

**UNITED NATIONS COMMITTEE ON THE RIGHTS OF THE CHILD
69TH SESSION (MAY 18 – JUNE 5, 2015)**

**CONSIDERATION OF THE FOURTH AND FIFTH PERIODIC REPORTS OF
MEXICO UNDER ARTICLE 44 OF THE UNITED NATIONS CONVENTION ON
THE RIGHTS OF THE CHILD**

INDIGENOUS PEOPLES ALTERNATIVE REPORT

April 15, 2015

Co-submitted by the International Indian Treaty Council/Consejo Internacional de Tratados Indios (Non-Governmental Organization in General Consultative Status to the United Nations Economic and Social Council), and the Affiliates of IITC in Mexico, including: Congreso Nacional Indígena de México; Consejo de Pueblos Nahuas del Alto Balsas, Guerrero, A.C. (CPNAB); Traditional Authorities, Yaqui Pueblo of Huirivis, Río Yaqui, Sonora; Traditional Authorities, Yaqui Pueblo of Potam, Río Yaqui, Sonora; Traditional Authorities, Yaqui Pueblo of Torim, Río Yaqui, Sonora; Jittoa-Bat-Natika-Weria, Río Yaqui, Sonora; Unidad de la Fuerza Indígena y Campesina (UFIC, regional members include Indigenous Peoples in 25 Mexican states), Red Indígena de Turismo de México A.C. (RITA); Di Sugave a Nana Shimajai, San Francisco Magu de México.

Additional co-submitters include Coordinadora Nacional de mujeres Indígenas (CONAMI) and. Coordinadora Nacional de mujeres Indigenas-Vinajel (COEMICH-Vinajel) Mexico.

The Co-Submitters of this Alternative Report thank Red de Acción en Plaguicidas y Alternativas en México (RAPAM) A.C. for their significant contributions to the content of this Report.

Contact: Danika Littlechild, Legal Counsel
International Indian Treaty Council
2940 16th Street, Suite 305
San Francisco CA 94103
Office phone: (415) 641-4482
Cell phone: +1(780)312-0246
Office fax: (415) 641-1298
danika@treatycouncil.org
www.treatycouncil.org

Table of Contents

EXECUTIVE SUMMARY	3
INTRODUCTION.....	6
THE REVIEW OF MEXICO	12
SCIENTIFIC STUDIES	19
THE GUILLETTE STUDIES	19
RECENT STUDIES ON PESTICIDES AND THE RIO YAQUI.....	22
INTERNATIONAL ENVIRONMENTAL STANDARDS:.....	23
THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS	23
ROTTERDAM CONVENTION ON THE PRIOR INFORMED CONSENT PROCEDURE FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES IN INTERNATIONAL TRADE	25
BASEL CONVENTION ON THE CONTROL OF TRANSBOUNDARY MOVEMENTS OF HAZARDOUS WASTES AND THEIR DISPOSAL.....	25
AGENDA 21 AND RIO + 20, THE WORLD CONFERENCE ON SUSTAINABLE DEVELOPMENT, JUNE 2012.....	26
INTERNATIONAL HUMAN RIGHTS STANDARDS:	27
THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES.....	28
WORLD CONFERENCE ON INDIGENOUS PEOPLES 2014	30
INTERNATIONAL DEVELOPMENTS REGARDING BUSINESS AND HUMAN RIGHTS.....	30
THE CONVENTION ON THE RIGHTS OF THE CHILD	32
CONCLUSION.....	35
PROPOSED QUESTIONS FOR MEXICO.....	36
PROPOSED RECOMMENDATIONS FOR THE COMMITTEE REGARDING MEXICO	36
ANNEX A.....	37
YAQUI TESTIMONIES RELATED TO THE CONVENTION ON THE RIGHTS OF THE CHILD.....	38

Executive Summary

The International Indian Treaty Council (IITC) *et al.* address issues to be raised in the review of Mexico's compliance as a State Party to the United Nations *Convention on the Rights of the Child*. The co-submitters of this Alternative Report respectfully call the attention of the UN Committee on the Rights of the Child (CRC) to critical human rights concerns that are not addressed in the Fourth and Fifth Periodic Reports of Mexico.

The co-submitters affirm the urgent need to address the crises facing Indigenous Peoples and communities in Mexico, in particular the children, who are disproportionately exposed to environmental contamination and toxic pesticides. This Report will provide research, evidence and testimonies that demonstrate incidents of illness, disability and death of Indigenous children as a result of pesticide exposure, in particular in Indigenous communities of Rio Yaqui, Sonora Mexico. The report also documents that the Mexican government has been informed that many of the pesticides it imports from the United States have been prohibited for use in that country due to their known dangerous and deadly health effects.

Since 2001, IITC has submitted over 80 cases documenting death and untold human suffering to UN Rapporteurs on Toxics, Rights of Indigenous Peoples, Right to Health and Right to Food; various sessions and two Expert Group Meetings of the UN Permanent Forum on Indigenous Issues; the UN Working Group on Human Rights Transnational Corporations and other Business Enterprises; the UN Stockholm Convention on Persistent Organic Pollutants Conference of the Parties; the UN Committee on the Elimination of Racial Discrimination (for its Periodic review of the United States in 2008 and 2014); the United Nations Permanent Forum Expert Group Meetings in 2012 and 2014, the Commission on Human Rights and the UN Human Rights Council (Universal Periodic Reviews of United States and Mexico).

Ten years ago, the Special Rapporteur on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Mr. Okechukwu Ibeanu submitted a report to the 61st Session of the Commission on Human Rights highlighting pesticide use and health impacts on Indigenous Peoples of Rio Yaqui.¹ Mexico's response was inadequate and the suffering has increased.

The UN Rapporteur on the Human Rights and the Illicit Movement of Toxics Wastes (Madame Ouhachi-Vesely) said during her country visit to the United States in 2001: "***Just because something is not illegal, it may still be immoral. Allowing the export of products recognized to be harmful is immoral.***" However the practice continues and is, in fact, legal under both national and international law. In particular, the United Nations *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade* permits this practice as long as the

¹ Report of the Special Rapporteur, Okechukwu Ibeanu, Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights (Addendum: Updates of cases contained in previous reports) E/CN.4/2005/45/Add.1 December 2004, at paras. 4-8

exporting country informs the importing country of the chemicals' non-registered or restricted legal status. Although informed of their dangers, Mexico continues to import these products. Indigenous Peoples in rural communities such as Rio Yaqui Sonora experience detrimental health impacts where such chemicals are used and applied indiscriminately, including by aerial spraying near schools and homes. The local Indigenous Peoples are not asked for their consent, nor are they informed of the dangers or provided with any safety precautions. The mothers and children who suffer profound illnesses, reproductive impacts and permanent disabilities as a result are not provided with medical care, support nor compensation.

This Report, including references to scientific peer-reviewed studies as well as thirty-nine (39) testimonies collected in Rio Yaqui (from midwives, health workers, and parents amongst others) documenting specific impacts on mothers and children including miscarriages, still births, and children suffering disabilities, liver disease, cancer and leukemia and death.

We respectfully present the Committee with the following core questions for Mexico.

1. The import and use of pesticides which have been banned or restricted in the exporting country, including highly hazardous pesticides, presents a significant harm to Indigenous children and families in Mexico who are exposed to these toxics. How does Mexico reconcile this importation and use with its obligations under Article 24 of the *Convention on the Rights of the Child* and Article 29 of the United Nations *Declaration on the Rights of Indigenous Peoples*?
2. What actions are being taken by Mexico to assess, minimize or prevent the impacts of toxic contaminants on maternal and children's health in Indigenous and local communities such as the Yaqui Pueblos in Sonora? What medical services, compensation and redress are provided to victims?

Finally, we submit the following recommendations to the Committee for consideration in their review and Concluding Observations regarding the Mexico Report:

1. Mexico should review and revise national laws and policies to prohibit the import of any pesticides or chemicals that have been banned or restricted for use in the exporting country, in particular when maternal and children's health may be impacted. Mexico should also revise national, state and local policies to address environmental exposures and the negative impacts of pesticides, toxics or mixed pollutants on maternal health and the health of children.
2. In conjunction with Indigenous Peoples, Mexico should develop appropriate regional environmental health programs, including biomonitoring of toxics, as a first step toward prevention of toxic-induced illnesses in vulnerable Indigenous groups such as mothers and children.

We also recommend that the CRC join with the United Nations Permanent Forum on Indigenous Issues (UNPFII) to call for "a legal review of United Nations chemical

conventions, in particular the Rotterdam Convention, to ensure that they are in conformity with international human rights standards, including the United Nations Declaration on the Rights of Indigenous Peoples and the Convention on the Rights of Persons with Disabilities.”²

² Permanent Forum on Indigenous Issues, Report on the thirteenth session (12-23 May 2014) E/2014/43-E/C.19/2014/11 at para. 16.

Introduction

In 2010, the National Institute for Statistics, Geography and Computing (INEGI) conducted the 13th Census of Population and Housing, which indicates that there are a total of 15,703,474 indigenous people in Mexico.³ This population size makes Mexico the country with the largest indigenous population on the American continent, and the greatest number of native languages spoken within its borders, with 68 languages and 364 different dialects recorded.⁴

Indigenous communities in Mexico have had agri-business imposed on their lands along with various governmental programs which negatively impact their access to clean water, the health of their families and communities, ecosystems and food resources and their right to consent to policies which affect their lands and lives. In order to survive and engage in the economy, many have worked on farms as labourers. Many communities have suffered severe health effects and deaths from exposure to toxic pesticides. In most cases they were never informed about the known dangers or provided access to address the government and corporate decision-makers responsible for the contamination that affects them so severely. The focus of this submission is the Sonora region of Mexico. In particular, we will present testimonies from members of the eight Indigenous Pueblos of the Yaqui Nation: Belem, Huirivis, Rahum, Pótam, Vicam, Tórim, Bácum and Cócorit.

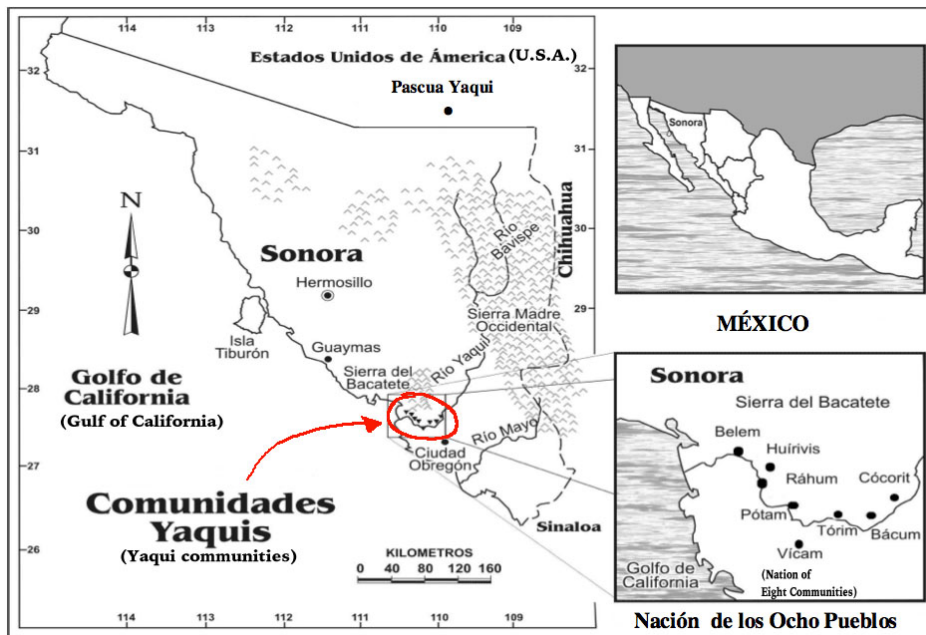


Figure 1 Map of the eight Pueblos of the Yaqui Nation. Source: International Water Security Network

³ A figure that is obtained by adding 6,695,228 “Indigenous language speakers and Population aged 0 to 4 years living with a head of household that is an indigenous language speaker” to the 9,008,246 on the registry of “Population in indigenous census households”.

⁴ Mikkelsen, Cæcilie (Ed.) *The Indigenous World 2014* (Denmark, The International Work Group for Indigenous Affairs (IWGIA), 2014 at page 66

In Mexico, exposure of children to pesticides, metals, and other toxic substances occurs in agricultural, industrial, and mining communities. Children do not experience these exposures one at a time, or in a vacuum. Rather, children are exposed to mixed pollutants in daily life. Children are often considered the most vulnerable to a variety of environmental contaminants, and they are like canaries in a coal mine: reflecting the trends of environmental exposure more accurately than adults.⁵ This submission will set out to describe the contexts and exposures of children of the Yaqui Nation and demonstrate some of the health outcomes resulting from those exposures.

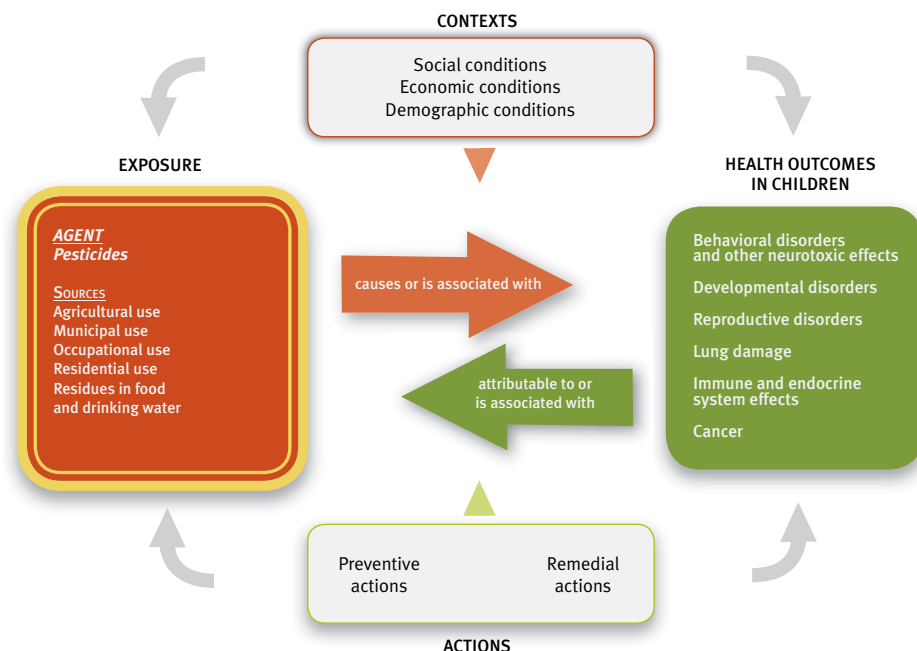


Figure 2 Source: Commission for Environmental Cooperation adapted from Briggs 2003⁶

The Yaqui valley is one of the most important agricultural areas in Mexico. The Green Revolution began in the Yaqui valley between the 1940s and the late 1970s. The valley is situated on a coastal strip along the Gulf of California, and consists of an intensively managed agricultural region amidst a desert scrub forest bordered by estuarine ecosystems that provide critical habitat for migratory and resident water birds, marine mammals, fish, and shellfish populations.⁷ Rural Indigenous Peoples in this region have depended on the health of the natural environment to sustain their traditional food systems and sources (farming, hunting, fishing and gathering) and are therefore severely

⁵ Trejo-Acevedo A, Diaz-Barriga F, Carrizales L, Dominguez G, Costilla R, Ize-Lema I et al (2009) "Exposure assessment of persistent organic pollutants and metals in Mexican children." *Chemosphere* 74:974-980

⁶ Commission for Environmental Cooperation, "Children's Health and the Environment in North America: A First Report on Available Indicators and Measures" January 2006 Online: <http://www.cec.org> at 66

⁷ Flores-Verdugo F, Gonzalez-Fariaz F, Zaragoza-Araujo U. In: Seeliger U, editor. *Man-grove ecosystems of the Pacific Coast of Mexico: Distribution, structure, litter fall, and detritus dynamics*. Coastal plant communities of Latin America Academic Press Inc.; 1992. p. 269-88.

impacted by environmental contaminants including agro-chemicals. Indigenous communities also use traditional plant and animal medicines as part of their cultural identities, healing and ceremonial practices. When these are contaminated, Indigenous cultures as well as overall community health are impacted.

