COMPLAINT FOR SPECIAL PROCEDURES

TO THE SPECIAL RAPPORTEURS ON:

TOXICS AND HUMAN RIGHTS, HUMAN RIGHTS AND THE ENVIRONMENT, SAFE DRINKING WATER AND SANITATION, and THE RIGHT TO HEALTH

ON BEHALF OF:

SAKALA COMMUNITY CENTER FOR PEACEFUL ALTERNATIVES

CONCERNING VIOLATIONS OF HUMAN RIGHTS IN CITÉ SOLEIL, HAITI

Submitted by:

James R. May, Esq. Senior Legal Counsel Dignity Rights International jrmay@widener.edu Erin Daly Executive Director Dignity Rights International edaly@widener.edu

Co-directors, Dignity Rights Project Widener University Delaware Law School

August 10, 2021

"Tout moun se moun."

-- Haitian Proverb ("Every person is a human being.")

"We want eyes to be open, voices to whisper hope on behalf of these children so that our efforts to create a cleaner environment for these children could also be an effort for dreams to come true.

We want these children to fly and know their potential. We have through this action a special thought for these children from SAKALA who have died already, suddenly, without having the time to tell us what they were suffering from, and for those who are still suffering from breathing smoke that is toxic.

We want to see our children becoming children again without having to deal with so much trash all around them.

This is the reason of this action. This is so the children there can become who they were born to be. So they can fully live with dignity that life intended for. It is starting with the children because they are the future, they will be our adults of tomorrow."

-- Declaration of Mr. Daniel Tillias, Founder of Petitioner SAKALA (Exhibit J)

"The children are not living in dignity and respect. Their right is violated all the way. It is the base of a lot of problem they are facing. No school, no water, no food. Tons of trash, tons of dirty water, mosquitoes, and microbes. People just try anything to protect themselves.

If we want to say something about justice. It's terrible ... it does not exist. All the rights are violated, right to live, to educate, to eat, to have water access and so on."

-- Declaration of Mr. Felder Jean Paul, Executive Director, Petitioner SAKALA (Exhibit K)

"The bad smell is not good for us. It makes me sick, I can't breathe well with the smell."

-- Statement of E.D., age 16 (Exhibit A)

"[W]hen the water dries there is a lot of dirt and trash. So they put it in a pile and set fire to it and the smoke [makes me ill] ... So what I would say is that we should gather together to find the solution because one person alone can't find the solution."

-- Statement of G.S., age 17 (Exhibit B)

"I don't know what is in the water, so that's why I am afraid of it"

-- Statement of M.Ca., age 15 (Exhibit C)

"When they are burning the trash it gives me a headache and it makes my eyes water."

-- Statement of M.Ch., age 11 (Exhibit D)

"When it rains, the trash goes into the canals and stuff the canals and then goes out and into the houses ... [the smoke from the trash fires are] a problem for me because it gives me a headache and I can't escape/avoid the problem."

-- Statement of N.I., age 15 (Exhibit E)

"When it rains trash gets inside of the houses ... I would like Cité Soleil to find help so we can clean our area and everywhere can be clean."

-- Statement of P.J., age 16 (Exhibit F)

"The environment is killing these kids not only physically but it's killing their dreams, it's killing their ability to be somebody tomorrow."

-- Expert Declaration of Dr. Mackenson Saint Fort (Exhibit L)

Question: "In your expert opinion, are the significant cases of infectious diseases, long-term respiratory conditions (such as asthma, lung cancer, etc.), and general high mortality rate for those living in Cité Soleil directly caused by massive accumulation of waste and the improper/unmonitored methods of its removal through general trash fires?"

Answer: "Yes."

-- Expert Report of Dr. Nadège Bélizaire (Exhibit G)

Question: "In your expert opinion, are the significant cases of infectious diseases, long-term respiratory conditions (such as asthma, lung cancer, etc.), and general high mortality rate for those living in in Cité Soleil directly caused by massive accumulation of waste and the improper/unmonitored methods of its removal through general trash fires?"

Answer: "Yes."

-- Expert Report of Dr. Kobel Dubique (Exhibit H)

"[The trash] comes from other areas and different parts of town, because Cité Soleil is downstream and these are upstream and they feed Cité Soleil with all the waste ... Cité Soleil, this neighborhood, is a dump site. They collect the waste everywhere ... and they bring it and throw it away in Cité Soleil. And there is a soccer field next door and people are living there and children should be playing there."

-- Testimonial of SAKALA Intern Witness #1 (Exhibit M)

"Right now we don't know what can be done and that's why we are looking for help. We really want the government to do something for us, but you know sometimes they are not concerned with this problem. We have seen that canal full of trash our whole lives and we want it to change. That is why we are asking for help right now because this is not good for us and it should be done."

-- Testimonial of SAKALA Intern Witness #2 (Exhibit N)

"Sometimes there is so much smoke that it makes me sick with bad headaches, deep fatigue, and body aches that takes a day or more to abate ... Then just over the wall, take a look at the trash canal. Maybe walk across it. Get your shoes dirty. Feel a little nervous that maybe it can't hold your weight and you might sink in the trash and sewage. Then imagine ... this is your life now."

-- Testimony of Volunteer/Visitor Witness Nancy Young (Exhibit O)

"Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being."

-- UN, Stockholm Declaration of the United Nations Conference on the Human Environment, June 16, 1972, UN Doc. A/CONF.48/14/Rev. 1

TABLE OF CONTENTS

INTRODUCTION	1
I. COMPLAINANTS	2
II. BACKGROUND and CONDITIONS	4
A. Haiti	1
B. Port-au-Prince	
C. Cité Soleil	
D. Environmental Conditions in Cité Soleil	
III. ENVIRONMENTAL AND HEALTH CONSEQUENCES	
A. Toxic Trash	
B. Lack of Sanitation and Drinking Water	
C. Toxic Fumes	
D. Physiological Effects	12
1. Waterborne Diseases	12
2. Contaminated Drinking Water	13
3. Respiratory Ailments	13
E. Health Effects for Children	15
F. Psychological Impacts for Children	
IV. REQUEST FOR RELIEF	22
Appendix: Exhibits	
Exhibit A: Statement of E.D, Age 16	
Exhibit B: Statement of G.S., Age 17	
Exhibit C: Statement of M.Ca., Age 15	
Exhibit D: Statement of M.Ch., Age 11	
Exhibit E: Statement of N.I., Age 15	30
Exhibit F: Statement of P.J., Age 16	32
Exhibit G: Expert Report of Dr. Nadège Bélizaire	34
Exhibit H: Expert Report of Dr. Kobel Dubique	38
Exhibit J: Declaration of Daniel Tillias, Founder and Chair, SAKALA	
Exhibit K: Declaration of Felder Jean Paul, Executive Director, SAKALA	55
Exhibit L: Declaration of Dr. Mackenson Saint Fort (with C.V.)	56
Exhibit M: Testimony of SAKALA Intern, Witness #1	
Exhibit N: Testimony Of SAKALA Intern, Witness #2	
Exhibit O: Testimony Of Nancy Young	72

INTRODUCTION

On behalf SAKALA, a community center established to provide a safe harbor for children in Cité Soleil, Haiti, and the hundreds of children it serves ("Complainants"), this Complaint requests that the Special Rapporteurs on Toxics and Human Rights, Human Rights and the Environment, Safe Drinking Water and Sanitation, and the Right to Health (collectively, "Special Rapporteurs") commence a Special Procedure and issue a joint communication on human rights violations to the Government of Haiti, requesting a response and remedial measures specifically concerning environmental conditions in Cité Soleil, including the canals, landscape, and trash dump sites conditions.

The Government of Haiti has created unsafe environmental conditions for Complainants and the residents of Cité Soleil by: importing toxic trash from around the region to the residential district of Cité Soleil, where SAKALA is located; by failing to dispose of it in a sanitary way consistent with international and national standards; by failing to take appropriate action to avoid flooding; by allowing the canals to fill with a stew of chemical and human waste; by failing to provide waste management services to Cité Soleil despite providing them to neighboring communities; and by permitting trash to be burned where children live, go to school, and play. Instead, the Government uses this sacrifice zone as a repository for toxic waste, violating Complainants' dignity, impairing health, and threatening their lives.

In Cité Soleil, industrial, commercial, household, and medical waste and trash collects daily in seven large canals that run through Cité Soleil. The canals have long been overwhelmed with trash, which spreads everywhere. Making matters worse, because there is nowhere for the canal water to go, the district floods with even the slightest precipitation, inundating homes, schools, and businesses with toxic slurry. The only way to reduce the volume of trash is to burn it in place, producing a constant haze of toxic smoke throughout Cité Soleil that envelopes the district, including and especially the children who suffer from chronic and sometimes fatal diseases that Complainants' experts conclude are preventable and are caused by these environmental conditions.

The Government of Haiti has failed the residents of Cité Soleil, even as funds destined for social development projects have been diverted, the courts are closed, and the Government has fallen. Complainants are more desperate than ever because of the violence and lawlessness that engulfed the country in 2020 and 2021 leading up to the assassination of the President Jovenel Moïse on July 7, 2021, and the chaos that has ensued since then. It may take months or years for the political situation in Haiti to settle and for governmental institutions to re-establish themselves, but every single hour of every single day, children in Cité Soleil are breathing toxic chemicals, walking through canals of human and toxic waste, suffering from preventable illnesses, and living lives of indignity and despair, knowing that their lives are being cut short by government neglect and recklessness.

