a Global Mercury Treaty and in measures to implement its provisions on the national, regional and local levels.38

9. That the United States and corporation it licenses fully disclose to all Indigenous Peoples, Nations, tribes, and communities, their activities and potential risks of pesticides, mining, dumping, incineration and other forms of toxic chemical production so that informed decisions can be made as part of Indigenous Peoples right to free, prior and informed consent.

10. That the United States honor, respect and fully implement the rights and relationships affirmed in the legally-binding Nation-to-Nation Treaties between States and Indigenous Peoples, including self-determination, free prior and informed consent, partnership, mutual respect, full and effective participation in decision-making and the “Treaty Right to Health”.

11. Finally, we recommend that the UN Rapporteur on the Rights of Indigenous Peoples focus attention and collect information from Indigenous Peoples, in particular Indigenous women, on the links between environmental contamination, right to health, reproductive justice and efforts to combat environmental violence for the purpose of recommending effective solutions and remedies at the international level.

In closing, we respectfully thank the Special Rapporteur for his attention to and consideration of these concerns and recommendations.

Participants in the 1st International Indigenous Women’s Environmental and Reproductive Health Symposium June 30 – July 1, 2010, Alamo California

38 “INDIGENOUS MOTHERS AGAINST MERCURY OPEN LETTER TO NATIONAL, STATE AND REGIONAL POLICY-MAKERS”, MAY 8TH, 2012, Submitted by the IITC and the Indigenous Women’s Environmental Justice and Reproductive Health Initiative