Ecological change for the Yaqui has been rapid due to agricultural intensification. The Yaqui valley produces 40% of Mexico's annual wheat output.⁸ Historically, large amounts of pesticides or agrochemicals were commonly used in the Yaqui valley including herbicides, carbamates, organophosphates, fungicides, organochlorines and pyrethroids.⁹ These pesticides are chemical substances or mixtures formulated for preventing, controlling, repelling, or mitigating any pest, including animals, plants and fungi. Categories of pesticides include insecticides for killing insects, herbicides for controlling weeds, fungicides for controlling fungi (e.g., on fresh produce), and rodenticides used to kill rodents such as rats and mice.¹⁰ For the purposes of this Report, it is also important to understand that persistent organic pollutants (POPs), a particular subset of those chemicals that continue to be identified under international law, are resistant to breakdown and are associated with different health problems, including teratogenic and carcinogenic effects. POPs are persistent, toxic, and bioaccumulative in nature because they are biomagnified through the food chain. Many pesticides, whether considered POPs or non-persistent, are endocrine disruptors.

Endocrine disruptors mimic or block hormones, and at nearly infinitesimal amounts, these chemicals cause harm to the system responsible for development and healthy functioning of animals and human beings. The endocrine system regulates the body by sending signaling molecules and hormones into the bloodstream. Interfere with that process, as endocrine-disrupting chemicals do, and you get deadly diseases and birth defects.¹¹

This submission will detail scientific, legal, policy and other standards relating to the crises faced by Indigenous Peoples of the Rio Yaqui Sonora region. However, by far the most important voice in this submission is that of the children.

⁸ Lobell DB, Asner GP, Ortiz-Monasterio JI, Benning TL. "Remote sensing of regional crop production in the Yaqui Valley, Mexico: estimates and uncertainties." In: *Agric. Ecosyst. Environ.* 2002;194:1-16.

⁹ Garcia de Llasera MP, Bernal-Gonzalez M. Presence of carbamate pesticides in environmental waters from the northwest of Mexico: determination by liquid chromatography. *Wat. Res.* 2001;35(8):1933-40. See also: Cantu-Soto EU, Meza-Montenegro MM, Valenzuela-Quintanar AI, Fe'lix-Fuentes A, Grajeda-Cota P, Balderas-Cortes JJ et al (2011) "Residues of organochlorine pesticides in soils from Southern Sonora, Mexico." *Bull. Environ. Contam. Toxicol.* 87:556-560

¹⁰ Commission for Environmental Cooperation "Toxic Chemicals and Children's Health in North America: A Call for Efforts to Determine the Sources, Levels of Exposure, and Risks that Industrial Chemicals pose to Children's Health" (2006) Montreal, Canada: Commission for Environmental Cooperation Online: <http://www.cec.org> at 13

¹¹ Vallianatos, E.G. *Poison Spring: The Secret History of Pollution and the EPA* (New York: Bloomsbury Press, 2014) at page 118

A tragic case is that of Cristian Molina Garcia,¹² born with multiple birth defects after his mother was exposed to toxic pesticides working without protection while a 17 year-old pregnant field worker. Cristian was never able to walk and his growth was permanently stunted. He passed away as a result of his birth defects at age 13 on March 15th, 2008. His was the first, but far from the last case presented by the IITC to UN Special Procedures since that time.

Another very difficult death to report is the passing on April 11th, 2013 of two-year old Juan Antonio Rodriguez Coronado shown in a video testimony¹³ provided in this submission. His medical report diagnosed him as born with cirrhosis of the liver. His family home in Vicam Rio Yaqui is on the flight path of airplanes spraying pesticides overhead, including in the residential areas where he lived.

The import of banned and dangerous toxics from the “developed/industrialized” to Mexico continues, with impacted Indigenous and other communities at the bottom end uninformed, sickened and killed. It should be noted with concern that the production and export of banned pesticides by other countries to Mexico is permitted under international law (the *Rotterdam Convention* discussed later in this submission), 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.

The International Indian Treaty Council has worked very hard to address the issues raised in this submission through advocacy, engagement and initiatives over a number of years. A brief and truncated summary of this work follows.

In May 2006, an International Indigenous conference, "Pesticides: The Threat to our Community Health and the Environment, Knowing our Rights, Exploring Alternatives and Working Together for a Healthy Future", was held in Potam Rio Yaqui, attended by over 300 participants from 16 Indigenous communities in 3 countries as well as health workers, scientists, and environmental advocates.¹⁴ In December 2006, a first-of-its-kind Declaration by Yaqui leaders was presented to the press and public, prohibiting aerial spraying of pesticides as an assertion of their human rights. This Declaration is attached to this submission under Annex B. This widely-publicized Declaration continues to be used by Tribal communities in Mexico as an example of the exercise of Tribal sovereignty and Free Prior and Informed Consent in defense of human rights, health, traditional food systems and natural ecosystems.

¹² See Testimony #5 in Annex A of this Submission.

¹³ See Testimony #29 in Annex A of this Submission. Access video testimony Online: <https://www.youtube.com/watch?v=e8MU9enE8jo>

¹⁴ Resolutivos Del Taller Soluciones y Plan de Acción: *Plaguicidas: La amenaza a nuestra salud comunitaria y al medioambiente; conociendo nuestros derechos, explorando las alternativas y trabajando juntos por un futuro saludable* La Guardia Tradicional, Potam Pueblo, Río Yaqui, Sonora, México, 29-31 de mayo de 2006 Online: <http://cdn7.iitc.org/wp-content/uploads/2013/07/Soluciones-y-Plan-de-Accion-taer-de-Potam.pdf>

In July 2010 IITC co-coordinated a historic gathering in Vicente Guerrero, Tlaxcala Mexico, “*Pueblos Indigenas Y Plaguicidas: Nuestra Tierra, Nuestros Derechos, Nuestro Futuro*” (“*Indigenous Peoples and Pesticides: Our land, our rights and our Future*”).¹⁵ It was attended by over 60 Indigenous representatives representing 9 Indigenous Nations and organizations. The Declaration from the conference called, among other recommendations, for the establishment of “pesticide free zones” and the organization of an Indigenous Peoples International Conference on Corn and traditional knowledge, which was held September 27 – 29, 2012 in Oaxaca Mexico. The *Declaration of Santo Domingo Tomaltepec*¹⁶ from that conference, attended by representatives of 48 Indigenous Peoples, communities and Nations from 6 countries and territories, reaffirmed the importance of establishing Indigenous Peoples’ food sovereignty zones free of pesticides, GMO’s and extractive industries. It also called for revitalizing traditional trade relationship and creating Indigenous Peoples’ Food Sovereignty Zones to promote, protect and exchange traditional methods, seeds, knowledge and sustainable, pesticide and GMO-free growing practices.

Indigenous women from the US, Alaska, Canada, Mexico, Guatemala and New Zealand participated in the “*International Indigenous Women’s Environmental and Reproductive Health Symposium*”, organized by IITC in Alamo, CA in June 30 – July 1, 2010.

Participants in this first Symposium from the North America, Latin America, Pacific, and Arctic and Caribbean regions summarized the impacts:

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 mothers 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.¹⁷

¹⁵ See the outcome document from this Conference: Declaración de Vicente Guerrero: 24 de Julio de 2010, Online: <http://cdn7.iitc.org/wp-content/uploads/2013/07/taller-agroquimicos-Vicente-Guerrero.pdf>

¹⁶ See the outcome document: *The Declaration Of Santo Domingo Tomaltepec September 30th, 2012 “La Lucha Sigue, El Maiz Vive” (The Struggle Continues, The Corn Lives)*, Online: http://cdn5.iitc.org/wp-content/uploads/2014/08/CORNCONFERENCEDDECLARACION-final-September-30th-2012_web.pdf

¹⁷ “Declaration for Health, Life and Defense of Our Land, Rights and Future Generations”, 1st International Indigenous Women’s Environmental and Reproductive Health Symposium, June 30 – July 1, 2010, submitted to the UN Permanent Forum’s 10th session as Conference Room Paper [E/C.19/2011/CRP. 9]

A second Symposium was held in April, 2012 in Chickaloon Village Alaska, attended by 52 Indigenous women and girls from 5 regions of the world between the ages of 14 and 89. It produced the 2nd “*Declaration for Health, Life and Defense of Our Land, Rights and Future Generation.*” The Declaration from the second Symposium included recommendations for states, Indigenous Peoples and the UN systems and international processes. For the purpose of this submission, the following recommendations are of particular relevance:

Recommendations for States and their Subsidiary Governments:

- 2) Eliminate the production and use of pesticides, industrial chemicals and toxic by-products that disrupt the endocrine system, affect learning and neurological development, cause cancers and other illnesses, undermine women’s reproductive and maternal health, contaminate lands, waters and traditional food sources and affect any aspect of the health and development of our future generations.
- 3) Take responsibility for effective and immediate clean-up of contaminated sites created by activities which they permitted or approved in collaboration and coordination with impacted Indigenous Peoples.
- 4) Implement programs to restore the health of Indigenous Peoples, including women and children who have been negatively impacted by environmental toxins, including their export and import in collaboration and coordination with the affected Indigenous Peoples including Indigenous women.
- 5) Immediately cease the practice of exporting and importing banned pesticides, toxic wastes and other chemicals in particular from the United States.¹⁸

During the UN Permanent Forum on Indigenous Issues (UNPFII) Expert Group Meeting (EGM) in January 2012 on “*Combatting Violence Against Indigenous Women and Girls*” the International Indian Treaty Council in conjunction with the Native Village of Savoonga in Alaska, presented a paper titled “*Indigenous Women and Environmental Violence, A Rights-based approach addressing impacts of Environmental Contamination on Indigenous Women, Girls and Future Generations.*”¹⁹ This paper also is directly relevant to the current submission and can be downloaded from the UNPFII’s web page.

The paper presented the human rights framework affirming the rights of Indigenous Peoples, including Indigenous women and children, and providing the context for addressing human rights violations caused by the deliberate exposure by States and corporations to toxic contaminants including pesticides which are known to have devastating impacts on reproductive health. It also documented the policies and practices of corporations and State governments which can be identified as “*environmental violence*” in this regard. This term and concept was recognized in the report of that EGM to the

¹⁸ Report Of The International Indigenous Women's Environmental And Reproductive Health Symposium April 27th – 29th 2012, Chickaloon Native Village, Alaska Online: <http://cdn6.iitc.org/wp-content/uploads/2013/08/FINALREPORTOF2nd-INTERNATIONAL-INDIGENOUSWOMENSYPwith-namesFIN.pdf>

¹⁹ This paper can be downloaded in its entirety from the UN Permanent Web Site under documents submitted for the Expert Group Meeting via http://www.un.org/esa/socdev/unpfii/documents/EGM12_carmen_waghiyi.pdf

UNPFII 12th session as well as in the Lima Declaration from the International Conference of Indigenous Women in October 2013.²⁰

The commitment to pesticide-free growing practices was reiterated in the *Okmulgee Declaration from the 2nd International Indigenous Peoples Conference on Corn, "Corn is a Gift From the Creator,"*²¹ which was held September 8 - 9, 2014 in Okmulgee Oklahoma, co-sponsored by IITC and the Mvskoke Food Sovereignty Initiative and attended by Indigenous Peoples from the US, Mexico and 6 other countries and territories.

In 2013 IITC worked with a film crew from the Pesticide Action Network who are producing a feature-length documentary on human rights impacts of pesticides and reached out to IITC to include the situation in Rio Yaqui Sonora Mexico. IITC guided the film crew in Rio Yaqui during two days of filming in Rio Yaqui with the permission of the traditional Yaqui authorities. Many Yaqui community members, including the family of a young boy who died soon after filming from birth defects caused by pesticide contamination, presented testimony for the film to be entitled "*Toxic Profits*" with anticipated release in 2015.

It is the hope of the International Indian Treaty Council and co-submitters that the Committee on the Rights of the Child can build on this momentum and make a significant contribution to elucidation and description of Indigenous children's rights respecting environmental health through the current Review of Mexico.

The Review of Mexico

As set out in the Common Core Document submitted by Mexico to the CRC for the purposes of this Review, Constitutional amendments occurred to recognize specific rights for children (2000 and 2011) and recognize the rights of Indigenous Peoples (2001).²² Mexico also has a National Human Rights Commission.²³ The challenge is that, like other states, Mexico has not achieved symmetry between their laws respecting human rights and their

²⁰ Specifically, the Lima Declaration stated: "There is an urgent need to implement the rights enshrined in the UN Declaration on the Rights of Indigenous Peoples. Indigenous women are active human rights defenders of all individual and collective human rights of our peoples. We often bear the burden of social and **environmental harms arising from the consistent denial and violation of our human rights and the lack of implementation and accountability of States.** Indigenous women and girls experience multiple forms of discrimination, lack of access to education and health care, high rates of poverty, maternal and child mortality. We are subject to all forms of violence, such as domestic violence and sexual abuse, including in the contexts of trafficking, armed conflict, **environmental violence** and extractive industries." (emphasis added) Online: http://www.un.org/en/ga/president/68/pdf/6132014Lima-Declaration_web.pdf

²¹ See the outcome document *2nd International Indigenous Peoples Corn Conference VCE OHFVNKV EN HEROMKV ("Corn is a Gift from the Creator")The Okmulgee Declaration September 9th, 2014* Online: http://cdn5.iitc.org/wp-content/uploads/2014/11/FINAL-Okmulgee-Declaration-2nd-Corn-Conference-ENGLISHrev1_web.pdf

²² UN Doc HRI/CORE/MEX/2012 at page 39

²³ Ibid. at page 43

laws respecting the environment and the use of toxins. Pesticides are regulated in Mexico by the Ministries of environmental, health, plant health, animal health, labor, and regulation for transportation. Also, indirectly, there are diverse customs and foreign trade regulations that must be observed in their handling.

The laws involved are: The General Law of Ecological Balance and Environmental Protection, through its regulations on environmental impact regarding dangerous residues; The Federal Law of Plant Health; The Federal Law of Animal Health, Customs Law, General Health Law, through its regulations regarding health control of activities, establishment, products, and services; Federal Labor Law, through its regulations on safety and hygiene at workplaces; and the Law of Roads, Bridges, and Terrestrial Transportation. Specifically, the use of pesticides in Mexico is regulated by CICOPALFEST (Inter-secretarial Commission for the Control and Use of Pesticides, Fertilizers, and Toxic Substances), constituted in 1987.