The Complaint has four parts. Part I introduces the Complainants. Part II provides information about Haiti, Port-Au-Prince, and Cité Soleil. Part III details the adverse environmental conditions to which the Complainants are subjected, including short- and long-term health ailments, particularly for children, resulting from exposure to contaminated water

and polluted air. Part IV comprises the request for relief. The Complaint includes photographic evidence of the environmental conditions complained of as well as first-hand accounts from some of the affected children, other residents, legal and medical experts, and others.

I. COMPLAINANTS

The SAKALA Community Center and the children it serves are Complainants. SAKALA – Sant Kominotè Altanatif ak Lapè ("Community Center for Peaceful Alternatives") – is a community center in the heart of Cité Soleil. SAKALA is registered as a non-profit organization in Haiti and in the United States. It receives funding from grants and donations. It has a staff of 11 people and a junior staff of 8 people. It offers programs around three axes: Sports, Education and Agriculture. ²

Co-founded by Mr. Daniel Tillias, SAKALA opened in 2006 and expanded significantly in response to the 7.0 magnitude earthquake that ravaged the nation on 12 January 2010. SAKALA provides a safe outlet for children, as well as healthy meals, access to computers and homework support, and other extra-curricular activities such as sports programs for boys and girls, including football, volleyball, basketball, baseball, table tennis, and dance, as well as bridge, board games, and chess.³ SAKALA has a sustainable garden, an athletic field, a multipurpose room, and an extensive library, as well as a kitchen and eating area. Its staff provides counseling to help children manage personal challenges associated with growing up in adverse environmental conditions.⁴ SAKALA is an "alternative for the kids – an alternative from gang recruitment, the lack of educational opportunity, the despair from the piles of trash that burn on their faces or the flooding canal kicking them out from their own homes."⁵

SAKALA provides education and engagement to promote environmental stewardship. It has developed arts and entrepreneurial projects around recycled material that staff members salvage from the local trash heaps. SAKALA is also internationally renowned for its community garden, which is maintained by the children and members of the community who grow fresh vegetables and plants by using recycled material. The garden is the largest community garden in all of Haiti.

¹ See generally, http://www.sakala-haiti.org/staff. See also CNN Hero Daniel Tillias, CNN, https://www.cnn.com/videos/world/2019/08/01/cnnheroes-tillias-mixed.cnn#:~:text=In%20an%20area%20of%20Haiti,children%20can%20learn%20and%20thrive.

² See generally, http://www.sakala-haiti.org/mission; see also Declaration of Felder Jean Paul, Exh. K, App. at 31.

³ Tillias, Exh. J, App. at 27.

⁴ *Id.*, App. at 30.

⁵ *Id.*, App. at 27.

⁶ Nancy Young, *Back to School at SAKALA*, *News for a Better World from the SAKALA Community Center in Cité Soleil*, SAKALA Haiti (Sept. 16, 2020), https://sakalahaiti.substack.com/p/back-to-school-at-sakala.

⁷ Allie Torgan, *Creating an Oasis of Hope in One of Haiti's Most Dangerous Neighborhoods*, CNN (Aug. 1, 2019), https://www.cnn.com/2019/08/01/world/cnnheroes-daniel-tillias-sakala/index.html.

⁸ Rashmee Roshan Lall, *Haiti Slum Blooms Into Urban Oasis*, The Guardian (Jun. 3, 2014), https://www.theguardian.com/global-development/2014/jun/03/haiti-garden-project-community-slum-enterprise-Cité-soleil.

SAKALA creates a positive developmental outlet for the children of the community. ⁹ In preparation of this Complaint, six children as well as several legal interns and employees of SAKALA were interviewed. Their statements are included in the Appendices and portions are quoted throughout the Complaint. Minors are identified only by their initials.

According to Mr. Jean-Paul, SAKALA is a "Paradise in Hell." N.I. says: "SAKALA is doing a great job with education, sports, and with the environment. I like SAKALA because it puts us on our way so we can help others, we can work with others to make things happen"¹¹ while P.J. is "very happy [to be] part of SAKALA because there are some things I didn't know before and when I came to SAKALA I learned." Some of the children noted that they appreciated receiving nurturing from SAKALA that is essential to their growth. For example, M.Ch. "like[s] how SAKALA teaches the kids, trains the kids, and to let them know how they're doing."13 E.D. puts it this way: "SAKALA guides us, takes our hands walks with us and helps us in everything that we do."14

SAKALA's contact information is:

SAKALA Ayiti PO Box 2320 7 Michiko, 3BB, Route Nationale #1 Cité Soleil, Haiti SAKALAayiti@gmail.com +509 3649-1493 (Daniel Tillias)

⁹ M.Ca., Exh. C, App. 5; E.D., Exh. A, App. at 3; N.I., Exh. E, App. at 8. ¹⁰ Jean Paul, Exh. K, App. at 31.

¹¹ N.I., Exh. E, App. at 8.

¹² P.J., Exh. F. App. at 9.

¹³ M.Ch. Exh. D, App. at 7.

¹⁴ E.D. Exh. A, App. at 3.

II. BACKGROUND AND CONDITIONS

A. Haiti

Haiti shares a border with the nation of Dominican Republic to form the island of Hispaniola. Haiti has 376 kilometers of coastline and is mostly mountainous. 15 Haiti frequently experiences floods, hurricanes, and earthquakes. ¹⁶ A long national history of deforestation in part to satisfy national debt has not only led to widespread soil erosion, but also helps intensify the damaging effects of the constant wind and rain that puts Haitian citizens at constant risk.¹⁷

Poverty is endemic in Haiti. 18 The poorest 45% of the nation's citizens live off less than US\$1.25 per day. 19 About 25% of Haitian children aged 5 to 17 live separated from their parents while nearly 300,000 children throughout the country aged 5 to 14 are classified as "child domestic workers."²⁰ As the World Bank reports, "[a]ccording to the Human Capital Index, a child born today in Haiti will grow up to be only 45% as productive as they could be if he/she had enjoyed full education and health."²¹ The World Food Program estimates that 50% of all Haitians - more than 5 million people - are malnourished, including 22% of children who are chronically malnourished, and that two-thirds of the population lack access to adequate sanitation. 22 This data is from before the worsening conditions Haitians have seen in the last two years. 23

The Covid-19 pandemic has, of course, only made matters worse. According to the World Bank, "[t]he pandemic is expected to disproportionately affect the poor and most vulnerable populations, including women, reinforcing existing social inequalities. Economic growth is expected to decline by at least 3.1% of GDP in 2020 as the service sector contracts, supply chains are disrupted, and remittances fall as the global economy heads into recession. The fiscal deficit is expected to widen to more than 6% of GDP (from a pre-COVID-19 forecast of 3%) and inflation is expected to reach over 20%."²⁴

¹⁸ Haiti is the poorest country in the Hemisphere and the fifth poorest country in the world. "Haiti is the poorest country in the Western Hemisphere, with a Gross Domestic Product (GDP) per capita of US\$797 and a Human Development Index ranking of 169 out of 189 countries in 2019." The World Bank in Haiti, https://www.worldbank.org/en/country/haiti/overview.

¹⁵ World Health Organization (WHO), Health In the Americas: Haiti, Pan-American Health Organization, https://www.paho.org/salud-en-las-americas-2017/?p=4110 (last visited Nov. 8, 2020).

¹⁶ Central Intelligence Agency (CIA), The World Factbook: Haiti, https://www.cia.gov/library/publications/theworld-factbook/geos/ha.html (last visited Oct. 30, 2020). See also Pan American Development Foundation (PADF), Urban Planning For Resilience In Haiti. (July 6, 2017), https://padf.squarespace.com/projects/urban-planning-forresilience-in-haiti.

¹⁷ WHO, *supra* note 18.

¹⁹ United Nations Development Programme (UNDP), 2013 MDG report: Haiti, A New Look. (June 26, 2014).

²⁰ Human Rights Watch, World Report 2014: Haiti, Events of 2013 (2014), https://www.hrw.org/worldreport/2014/country-chapters/haiti. See also Pan American Development Foundation (PADF), Urban Planning For Resilience In Haiti. (July 6, 2017), https://padf.squarespace.com/projects/urban-planning-for-resilience-in-haiti. ²¹ Id. The average Haitian citizen earns less than \$2,000 (US) annually. Id.

²² "Hunger Crisis in Haiti," World Food Program, https://www.wfpusa.org/countries/haiti/.

²³ World Food Program, https://www.wfpusa.org/countries/haiti/, ("The protests quickly turned violent and have continued. The precarious security situation combined with road blocks and political gridlock have led to a spike in hunger and made it difficult to deliver humanitarian aid. The price of staple foods has increased by more than 22 percent in the last year while agricultural production has dropped by about 12 percent"). ²⁴ The World Bank in Haiti, https://www.worldbank.org/en/country/haiti/overview

B. Port-au-Prince

Port-au-Prince is Haiti's capital city and has between 2.6 and 3.7 million residents, roughly one-quarter of the national population. Population density in the city is among the highest on the globe at 34,270 per square kilometer (88,703 people per square mile), compared with a world average population density of 25 people per square kilometer and a national average of 398 people km^{2,27}

Residents of Port-au-Prince face many additional challenges on a daily basis. Port-au-Prince is one of the most dangerous cities in the world. Air quality there is among the worst in the world. Housing is scarce, overly crowded, and often dangerously unsanitary. ²⁹

Port-au-Prince is the largest capital city in the world without a centralized sewage system.³⁰ Most residents use outhouses or whatever is convenient because there is no sewage system.³¹ Fecal matter mixes with trash and rainwater, contaminating what might otherwise be drinking water and making every flood toxic to everyone in its path. As a result, according to Dr. Mackenson Saint Fort, "[t]he contamination of the water table in this commune by the faeces which arrive there either by runoff, or by non-compliant latrines or quite simply because the population does not have any, makes the water unsuitable for safe consumption."³²

C. Cité Soleil

The district of Cité Soleil is the low-lying geographic heart of the City of Port-au-Prince. It has at least 300,000 to 500,000 people, although an exact count is not available. Of Port-au-Prince's seven municipalities, Cité Soleil is by far the poorest and most crowded and vulnerable, with environmentally catastrophic conditions and high levels of destitution, unemployment, pollution, and food insecurity. According to Complainants' expert Dr. Nadège Bélizaire, a medical doctor and Medical Director at Haiti Clinic in Cité Soleil, "Cité Soleil is an extremely impoverished and densely populated community of an estimated 300,000 to over 500,000 residents, the overwhelming majority of whom live on less than \$1 (USD) per day and cannot afford to eat every day. Cité Soleil is the largest and most dangerous slum in Haiti, literally known as a Red Zone due to level of insecurity." Cité Soleil lacks its own government, is ignored by the central government, and is largely governed by gangs.