The *Secretaría de Salud* is in charge of supervising public health in Mexico. This responsibility includes cases of exposure and intoxication with persistent, bioaccumulative, and toxic substances (PBTS). Nevertheless, the SSA only infrequently carries out monitoring programs in some cases in specific subgroups of the population. Consequently there is little organized information regarding formal inventories or assessments about exposure and risk to these chronic toxicants.²⁴

CICOPALFEST includes the Ministries of Agriculture, Environment, Health, and Commerce and Industrial Foment (currently the Secretary of Economy), through a catalogue of registered products and their authorized uses. Its function is to carry out a uniform and integral procedure for the solution of registry requests, authorizations regarding pesticides, fertilizers, and toxic substances, as far as: exploitation, fabrication, formulation, mixing, conditioning, packaging, handling, transportation, distribution, application, storage, commercialization, keeping, use, and final disposal. Moreover, it contains the list of prohibited and restricted products in the country.

In the Official Catalogue of Pesticides, the chemical products are listed, per crop, the pesticides approved for control of plant health problems, safety intervals (days after application before to harvest), and maximum limits of residues authorized for each product (maximum amount of the active ingredient legally allowed in or on the agricultural product obtained, expressed in ppm). It also contains Technical information such as: Chemical name, synonyms, commercial name, formula (%), presentation, chemical structure, molecular weight, type of pesticide, classification, use, physical and chemical properties, hazard, and persistence. The official catalogue of pesticides constitutes an important reference to those that have been registered by the CICOPALFEST.

However, just because there is a registry does not automatically make people safe.

²⁴ Commission for Environmental Cooperation, "A Limited Compendium of National and Regional Environmental and Human Data Sources and Monitoring Initiatives in Canada, Mexico and the United States (2009) Montreal, Canada: Commission for Environmental Cooperation Online: <http://www.cec.org> at 49

Mexico continues to import and use highly hazardous pesticides, including at least 42 pesticides that are suspected human carcinogens, with allowances for 85 active ingredients for agricultural use that are not permitted in the European Union. "In Mexico they authorize and use highly hazardous pesticides banned in many other countries, including the European Union, and RAPAM asks for a policy to reduce such use and promote agroecological alternatives," said Fernando Bejarano, director of the Action Network Pesticides and Alternatives in Mexico (RAPAM).²⁵

The lack of congruency between human rights standards and environmental laws is glaringly apparent in the content of the Fourth and Fifth Periodic Reports of Mexico²⁶ submitted to the CRC for the purposes of their Review. In their Report, Mexico details initiatives and developments relevant to Article 24 of the Convention on the Rights of the Child, without ever mentioning environmental health. Unfortunately, Mexico was unable to provide any additional updated information regarding Article 24 in their Addendum to the Fourth and Fifth Periodic Report on the Implementation on the Rights of the Child (submitted to the CRC in June of 2014).

This is in spite of a past concluding observation of the CRC, from 2006:

The Committee reiterates its previous recommendations (see document CRC/C/15/Add.112, paras. 26 and 27), in particular, its recommendation that the State party implement all necessary measures to reduce the persistence of regional disparities in access to health care, the high rates of malnutrition among children under 5 years of age and those of school age, especially in rural and remote areas and among children belonging to indigenous groups. It also recommends developing interventions programmes for the new challenges that emerge from the globalization and the urbanization process: child obesity **as well as environmental health**. (emphasis added)²⁷

Mexico has not responded to this concluding observation of the CRC, at least in any posted or publicly available documentation.

The only significant update provided by Mexico on its Fourth and Fifth Periodic Report was including in the Addendum submitted to the CRC in para 15 on page 10:

On November 30th, 2012 the Federal Labor Act²⁸ was amended in order to incorporate into its article 176 a list of dangerous or unhealthy work prohibited for all minors no matter their age, as established by ILO Convention 182 on the worst forms of child labor, ratified by Mexico on 30 June 2000.

²⁵ Bejarano, Fernando "Mexico: Urgent policy aiming to reduce the use of Highly Hazardous Pesticides and Promote Agroecological Alternatives" (3/21/2104) Online: <http://www.rapam.org.mx> and at: <http://semana-sin-pesticidas.org>

²⁶ UN Doc CRC/C/MEX/4-5 see pages 36-38

²⁷ UN Doc CRC/C/MEX/CO/3 (8 June 2006) at para 49

²⁸ For further information, please visit: <http://www.diputados.gob.mx/LeyesBiblio/pdf/125.pdf>

There is a Mexican Labor Safety Standard related with Pesticides, Fertilizers and Vegetal Nutrition inputs. The stated objective is to “[s]et the safety and hygiene conditions to prevent the risks of exposure from workers that are conducting activities related with storage, transport and use of phytosanitary inputs, pesticides and nutrition inputs or fertilizers.”

The Labour Safety Standards requires that women under 18 years of age, pregnant women or lactating women avoid activities that constitute occupational exposure, such as those that directly are involved in the storage, transport, use or triple wash of containers. The Labour Safety Standard also contains an obligation to inform all workers about risks of pesticide exposure according to label or safety data sheet. The Standard requires that only pesticides with legal actual registration by CICOPLAFEST can be applied. The Standard also includes the obligation to keep a list of training, provide protective personal equipment, water soap etc.; to avoid the storage and management of pesticides near water supplies or food preparation; and requirements of aerial pesticide spraying.

Unfortunately, there are significant examples of situations where such standards are violated or not met at all. For example, in April of 2013 in Atitalaquia, Hidalgo, Mexico there was an explosion at a pesticide plant leading to the evacuation of over 2000 people. Mexican Environmental Attorney’s office, Salvador Aguilar, said that the Tula-Tepeji region is one of the most polluted in the world, verifying that reviews performed by his office over the year before the incident, that of the 2600 industries in Hidalgo, only five percent complied with environmental regulations.²⁹

There are other established frameworks in Mexico for tracking the release of chemicals. Information about the amounts of chemicals being released from industrial facilities into the environment in Mexico is available through national pollutant inventories, known as pollutant release and transfer registers (PRTRs). Mexico is implementing mandatory reporting under its PRTR, the Registro de Emisiones y Transferencia de Contaminantes (RETC), which until 2005 had been voluntary. PRTR data provide important insights into the large amounts of chemicals entering the environment each year from industrial releases but they tend to underestimate the actual loads of chemicals into the environment because inventories, by design, collect information on a limited list of chemicals released or transferred, and only from larger industrial facilities. Most importantly for this Report, the data **do not** include emissions from agricultural sources (i.e., pesticide use), mobile sources, small sources, consumer products or natural sources.³⁰

Our research revealed no up to date sources of data from Mexico regarding pesticide exposure, biomonitoring or pesticide poisonings.

²⁹ Las comunidades que registraron evacuaciones fueron la colonia 18 de marzo, El Dendho, Bojay, Cardonal, Osorio de León, Cardonal, y Tlamaco.

Fuente: http://www.elmanana.com/diario/noticia/nacional/noticias/evacuan_a_miles_en_hgo_tra_s_estallido_en_planta/2030862

³⁰ Supra note 10 at viii

It is believed that pesticide poisonings are under-recorded in Mexico for various reasons, including the relative inaccessibility of health services, under-reporting by physicians in private practice, lack of knowledge as to the real population at risk, inadequate diagnostic training for physicians visiting rural communities and lack of training in safe handling of toxic substances in the workplace.³¹

This has been the case since at least 2004, when the IITC communicated the situation of the dangerous and possible illegal use of these dangerous chemicals and pesticides to Mr. Okechkwu Ibeanu, Special Rapporteur of the Commission on Human Rights on Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, as well as to Mr. Rodolfo Stavenhagen, the Commission's Special Rapporteur on the Human Rights And Fundamental Freedoms of Indigenous Peoples.

The Mexican government responded to Mr. Ibeanu in 2005 (E/CN.4/2005/45/Add.1, pp. 2-3) stating that the matter had been referred to COPREFIS, the Federal Commission for Protection from Sanitary Risks of the Ministry of Health, an agency that the Mexican government reports has conducted training-of-trainers workshop, run in 2002 in the State of Sonora, the purpose of which was to ensure the proper management of pesticides in the Yaqui Valley area. We have spoken to our contacts in the community, and the community was not aware of any such training, nor were they informed that it would take place. Perhaps a more appropriate human rights response would have been assurances that the Yaqui Traditional Authorities of the eight Pueblos would be contacted and that such training would in fact take place.

In 2006, the Mexican government responded to further communications to Mr. Ibeanu, outlining the federal agencies involved in the regulation and use of pesticides, generally as stated above. The government made no mention of steps taken to investigate or correct the situation, stating that, "three cases of pesticide poisoning were reported in 2003 in the Yaqui valley, and five cases in 2004. According to reports issued by the Directorate-General for Health Regulation and Promotion, no complaints concerning illnesses deriving from pesticides or other toxins in the Yaqui valley have been filed with the local health authorities. Consequently, no studies or comparative analyses on the incidence of pesticide-related diseases has been carried out in the Yaqui Valley."³²

In 2008 Mr. Ibeanu reported a further response from Mexico.³³ Mexico responded by re-stating that SAGARPA, a federal agency had conducted training for trainers to attend the problem in the Yaqui area and that 4 of the attendees would be assigned to the Yaqui Tribe.

³¹ Mexico Secretariat of Health, "Country Report Mexico: Children's Health and the Environment in North America A First Report on Available Indicators and Measures" December 2005 Published by the Commission for Environmental Cooperation Online: <http://www.cec.org> at 39

³² Cited in 2008 in the IITC Submission on the Universal Periodic Review of Mexico. Submission is referenced in UN Doc A/HRC/WG.6/4/MEX/3

³³ UN Doc A/HRC/7/21/Add.1 5 March 2008, Page 17, paras 52 -53

These persons would train and inform the population exposed to pesticides on the risks to their health. Other training programs were offered to doctors in the area on pesticides poisoning, on pesticides used in the growing of vegetables, and stated that a centre was being established for the recycling of pesticide and chemical containers. The response also stated that it had begun a regulatory process (NOM-033-STPS-1999) on the use of phylsanitaries or pesticides and their consumption where they are stored, transported or managed. Finally, the government announced a program of training for agriculturalists and commercial producers of agricultural pesticides in the Yaqui Valley and a program of verification for these types of establishments.

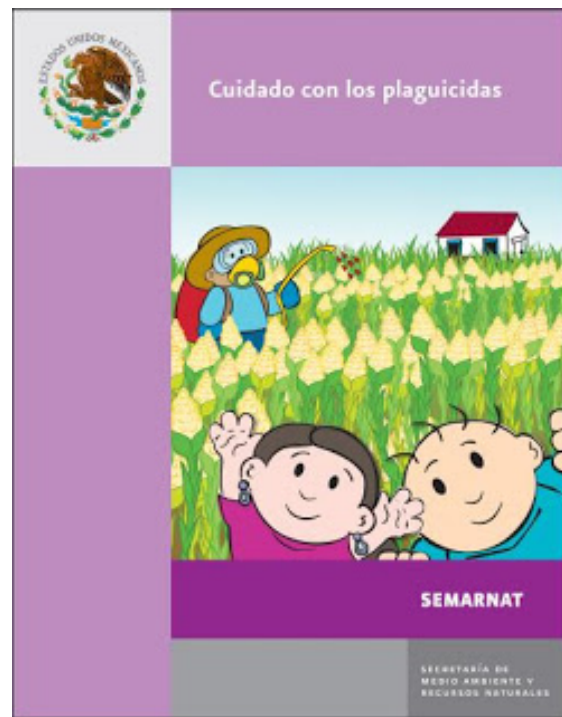
In spite of these efforts the training offered was merely on how a worker could protect him or herself, and the need for specialized clothing and protective gear that the worker could not afford. Mayo Indigenous workers reported that when they approached their employers on the need for this protective gear, they were told that they worked under the conditions offered by the employer or they would not work. And although the Mexican government also offered radio announcements on the “proper” use of pesticides, they are very few and far between, normally when people are asleep.

Mr. Angel Valencia, Coordinator of the Red Indigena Contra Plaguecidas (Indigenous Network against Pesticides) intervened at a meeting of the North American Free Trade Agreement’s (NAFTA) Commission for Environmental Cooperation (CEC). His oral intervention at the meeting of the CEC Sound Management of Chemicals Working Group, held in Monterrey Mexico in April of 2007 and presented the problem of the toxic effects of chemical pesticides on members of his Yaqui Tribe, and delivered the Declaration from their Conference, as referenced elsewhere in this submission.

In response to this intervention, the SEMARNAT emailed a request that Mr. Valencia identify the pesticides complained of and/or their chemical composition and citing web pages where information can be found on pesticides that are permitted in Mexico. This was a fruitless request as these pesticides are not actually identified in most cases. When the canisters do have labels, they often offer no information on the name or chemical composition of the substance. More often than not, they have no label or identifying information at all, simply a skull and crossbones.³⁴

³⁴ Supra note 32

The email from the SEMARNAT officials also contained a booklet, attached, called “Cuidado con los Plaguicidas” or “Careful with Pesticides”. It is directed at children who may live in areas exposed to pesticides. Although the first few pages correctly state the dangers of pesticides and their adverse effects on the health of children and women, the booklet’s advice to children is to run away from exposure (at page 12). Our submission has been about the lack of information on the chemicals used, the suspected use of banned pesticides, and our concern about improper application. It is difficult for children to run away from aerial spraying when it occurs without warning over their homes or in fields adjacent to their schools.



We are informed by Mr. Valencia that these SEMARNAT officials also offered to do training for the residents of Rio Yaqui. However, according to local community members, no such training has taken place, nor has any protective equipment been provided to people in Rio Yaqui valley.

...farmworkers, especially migrant workers, being at the very bottom of the socioeconomic ladder, carry little ammunition to counter the powerful voices of industry lobbyists.³⁵

Farm workers have families, and in the case of the Indigenous Pueblos of the Yaqui Nation, they live adjacent to the land where pesticides are being used prolifically. It impacts them through environmental exposures (water, soil, air and others).

With little public education, the ongoing need for labor and the requirement of families to ensure financial incomes, the challenges faced by the Yaqui Nation are ongoing. The main concern raised by this submission is regarding the particular impacts on children.

In April of 2011, the American Academy of Pediatrics released a major report on childhood exposure to toxic chemicals. The Academy wrote: “As children grow and mature, their bodies may be especially vulnerable to certain chemical exposures during critical windows of development. Neurological and endocrine systems have demonstrated particular sensitivity to environmental toxicants at certain stages of growth. These differences in biological susceptibility and exposures in children versus adults support the need for

³⁵ Supra note 11 at p. 108

strong consideration of children in chemicals policies. This principle must underpin all chemical-management legislation and regulation.”³⁶

The question then becomes, how can Mexico and the peoples of Mexico, including the Yaqui Nation, work towards a better future for children and a healthy environment?

In their 2006 wrap up report on Children’s Health and the Environment, the CEC made recommendations that are particularly relevant. The CEC suggested that states institute biomonitoring programs to measure the levels of pesticides and/or their metabolites in children’s blood and urine, which would provide the best measure of a child’s exposure to pesticides from multiple sources.