²⁵ https://www.macrotrends.net/cities/21133/port-au-prince/population.

²⁶ Capital Facts for Port-au-Prince, Haiti,

https://www.worldscapitalcities.com/capital-facts-for-port-au-prince-haiti/

 $^{^{2}}$ Id

²⁸ Capital Facts for Port-au-Prince, Haiti, https://www.worldscapitalcities.com/capital-facts-for-port-au-prince-haiti/

²⁹ Orville F. Grimes, *Housing for Low-income Urban Families: Economics and Policy in the Developing World* (1976).

³⁰ Rebecca Hersher, *You Probably Don't Want To Know About Haiti's Sewage Problems* (July 29, 2017), https://www.npr.org/sections/goatsandsoda/2017/07/29/537945957/you-probably-dont-want-to-know-about-haitis-sewage-problems.

 $^{^{31}}$ Id

³² Expert Report of Dr. Mackenson Saint Fort, Exh. L, App. at 33.

³³ Expert Report of Dr. Nadège Bélizaire, Exh. G, App, at 11.

Residents of Cité Soleil have inadequate access to sanitation and medical services, as hospitals, healthcare centers, and dispensaries are often inoperative, obsolete, and overcrowded.

Seven large drainage canals run directly through Cité Soleil. They were designed by city planners decades ago to direct stormwater and trash away from the higher suburbs of Port-au-Prince into the Bay of Port-au-Prince. However, they have not been maintained and, for more than a decade, they have been clogged with refuse.

D. Environmental Conditions in Cité Soleil

Cité Soleil has become the receiving point of toxic commercial, household, and medical waste. Waste arrives from other sections of Port-au-Prince to Cité Soleil through canals or is shipped or trucked by national waste management services; upon arrival in Cité Soleil, it is left in the open canals that run through the district, where it sits and floods into the streets and into people's homes, or is thrown into open dumps where it is left uncovered, unmanaged, and uncontrolled. The trash grows into mountains sometimes more than 3 meters high amid residential areas where children live, play, and go to school.

Cité Soleil lies below sea level and was built over a wetland. Even during light rainfall, floods of toxic water invade houses, schools, and businesses, creating a high likelihood of infection from pests, parasites, and toxins. The Government does not collect, remove, or dispose of the solid and liquid waste, which includes hazardous metals, plastics, organic matter, and chemicals; nor does the Government manage waste in accordance with international and national standards, thus maintaining the air, ground, and water in a constant state of pollution and threatening the security and health of all people in the community.

Neglected by the government and with limited access to adequate health and environmental education, residents reduce the volume of trash by burning it on a regular basis, generating hazardous smoke which dramatically affects the health of those who live among the trash-filled canals, trash heaps, and trash fires.

Children bear the disproportionate burden of the cumulative impact of so many challenges in Cité Soleil.³⁴ The tragic environmental conditions and exposure to hazardous substances especially affect children, due to their poverty, diminished resilience, and still-developing bodies and minds. Moreover, children in the community face continuous barriers to adequate access to food, clean water, education, and medical care, all of which deeply threaten their opportunities for healthy development and well-being. Mr. Felder Jean Paul – born and raised in the district – reflects: "[In] our community kids are facing a lot of challenges, like education problems, health problems, sexual abuse, and so on. The children are not living in dignity and respect. Their right is violated all the way. It is the base of a lot of problem[s] they are facing. No school, no water, no food. Tons of trash, tons of dirty water, mosquitoes, and microbes. People just try anything to protect themselves."³⁵

6

³⁴ Bélizaire, Exh. G, App, at 11.

³⁵ Jean Paul, Exh. K, App. at 31.

III. ENVIRONMENTAL AND HEALTH CONSEQUENCES

The root of Cité Soleil's alarming environmental conditions is the influx of untreated and unmanaged toxic trash, which contaminates the water and pollutes the air. ³⁶

A. Toxic Trash

This neighborhood of hundreds of thousands of impoverished human beings is the resting ground of the nation's trash dump. Toxic trash is the landscape of children's lives in Cité Soleil. It is on the ground, it is in the fields, it is in the water, it is in the streets, and it comes inside when it rains. It arrives in two primary ways. First is informally, by canal. Trash is carried here through seven canals that flow to Cité Soleil from elsewhere in Port-au-Prince whenever it rains. Second is formally, by transport directly by the Government. In fact, the Service National de Gestion de Résidus Solides (the National Service for Solid Waste Management, or SNGRS) makes direct deliveries of trash to an open, unregulated trash dump in Cité Soleil, a few hundred metres from Sakala.

Dr. Kobel Dubique, Country Director for Haiti Clinic, was born in and grew up in Cité Soleil. Dr. Dubique explains that "[e]very day the minimal quantity of trash produced in Port-au-Prince is estimated approximately to 6,000 m³ while only 30% is collected by the Haitian solid trash office (SGNRS) because of lack of removal means. [The m]ajor part of this 30% will be deposited to Truitier in Cité Soleil (the biggest discharge site of 250 hectares) and the rest will take the routes of canals and the capital roads to end up again in Cité Soleil. In conclusion, trash takes formal and informal routes to arrive to Cité Soleil."

While the SNGRS deposits waste in Cité Soleil, it does not remove trash *from* Cité Soleil, but rather leaves trash exposed to people there. Some trash is removed from upper-middle-class neighborhoods under an Order from the Government that services most of the city, except for Cité Soleil. Despite the Order, roughly 25% of even upper-middle-class neighborhoods within Port-au-Prince lack a proper waste collection service. Meanwhile, an overwhelming 93% of low-income families living amongst the most impoverished neighborhoods of Port-au-Prince do not have any formal waste collection service at all. One resident of Cité Soleil explains: "Before ... there used to be some big loaders and tractors coming to clean the canal, but it has

7

³⁶ Tillias, Exh. J, App. at 28.

³⁷ United Nations Central Emergency Response Fund (UN CERF), *Haiti: Executive Summary* (July 19, 2007), https://cerf.un.org/sites/default/files/resources/Haiti_2006_110308%20New%20Format.pdf. *See also* Expert Report of Dr. Kobel Dubique ("Dubique"), Exh. H at 12.

³⁸ Milo Milfort, *Who Benefits from the Poor Management of the Truitier Landfill?*, Haiti Liberté (Apr. 4, 2018) https://haitiliberte.com/who-benefits-from-the-poor-management-of-the-truitier-landfill/.

³⁹ Dubique, Exh. H, App. at 15.

⁴⁰ Dubique, Exh. H, App. at 15.

our the country's largest trash dump, AP News (Sept. 12, 2018), https://apnews.com/50c5062763b64fe297b643815fbd6568.

⁴¹ A. Bras, C. Berdier, et al., *Problems and current practices of solid waste management in Port-au-Prince (Haiti)*, 29 Waste Management 2907-09 (2009). ⁴² *Id*

⁴³ *Id*.

been more than 10 years now since then and Cité Soleil has been completely neglected and forgotten.",44

The SNGRS is beset by a lack of funding, a failure to maintain its equipment, and inconsistent management, chronic conditions that are compounded by predictably frequent natural disasters. 45 For example, after the 2010 earthquake, the SNGRS was only able to collect 20% of the waste generated within Port-au-Prince before having to stop due to equipment failures. In more than a decade since this earthquake, the Government has utterly failed to resolve those mechanical issues, so that devastation from the earthquake was left untouched and compounded by hourly imports of waste.⁴⁶

The trash dump the Government uses in Cité Soleil is itself a giant hazard. It is unmonitored, unregulated, uncovered, and open to public access.⁴⁷ It attracts pigs, rodents, and other undesirable animals. Alongside the animals are people who salvage through this open trash dump for scrap to reuse or sell.⁴⁸

The combination of government programs that bring trash to the population centers in Cité Soleil, and the absence of programs that manage the waste or remove it *from* where people live, leaves the landscape of Cité Soleil covered with trash.

Complainants are acutely affected by the accumulation of trash. Children play on hills of trash. They walk across the trash-filled canals to get to school, walking on the trash itself, careful not to fall into the contaminated water.⁴⁹ Getting to and from SAKALA is dangerous: "The children who come to SAKALA have to cross piles of trash to get to the Center. Sometimes, they must fight blind spots because of heavy smoke that invades the entire community. Other times, they must cross the canals that [overflow] and flood their homes and the path to the neighborhood."50 Former Cité Soleil resident Billy Lafalaise, for example, recounts that by the time he was 16 years old, he had "lost count" of the number of abandoned corpses he'd seen at or around the dumping site.⁵¹

It needn't be this way. The trash in Cité Soleil accumulates for political reasons and it is not removed for political reasons. "The [national] government provides barely any services in Cité Soleil and there is no sanitation program, which affects the health of the residents [because] Itlrash is never collected and removed from the streets and canals... and the residents are not educated on the [safe] disposal of trash,"⁵² explains Complainants' expert Dr. Bélizaire.