While some data has been created that begins to set a baseline (see the review of a 2012 scientific study, above), it is vital that Mexico begin biomonitoring in order to understand the current status of health impacts of pesticides on children, in particular in agriculture intensive regions like the Yaqui valley. In the same report, the CEC recommended:

- Health effects surveillance could provide additional information on the adverse health effects in children associated with pesticide exposure.
- In addition to organophosphates, future indicators could address other classes of pesticides that may be of concern.
- Data from poison-control centers and emergency clinics for pesticide poisonings, like those reported by Mexico, should be examined for potential use in the future.
- Data from state/provincial information systems to develop case study reports from exposure to pesticides should also be examined for potential use.³⁷

Scientific Studies

The Guillette Studies

In 1997 a groundbreaking and highly impactful study was conducted in Yaqui Indian communities in Sonora, Mexico by scientist Dr. Elizabeth Guillette with others.³⁸ Since the late 1940’s this area was targeted by the green revolution promoting heavy use of chemical pesticides and fertilizers as well as hybrid strains of commercial corn and other food crops to replace traditional seeds and cultivation methods. Dr. Guillette’s ground breaking study detected high levels of multiple pesticides in the cord blood of newborns and in mothers’

³⁶ Paulson, Jerome et al. “Policy Statement Chemical Management Policy: Prioritizing Children’s Health” In: *Pediatrics*, April 25, 2011, 983-90

³⁷ Supra note 10, at 69

³⁸ Guillette, Elizabeth A., María Mercedes Meza M., Maria Guadalupe Aquilar A., Alma Delia Soto A. and Idalia Enedina Garcia C. “An Anthropological Approach to the Evaluation of Children Exposed to Pesticides in Mexico” In: *Environ Health Perspect* 106:347-353 (1998) Online: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1533004/pdf/envhper00529-0083.pdf>

milk, and found severe learning and developmental disabilities as well as birth defects and cancer in Yaqui children living in high pesticide use areas, compared to children living in areas with less or no exposure.

With regard to birth defects, learning and development disabilities, leukemia and other severe health problems found in Yaqui children, the study in combination with testimonies from community members attached to this submission, 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:

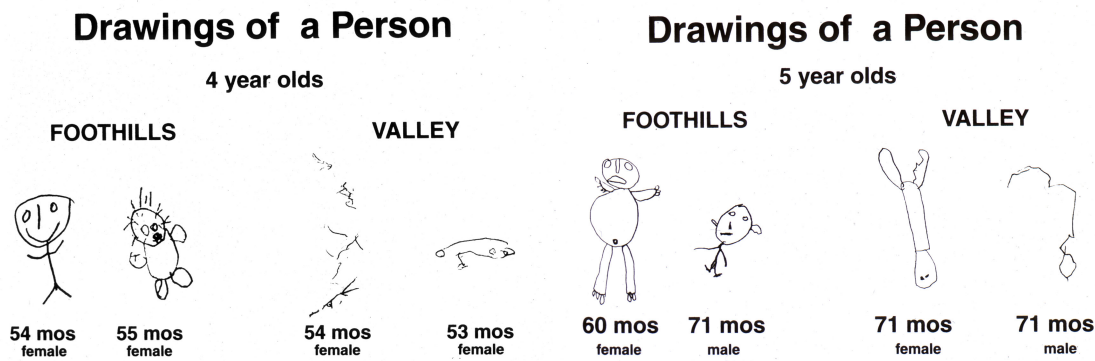


Figure 3: Guillette et al. (1997)

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. Finally, Dr. Guillette’s study documented the resulting high levels of pesticides found in the cord blood of newborns and in mother’s milk:

Pesticide	Cord Blood (ppm)	Milk (ppm corrected for fat)
N	19	20
α -HCH	0.030 \pm 0.03	0.8599 \pm 2.75
β -HCH	0	0.3791 \pm 1.08
Lindane	0.084 \pm 0.06	0.6710 \pm 0.59*
Δ -HCH	0.0039 \pm 0.1	0.4432 \pm 0.84
Heptachlor	0	1.269 \pm 1.65*
BHC	0.003 \pm 0.002	0.6270 \pm 0.66*
Aldrin	0	0.2363 \pm 0.59*
Dieldrin	0.159 \pm 0.12	0.0487 \pm 0.08
Endrin	0.022 \pm 0.02	0.5238 \pm 1.1*
p,p'-DDE	0.03 \pm 0.03	6.31 \pm 5.9
γ -DDE	0.0434	6.52*

Figure 4: Guillette et al. 1997

*All exceed FAO/OMS established limits

In a second study, carried out in 2006, Elizabeth Guillette et al. the design was 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.³⁹ 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)”⁴⁰

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.

³⁹ Vizcaino, Esther, Joan O. Grimalt, Ana Fernández-Somoano, Adonina Tardon “Transport of persistent organic pollutants across the human placenta” In: Environment International 65 (2014) 107–115 Online: www.elsevier.com/locate/envint

⁴⁰ Guillette, Elizabeth A., Craig Conard, Fernando Lares, Maria Guadalupe Aguilar, John McLachlan, and Louis J. Guillette Jr. “Altered Breast Development in Young Girls from an Agricultural Environment” In: Environ. Health Perspect. 114:471–475 (2006). doi:10.1289/ehp.8280 available via <http://dx.doi.org/> [Online 10 November 2005]

Recent Studies on Pesticides and the Rio Yaqui

A more recent study (2009) was carried out to assess the exposure of children to different organochlorine pesticides, arsenic, and lead in the Yaqui and Mayo valleys of Sonora to generate population baseline levels of these toxins. A cross-sectional study was undertaken in 165 children (age 6–12 years old) from 10 communities from both valleys during 2009. What they found was that DDT (a chemical outlawed under the Stockholm Convention) was detectable in 100% of the children's samples and at concentrations greater than any other pesticide measured. In addition, the study found that a significant percentage of children's samples contained endosulfan, a type of organochlorine pesticide that is still being used in Mexico despite being prohibited in industrialized countries like the United States.⁴¹

To our knowledge, there are no published reports to date regarding the levels of endosulfan in children in Mexico, in spite of the prohibition of endosulfan in countries like the US as well as the listing of endosulfan under the Stockholm Convention (POPs). Fernando Bejarano has advocated for greater attention to the impacts of endosulfan due to the fact that it is an endocrine disruptor.⁴²

The results from the 2009 study, according to the authors, demonstrated that it is important to start a risk-reduction program to decrease exposure to these toxins in Mexican communities. In addition, the results were offered to be used to establish the baseline levels of exposure to these toxins in this agricultural region and as a reference point for regulatory agencies.

A study published in 2012 demonstrated that it is not only the pesticide contamination and health impacts that the Yaqui Peoples have to face, but also the additional load of metal pollution and the cumulative risk to health of children in particular.⁴³ The Yaqui soils

⁴¹ See the following description from the final decision of the Permanent Peoples Tribunal: Session on Agrochemical Transnational Corporations, Bangalore, 3-6 December 2011 Online: <http://www.internazionaleleliobasso.it>: "The poisoning with endosulfan, an insecticidal organochlorine pesticide (produced by Bayer). It is used on crops such as cashews, tea, coffee, cotton, fruits, vegetables, rice, and grains. The long term use and aerial spraying of endosulfan in plantations has led to severe suffering of many communities who work in these plantations or live in their vicinity. Endosulfan is a persistent organic pollutant (POP) which remains in the environment, bio-accumulates through the food web, and does not decay with long-range transport. As an immune system and endocrine disrupter it is highly toxic to humans and wildlife. Direct exposure of humans, i.e. coming in contact with the spray on the ground when applied by helicopter, has resulted in irreversible paralysis and death. Long term exposure has resulted in significant congenital, reproductive, neurological damage and other health effects. By 2011, endosulfan was banned by more than 80 countries...."

⁴² Bejarano Fernando (2009) La regulacion internacional de los plaguicidas altamente peligrosos y sus implicaciones para Mexico. In: Sanchez SE, Ortiz HL, Olvera VA, Folch MJ (eds) La situacion de los plaguicidas en Mexico: Impactos y perspectivas. Cuernavaca, Morelos, 56–59

⁴³ Meza-Montenegro, Maria A., A. Jay Gandolfi, María Ernestina Santana-Alcántar, Walter T. Klimecki, María Guadalupe Aguilar-Apodaca, Rafael Del Río-Salas, Margarita De la O-Villanueva, Agustín Gómez-Alvarez, Héctor Mendivil-Quijada, Martín Valencia, Diana Meza-Figueroa "Metals in residential soils and cumulative

contained more lead, copper, chromium, and zinc than those from Italy, China, Iran, Serbia, and Spain. Chromium, lead and zinc concentrations for the Yaqui and Mayo soils exceeded maximum agricultural soil concentration in some European countries.⁴⁴ Contaminated soils can endanger human health. Exposure of humans to soil is through dust exposure through inhalation and/or ingestion. Common symptoms associated to inhalation include coughing, bronchitis, and nose, eyes and throat irritation.⁴⁵

International Environmental Standards:

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. On 31 May 2001, Mexico signed the Stockholm Convention and later ratified it on 10 February 2003. Currently, the Convention includes 176 State parties that agree to work together toward global elimination of the world's most dangerous chemicals. The Stockholm Convention is an internationally binding treaty that includes provisions to add new chemicals that meet scientific criteria for persistence, long-range transport, adverse effects, and bioaccumulation. In addition to the initial list of twelve chemicals including nine pesticides, which were included in the Convention,⁴⁶ the Parties agreed to add 9 new substances in 2009 and an additional pesticide, endosulfan, in 2011. As outlined elsewhere in this submission, the continued import of banned or restricted pesticides to Mexico and the health impacts on children is of an urgent nature.

The scientific committee of the Stockholm Convention, the "POPs Review Committee" (POPRC), works to determine whether chemicals that are nominated for inclusion under the Convention meet the scientific criteria and warrant global action.

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.

risk assessment in Yaqui and Mayo agricultural valleys, northern Mexico" In: Science of the Total Environment 433 (2012) 472–481 Online: www.elsevier.com/locate/scitotenv

⁴⁴ Ibid at 477

⁴⁵ Calabrese EJ, Stanek EJ, James RC, Roberts SM. "Soil ingestion: a concern for acute toxicity in children." In: Environ Health Perspect. 1997;105(12):1354–8.

⁴⁶ The "dirty dozen" aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex, toxaphene, hexachlorobenzene, PCBs, dioxins, and furans.

However major challenges remain. The 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 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), ongoing concerns of Indigenous Peoples 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.⁴⁷

In November 2006, Mexico began to prepare its National Implementation Plan (NIP)⁴⁸ in order to address the issue resulting from POPs through this international agreement responding to what they perceived as the consensus of the Mexican society after public consultation. Mexico submitted its NIP in February of 2008.

In their NIP, Mexico noted that 66% of workers of the main agricultural areas of northern Mexico (Sonora, Sinaloa and Baja California) are children and women, who are more vulnerable to the effects of POPs.⁴⁹

⁴⁷ United Nations Stockholm Convention on Persistent Organic Pollutants , 5th Conference of the Parties, April 25th 29th, 2011, Geneva Switzerland , Global Indigenous Peoples Caucus Closing Statement , Presented by Monique Sonoquie, International Indian Treaty Council

⁴⁸ <http://siscop.ine.gob.mx/index.html>

⁴⁹ Secretaría De Medio Ambiente y Recursos Naturales (Semarnat) Plan Nacional De Implementación Del Convenio De Estocolmo México Distrito Federal 2007 at page 240 Note 2 Online: http://www.pops.int/%5C/documents/implementation/nips/submissions/Mexico_sp.pdf

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

The Rotterdam Convention 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 informed 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 and other human rights standards that are addressed later in this submission. 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 submission, putting this UN Convention directly at odds with a number of existing UN human rights standards.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

The Basel Convention covers most waste, with the exception of radioactive waste. If a party prohibits the import of hazardous waste, another party must not permit its export to that party. Even if a party has not prohibited the import, other parties must not permit the export of the waste without written consent, or if it does not have the capacity to dispose of the waste in an environmentally friendly manner. Illegal traffic in hazardous waste is made a criminal offence. If waste is illegally exported, the state of export must ensure that the waste is taken back. If this is impracticable, the state of export must ensure that the waste is disposed of properly.

In years past, Mexico only accepted hazardous waste that was being transported there for “recycling” or as “raw materials”. However, research suggests that hazardous waste enters many countries like Mexico through criminal operators as well as through pro forma procedures characterizing it as “recycling” products.⁵⁰ The challenge is whether there exists the capacity and facilities to properly recycle or dispose of hazardous wastes. This topic is beyond the scope of this submission, but worth mentioning as an aspect of the full picture regarding international law on pesticides and toxics.

⁵⁰ Vero-Morales, Luis R. “Dumping in the International Backyard: Exportation of Hazardous Wastes to Mexico” 7 Tul.Envntl.L.J. 353 1993-1994

Agenda 21 and Rio + 20, the World Conference on Sustainable Development, June 2012

In 1972, the United Nations held the World Conference on the Human Environment in Stockholm, Sweden. The resultant Declaration of the United Nations Conference on the Human Environment was the first pronouncement by the international community on the world's environment. Calling for an environment of a quality that permits a life of dignity and well-being, the Conference established the United Nations Environmental Programme (UNEP).

The Stockholm Declaration addressed the issue of the environment and development but left it up to the States to deal with the growing problem of environmental degradation as a result of development throughout the world. The Stockholm Declaration did recognize the connection between human right and the environment, but in its formulation of a right to the environment, it framed this right as an individual right even though the right to the environment, like the rights of self-determination, development, and peace, are all so-called "third generation" collective rights of peoples.

The World Conference on the Environment and Development (Rio) was held twenty years later, in 1992, in Rio de Janeiro, Brazil, leading to an explosion of international activity, including development of international conventions addressing the environment. Principle 22 of the Rio Declaration recognizes that:

Indigenous Peoples and their communities... have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of their sustainable development.

Indigenous Peoples are addressed in Agenda 21, Chapter 26 which calls for a "full partnership" with Indigenous Peoples in the accomplishment of the goals of Agenda 21. Chapter 26.3 calls upon the States to "strengthen and facilitate" Indigenous Peoples' participation in their own development and in external development activities that may affect them.

Another important advance, which was also included in the Stockholm Convention, was the key concept of the Precautionary Principle placing the burden of proof on the corporation or State that chemicals are safe for human and environmental health BEFORE they are produced, used or released. This formula stands as a rights- based alternative to current practices supported by governmental regulatory models such as "risk assessment", "safe management", and "acceptable risk" which allow the continued use and proliferation of chemicals known to be dangerous if their impacts can be "controlled" or limited to low or "acceptable" rates of illness and death.

Agenda 21 Section I, Chapter 6: “Protecting & Promoting Human Health, E. Reducing health risks from environmental pollution and hazards” recognizes that pesticides pose a serious threat to human health. Although Agenda 21 also endorses partnership with Indigenous Peoples, the Precautionary Principle and Free Prior and Informed Consent, in Chapter 19 and 20 it endorses another model altogether regarding the Management of Chemicals and Hazardous Wastes.

In Chapter 19 it states that “the principle of the right of the community and of workers to know those risks [of chemicals] should be recognized. However, the right to know the identity of hazardous ingredients should be balanced with industry’s right to protect confidential business information.”⁵¹ In other words, it proposes that the fundamental right of exposed communities to FPIC be “balanced” with corporate business interests. Chapter 19 paragraph 52 f) also allows for the “export of chemicals that are banned, severely restricted, withdrawn or not approved for health or environmental reasons, except when such export has received prior written consent from the importing country.”⁵²

This provides the basis for similar provisions in the Rotterdam Convention. Indigenous Peoples have challenged these provisions of Agenda 21, and the health and human rights threats they pose, in their statements in preparation for the World Conference on Indigenous Peoples, “Rio + 20” held in June 2012, based on the minimum standard in the UN Declaration on the Rights of Indigenous Peoples, in particular Article 29, in this regard.

The outcome document of Rio + 20 was not what Indigenous Peoples had hoped. However, it did mention Indigenous Peoples in regard to the path forward and, by extension can be understood as support of Article 29:

We stress the importance of the participation of indigenous peoples in the achievement of sustainable development. We also recognize the importance of the United Nations Declaration on the Rights of Indigenous Peoples in the context of global, regional, national and subnational implementation of sustainable development strategies.⁵³

International Human Rights Standards:

Mexico has ratified 9 international Conventions and some Optional Protocols regarding human rights.⁵⁴ Fundamental rights contained in Convention on the Rights of the Child, the

⁵¹ Agenda 21, Chapter 19 paragraph 8

⁵² Agenda 21 Chapter 19, “Environmentally Sound Management Of Toxic Chemicals, Including Prevention Of Illegal International Traffic In Toxic And Dangerous Products”, paragraph 52 f

⁵³ World Conference on Sustainable Development *The Future We Want* at para 49

⁵⁴ International Convention on the Elimination of All Forms of Racial Discrimination, International Covenant on Civil and Political Rights, Optional Protocol to the International Covenant on Civil and Political Rights, Second Optional Protocol to the International Covenant on Civil and Political Rights, aiming at the abolition of the death penalty, International Covenant on Economic, Social and Cultural Rights, Convention on the Elimination of All Forms of Discrimination against Women, Optional Protocol to the Convention on the

United Nations Declaration on the Rights of Indigenous Peoples, ILO Convention 169 and other international norms and standards together provide a framework by which the relevant rights for Indigenous Peoples can be understood and interpreted by the Committee.

The United Nations Declaration on the Rights of Indigenous Peoples

The UN Declaration on the Rights of Indigenous Peoples (the “Declaration”) is a unique instrument in arena of international human rights,⁵⁵ and is of particular importance for this submission to the CRC.

The Declaration represents a compendium of existing human rights understood through the lens of Indigenous Peoples, as well as numerous unique Indigenous rights. The Special Rapporteur on the Rights of Indigenous Peoples has observed: “the Declaration reflects and builds upon human rights norms of general applicability, as interpreted and applied by United Nations and regional treaty bodies.”⁵⁶

The content of the Declaration represents over thirty (30) years of negotiation, collaboration and advocacy of numerous Indigenous Peoples representatives, States and other stakeholders. The Declaration describes the “minimum standards” to be achieved with regard to the rights of Indigenous Peoples in the States in which they exist and live.

When the Declaration was passed by the United Nations General Assembly in September of 2007, one hundred and forty-four states supported it, including Mexico. Only four states voted against it – Australia, New Zealand, Canada and the United States.⁵⁷

Implementation of the Declaration occurs on multiple levels. Paul Joffe, an international lawyer working for Indigenous Peoples, has described the implementation and enforcement of the Declaration as occurring through the development of customary international law, domestic courts, through treaties between Indigenous Peoples and states, and in negotiations with governments. In fact, there are numerous examples of

Elimination of All Forms of Discrimination against Women, Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, Optional Protocol to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, Convention on the Rights of the Child, Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict, Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography, International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families, International Convention for the Protection of all Persons from Enforced Disappearance, Convention on the Rights of Persons with Disabilities, Optional Protocol to the Convention on the Rights of Persons with Disabilities

⁵⁵ Hartley, Jackie, Paul Joffe, and Jennifer Preston *Realizing the UN Declaration on the Rights of Indigenous Peoples: Triumph, Hope and Action* (Saskatoon: Purich Publishing, 2010) at 12

⁵⁶ Human Rights Council, *Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of Indigenous Peoples*, S. James Anaya UN Doc A/HR/9/9 (11 August 2008) at para 85

⁵⁷ *Ibid* at 13

United Nations Treaty Bodies (such as the CERD, cited elsewhere in this submission) and UN Special Procedures who have used the Declaration as the lens through which implementation of binding human rights instruments occurs for Indigenous Peoples in state boundaries.⁵⁸

Of particular relevance to our core questions and recommendations to the CRC on the review of Mexico is article 29 of the Declaration:

Article 29

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

For Indigenous Peoples, the Right of Free, Prior and Informed Consent (FPIC) is a requirement, prerequisite and manifestation of the exercise of their fundamental right to self-determination as defined in international law. It is also an essential right for the protection and defense of Indigenous Peoples' sacred areas in particular those threatened by imposed development.

With the Adoption of the Declaration, as well as other international standards such as General Recommendation XXIII of the UN Committee on the Elimination of Racial Discrimination (CERD) and the 2005 UN General Assembly's Plan of Action for the 2nd

⁵⁸ The CERD recommended in 2008 that the US use the UNDRIP "as a guide to interpret the State party's obligations under the [ICERD] Convention relating to Indigenous peoples." See Concluding Observations of the Committee on the Elimination of Racial Discrimination on the United States of America, Consideration of Reports Submitted by States Parties under Article 9 of the Convention, 8 May 2008 CERD/C/USA/CO/6, at para. 29

International Decade of the Worlds' Indigenous Peoples,⁵⁹ FPIC is an undeniable operative international human rights framework to which Mexico is accountable.⁶⁰

FPIC has also been affirmed in the jurisprudence of the Inter-American Human Rights Commission, the Inter-American Court and by a number of landmark studies by UN Special Rapporteurs.

World Conference on Indigenous Peoples 2014

Notably, the Outcome Document of the High Level Meeting of the UN General Assembly called the World Conference on Indigenous Peoples, adopted September 22st 2014 stated:

20. We recognize commitments made by States, with regard to the United Nations Declaration on the Rights of Indigenous Peoples, to consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources.

24. We recall the responsibility of transnational corporations and other business enterprises to respect all applicable laws and international principles, including the United Nations Guiding Principles on Business and Human Rights and to operate transparently and in a socially and environmentally responsible manner. In this regard, we commit ourselves to taking further steps, as appropriate, to prevent abuses of the rights of indigenous peoples.⁶¹

This High Level Plenary set the stage for future state actions in the framework of the United Nations on the implementation of the Declaration and in particular article 29, and represents a commitment by states to this implementation.

International developments regarding Business and Human Rights

An emerging opportunity for greater implementation of the UN Declaration including article 29, as well as potentially positive action on the part of Mexico, Indigenous Peoples

⁵⁹ One of the UN General Assembly's five objectives for the Programme of Action for the Second International Decade of the World's Indigenous People 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", GA Res 60/142, UN GAOR, 60th Sess., Supp. No. 49, UN Doc. A/60/49 (2006)

⁶⁰ Including the International Labor Organization Convention No. 169 on Indigenous and Tribal Peoples, which also affirms consent

⁶¹ United National General Assembly Sixty-ninth session, Item 66 of the provisional agenda, Rights of indigenous peoples, Outcome document of the high-level plenary meeting of the General Assembly known as the World Conference on Indigenous Peoples", UN Doc A/61/L.1.

and civil society may participate in the national consultation process for the development of a Mexican government “National Action Plan” (NAP) for implementation of the *UN Guiding Principles on Human Rights, Transnational Corporations and other Business Enterprises* approved by the UN Human Rights Council in 2012. There is also an opportunity to engage in the upcoming negotiation of a new international instrument on business and human rights.

The UN *Guidelines* affirm the 1) *State Duty to Protect* against human rights violations; 2) *Corporate Responsibility to Respect* human rights; and 3) *Access to Remedies* for victims of human rights violations caused by activities of corporations. The Guidelines speak directly to the situation of the Yaqui Peoples as described in this report, who are suffering at the nexus of government, agriculture, environment, human rights and the rights of Indigenous Peoples.

At the recent United Nations Third Annual Forum on Business and Human Rights, held in Geneva in December of 2014, IITC co-chaired the Indigenous Peoples’ Caucus. The Caucus made a Statement at the Forum, citing:

4. With respect to the right to free, prior and informed consent of indigenous peoples, States must commit themselves to refrain from issuing regulations and laws that restrict it. They must also adapt their domestic legislation consistent with international standards and commitments currently in effect concerning the rights of indigenous peoples.

5. States must safeguard the life of indigenous peoples and protect them from all kinds of threats. It is urgent that they suspend the production and export of toxic agrochemicals and pesticides, as well as prohibiting their use in the lands, territories and water sources of indigenous peoples. In this regard, we reaffirm the recommendation of the Permanent Forum on Indigenous Issues of May 2014 to conduct a legal review of the Rotterdam Convention...

The International Work Group for Indigenous Affairs (IWGIA) in their Report on the *Guiding Principles*, recommended that Treaty Bodies such as the CRC “should ensure that indigenous peoples’ organisations have sufficient access to technical and financial assistance, as required by Art. 39 of the UNDRIP, for the purpose of expanding their knowledge and building their capacity regarding the efficient use of relevant national, regional and international human rights standards, instruments and judicial as well as non-judicial mechanisms.”⁶²

⁶² Rohr, Johannes and Jose Aylwin, “IWGIA Report 16: Business and Human Rights: Interpreting the UN Guiding Principles for Indigenous Peoples” (2014) International Work Group for Indigenous Affairs (IWGIA) and European Network on Indigenous Peoples, ISBN: 978-87-92786-44-9 at page 46

The Convention on the Rights of the Child

The Convention on the Rights of the Child represents a significant achievement in international law and standard setting, being the most widely-ratified human rights treaty. While the Convention has been an important tool in awareness raising, this submission points to the need for more specific analysis regarding health related issues facing Indigenous children in particular regions.

While we understand that the majority of the provisions of the Convention are of general application (applying to all children), there are some specific references to Indigenous children.

In article 17, states parties are to “[e]ncourage the mass media to have particular regard to the linguistic needs of the child who belongs to a minority group or who is indigenous.” In article 29, states parties agree that the education of the child shall be directed to “[t]he preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin.” Article 30 guarantees the rights of children to their language, culture and religion which is of particular resonance for Indigenous children and families.

Under article 2, states are to “respect and ensure the rights set forth in the present Convention to each child within their jurisdiction without discrimination of any kind,” and to “take all appropriate measures to ensure that the child is protected against all forms of discrimination or punishment.” This guarantee is of great importance to Indigenous children and families, as “they are frequently unable to enjoy their rights in equality with non-Indigenous children.”⁶³

It is in the context of the guarantee of rights without discrimination that we respectfully draw the attention of the Committee to article 24 of the Convention as well as General Comment 15⁶⁴ on the right of the child to the enjoyment of the highest attainable standard of health, which for the purposes of this submission forms the core of our analysis and the basis for our proposed questions and recommendations on the review of Mexico:

Article 24

1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.

⁶³ Supra note 28 at 180

⁶⁴ Committee on the Rights of the Child, General comment No. 15 (2013) on the right of the child to the enjoyment of the highest attainable standard of health (art. 24) UN Doc CRC/C/GC/15

2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
 - a. To diminish infant and child mortality;
 - b. ...
 - c. To combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, **taking into consideration the dangers and risks of environmental pollution;** (emphasis added)

In the course of our research, we were unable to find any specific observations or conclusions of the CRC in any states parties reviews that cited environmental health concerns further to article 24. We stand to be corrected on this finding. However, we think given the increasing international attention to the nexus between the environment, climate change, pollution and human rights – this is an ideal time for the CRC to begin setting the stage for what the rights of children ought to be in a contaminated or polluted environment. In General Comment 15, the CRC described in a brief fashion what health concerns were of interest with regard to the rights of children in situations of environmental pollution:

Environmental pollution

Para 49: States should take measures to address the dangers and risks that local environmental pollution poses to children’s health in all settings. Adequate housing that includes non-dangerous cooking facilities, a smoke-free environment, appropriate ventilation, effective management of waste and the disposal of litter from living quarters and the immediate surroundings, the absence of mould and other toxic substances, and family hygiene are core requirements to a healthy upbringing and development. **States should regulate and monitor the environmental impact of business activities that may compromise children’s right to health, food security and access to safe drinking water and to sanitation.** (emphasis added)

Para 50: The Committee draws attention to the relevance of the environment, beyond environmental pollution, to children’s health. Environmental interventions should, inter alia, address climate change, as this is one of the biggest threats to children’s health and exacerbates health disparities. States should, therefore, put children’s health concerns at the centre of their climate change adaptation and mitigation strategies.

In this submission, we have provided scientific evidence as well as Indigenous testimonies that demonstrate the significant harms suffered by Indigenous children and families in the Rio Yaqui Sonora region of Mexico as a result of pesticide and environmental exposures. We have also provided information regarding the limited action taken by Mexico to address these harms, which remain ongoing.

We submit that the CRC should take a comprehensive approach to understanding the binding obligations of Mexico under the Convention, with reference to other human rights and environmental instruments, in particular the UN Declaration on the Rights of Indigenous Peoples. The Committee on the Elimination of Racial Discrimination has already indicated that the Declaration should be used as a guide to interpret state party obligations under the *International Convention on the Elimination of All Forms of Racial Discrimination*.⁶⁵ In the same way, the articles of the Declaration on the Rights of Indigenous Peoples can be used to build upon the application and interpretation of the *Convention on the Rights of the Child* as it applies to Indigenous children and their distinct communities. This is important because the Convention is generally concerned with individual rights. It is therefore limited in its ability to address issues faced by indigenous children, given their broader human rights status as members of unique peoples under international law.

We do recognize the important work that the CRC has undertaken over the years to address the situation of Indigenous children, such as the Day of General Discussion on the Rights of Indigenous Children held by the CRC in 2003. Following that Day, a Sub-Group on Indigenous Children and Young People was formed by Indigenous Peoples' organization as part of the NGO group of the Committee. The Sub-group assisted the Committee to draft a General Comment on Indigenous Children and Young People to provide states parties with clear directions as to their obligations towards Indigenous children under the Convention. The General Comment was finalized and adopted in January of 2009.⁶⁶

In the General Comment, the Committee "urges States parties to adopt a rights-based approach to indigenous children based on the Convention and other relevant international standards, such as the ILO Convention 169 and the United Nations Declaration on the Rights of Indigenous Peoples."⁶⁷ This further supports our submission that the interpretation and application of the Convention must take place in the context of both the listed instruments, both of which Mexico has endorsed.

We therefore recommend that Mexico implement the UN Declaration on Rights of Indigenous Peoples, in particular article 29 paragraph 2 as the context for the interpretation of its obligations for compliance with Convention on the Rights of the Child article 24, with particular attention to the expanded description found in General Comment 15 requiring States to regulate and monitor the environmental impact of business activities that may compromise children's right to health, food security and access to safe drinking water and to sanitation.