⁴⁴ Interview with Witness #1, Exh. M, App. at 45.

⁴⁵ Kestride Estil, From Waste To Housing: Using Plastic Waste To Build Sustainable Housing In Haiti (December 2019) (unpublished Master of Urban and Regional Planning thesis, Florida Atlantic University, on file with College for Design and Social Inquiry).

⁴⁶ *Id*. ⁴⁷ *Id*.

⁴⁸ Dieu Nalio Chery, *Haitians scour the country's largest trash dump*, AP News (Sept. 12, 2018), https://apnews.com/50c5062763b64fe297b643815fbd6568.

⁴⁹ M.Ca., Exh. C, App. at 5; and M.Ch., Exh. D, App. at 7.

⁵⁰ Tillias, Exh. J, App. at 28.

⁵¹ Joe Parkin Daniels, Learning brings hope to Haiti's most notorious slum, The Guardian (Oct. 4, 2019, 2:00 PM), https://www.theguardian.com/global-development/2019/oct/04/words-not-guns-learning-brings-hope-to-haiti-slum-Cité-soleil.

⁵² Bélizaire, Exh. G, App, at 11.

Complainants are exposed to myriad health hazards that thrive in the trash and contaminated water that are ever-present in their homes, on their streets, and in the places where they walk, play, and go to school. Complainants are suffering daily from the grave impacts of the Government's actions as well as its failure to act. They are suffering from life-threatening illnesses such as diarrhea, malaria, and respiratory issues that would be avoidable if the Government were to remedy the environmental conditions in which Complainants live.⁵³

All of Complainants' experts agree that these effects are both preventable and caused by the Government's failure to act.⁵⁴ Rather than address these problems, the Government actively contributes to the deterioration of the environmental conditions by continuing each day to add to the trash piles, by not keeping adequate waste removal and canal dredging,⁵⁵ and by placing the city's only trash dump in the poor residential neighborhood of Cité Soleil.⁵⁶

Those living in Cité Soleil are left to rely upon the volunteer efforts of local leaders who take it upon themselves to organize basic essential neighborhood programs such as recycling and trash and waste removal. SAKALA is one such initiative. But these efforts are insufficient to counter the continual onslaught of environmental insults endured by the community and its residents.

B. Lack of Sanitation and Drinking Water

The toxic trash produces toxic water, the exposure to and ingestion of which is a constant for residents of Cité Soleil. Many people live alongside the seven drainage canals: "[t]he wall of my house was part of the canal," 57 says Mr. Jean Paul, describing his childhood home.

Dr. Bélizaire describes how the canals are perpetually clogged with toxic trash:

"Since the creation of Cité Soleil, because of its location downstream on the coast, up to 7 huge canals that are 10-feet to 20-feet-wide and almost 2 miles long lead to the ocean. These canals that were built to channel used water to the ocean can no longer serve this purpose. Over the years they have become clogged with waste; now they are only a huge long reservoir fill[ed] with aggregates, plastic, and trash. All the water from upstream cities like Delmas, Pétion Ville, and Tabarre is mixed with solid waste from the street." 58

Making matters worse, whenever it rains, water backs up and floods the streets and homes of Cité Soleil⁵⁹ in a "mixed salad of trash." Mr. Tillias describes it this way:

With the first drop of rain anywhere in these cities, everything flows directly to the ocean through Cité Soleil[,] but because of the clogged canals, the waste does not find its way to the ocean but makes its way instead to the tables and the beds of the households where

9

⁵³ See Dubique, Exh. H, App. at 15; Bélizaire, Exh. G, App, at 11; Saint Fort, Exh. L, App. at 34-38.

⁵⁴ See Dubique, Exh. H, App. at 15-16; Bélizaire, Exh. G, App, at 11; Saint Fort, Exh. L, App. at 33-35.

⁵⁵ See Dubique, Exh. H, App. at 15; Bélizaire, Exh. G, App, at 11; Saint Fort, Exh. L, App. at 33-34.

⁵⁶ P.J., Exh. F, App. at 9.

⁵⁷ Jean Paul, Exh. K, App. at 31.

⁵⁸ Bélizaire, Exh. G, App, at 28.

⁵⁹ See N.I. Exh. E, App. at 8: "When it rains, the trash goes into the canals and stuff the canals and then goes out and into the houses."

⁶⁰ Dubique, Exh. H, App. at 15.

children live, chasing them from their own rooms for hours and sometime days until the water recedes. The canals are no longer a channel to let thing[s] go through but more of a reservoir to hold a lot of solid waste."

Even with slight precipitation, the trash in the canals overflows and fills the streets; when it pours, the dirty water floods into their houses, filling their homes with fetid water containing plastics, organic matter, medical debris, and human waste, resting in pools as it attracts malarial mosquitoes and other pests. ⁶²

When it rains, the canals easily overflow and cause the trash and human waste to flow "inside the houses and people have to sleep outside or spend days trying to clean up all the mess that the trash and the water brought." Streets in turn are nearly impassable: "[t]he people of Cité Soleil are left on their own with this problem, as they can not remember the last time there was a real cleaning of the approximately 2 miles of these canals that are one ... with the street."

Children can play nowhere but on mounds of trash and they walk past, over, and along the trash mounds going to and from school. They see trash everywhere they look. It infiltrates their bodies, entering their lungs, infecting their eyes, and ruining their belongings. And it makes them sick.

The children who attend SAKALA report that the trash they see daily harms them in myriad ways. For example, G.S. says: "the way to go from my home to SAKALA, there is a lot of trash. When the rain comes it brings a lot of trash, a lot of water in the streets." M.Ca. says that on their way to SAKALA, "there was a lot of water and so when I came to SAKALA I had to put my feet in the water, in the mud, in the trash." M.Ch explains that walking around Cité Soleil, "I see trash, I see dirty water" and that they need to "take blocks" -- to find pieces of stone or pavement to lay down across the canal so they can walk across because, as P.J. says, "people can't walk on trash." The constant flooding makes even the children's homes an unsafe place to stay. P.J., recounts that "when it rains trash gets inside the houses. ... When water gets into my house I [have to get] it out. We have to repeat that many times[,] so if after many tries we see the water won't stay out, we [are forced to] just leave until it dries by itself."

It does not even have to rain *in* Cité Soleil for this flooding to occur because "when it rains in other cities or up in the mountains, [Cité Soleil residents] just wake up and see all the trash is coming down with water but [they] don't know where it is coming from." The continuing flood of dirty and hazardous conditions throughout Cité Soleil make the immediate area around SAKALA especially dangerous for children and others who go there. 71

⁶¹ Tillias, Exh. J, App. at 28.

⁶² E.D., Exh. A, App. at 3; G.S., Exh. B, App. at 4; M.Ca., Exh. C, App. at 5; P.J., Exh. F, App. At 9.

⁶³ Interview with Witness #2 ("Witness #2), at SAKALA September 3, 2019, Exh. N, App. at 46.

⁶⁴ Tillias, Exh. J, App. at 28.

⁶⁵ G.S., Exh. B, App. at 4.

⁶⁶ M.Ca., Exh. C, App. at 5.

⁶⁷ M.Ch. Exh. D, App. at 7. *See also* G.S. Exh. B, App. at 4: "To deal with that is that if I am trying to cross I search for some blocks and I just cross on the blocks to make it easier for me."

⁶⁸ P.J. Exh. F, App. at 9.

⁶⁹ Id

⁷⁰ Witness #2, Exh. N, App. at 46.

⁷¹ Tillias, Exh. J, App. at 28-29.

Complainants' expert, Dr. Bélizaire, concludes that these conditions lead to compounding hardships:

"There are also water contamination issues caused by the frequent flooding. For instance, when it rains, the rainwater generally floods the houses and the streets, causing disease. There is also widespread malnutrition and respiratory illnesses such as acute asthma, caused by burning of the waste and nearby industries. I treat other conditions like diarrhea, malaria, typhoid worms, and dengue fever. There are virtually no medical clinics or other healthcare providers except through non-profit organizations like Haiti Clinic, and child mortality is very high."

C. Toxic Fumes

Trash accumulates in the canals, day-by-day, hour-by-hour. It takes no breaks and knows no holiday. The waste holds hazardous metals, plastics, and chemicals; thus, it produces poisonous smoke that is harmful to inhale. ⁷³ Because the Government takes no responsibility for the accumulation of trash, the only way to manage its volume is for residents to burn it in huge piles:

"Very often, the solutions to mitigate the disaster of the poor management of this waste is actually burning everything. But that creates an even bigger threat on what people (and mostly children) have to breathe there. As the houses are on the canals or very close to them, disposing of the waste in this way itself becomes a threat to public health in the entire community and the communities nearby."

While the toxic smoke sickens everyone, it affects children most of all. Complainants' expert, Dr. Dubique, elaborates: "To remove or destroy the trash, the residents burn it, which can exacerbate asthma, causing acute asthma episodes, and produce acute distress respiratory issues and death mostly in children who live in houses where there is no space and enough rooms to bring in fresh air." ⁷⁵

The pervasive trash throughout the neighborhood, the incessant flooding, and the toxic fumes define the landscape of these children's lives, damaging their sense of dignity and limiting their opportunities for healthy development and well-being. The ensuing adverse impacts on the residents of Cité Soleil are discussed next.