⁶⁵ Supra note 30

⁶⁶ Committee on the Rights of the Child, General Comment No. 11 (2009): Indigenous Children and their rights under the Convention UN Doc CRC/C/GC/11 (12 February 2009)

⁶⁷ Ibid at para 82

Conclusion

Throughout this submission, we have attempted to capture a comprehensive picture of the impacts of pesticide and toxic use on the lives and wellness of the Indigenous Peoples of the eight Pueblos of the Yaqui Nation.

We have provided, to the best of our efforts, research that addresses the specific experiences and data regarding the Yaqui Nation, the existing legal framework of Mexico on these matters, and the applicable international law and standards.

The testimonies attached in Annex B of this submission contain the real life stories of peoples on the ground, who are struggling with the impacts of toxics and pesticides on their health and the health of their children.

The experience of the Yaqui Nation has been central to the work of the International Indian Treaty Council for well over a decade. IITC has attempted over the years to make inroads in awareness raising, community education and supported advocacy efforts of the representatives of the Yaqui Nation including the eight traditional authorities. These authorities have been consistently consulted and provided instruction to IITC in carrying out the advocacy and work over the years.

In the experience of the Yaqui Nation, the continued import and use of pesticides which are banned or restricted in the exporting countries constitutes a violation of Mexico's obligations further to Article 24 of the Convention on the Rights of the Child, in particular when read together with Article 29 of the UN Declaration on the rights of Indigenous Peoples.

Yaqui children experience disabilities, illness and tragically significant numbers of deaths as a result of pesticide exposures.

Mexico must review their legislation and policy to ensure compliance with Indigenous Peoples' rights as set out in the Convention on the Rights of the Child, the UN Declaration and ILO Convention No. 169, including remedial mechanisms, children's rights and their right to health.

Mexico must consider a future where such legislative and policy progress is not considered an "attack on agriculture" but rather appropriate measures for the "protection of children."

Proposed Questions for Mexico

1. The import and use of pesticides which have been banned or restricted in the exporting country, including highly hazardous pesticides, presents a significant harm to Indigenous children and families in Mexico who are exposed to these toxics. How does Mexico reconcile this importation and use with its obligations under Article 24 of the *Convention on the Rights of the Child* and Article 29 of the United Nations *Declaration on the Rights of Indigenous Peoples*?
2. What actions are being taken by Mexico to assess, minimize or prevent the impacts of toxic contaminants on maternal and children's health in Indigenous and local communities such as the Yaqui Pueblos in Sonora? What medical services, compensation and redress are provided to victims?

Proposed Recommendations for the Committee regarding Mexico

1. Mexico should review and revise national laws and policies to prohibit the import of any pesticides or chemicals that have been banned or restricted for use in the exporting country, in particular when maternal and children's health may be impacted. Mexico should also revise national, state and local policies to address environmental exposures and the negative impacts of pesticides, toxics or mixed pollutants on maternal health and the health of children.
2. In conjunction with Indigenous Peoples, Mexico should develop appropriate regional environmental health programs, including biomonitoring of toxics, as a first step toward prevention of toxic-induced illnesses in vulnerable Indigenous groups such as mothers and children.

We also recommend that the CRC join with the United Nations Permanent Forum on Indigenous Issues (UNPFII) to call for "a legal review of United Nations chemical conventions, in particular the Rotterdam Convention, to ensure that they are in conformity with international human rights standards, including the United Nations Declaration on the Rights of Indigenous Peoples and the Convention on the Rights of Persons with Disabilities."

Annex A

As indicated in the Executive Summary, this Report contains thirty-nine (39) testimonies relating specifically to children, from Indigenous Peoples in the affected communities. These testimonies have been gathered from 2001 to present day, 2015. IITC has worked with our affiliate and a co-submitter of this Report, Jittoa Bat Natika Weria, to collect a total of over 80 testimonies from parents, midwives and families documenting severe illnesses including many forms of cancer, as well as birth defects and at least 25 deaths due to toxic pesticide exposure in the 8 small Yaqui communities in Rio Yaqui Sonora Mexico.

The testimonies contained in this Report constitute the voice of the people, speaking directly to the members of the Committee on the Rights of the Child regarding their experiences, suffering and loss. It is our hope that you hear their voices ring out - clear and unafraid - in the context of history, science, law, policy, international standards and our collective aspiration to implementation of our rights as Indigenous Peoples, a higher ethic regarding toxics and a healthy environment.

Yaqui Testimonies related to the Convention on the Rights of the Child

(Translated from the original Spanish)

1. Jose Mario Alvarez E.

October 10, 2003

My name: Jose Mario Alvarez E.

Age: 42 years old

I live in the indigenous community of the town of Potam, Municipality of Guaymas, Sonora.

My testimony is:

For purposes of receiving support from the IITC Organization.

I am going to write about my life experiences, up to the current year. In 1990, we suffered a great tragedy in the family, when vegetables were planted in a 5-hectare plot here in my town. The crops included lettuce, radishes, carrots, coriander, squash, and melons. These crops were a demonstration so that the community would realize that the soil is indeed capable of growing those crops. My brother, whose name was Amado Alvarez Encinas, worked on this plot of land, as did my nephews. A type of shed was built on that parcel for storing the pesticides that were used to fumigate the plants.

My brother was the caretaker of the crops, and he slept where the “toxic” substances were stored. Gloves and masks were not used when applying these substances. The only thing that was done in that regard was to wash our hands with soap. In 1992 my brother was diagnosed with leukemia. When the doctor did an in-depth study, we discovered that when he was working, my brother used a backpack with pesticide. The backpack tore and my brother was soaked with the liquid.

He ran to bathe in a channel next to the parcel, but he never told the family about this accident. If he had notified us on time, we would have taken him to the doctor to see what the doctor would have prescribed for him in case he had been poisoned.

Due to this accident, my brother was hospitalized, and we suffered for one year. The doctor first treated him, and then he underwent chemotherapy. The family was never at peace. We brought him blood donors, platelets donors, and all sorts of other donors. My brother died on May 10, 199[3]. Since then, we are against “pesticides.” Still, we must work in the fields because this is what we live off of in our community.

As I stated above, we don't have anyone to advise us with information.

Personally, I believe that my body may already be infected, since I have diabetes. I've worked with chemicals, and sometimes feel severe itching, headaches, and a pricking sensation in my fingers and toes, and I think that's the reason why.

I worked in the agricultural fields for eight years with the same boss, and we used the following to fumigate:

Parathion

Aminoparathion

"Lorban"

"Estarane"

"Topir"

"Bambel"

Tamaron

"Fagna"

"Guanfluth"

and other chemicals that I barely remember, because I am even losing my memory.

My boss used to store whatever was left over in a room close to where he and his family still sleep. I would always tell him that it could be harmful to him and his family, But he would always say that it was not a problem, because the room was well protected, and the smell from the chemicals wasn't reaching the bedroom. I was fearful, because his wife was pregnant and it could have caused damage.

When the boss's wife gave birth, her child only lived for two months. When he was two weeks old the doctor said he came down with a disease and had to be checked up on. But when the doctor found out that there were chemicals stored there, the doctor got upset with him and told him that this was the consequence. The baby died of a sickness called cancer.

That is all I have to say. Please excuse my spelling mistakes, since I am a person with little schooling.

[signed]

2. Diana Barroza Murillo

October 19, 2003

Potam Rio, Yaqui, Sonora.

My name is Diana Barroza M. I am 48 years old and I have six children. The following is my experience and that of the inhabitants of this town. In reference to the toxic chemicals that are found in this town, they have leaked on several occasions; the people suffered from vomiting and headaches and had to be evacuated. I live on the outskirts of town, near the land that is being cultivated. Often, when fertilizer is applied, it reaches us. All of the people of this community, myself included, would like the indigenous network to make this known. We'd like to get an orientation from the indigenous network too. The airplanes spray chemicals on the crops, and it affects the town and its inhabitants. In and around the whole town there are large tanks holding hazardous chemicals. Many people have died here. One little boy did not understand the serious consequences; he went swimming in a canal when they were spraying, and it had chemicals. He got leukemia. Another man also died from the same disease because he had fertilizers in his house. A young man died last month because he slept where they stored toxic substances. He absorbed it all, and he didn't last long at all. Nothing could be done to save him.

I am writing to you to inform you about what is happening in our community, to see what can be done to help this town.

We have this poison on a plot of land, where there are six or seven tanks of toxic chemicals and they're refusing to get it out of town. We don't know exactly what's in them, but we do know that it is hazardous. For that reason, I urge you to inform the United Nations through the "Indigenous Network Against Pesticides" or the International [Indian Treaty] Council. We ask that they oppose it on principal and begin to eradicate what is prohibited in the United States, while nothing is being done here. We have the right to be heard too, so that this situation in our indigenous Yaqui community can end once and for all. We want the message from our indigenous community of Sonora to be heard loud and clear.

We are hoping for your valuable assistance. Don't forget us. We are counting on your assistance.

I want to be a member of the organization to support you in the work you are doing for the entire community. I also want to receive more information to help my community and all of the people around me.

Thank you,
Diana Barroza Murillo

3. Carla E. Arenas Verdia

April 18, 2005

Potam, Río Yaqui, Sonora

Testimony of Carla E. Arena Verdia, born in Potam, June 30, 1980

My experience is when I had my baby on August 21, 2002. It was a very bad experience, because my baby, when she was born, didn't cry and didn't react like a normal baby. Her color was as white as a piece of paper. I remember that the midwife was so shocked, they had to take my baby to the Hospital. The doctors were alarmed. Some of them said that she had an inflamed liver. Others said she had leukemia. There were so many studies, and they ended up discovering that the cause had been the chemicals my husband had used. My husband used to work in the fields on a vegetable farm named "Los Hoyos" that has our people work for them, exploiting our human rights, because they don't give us protection for handling the chemicals we work with.

It is my experience that this isn't the only case. In fact, there are several similar problems, such as the boy Cristian. His parents were working in the fields, on account of which Cristian was born with a deformity. His body hasn't developed yet. He is now 11 years old and his parents live in the countryside, in El Pescado, the landing place for the planes that fumigate our lands. That is why we are asking for more support to make progress on problems with the chemicals that are so harmful to us. We [want] the United Nations rapporteur to follow up on the problems we are suffering and for the International Indian Treaty Council to continue supporting us, so that there will be follow-up on our problems.

I don't know exactly, but my grandparents used to say that in their times there weren't any chemicals. Everything was organic; there weren't any chemicals at all. More or less in about the '60's they started coming in to our territory.

The members of our community would like to have people sent in the near future to train us, so we can defend ourselves in the event of accidents that occur on account of the misuse of the chemicals.

This testimony is addressed to the Indigenous Network Against Pesticides for the IITC project.

We hope you understand us and support our community.

Sincerely,
Carla E. Arenas V.

4. Andrea Sandoval Barraza

April 19, 2005

Potam, Río Yaqui, Sonora

Testimony of Mrs. Andrea Sandoval Barraza, the mother of three children

When the woman was one month pregnant, her husband was working in the fields, and one day his job was to spray fertilizer with a manual pump that you carry on your back. All she did was wash the clothing, but with that, she absorbed the poison and harmed the baby. In fact, when the baby was born, he was affected. He was born with a harelip and a cleft palate. The pediatrician interviewed the mother and the father separately and asked them whether they had other such cases in the family or if they used drugs, and they said no. She also asked whether they worked in an agricultural field and whether they had applied chemicals to the land and the father said that yes, he had fumigated when the mother was one month pregnant. The doctor told them that was the cause.

Andrea Sandoval Barraza

5. Norma Alicia García Nasaumea

April 20, 2005

Potam, Río Yaqui, Sonora, April 20, 2005

Norma Alicia García Nasaumea (mother)

Víctor Amarillos Molina (father)

Cristian Roberto Amarillos García (child)

July 24, 1994 (date of birth)

November 1993: date on which the child's mother went to work weeding chickpeas and the foreman told the workers they were going to apply a chemical that harms the skin, because it was very strong, and it could cause them to have blisters on their skin. The woman was in her first month of pregnancy, but didn't exactly know that she was pregnant. During the nine months, she didn't feel anything. Everything appeared normal. When it came time for her to have the baby she didn't have any pain. She had a green discharge.

When the boy was born, the doctor told her that she couldn't see him, because the boy was born with problems. The woman left the hospital and the baby remained hospitalized for a month. He was born with a big head and a small body. During the month the baby was hospitalized, he was operated on twice, once on his head due to hydrocephalus and once on

his spinal column (meningocele), and they told the mother that the boy's body wasn't going to develop.

He was under treatment for four years, but their insurance ran out.

For three years he was more or less alright. After that, his hold body started swelling. The boy's mother took him to the Children's Hospital (DIF*) in Hermosillo. It turned out that he had an infection in his kidneys. He was in treatment for a year so he could have his kidney operated on in July 2004.

This coming April 15, he will have an operation on his bladder. They're going to take his bladder out and replace it with an artificial one.

The woman is the mother of 5 children.

Flor Arcelio	14 years old
Cristian Roberto	10 years old
Bertha Paola	7 years old
Víctor Antonio	6 years old
Norma Angélica	4 years old

She would like to hereby ask you for assistance for her child who needs a great deal of care and good food, because they have very few economic resources.

The child's father is in agreement with all of this, but he is not currently present, since he works as a cowboy.

Norma Alicia García Nazaumea

* Translator's Note: "DIF" is the Mexican abbreviation for "*Desarrollo Integral de la Familia*," which is the Mexican Department of Family and Child Services.



Interviewer Note: Cristian Roberto Amarillos Garcia passed away on March 15, 2006. He was 12 years old in these photos, almost 14 when he died, and never grew past the size of a 2 year-old.

6. Rigoberto Cota Amarillas

November 20, 2005

Relates that a child, Rigoberto Cota Amarillas, age 6, died of pesticides poisoning. From age 4 he played with agricultural machinery his father, an agricultural worker, kept at home. He began to have a high temperature, vomiting and a loss of appetite. The doctor that diagnosed his leukemia illness as a result of his contact with and the indiscriminate spraying of chemicals in the area.

Provided by Francisco Javier Villegas Paredes, Agricultural Parasitologist

7. Guadalupe Armatos Castro

November 22, 2005

(5 May 2005) A child of 6 years, Guadalupe Armatos Castro scarcely 6 years of age, subjected to the spraying of pesticides. He was employed as an applicator and sprayed these substances without any protection for years.

Provided by Francisco Javier Villegas Paredes, Agricultural Parasitologist

8. Unnamed

November 22, 2005

A 4 year-old child (unnamed) died as a result of the indiscriminate aerial spraying of chemicals 300 meters from his home.

Provided by Francisco Javier Villegas Paredes, Agricultural Parasitologist

9. Lourdes Guillen Aguilera (anonymity requested)

January 16, 2006

Please note that the Declarants request anonymity, as they fear they will be fired from their jobs if their identity is revealed.

We are young couple anticipating their first child, worked at a farm called Los Hoyos. We were required to fumigate crops with no protection from the chemicals used. Our baby was born with a disfigured face and without a cerebellum. We believed it was the will of God. But we finally consulted a doctor who told us it was the work and lack of protection against the chemicals. I know believe these chemicals are strong, because we are doing the planting and the harvesting of vegetables. There is no other way for us.

10. Teofilia Palomarez Baycuri

January 18, 2006

My 9 year-old child Jesus attended 4th grade at the Javier Torrez Bedet School. He used to tend goats with his cousin. He began to be sick but I didn't pay much attention until one night he complained of a headache, and I gave him some pills, but they did not do any good. Later on that night he was burning up with fever and I took him to the hospital but there were no doctors, so I took him home. The next day I took him to a doctor in Vicam and the doctor sent us to the hospital in Ciudad Obregon. By that time my child had lost

consciousness and the next day he died in the hospital. The doctor said that a chemical had entered his body but I did not believe it, until his cousin told me that they would stop while tending their goats to watch airplanes fumigate the fields. I think the work of informing people with help although there have been more children that have died, such as my nephew who also died. It was a similar case.

Thank you.

11. Bertha Miranda

January 27, 2006

Mrs. Miranda' daughter worked packing vegetables in the fields at a farm. She became pregnant but out of necessity continued to work. Although she had no problems during her pregnancy and all appeared all right, the child was born with the help of the community midwife. It was born with a deformed face, and just stopped breathing. We consulted with a doctor in Ciudad Obregon, and he said that her contact with chemicals had affected the fetus. She also comments that it is good that we are informing the community so that this does not happen to others.

12. Carlos Buitimea Galaviz

May 31, 2007

Modesta Buitimea Gomez, age 12
Choacahui, Ahome, Sinaloa
Leukemia

Testimony:

Carlos Buitimea Galaviz, father of the young woman, notes that he has been working for 10 years at the company names Cascos Metalicos S.A. de C.V., located along the banks of the Rio Fuerte river, near the community of Choacahui, Ahome, Sinaloa, where he works gathering and processing frogs, cats, grasshoppers, and reptiles, and where he handles chemicals without any protection whatsoever.

“Yormes Unidos del Municipio de Ahome, A.C.”

President
Leobardo Alvarez Valenzuela

Secretary
Bulmaro Bacasegura C.

13. Gregorio Garcia Inzunza

May 31, 2007

Jesus Manuel Garcia Chicuate, age 12
Leyva Solano, Ahome, Sinaloa
Muscular Dystrophy

Gregorio Garcia Chicuate, age 14
Leyva Solano, Ahome, Sinaloa
Muscular Dystrophy

Testimony:

Gregorio Garcia Inzunza, the father of these young men, has stated to us that he worked as a tractor operator and as a farmworker for 12 years, applying agrochemicals with a backpack or a sprayer; he believes that this constant contact he had with agrochemicals resulted in his children being born with muscular dystrophy.

“Yormes Unidos del Municipio de Ahome, A.C.”

President
Leobardo Alvarez Valenzuela

Secretary
Bulmaro Bacasegura C.

14. Manuel Ruiz Heredia

May 31, 2007

Martha Ruiz Escalante, age 11
Sector Chalante, San Miguel Zapotitlan
Muscular Dystrophy

Testimony:

Manuel Ruiz Heredia, father of the young woman, has stated to us that he worked for 17 years applying agrochemicals. In the years 1982 to 1983 many births were recorded at the Mexican Social Security Institute (IMSS) of children with muscular dystrophy and leukemia. These children were born to farmworker couples.

“Yormes Unidos del Municipio de Ahome, A.C.”

President
Leobardo Alvarez Valenzuela

Secretary
Bulmaro Bacasegura C.

15. Enrique Bacasegura Espinoza

April 12, 2008

Vicam, Rio Yaqui Sonora

I live in the neighborhood of La Nopalera, tortured by pesticides during the time of sowing. I have seen with sadness how we are intoxicated and affected. In recent studies it was shown that 20% of the children of the Indigenous communities are born affected and I think that the first thing the authorities should do is to remove the landing field for airplanes, and that they be relocated outside the pueblo's perimeter. The application should be directly on the plants, and the users register the applications and that they be supervised to have full control. I join with this project to struggle for the children.



(Landing strip and plane for aerial fumigation)

16. Guadalupe Benavides Rivera

November 26, 2008

Testimony

The effects of agrochemicals on the Yaqui tribe

Mrs. Guadalupe Benavides Rivera

Youth: Alejandro Benavides Ribera (R.I.P.)

Mrs. Guadalupe, sister of Alejandro now deceased commented to us that cancer of the bone was detected in the youth, an illness known as Edwin's [Ewing's] Sarcoma; his body was soaked with this illness she comments that his short life was spent with the medicines Alópata, she also

lives in an area of high risk, as the agricultural lands are 500 meters from her house and the spray from the airplanes and the contact that his father also had with agrochemicals unleashed the illness. He died at 17.

Sincerely
[signed]
Guadalupe Benavides Rivera

Estación Vicam
On the 26th of November of 2008

17. Juan Soto Lopez

November 28, 2008

Actual effects of pesticides on the Yaqui tribe
Mr. Juan Soto López (testimony)
Child: Dolores Valencia (person who is ill)
Child: Miguel Salas B. (person who is ill)

What Mr. Juan López Soto relates to us is that these children and many others live in a neighborhood of high risk from the fumigations that the airplanes do in seasons that are normally the months of December, January, February, and in some cases until March, These children in particular suffer from vomiting, nausea, diarrhea, itching or burning on the body during these months when the actions at the moment of application let loose the product on houses where they are situated, at agricultural lands, it is children that do not know the extent of the infection.

Don Juan gives this testimony in support of the Authorities that they put an end to this evil.

Sincerely,
[signed]
Mr. Juan López Soto

Vicam Rio Yaqui
On the 28th of November of 2008
Neighborhood CBTA#26

18. Miguel Arnulfo Molina Flores

November 28, 2008

Testimony
Effects of pesticides on the peoples of the Yaqui tribe

Father: Miguel Arnulfo Molina (testimony)

Child: Miguel Arnulfo Molina (person who is ill)

Illness: His father related to us how it was that his son was born malformed so severely in his bones (feet and hands).

Mr. Arnulfo is 33 years old, of which 70% of his life has been dedicated to agricultural work, in the Los Hoyos fields, he carries out his work of applying toxics and he has no means of protection: gloves, protective equipment, etc. His wife at one short time also dedicated herself to work in the agricultural fields for which the doctor diagnosed the contamination of the father and mother when the child was in gestation. The child is 7 years old, does not walk, does not speak, is prostrate a wheelchair and lives in an area of high risk.

His father asks the authorities that the aerial spraying be avoided.

Sincerely,

[signed]

Miguel Arnulfo Molina Flores

Vicam Rio Yaqui

On the 28th of November of 2008

19. Eustaquio Romero, Apolonio Valenzuela & Gabino Romero

November 29, 2008

Other effects of pesticides on the Yaqui communities

Mr. Eustaquio Romero "El Baro" (testimony)

Mr. Apolonio Valenzuela M. (testimony)

Mr. Gabino Romero (testimony)

These three persons comment on another problem caused by chemicals, that there are male children whose sex is well defined, but it has been observed that upon their passing from childhood to youth, their sex changes and they act like women, they consider and ask if the chemicals interfere in their organism as they are in contact with pesticides.

There is a high incidence with these tendencies in minors upon passing to youth.

They suggest that the neighborhoods La Nopalera, CBTA, Sebastián, Los Cupiz, Cruz Roja, be provided information on the pesticides periods of application.

Sincerely,
[signed]
Eustaquio Romero

Vicam Rio Yaqui
On the 29 of November of 2008
Neighborhood La Nopalera

20. Eva Morales Alvarez

February 23, 2009

Hector Manuel Rocha Flores

Ms. Eva Morales Alvarez, the mother of the child, tells us that her child began treatment at age 4 since he suffered from dizziness and fainting. After some studies, it was determined that he had lymphoblastic leukemia (his body's blood was contaminated). He began chemotherapy for a time period of 2 ½. Currently he is receiving monthly medical attention.

Ms. Eva, sick herself and mother of the child, comments that the agrochemicals lower the defenses in the bodies of children and adults. My husband, worker in the fields, had a warehouse with wheat seed for growing. The contact my son had with this warehouse was a determining factor of him being affected by agrochemicals. I currently live in a zone identified as high risk due to the fumigation that takes place in this region. I also mention the Tepeyac company, which has installed itself among our population and is surrounded by inhabited homes. I support the effort you are carrying out in favor of this community to gain the eradication of the fumigation and the change to the aerial landing strip.

Eva Morales Alvarez



(Tanker truck carrying sulfuric acid through the community)

21. Mauro Cota Valencia

February 28, 2009

I want to mention that in my community (Vicom Pueblo) the youth are workers in the fields, they tend to the herds, others to the factories. I want to give my testimony of what is happening with the agrochemicals. The practice of investors is making an agreement so that the equipment used for agricultural workers are deposited in areas or plots belonging to homes.

The children, out of curiosity, play with this equipment, touch deposits, and many times take with them residue from these products. We do not know what kind of toxics these are, much less the children. I make this comment from the main pueblo of this community so that measures are taken to halt this activity which is out of control. This comment or testimony that I am giving applies in general to other communities, with lamentable consequences. I support this work that is being done for the good of the Yaqui tribe.

Mauro Cota Valencia



22. Ana Maria Villegas Paredes

February 26, 2009

Petra Onameca Cupiz (ailment: stomach cancer)

Ana Maria Villegas Paredes (godmother)

The godmother of Ms. Ana Maria Villegas tells us that the 8 year-old child was diagnosed with stomach cancer; the illness was treated and controlled. When she entered development chemotherapy was applied, she was operated and glands from the side of her throat were extracted. Her illness continues, she lost her hair and it has grown back, currently she has monthly appointments and her problem is in the breasts, she is 23 years old. Her father Domingo Onamea Cupiz worker in the field, connected to pesticides, would at the beginning take his wife and daughter to work. The doctors diagnosed this illness due to contact with toxics, the symptoms being vomiting and vertigo, same symptoms the child presented.

The godmother says her goddaughter is currently exposed to pesticides through the aerial application. When this happens the companies of these products such as Tepeyac, Kraff and others do not take responsibility for the product once it has left their factory. Also, 40% of the aerial applications are conducted by Mr. Juan Mendivil who also refuses to be responsible for the damages caused to second and third parties.

Ana Maria Villegas Paredes

23. Edna del Carmen Villegas de Miranda

June 26, 2009

Testimony

Edna del Carmen Villegas de Miranda

C. Polet Bacasegua, age 10

The woman who gave us her testimony is a neighbor of the child and states that since the age of three she began losing sight momentarily and suffered from fainting. Through testing she was diagnosed with malignant protuberances from the sides of the eyes and they detected carcinogenic tumors. The woman tells us that the child is undergoing additional testing and will likely require 6 radiation sessions of chemotherapy. She tells us as well that the child's grandfather, Mr. Juan Maria Bacasegua, an agriculturalist, was accustomed to having fertilizers, seeds and chemical product in the child's mother's home without any precautions. The woman who gives her testimony asserts that the doctors in their own version say there is deep relationship between the little girl's ailment and the products indicated (fertilizers, seeds and pesticides). Currently she is undergoing medical studies through public medical care.

24. Ambrocio Matuz

August 5, 2009

C. Ambrocio Matuz (testimony)

C. Ramon Valenzuela (R.I.P. [Rest in peace])

Illness: Leukemia

Community: El Tampiro

Mr. Ambrosio Matuz, former governor of Vicam Pueblo, gives us testimony of the child Ramon Valenzuela Elenes, son of Mr. Ramon Valenzuela, who passed away from leukemia.

He tells us that the child, when he was small, looked very weak. His home was 50 meters from the agricultural implements and such.

Ambrosio, did you on any occasion see the child play with or touch the chemical product?

“I never saw that. What I did notice was that there were very bad fertilizer odors, sometimes very penetrating odors. I think that is what the child absorbed and his body became poisoned. They diagnosed him terminal phase leukemia at age 10.”



(Tank where chemicals are stored and later burned)

25. Ofelia Seguapicio, Jesus Gonzalez, Aurelia Espinoza, December 2011
Lina Molina, Teofil Mendoza

Comments on Experiences of our Yaqui Tribe Midwives

Ofelia Seguapicio, Jesus Gonzales Aurelia Espinosa, Lina Molina, Teofila Mendoza

The experiences they have lived while assisting pregnant women results in the following analysis.

Each of these people, in their own different communities, is the town doctor, which gives them a vast knowledge of reality, in this case of problems children present at birth.

They consider that water for domestic use is also a source of contamination for the body given that in the last 15 years the widespread application of agrochemicals has intensified, the major proof a high percentage of the population drinks contaminated water.

These cases lead to a reality in our community: malformed children, children with cancers, children with leukemia.

We make these comments so they can serve to support other organizations to manifest in the same or a better way so that we can reach a common good.



26. Flor Reyna Osuna & Jesus Gonzales

December 15, 2011

Ms. Flor Reyna Osuna (Mother of the young lady)

Young woman: Flor Osuna Garcia

Jesus Gonzales (midwife)

Mrs. Flor Reyna is the mother of the young lady who was born with malformations, currently the young woman is 30 years old and her height is 1.20 meters. The woman comments that at birth the child's body was AQUEOUS, GELATINOUS.

With the little growth the child has had, her lower extremities lack of movement, she can only move the upper extremities. Her vital organs are atrophied; studies run have shown that the girl had malformations while in the mother's womb.

Physicians, as an important point of the studies conducted, consider that the location of the young woman's home, installed at the periphery of agricultural land, and exposed to

spraying of agrochemicals, brings in a relatively short period of time the ailment of CONGENITAL DISEASES. Chemical Biologists specializing in clinical analysis have examined some products, yielding important conclusions: mixtures of two or more chemicals applied in inhabited areas also results in CARCINOGENIC-type diseases.

The midwife Mrs. Jesus makes the following comment, malformations stem from tumors produced by chemicals when young women are exposed to applications during work in the fields without personal security measures and others.

Sincerely,
Francisco Javier Villegas Paredes
Interviewer



27. Xochilt Valdez
2011

December 20,

Ms. Xochilt Valdes (child's mother)
Child: Mariana Lopez Valdes

The mother of the girl Mariana Lopez Valdes says her pregnancy was very delicate, she constantly went to the doctor, even some midwives commented that her child was not in a good position. When the child was born she had malformations of the face, especially the lips.

The woman also says that the girl's grandfather, Mr. Manuel Valdes, works in the agricultural business and used to bring home chemical residues. Some doctors commented after running studies on the child that agrochemicals had a direct effect.

The contact she had with the residues as a young woman caused the fetus to form inadequately in the body. Currently the girl lives, is 1 year and 6 months old, and the malformations are expanding.

Sincerely,
Francisco Javier Villegas Paredes
Interviewer

28. Aurelia Espinoza Valencia
2011

December 28,

Ms. Aurelia Espinoza, Vicam Village midwife, tells us about a very special case that she was able to witness.

She was requested to assist Mrs. Tomasa Molina who was in pre-labor at 9 months of pregnancy, when it was time to receive the child the surprise was huge, as the little body of the child had pronounced malformations throughout the body.

The color of the infant was a deep black, which was in fact what caught Mrs. Aurelia's attention the most.

The baby lived for only 8 hours before it died.

Also, says Ms. Aurelia (midwife), when the child was received its body was AQUEOUS and GELATINOUS. She notes that the Social Security [government hospital] Doctors did not provide a clinical response about this case.