These desperate conditions have tragic consequences. Dr. Dubique describes the threats to health that surround the lives of children, including the:

"incalculable ... cost of premature death and loss of human capital for development. In Cité Soleil, people always die young. Between 0-5 years, a child could easily die due to lack of access to vaccinations, sanitary conditions, lack of parents, lack of health education, and food insecurity. If a child is lucky enough to live through these fragile early years of development, he or she could easily die from hunger, armed conflict,

11

⁷² Bélizaire, Exh. G, App, at 11.

⁷³ G.S., Exh. B, App. At 2; C.Ma., Exh. C, App. at 3; M.Ch., Exh. D, App. at 5; and N.I., Exh. E, App. at 6.

⁷⁴ Tillias, Exh. J, App. at 28.

⁷⁵ Dubique, Exh. H, App. at 16.

sexually-transmitted diseases, or lack of basic essential services. I have personally seen a lot of young leaders with great potential lose their lives too early and this affects Cité Soleil's ability to grow and progress."⁷⁶

Yet the Government stands by. Every day "that this issue remains ignored," Dr. Dubique says, "the number [of] respiratory diseases among the Cité Soleil community increases," along with other preventable physiological and psychological conditions, discussed in the sections that follow.

D. Physiological Effects

Prolonged exposure to trash and contaminated wastewater presents an immediate danger to children. Some of the children experience headaches and other physical ailments. M.Ca. says: "It makes it very difficult to breathe. Sometimes it goes in my eyes and it goes in my nose. It makes my eyes water." M.Ch. says: "When they are burning the trash it gives me a headache and it makes my eyes water." N.I. complains that the burning trash "is a problem for me because it gives me a headache and I can't escape/avoid the problem."

Dr. Dubique reports that, "people from Cité Soleil are more likely to die from diseases and floods and from hunger and gang violence . . . [when it rains] the trash and dirty waters inundate the communities and the households, causing malaria, typhoid, cholera, acute diarrhea, worms and skin diseases." The growing trash problem affects the residents of Cité Soleil in all aspects of their life: physically, mentally, and socially." **

1. Waterborne Diseases

Contaminated water is a major problem for children in sacrifice zones like Cité Soleil. Dr. Bélizaire explains some of the health consequences of living around stagnant pools of dirty water:

"The collection of water in the trash and the buildings when it rains and touches the body can lead to skin diseases like scabies and tiňa capitis, or worsen existing infections like vaginal infections, and STIs. The water may be used for cooking and lead to diarrhea. The water also breeds mosquitoes that bite the individual, and cause malaria and dengue fever, and others. Most of the children in Cité Soleil do not eat every day and many have malnutrition, so their bodies are not strong enough to fight off illness. Some of the diseases are treatable, such as scabies, but others like diarrhea can lead to death. The children that live within these conditions often have mental health issues due to the dangerous and unhealthy conditions."

⁷⁸ M.Ca., Exh. C, App. at 5.

⁷⁶ Dubique, Exh. H, App. at 19.

^{&#}x27;' Id.

⁷⁹ M.Ch., Exh. D, App. at 7.

⁸⁰ N.I, Exh. E, App. at 8.

⁸¹ Dubique, Exh. H, App. at 15.

⁸² *Id.* App. at 16.

⁸³ Bélizaire, Exh. G, App, at 11.

Waterborne diseases run rampant. Dr. Mackenson Saint Fort is a physician who provides surgical and other services in Cité Soleil and throughout Haiti. He concludes that the canals create a widespread breeding ground of "malaria, dengue, yellow fever, Chikungunya, Zika and filariasis." Scabies, for example, is prevalent due to the prevalence of rainwater soaking everything both in and out of private homes and contaminating whatever it encounters. Scabies is an intensely itchy skin condition caused by bites from tiny, burrowing mites that live in dirty water. It is also highly contagious. Like malaria and typhoid, scabies is rampant in Cité Soleil.

In addition to these diseases, women and girls in Cité Soleil are especially susceptible to urinary tract infections caused by lack of access to clean water. Dr. Saint Fort concludes, "[approximately] 67% of girls have urogenital infections." 86

2. Contaminated Drinking Water

Potable water is not available in Cité Soleil. Dr. Saint Fort reports that "33% of the population consume dirty water during the rainy season [while] 23% quench their thirst with cloudy water and only 42% [have access to] clean water." Diarrhea is an especially dangerous affliction for the children of Cité Soleil; it is, after respiratory illness, the leading cause of death among children under 5 years. Diarrhea is a constant in Cité Soleil. Dr. Bélizaire reports that even though diarrhea is easily treatable in most areas of the world, it becomes a common cause of death to the residents of Cité Soleil due to widespread inaccessibility of clean drinking water, along with living among flood-damaged homes. This makes residents susceptible to repeated ailments despite receiving treatment. While diarrhea itself can be serious in Haiti, the most significant problem with widespread diarrhea comes from the resulting dehydration for the infected individual. For an area that already lacks access potable water, inability to replenish fluids and to hydrate makes disease deadly. Potation of the serious in the resulting dehydration for the linest and to hydrate makes disease deadly.

Dr. Mackenson Saint Fort has examined the children of SAKALA. He concludes that water that has become unsuitable for drinking by coliform bacilli, parasites, protozoa, fungi and the toxins it contains become a poison for the inhabitants of this area. The dirty water from the canals contaminates all other water sources used by the Complainants.

3. Respiratory Ailments

The environmental conditions where Complainants live also cause respiratory ailments. As expert Dr. Dubique explains:

"Inhalation from burning trash/plastic in Cité Soleil is affecting not only the health of the people but also affects them socially. When people in Cité Soleil respire the burning trash, it makes them more likely to develop asthma. This has directly exacerbated the growing deadly asthma crisis in Haiti. ... You don't need to be directly next to burning

⁸⁴ *Id.*, App. at 34.

⁸⁵ Bélizaire, Exh. G, App, at 11.

⁸⁶ Saint Fort, Exh. L, App. at 38.

⁸⁷ *Id.*, App. at 33.

⁸⁸ Saint Fort, Exh. L, App. at 34.

⁸⁹ Id., See also A. Bras, C. Berdier, et al., Problems and Current Practices of Solid Waste Management in Port-au-Prince (Haiti), 29 Waste Management 2907-09 (2009).

⁹⁰ See id.

⁹¹ Saint Fort, Exh. L, App. at 33.

trash and plastic to be affected because the smoke invades the environment and all in Cité Soleil are adversely affected. In Haiti, much of the trash includes plastic bottles and otherwise recyclable plastic material. When we burn this plastic trash close to the community, it puts the residents at heightened risk to develop several different types of cancer "92"

Dr. Bélizaire concludes: "When trash, including plastic, rubber from the tires, is burned, the respiratory system is affected, causing conditions like asthma[tic] bronchitis, [and] asthma, (which is an inflammatory respiratory disease caused by allergies.)." Dr. Dubique explains:

"Respiration diseases and infections are the leading causes of death among children. In this community, aluminum is commonly used to make metal utensils to cook. When this aluminum is thrown out and then burned, those nearby are at heightened risk to harm their respiratory systems as inhalation of burning aluminum can easily cause lung cancer with chronic exposure." ⁹⁴

Resulting respiratory ailments constitute a significant cause of death in Cité Soleil. Dr. Saint Fort reports that "15% of all annual deaths result from bronchial atrophy" caused by hazardous air pollution from burning trash in the canals.⁹⁵

The burning trash produces cancer-causing chemicals. For example, when these burns occur, toxic and cancer-causing chemicals such as Agent Orange are released into the environment, leaving Cité Soleil's residents susceptible to "neurological [damage, damage to] thyroid function and respiratory system damage." Dr. Bélizaire concludes:

"The dioxins, the tetrachlorodibenzo-p-dioxin and the carbon dioxide that are inhaled from the burning trash are lethal. Commonly known as Agent Orange, these chemicals provide a toxic compound for the organism that cause cancer and neurological, thyroid function and respiratory system damage. Thus, the burning of plastic wastes increases the risk of heart disease, aggravates respiratory ailments such as asthma and emphysema, and can cause rashes, nausea or headaches, and damage to the nervous system." ⁹⁷

Toxic smoke adversely affects those who aren't exposed directly. Dr. Bélizaire concludes: "a person does not need to be physically close to the smoke from burning trash/plastic in order to be harmed by it. Toxicological studies on dioxin showed the potential health risks within 26 feet of the source of waste burning source from just 15 minutes of burning. It is recommended to burn trash 50 ft [or more] from houses and individuals which does not occur in Cité Soleil." ⁹⁸

93 Bélizaire, Exh. G, App, at 11

98 Bélizaire, Exh. G, App, at 12.

⁹² *Id.* App. at 16.

⁹⁴ Dubique, Exh. H, App. at 14.

⁹⁵ Saint Fort, Exh. L, App. at 34.

⁹⁶ Bélizaire, Exh. G, App, at 11.

⁹⁷ Id.

E. **Health Effects for Children**

Children are disproportionately affected by poor environmental conditions, on account of their metabolism, immune systems, physiology and developmental needs. 99 Children in Cité Soleil are among the most vulnerable in the world. The water they drink is filled with disease. 100 The air they breathe is suffocating and causes permanent damage to their respiratory systems. 101 They are exposed to these conditions daily while their bodies and minds are in their most crucial stage of development. These conditions - resulting from inaction and neglect by their government – not only diminish each child's physical health, but also threaten their human dignity and poison their potential to grow mentally. 102

Speaking of conditions in Cité Soleil, expert Dr. Bélizaire says that "[f]or children under five, the first cause [of death] is respiratory diseases." Having examined children at SAKALA, Dr. Saint Fort concludes that:

- * "100% of these children had a complaint related to the respiratory tract ranging from repeated influenza-like illness in the majority of cases, however about 27% of them had signs and symptoms compatible with a serious bronchopulmonary disease";
- * "[a]pprox. 87% of them presented ophthalmic disorders in the form of eye irritation: red eye, pruritus, excessive tearing, blurred vision;
- "About 53% had a decrease in visual acuity";
- * "[a]lmost 53% of them had nasal sinusitis and 60% had irritative pharyngolaryngitis"; and
 - * "73.3% had an irritative skin condition ranging from pruritus, erythema, to vesicular, papular, pustular lesions and fungal dermatophytias which create remarkable psychological and aesthetic damage in girls especially."104

Girls and women in Cité Soleil who are pregnant are especially at risk for harm to themselves and their babies due to exposure to the toxic smoke, as Dr. Dubique explains:

"One example of how the smoke pollution affects the residents' physical [health] can be seen in how a pregnant woman who inhales smoke can affect the neural tube. This is especially detrimental to the embryonic development of the child because the neural tube

⁹⁹ See generally World Health Organization (WHO), Inheriting a Sustainable World? Atlas on Children's Health and the Environment (2017), available at www.who.int/ceh/publications/inheriting- a-sustainable-world/en/.

¹⁰⁰ Saint Fort, Exh. L, App. at 33: "The contamination of the water table in this commune by the faeces which arrive there either by runoff, or by non-compliant latrines or quite simply because the population does not have any, makes the water unsuitable for safe consumption.... The coliform bacilli, parasites, protozoa, fungi and the toxins it contains transforms it into a poison for the inhabitants of this area." See Section E below.

¹⁰¹ Id., App. at 34: "The state has no recycling cost plan for the tons of plastics of all kinds it utilizes or receives on a daily basis which are thrown away in the environment. These materials are destroying Cité-Soleil, by intoxicating the air, the water in addition to being responsible for the depletion of the water table by the phenomenon of runoff they produce and the flooding that comes along with it. This accelerates the salinization of the aquifer. Their nonstandard combustion get rid of them or their use as a combustible (manufacture of aluminum boilers) release toxic gases into the atmosphere which will have harmful effects on the physical, neuropsychiatric and mental health of the population of this area."

102 Dubique, Exh. H, App. at 19.

¹⁰⁴ Saint Fort, Exh. L, App. at 38.

is responsible for brain development and toxic pollution from burning trash can produce congenital malformation." ¹⁰⁵

Toxic smoke is inescapable. It is so severe that it prevents children from living their lives, going to school, playing with friends. For example, E.D. says "It is a problem for us because of the smell. The bad smell is not good for us." ¹⁰⁶

The Government can prevent all of this. Both Dr. Dubique and Dr. Bélizaire agree that "the significant cases of infectious diseases, long-term respiratory conditions (such as asthma, lung cancer, etc.), and general [high] mortality rate for those living in Cité Soleil [is] directly caused by massive accumulation of waste and the improper/unmonitored methods of its removal through general trash fires." ¹⁰⁷

Climate change-related effects – such as more frequent flooding and more intense storms –adversely affect children most of all, and in worse ways than adults, including "(1) environmental displacement, which reduces opportunities for education and destabilize children's families and community structures; (2) food and water insecurity; (3) diminished health and reduced access to medical care; and, (4) reduced access to information, participation and justice."

Furthermore, climate change-related floods worsen the spread of waterborne diseases, especially when the water and sanitation infrastructure is compromised already. Poor hygiene and consumption of contaminated water can contribute to increased incidence of diarrhea, cholera, and other diseases. Diarrhea alone is the second leading cause of mortality in children under five years old. Climate change also expands the seasonal and geographic range of vector-borne diseases, including insect-borne diseases. Besides impacts to safe food and potable water, climate change disrupts child protection systems and worsens societal and familial pre-existing tensions and conflicts, leaving children susceptible to abuse, child labor, trafficking and other forms of exploitation, already significant problems in the poorer sections of Haiti. Moreover, "disproportionate impacts will be felt by children living in developing countries, particularly those in geographically vulnerable areas, such as riparian and low-lying coastal areas," as here. Girls in particular face heightened risks due to these climate change-related

¹⁰⁷ Dubique, Exh. H, App. at 20; Bélizaire, Exh. G, App, at 12-13.

¹⁰⁵ Dubique, Exh. H, App. at 14.

¹⁰⁶ E.D., Exh. A, App. at 3.

¹⁰⁸ UNICEF, Unless We Act Now: The Impact of Climate Change on Children (New York, 2015), p. 6; UNICEF, The State of the World's Children 2014: Every Child Counts (New York, 2014).

¹⁰⁹ P.J. Landrigan and A. Garg, "Children are not little adults", in Children's Health and the Environment: A Global Perspective, J. Pronczuk-Garbino, ed. (Geneva, WHO, 2005).

¹¹⁰ Dignity Right Project, "Climate Change and the Dignity Rights of the Child," at 3 (Madison McGuirk and Brianna Mills et al., submission to the United Nations High Commissioner for Human Rights, September 2017), available at: https://www.ohchr.org/Documents/Issues/ClimateChange/RightsChild/Dignity_Rights_Project.pdf

WHO, "Diarrhoeal disease", Fact sheet No. 330 (2013), available from www.who.int/mediacentre/factsheets/fs330/en/.

¹¹² Sheridan Bartlett, "Climate change and urban children: impacts and implications for adaptation in low- and middle-income countries." Environment and Urbanization, vol. 20, No. 2 (October 2008), pp. 509-510

¹¹³ "Analytical Study on the Relationship Between Climate Change and the Full and Effective Enjoyment of the Rights of the Child," Report of the Office of the United Nations High Commissioner for Human Rights A/HRC/35/13 (2017), available at https://documents-dds-

ny.un.org/doc/UNDOC/GEN/G17/110/91/PDF/G1711091.pdf?OpenElement

effects. ¹¹⁴ Thus, climate change magnifies the adverse environmental conditions facing children in Cité Soleil, including the Children-Complainants.

F. Psychological Impacts for Children

The environmental conditions in Cité Soleil exact profound psychological damage. The feelings of worthlessness are made worse by the fact that many of the wealthier communities have some form of waste collection service, while the poorest communities who need it the most are left with none. ¹¹⁵ Dr. Dubique explains:

"We have to understand first the context of Cité Soleil and it[s] location with respect to wealthy neighborhoods. The richest areas are located above Port-au-Prince, while Cité Soleil is located in downtown Port-au-Prince near the sea. Cité Soleil is linked to these wealthy neighborhoods by the canals more than the roads. The section of a canal in a wealthy neighborhood is large, paved, and well-built, while the same canal in Cité Soleil is small and not paved, with contaminated water. As a result, the waste, trash, and water that flow from the wealthy neighborhoods down to Cité Soleil produce in Cité Soleil a mixed salad of trash that includes human waste, medical waste, industrial waste such as plastic bottles, plastic plates, syringes, and more."

Because of Cité Soleil's role as the "Haitian trash dump," the residents of the community have been unfairly considered the "waste of the country." ¹¹⁷

Children are acutely affected emotionally and physically by adverse environmental conditions, ¹¹⁸ including toxic fumes ¹¹⁹ and contaminated water. ¹²⁰ The consequences of exposure to unhealthy environmental conditions are profound and last a lifetime:

"There are many environment- and pollution-related causes of ill-health in children, and pediatric health and science tell us that children are more vulnerable to environmental pollution than adults on account of their physiology and immature immune defences. The

Dubique, Exh. H, App. at 15.

 $^{^{114}}$ Id

¹¹⁶ Id.

¹¹⁷ Daniel Tillias, *Wealth of Waste*, INDIEGOGO (2018), https://www.indiegogo.com/projects/the-wealth-of-waste#/.

¹¹⁸ UNICEF, *Children in the New Millennium: Environmental Impact on Health*, 20 (2002); Makuch, Karen E, 'Environmental Rights of Children,' in James R. May & Erin Daly (eds) *Human Rights and the Environment: Indivisibility, Dignity, Legality, Geography, Encyclopedia of Environmental Law (Edward Elgar Press 2019)*; Tamburlini G, von Ehrenstein OS and Bertollini R, 'Introduction' in Tamburlini G, von Ehrenstein OS and Bertollini R (eds), *Children's Health and Environment: A Review of Evidence* (European Environment Agency and the WHO Regional Office for Europe 2002) 12.

¹¹⁹ Grigg J, Adjacent Government, in The United Nations Children's Fund [Unicef] et al. *The Lifelong Impact of Air Pollution*, (May 2016); Rees N, 'Danger in the Air: How Air Pollution Can Affect Brain Development in Young Children' (2017) Paediatrics and Child Health 22; Sack C and Kaufman J, 'Air Pollution Levels and Children's Lung Health: How Low Do We Need to Go?' (2016) 193(8) American Journal of Respiratory and Critical Care Medicine 819–820. https://www.openaccessgovernment.org/wp-content/uploads/2016/05/AG10-web-final.pdf; Rees N, *Danger in the Air: How Air Pollution Can Affect Brain Development in Young Children* (2017) Paediatrics and Child Health 22; Sack C and Kaufman J, *Air Pollution Levels and Children's Lung Health: How Low Do We Need to Go?* (2016) 193(8) American Journal of Respiratory and Critical Care Medicine 819–820.