However, a group of midwives (Ofelia Seguapicio, Jesus Gonzales Aurelia Espinosa, Lina Molina, Teofila Mendoza) state that most of the cases of deformed children that they've seen during deliveries result from the consequences of the aerial spraying of chemical products.

Sincerely,
Francisco Javier Villegas Paredes
Interviewer

29. Juan Antonio Rodriguez Coronado
January 2013

Testimony provided by the child's grandmother
Filmed by Evan Mascagni for the documentary "Toxic Profits"
Link: <https://www.youtube.com/watch?v=e8MU9enE8jo>

Transcript of Video Testimony

Grandmother: The child? His name is Juan Antonio Rodriguez Coronado.

Translator: He was born on June 28th and he's two now.

Grandmother: Well, the first months of pregnancy.

Interviewer: But she was working prior to that, right?

Grandmother: Prior to that, yes. Before she got pregnant she was already working in the

fields. She's worked in the fields her whole life.

Translator: His mom worked her whole life in the fields and so, before the pregnancy she

was working in the fields and for the first few months of the pregnancy.

Grandmother: He's been diagnosed with the liver cirrhosis.

Translator: So, he's been diagnosed with cirrhosis of the liver.

Grandmother: Well, as he got sick he started with a little swelling, then it began getting

larger. ... to take a look at his liver, that's the scar he has here.

Translator: So, he started out when h he was born a little bit swollen, but it's gotten much

worse and you can see they did an operation and they took a look at his liver and in

June they said he just has about three years to live and that there's nothing they can do now.

(Filmmaker's note: Juan Antonio passed away in April 2013, 3 months after this interview.)

30. Edna del Carmen Villegas
2013

September 1,

Testimony given by Mrs. Edna Del Carmen Villegas about the child FELIX LUIS ALBERTO CLEMENTE. His father by the name of ROBERTO CLEMENTE worker in the farmland LOS VENADOS where a variety of vegetables are grown.

Mrs. Edna lives in ESTACION VICAM, aunt by marriage of the deceased child, gives us an overview of the case. First the child starts showing light spots on his body; he is immediately seen by doctors. The child was 2 years old, it was a struggle against death, says the woman, he was diagnosed with liver cancer, his stomach began growing gradually, the fingernails began to change color, under medical supervision the child is invalid as a result of the cancer the fingernails it began to burst, the final diagnosis of the doctors is terminal stage leukemia, the woman says. The child dies at age 4. His father, who currently works in the fields, says his son is gone due to the chemicals he handled.

Mrs. Edna Del Carmen also highlights the large number of patients with leukemia and cancers as a result of open-air pesticide applications.

Sincerely,
Edna del Carmen Villegas Paredes
[signed]

**31. Luisa Anguis
2013**

August 20,

Testimony given by Mrs. Luisa Anguis.

The indigenous community of La Loma de Bacum is an agricultural area considered dangerous due to the high amount of chemical products.

We made a visit to the woman so that she could provide us testimony of the child Lucio Juarez, affected by pesticides. She tells us and states that the child was exposed to the product, first small marks began appearing on his body, he was taken to the doctor, studies were run, the child was 5 years of age, a child has no defense, she says, the creatures are innocent, they do not know the danger that surrounds them. Shortly after he was again taken to the doctor, he is diagnosed with leukemia and transfusions are not permitted due to the child's age, loss of appetite, weight loss, etc. Unfortunately the child dies while hospitalized at social security [the state hospital]. The woman makes one last comment regarding the deceased child, there are cases, she says, in which we as mothers must be very attentive to the children who are defenseless. Our community is hit with chemicals by airplanes, fathers and mothers work in the field of bataconsica, many older people are affected, there is a lot of cancer.

**32. Lucia Hernandez & Hermenejildo Sibamea
January 2014**

Lucia Hernandez, Hermejelindo Sibamea (Witnesses)
Francisca Gotopicio Cota (Mother of the Child)
Guamuchil Village, Cocorit Rio Yaqui

Testimony provided by the married couple, Lucia and Hermenejildo, gives us an idea of the magnitude of the real problem caused by pesticides in our Yaqui Tribe region.

I visited Mr. Hermenejildo to inquire about the case of **Francisca Gotogopicio**, mother of the girl who was born with birth defects. He recounts the case of the girl who lived merely four hours. He says the baby 's body was completely amorphous, gelatinous, the body slightly elongated and the upper and lower extremities slightly short. He also tells us that the family of the girl are people who have jobs related to pesticides. He tells us that the village Cocorit has problems of ARSENIC in the water,

and so he argues from cases like the one he describes, the presence of PESTICIDES in agricultural fields, ARSENIC in the water, we have a polluted environment.

Question: You, as members of the Yaqui Tribe, healers by profession, how many cases like the one you describe have developed among other Peoples?

Response: Actually there are many cases but also Yoremes (Yaqui), some are attributed to enigmatic causes, others don't shine light on the cases due to shame, but the health centers are aware of everything that is happening.

Sincerely,
Villegas Francisco Paredes
Interviewer

33. Ramon Valencia Amarillas
January 2014

Ramon Valencia Amarillas (Witness)
Julieta Amarillas Alvarez (Mother of Efrain)
Efrain Valenzuela Amarillas

Mr. Ramon Valencia, cousin of the late Efrain, gives the testimony. He says that after the birth the mother struggled to care for the child, since the baby was very susceptible to contacting illnesses, was very weak, had a frail little body, was thin. Thank God, he says, he was unable to recover without any medical treatment, but the child grew to the age of 6 with major respiratory problems, fatigue, he was treated medically and diagnosed with Leukemia. Mr. Ramon tells us that the child lived in a heavily polluted area named Barrio la Nopalera, it also adjoins agricultural plots and the established pesticide application aircraft field.

The child entered a health crisis; he continued medical consultations, analgesics, sedatives, etc. Unfortunately, he says, they don't have the resources necessary to give the child better medical care, after a long daily struggle the child died at age 13.

The child's family tells us they are ready to struggle against anyone to put a stop to the deaths being caused by the aircrafts.

Sincerely,
Villegas Francisco Paredes
Interviewer

34. Aurelia Espinoza
January 2014

Midwife Interview
Sonora, Mexico

“Well good morning dear friends that are here present. Now we are in an organization of [inaudible]. I’m a midwife and my name is Aurelia Espinoza [inaudible].

And I assist pregnant women. Those who are brave come to me and others go to the hospital. But in one year I have assisted 150. There was no protection for women, no pills.

And us women started to look for...and thank God we were given that opportunity, providing us with pills and all that. Now we are there because back then people die because sometimes they would go to [inaudible] and there they were poorly treated and now, I started really young, just like I ask to my God ‘why is this so risky my lord, what is happening to my race.’ And it started at a hospital. I think that was my God. And they call me to work in the hospital. And then later I started working at the top, because of my dad. He asked them not to treat me like a little girl, to treat me like an adult.

And doctors saw this and sent me there to see if I’d faint out of nervousness. You know how a scene of birth is. And there with only two doctors, I couldn’t function because I wasn’t strong enough to see such thing from a woman.

So there I was left alone on the third time. And I didn’t know how to. The doctor would tell me what to do on each birth and at the third time I was left by myself. The doctor told me, ‘Now I’m going to have breakfast with Doña Goyita and then I will pass time with Martina Tadeo and so your eyes must be on this bed.’

And I follow the doctor asking him to not leave me alone because I didn’t know what I was doing and he just told me to follow everything he’s taught me. And yes, I assisted the birth and everything went well. I hid from the doctor upon his return. He returned around 2 or 3 and I hid because I was still upset he left me by myself. And he would laugh at me and asked me, ‘What did you do to the woman?’ And the woman was covered from head to toe with a sheet because she was sleeping,

resting. 'What did you do Aurelia?' he asked. And the baby started crying. 'Aurelia what did you do? Did you operate her?' 'Don't laugh at me doctor,' I said, 'this is my first time.' 'This is going to be your job.' And that's how I started.

Well back then the babies I delivered were really beautiful. Now after 70, the babies frighten me and I left my job.

Because I wanted beautiful babies and they started to be born with two heads, long necks and I didn't like it. I'd cry with the person because I didn't know how to tell them what it was. I had no words.

I would clean it and show it to the mother and she would say, 'what is this...it's a monster.'

There was one that I thought that below the head there was a neck and no, there was another head. It didn't last 24 hours and it died.

Very beautiful but seeing those things was very bad because you couldn't frighten the mother like that under that condition.

And then there was one that I thought it was going to be born ok. I would touch the mother and ask myself, 'How is it?' And then the baby started coming out.

The legs were where the arms are supposed to be and the arms were where the legs were supposed to be.

I couldn't comprehend this. I would lay her down and she look like a little frog and shortly after, she died.

Because back then they had accepted all these liquids and we didn't know them. Young people would eat grains thinking they were vitamins. They would eat these grains that were going to be spread. Now they don't live. Obardo Miranda would eat it like this and had no idea what he was eating. 'These are vitamins,' they would say. I would say, 'This is good once it grows, not now.'

Many like these. And now there's one that his stomach becomes swollen, his mouth dries and he has gone to doctors. Now it's gastritis.

This is such a risk that has landed here, like a curse. We don't live well here. We are all contaminated. No point in getting cured or getting the right medication.

The only thing we're doing is believing in Jesus, my lord. These medications here, we haven't used them because of lack of many things that are missing here. But we are moving forward. That is my decision and that is what I asked in the name of many generations like Andrea who are helping us.

And like my Christ he loved the world and wanted to make kids here. And I'm grateful. This is all I can say."

**35. Rafaela Paredes Borbon
2014**

March 28,

Estación Vicam, Rio Yaqui

Patient: Alejandro Benavides Rivera

Illness: Bone Cancer

Age: 17

Testimony: Rafaela Paredes Borbon

Ms. Rafaela, aunt of Alejandro, gives us her testimony of Alejandro's short life. The family's address is located in a neighborhood very close to the airfield for pesticide-spraying planes. From a very young age the child played in agricultural areas near his home. There were occasions when the planes passed overhead and sprayed him with chemicals.

We were also able to realize that at night in the airfield they would burn insecticide containers, contaminating the entire town.

As time went on, the middle-school student would complain of bone pain, specifically in the left ankle. The medical interns recommended pain pills. That treatment lasted about 8 months. Later, as a high-school student he developed a protuberance of about 1 cm.

The low-income family was able to conduct all the necessary testing. To their surprise he was invaded by the cancer, considered one of the more painful (Ewing's sarcoma). He was interned and they authorized radiation treatments in various parts of his body.

The protuberance grew about 10 cm causing him a significant amount of pain which prevented him from walking; he had fainting, weight-loss, lack of appetite. He died in 1977.

Sincerely,
Rafaela Paredes Borbon
Testimony

Engineer Francisco Javier Villegas Paredes
Redactor

**36. Olga Marquez Valencia
2014**

December 10,

Patient: Juan Jose Lopez Medina
Illness: Birth Defect
Age: 8 years
Community: Torim Pueblo

The child Juan Jose was born with disabilities. In addition he was missing a toe and the size of his left foot was smaller than his right. At birth the child had only nubs instead of formed fingers. Over time, as it relates to growth, he developed gradually less on one side in proportion to the other.

His parents, field workers for over 10 years, consider it important to mention that their child's problem exists in the presence of chemicals in the region, since they know from family members of other similar cases of disabilities in other communities due to the presence of chemical applications.

This testimony was provided by family members and Ms. Olga Marquez Valencia, representative and assistant at the health center in the Torim Pueblo.

Ms. Olga Marquez Valencia tells us that in the health center she has promoted talks with people who are affected by the chemicals. She also tells us she advocates with the medical centers for them to receive care since many patients lack medical services.

Sincerely,
Francisco Javier Villegas Paredes

Coordinator

**37. Alejandra Mariela Miranda Espinoza
2014**

January 18,

Parents: Pedro Damian Valdez Sol and Alejandra Mariela Miranda Espinoza

Child: Angel Agustin Valdez Miranda

Age: 3 months

Illness: Myelo Meningocele



The young woman, mother of the child, describes and tells us that during the pregnancy she suffered a fall and at birth the child presented with a protuberance at the end of the spinal column at the coccyx. At 35 days old the baby underwent an operation in the coccyx region due to the protuberance. They also implanted a valve in the brain that drains at the navel level. The child has a slight malformation in the lower lip of the mouth.

It is still too early to diagnose the effects and results of operation that the child underwent since prior to the surgery the doctors stated that in their medical opinion they were unsure whether the baby would be able to walk in the future or nor. The lady emphasizes the work done by her husband in the tomato fields.

The chemical products used are highly dangerous and these are injected into the ground. Therefore, from the moment there is contact, the worker is immediately contaminated. The home of the child is located 500 meters from the airfield, affecting Alejandra's pregnancy.



The parents of Angel, the child, thank all the people who care to investigate the suffering of these children because they are innocent in this world.

Sincerely,

Alejandra Mariela Miranda Espinoza

**38. Maria de Jesus Valenzuela
2014**

January 20,

Mother: Maria de Jesus Valenzuela
Patient: (child) Dulce Nocamea Valenzuela
Age: 10 years

The 35 year-old single mother residing in Barrio La Nopalera received us in her home to give testimony of her child, age 10. She begins with a sad description as she tells of her child from birth through age 4, when she was diagnosed with myringitis, a disease associated with problems in the head, common among children, she says. In addition, they detected mild kidney problems due to the water consumed.



“My child was normal. She walked, played and was healthy. Suddenly she got this filthy disease and stopped walking. Her feet, she stopped moving them. She lost her strength, lost her speech, her body began to weaken. She’s been in a wheelchair for the past 6 years. My neighbors say that it is due to the chemicals. I live 300 meters from the aircraft plant that is used for aerial spraying.”

“During sowing seasons,” she says, “the planes spray the homes with chemicals and we become sick. In addition, at night, they burn the plastics and it smells really bad. There are children who begin throwing up due to the bad odors.”

In closing the conversation, the mother says that the authorities of the state government do nothing for sick children like her daughter. She requests help so that the airfield is closed since it causes so much harm.

Sincerely,

Maria de Jesus Valenzuela Romero



**39. Javier Arballo Hernandez and
January 22, 2014
Maria Esthela Castillo Ramirez**

Parents: Javier Arballo Hernandez and Maria Esthela Castillo Ramirez
Child: Julian Arballo Castillo
Illness: Phychomotor

His father, Javier Arvallo, tells us with much sadness of his child’s illness. He recounts that

when the child was born there was no diagnosis; seemingly the child had been born normal. At 6 months of age he began receiving treatment since it was noted that he had no strength in his lower extremities; when they would sit him on his bed he couldn't hold himself up for very long. He says, "We must take care since his legs do not respond, they have no strength."

His body from the waist up presents as normal; from the waist down abnormal with the baby's legs slightly short.

The mother of the child tells us she has worked in the agricultural fields for 10 years, during which time she has always had contact with agrochemicals without protection (gloves, facemask, safety suit). Her husband, too, for 4 years has worked in squash packaging where he also had direct contact with agrochemicals.

They give their opinion on their child's illness and reply on the products applied in Yaqui Tribe region: "There is no monitoring, no control and those affected are pregnant women and small children."

We ask for help to remove all businesses that sell chemical products in the Yaqui Tribe.

Sincerely,

Javier Arballo Hernandez and Maria Esthela Castillo Ramirez