¹²⁰ See e.g., European Commission DG Environment (child-centric materials on environmental issues) http://ec.europa.eu/environment/pubs/children/children.htm

effects of air pollution are well[-]documented for indoor and outdoor pollution. There are well-documented studies on the effects on children of persistent organic pollutants and heavy metals, including lead and mercury[;] whether from air, water or land pollution, environmental harms to children include emotional as well as physical health impacts."¹²¹

These impacts are felt most acutely by children. Dr. Saint Fort has examined children at SAKALA, and in his expert opinion concludes: "The environment is killing these kids not only physically but it's killing their dreams, it's killing their potential, it's killing their ability to be somebody tomorrow." Mr. Tillias reinforces this: "As much as the canals will continue to be clogged, so many young lungs will be clogged the same. The smoke that dissipates in the air is the same as the dreams of children dissipating in the air. Children whose parents have to choose between sending them to school or sending them to a [medical] clinic. Children should not be expose[d] to this." The children believe this as well. As Mr. Tillias describes it:

We know it is devastating for a child['s] life to have only trash as their decoration. They can only dance on the mud and trash that take away their sense of humanity. The way the trash is disposed of now in the canals is just like the children there had no other destiny and had no dignity. Because of this, you hear them say too often say that they have no existence. A young boy told me once he was already dead, they just cannot find a grave for him yet, this is why he is still among us. When the sense of despair is so bad, the children there in Cité Soleil are then ready for any big loss. They have no real reason to live, they are ready not to be a real human being, their only dignity becomes the dignity of dying that at least everyone share. 124

Children are affected most of all, again. Some have given up. M.Ca., explains that sometimes they did not go to school at all: "Sometimes I just go home so I could avoid smelling this bad smell." ¹²⁵

When people – and especially children – are stigmatized, their dignity is impaired: they feel less valued than others and their feelings of self-worth are diminished. This is a constant condition for the local children. Even when a child is feeling healthy enough to be able to play and interact with other children, they face the stigma of being "unclean" to the children of the wealthier areas in Haiti. Routine trips to the hospital as a result of dehydration and stomach problems related to going days without eating a proper meal are all very real issues to these children. Daniel Tillias recounts his own childhood: "I went to elementary school outside of Cité Soleil. Early at age 6, I was already told that this is a place to leave ... I knew first-hand what it was to be treated with less regard because of what you have and what you look like. At school, I was bullied because I was the one coming from Cité Soleil. It was quite an incentive to be on the side of the marginalized." 128

¹²⁵ M.Ca., Exh. C, App. at 6.

¹²¹ Makuch at 390 (internal references omitted).

¹²² Saint Fort, Exh. L, App. at 39.

¹²³ Tillias, Exh. J, App. at 29.

¹²⁴ *Id*.

¹²⁶ See A. Bras, C. Berdier, et al.; see also Dubique, Exh. H, App. at 16.

¹²⁷ Bélizaire, Exh. G, App, at 12.

¹²⁸ Tillias, Exh. J, App. at 26.

These unsanitary conditions and the lack of comprehensive resolution harms the social well-being and development of a child. As Dr. Dubique reports,

[W]henever a child is stricken with malaria, typhoid or scabies . . . they cannot play with their friends or go to school, so they are forced to stay home and are deprived of interaction with other children. Socially, when you live in these neighborhoods that are infected with disease from the growing trash problem, it is difficult to show your friends your home and bring them to visit you. Your clothes are often dirty and smell of meat, fish or smoke because it is impossible to live in Cité Soleil with trash and dirty water that inundate your house and your community and manage to stay hygienic. Sincerely, it is not easy to cohabit with trash in Cité Soleil. 129

The forced isolation that results from the pervasive waste directly impacts the human dignity of the children because they are deprived of the ability to interact with others and are treated as less worthy than the rest of society.

Repeated exposure to any level of harassment and humiliation stemming from this stigma would burden any child's self-esteem. Growing up with such stigmatization and with no hope for the future severely impacts a child's chances of healthy social growth and development.

Dr. Dubique illustrates the feeling of abandonment that a child living among the trash in Cité Soleil experiences, reporting that "[i]n Cité Soleil, people always die young. Between 0-5 years [of age], a child could easily die due to lack of access to vaccinations, sanitary conditions, lack of parents [or consistent guardian/authority figure], lack of education in regards to health, and food insecurity." ¹³²

Children experience an acute sense of abandonment. N.I. is a resident of Cité Soleil and only 15 years old, but sees the daily buildup of trash throughout their neighborhood and is impacted by the lack of help from anyone outside the community to create a solution. N.I.'s heartbreaking testimonial is just one of the several provided herein and highlights the mentality of a child who has already lost hope for a solution, "because now we can't save them." 134

Continuing this way confirms to these children that their fears are correct and that their lives are not recognized as having equal worth. Now, the residents of Cité Soleil have been left to fend for themselves, leaving children especially vulnerable to short-term and long-term medical and developmental challenges that are otherwise preventable. P.J. "would like Cité Soleil to find help so we can clean our area and everywhere can be clean" while M.Ca. would

¹²⁹ Dubique, Exh. H, App. at 16.

¹³⁰ Marta Marello, *Waste Pickers: Strategies to Enhance Livelihoods*, (Aug. 23, 2013), http://www.bu.edu/pardeeschool/files/2014/08/Sample-Policy-Paper-1.pdf.

¹³¹ Vanessa Hua, *Rise of the trash-picker collective*, Pacific Standard (Jan. 15, 2016), https://psmag.com/environment/rise-of-the-trash-picker-collective.

¹³² Dubique, Exh. H, App. at 19.

¹³³ N.I, Exh. E, App. at 8.

 $^{^{134}}$ Id

¹³⁵ See generally Saint Fort, Exh. L, App. at 33; Bélizaire, Exh. G, App, at 12; Dubique, Exh. H, App. at 16; P.J. Exh. F, App. At 9.

¹³⁶ P.J., Exh. F, App. at 9.

like to "find a sponsor to deal with the issue of trash in the country," knowing that the Government is unlikely to take on that responsibility. 137

From Dr. Dubique's perspective, conditions in Cité Soleil could be ameliorated so that local children were not more disadvantaged than their peers in other parts of the country:

I am not an economist, but I assume that the general annual cost of providing access to general medical treatment to an impoverished community of Port-au-Prince would be less than 4 million dollars USD of the Petro Caribe money (Venezuela has loaned money to Haiti with tax and it was mismanaged by the Haitian officials). These funds could be used to help repair and run the hospital Sainte Catherine and the CHAPI health center, as well as build two additional health centers. Funds being brought into Haiti for other reasons would go to much greater use if it were re-directed towards combating the growing waste issue. These funds would be helpful to decrease the incidence of diseases, hunger, and gang violence in Cité Soleil and improve the living conditions. 138

The extreme societal differences between Cité Soleil and the rest of the country due to the difference in sanitary conditions leads many Haitians to unfairly see Cité Soleil as a community that is sub-standard in comparison and, as such, expect the children of the community to be less likely to reach their potential.¹³⁹

The Government has allowed some children to grow up in and around trash dumps, while taking care of the children in other neighborhoods. This has contributed to a sense of social tension among different communities and the sense among the children that they have been discriminated against because they are poor. This unfair discrimination has a direct impact upon a child's social learning because social relationships are dependent upon the nature surrounding them. These children live in life-threatening conditions and are deprived of the most basic humanitarian needs. They lack access to adequate shelter, clean water, sanitation, food, education, and healthcare. They face discrimination by society as they are considered the "trash kids of the country." They are suffering from life-threatening illnesses such as diarrhea, malaria, and respiratory issues that are avoidable if the Government were to remedy the environmental conditions in which they live. 141

All of Complainants' experts agree that these effects are both preventable and caused by the Government's failure to act. Yet, in profound, objective, and measurable ways, the landscape of waste in Cité Soleil is directly impairing the ability of children to grow, to learn, and to develop their identities. Dr. Saint Fort's examination of a sample of 15 children at SAKALA revealed how the pollution impairs the mental and cognitive capacities of the children:

- * 100% of them had a neuro-psychiatric attack which had serious repercussions on their school learning.
- * 100% had problems concentrating which could be correlated with attention deficit hyperactivity disorder. However, hyperactivity and impulsivity were not always present.

Dubique, Exh. H, App. at 17.

¹³⁷ M.Ca., Exh. C, App. at 5.

¹³⁹ Cité Soleil, KONBIT BIBLIOYOTÉK SITE SOLÉY, https://www.konbitbibliyoteksitesoley.org/Cité-soleil.

¹⁴⁰ Tillias, Exh. J, App. at 28.

¹⁴¹ See Dubique, Exh. H, App. at 15; Bélizaire, Exh. G, App, at 11; Saint Fort, Exh. L, App. at 34-38.

¹⁴² See Dubique, Exh. H, App. at 15-16; Bélizaire, Exh. G, App, at 11; Saint Fort, Exh. L, App. at 33-35.

- * The inability to pay attention to detail [is present]. Careless mistakes in schoolwork were present in 100% of cases as well as difficulty concentrating on a task and avoidance of work requiring prolonged effort.
- * About 53% of these children suffered from ongoing anxiety.
- * 60% of them had stress and headache on a [continuing basis].
- * 13.3% of them detected fairly worrying memory problems in them, which greatly affected their academic performance. 143

These conditions limit the ability of SAKALA's children to fully develop their personalities and have control over the course of their lives.

Rather than address these problems, the Government actively contributes to the deterioration of the environmental conditions by continuing to add to the trash piles, by not keeping adequate waste removal and canal dredging, ¹⁴⁴ and by placing the city's only trash dump in the poor residential neighborhood of Cité Soleil. ¹⁴⁵

-

¹⁴³ Saint Fort, Exh. L, App. at 38.

¹⁴⁴ See Dubique, Exh. H, App. at 15; Bélizaire, Exh. G, App, at 11; Saint Fort, Exh. L, App. at 33-34.

IV. REQUEST FOR RELIEF

Complainants have demonstrated that the Government of Haiti has violated their rights by its actions that brought trash into Cité Soleil without any plan for its removal or sanitary disposal; by its acquiescence in allowing trash from other neighborhoods to flow into Cité Soleil year after year, and by its utter failure to drain the canals, or to protect children from the toxic fumes, contaminated water, and unsanitary trash dumps that form the landscape of their lives and from which they can get no respite. Neglected and abandoned by the national government, the children especially suffer from preventable and treatable diseases that recur, and threaten their health, their lives, and their dignity. These children are especially vulnerable to irreparable harm given their poverty and their youth: their developing minds and bodies make them even more at risk for both short-term and long-term medical and psychological problems caused by prolonged exposure to these conditions.

Respectfully submitted, 146

James R. May, Esq. Senior Legal Counsel Dignity Rights International

gonel May

jrmay@widener.edu

27.9

Erin Daly Erin Daly Executive Director Dignity Rights International edaly@widener.edu

Co-Directors, Dignity Rights Project Widener University Delaware Law School

Dated: August 10, 2021

_

¹⁴⁶ We acknowledge and are grateful for contributions from students in the Dignity Rights Practicum at Widener University Delaware Law School, Wilmington Delaware, U.S.: Caroline Beetz, Julian T. Benson-Reid, Paige DeBell, Alicia Dugger, Joshua Dziczek, Chloe Hunter, Dominic Mallon, Jessica Ott, Madhuri Ray, Uri Simms and Matthew Walker.

APPENDIA: EAHIBITS	
COMPLAINT	
TO THE SPECIAL RAPPORTEURS ON:	
TOXICS AND HUMAN RIGHTS;	
SAFE DRINKING WATER AND SANITATION;	
THE RIGHT TO HEALTH; and,	
HUMAN RIGHTS AND THE ENVIRONMENT	
ON BEHALF OF:	
SIX CHILDREN OF CITÉ SOLEIL, HAITI	
And	
SAKALA COMMUNITY CENTER FOR PEACEFUL ALTERNAT	IVES
CONCERNING VIOLATIONS OF HUMAN RIGHTS IN CITÉ SOLEI	і наіті
CONCERNING VIOLATIONS OF HUMAN RIGHTS IN CITE SOLEI	L, 11A111

Exhibit A: Statement of E.D, Age 16

(Interview recorded, conducted, translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, November 18, 2020. Identity of interviewee available upon request by IACHR.)

Nancy: Thank you so much for speaking with us today. What is your name?

E.D.: My name is [E.D]

Nancy: And how old are you?

E.D.: I am 16.

Nancy: How old were you when you first started coming to SAKALA?

E.D.: I was 14.

Nancy: Do you go to school?

E.D.: Yes.

Nancy: Where do you go to school?

E.D.: I go to school in Sarthe.

Nancy: Is Sarthe in Cité Soleil?

E.D.: Yes.

Nancy: Do you live in Cité Soleil?

E.D.: Yes.

Nancy: When you are walking around in Cité Soleil, going to school and to SAKALA, do you notice a lot of trash in the streets?

E.D.: Yes. I have seen a lot of trash.

Nancy: Is the trash a problem?

E.D.: Yes.

Nancy: Why?

E.D.: It is a problem for us because of the smell. The bad smell is not good for us.

Nancy: What happens with the trash when it rains?

E.D.: So when it's raining the water can just spring in and also the water can go in to houses and stay.

Nancy: Have you also noticed trash burning in Cité Soleil?

E.D.: Yes.

Nancy: And is the burning trash a problem?

E.D.: Yes, for me it is a problem.

Nancy: Why?

E.D.: It makes me sick, I can't breathe well with the smell.

Nancy: And would you like to say anything else about the trash situation in Cité Soleil?

E.D.: What I can say is that the people of Cité Soleil can work together and find where this trash is and move it to somewhere else.

Nancy: Now we will talk a little bit about SAKALA. Do you like SAKALA?

E.D.: Yes, a lot.

Nancy: What do you like to do at SAKALA?

E.D.: I like the soccer. I like the education that SAKALA is giving us. I go to the library.

Nancy: I am so sorry for all the mosquitos (marenguen) so we will be quick. Is there anything else you would like to say about SAKALA?

E.D.: What I like about SAKALA is that SAKALA guides us, takes our hands and walks with us and helps us in everything that we do.

Nancy: OK, mèsi anpil. Thank you so much.

Exhibit B: Statement of G.S., Age 17

(Interview recorded, conducted, translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, November 18, 2020. Identity of interviewee available upon request by IACHR.)

Nancy: Thank you so much for speaking with us today.

G.S. Thank you too.

Nancy: What is your name? G.S.: My name is [G.S] Nancy: How old are you?

G.S.: I am 17.

Nancy: How old were you when you first started coming to SAKALA?

G.S.: I was 15.

Nancy: And do you go to school?

G.S.: Yes.

Nancy: Where do you go to school?

G.S.: My school is in Bwa Nef, the name of the school is St. Francis.

Nancy: And Bwa Nef is in Cité Soleil?

G.S.: Yes.

Nancy: Do you live in Cité Soleil as well?

G.S.: Yes.

Nancy: Where do you live?

G.S.: I live at Rue Sanon.

Nancy: When you come to SAKALA from your home and school, do you see a lot of trash in the streets?

G.S.: Yes, because the way to go from my home to SAKALA, there is a lot of trash. When the rain comes it brings a lot of trash, a lot of water in the streets.

Nancy: And how do you deal with that situation?

G.S.: To deal with that is that if I am trying to cross I search for some blocks and I just cross on the blocks to make it easier for me.

Nancy: Do you also ever see trash burning in Cité Soleil?

G.S.: Yes.

Nancy: Is that a problem?

G.S.: Yes. It is a problem for me because I am the captain of what we call Earth Fridays here (an environmental group at SAKALA). So I am fighting against everything that is bad for the environment. So yes it is a problem for me.

Nancy: Does the smoke ever make it hard for you to breathe or feel sick?

G.S.: Sometimes yes. Because the water brings a lot of mud, so when the water dries there is a lot of dirt and trash. So they put it in a pile and set fire to it and the smoke [makes me ill]."

Nancy: Is there anything else you would like to say about the trash situation in Cité Soleil?

G.S.: So what I would say is that we should gather together to find the solution because one person alone can't find the solution. We should put ourselves together to find the solution to these problems.

Nancy: So now we're going to talk about SAKALA. Do you like SAKALA?

G.S.: Yes, I like SAKALA.

Nancy: And what do you like about SAKALA?

G.S.: So when I first came to SAKALA I liked all the things that had to do with the garden.

Because my dream is to become an agronomist.

Nancy: And what else do you like to do at SAKALA?

G.S.: I like playing chess. I practice a lot. I take all the opportunities that SAKALA offers so that we can grow.

Nancy: Is there anything else you would like to say about SAKALA?

G.S.: No.

Nancy: Thank you so much for talking with us.

G.S.: Thank you to you too.

Exhibit C: Statement of M.Ca., Age 15

(Interview recorded, conducted, translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, November 18, 2020. Identity of interviewee available upon request by IACHR.)

Nancy: OK, thank you so much for agreeing to speak with us today.

What is your name?

M.Ca.: My name is [M.Ca.] Nancy: And how old are you? M.Ca.: I am 15 years old.

Nancy: How old were you when you first started coming to SAKALA?

M.Ca.: I was 10 years old. Nancy: Do you go to school?

M.Ca.: Yes.

Nancy: Where do you go to school?

M.Ca.: I go to Saint Leonel School. It is in Delmas 41.

Nancy: OK, and do you live in Cité Soleil?

M.Ca.: Right now I am not living in Cité Soleil, but I was living in Cité Soleil –

Nancy: Up until, was it eight months ago?

M.Ca.: Eight months.

Nancy: Can you describe, so when you used to live in Cité Soleil, can you describe if you saw a lot of trash in the streets?

M.Ca.: When I was living in Cité Soleil, when it was raining so there was a lot of water and so when I came to SAKALA I had to put my feet in the water, in the mud, in the trash.

Nancy: How did you deal with that, with the rain?

M.Ca.: Sometimes I used to be afraid and I stayed at home from school. Sometimes I would say I should go out and I went out.

Nancy: What were you afraid of?

M.Ca.: I am afraid of the water.

Nancy: What about the water scared you?

M.Ca.: I'm afraid of the water because it is dirty water. It is full of mud and trash. So I don't know what is in the water, so that's why I am afraid of it.

Nancy: How about, um, have you ever seen trash burning in Cité Soleil?

M.Ca.: Yes, especially where I was living.

Nancy: Before?

M.Ca.: Yes.

Nancy: And what was your experience when the trash was burning?+

M.Ca.: I don't feel good because it is not a good smell. Sometimes I just go home so I could avoid smelling this bad smell.

Nancy: Did the smoke ever make it hard to breathe?

M.Ca.: Yes. It makes it very difficult to breathe. Sometimes it goes in my eyes and it goes in my nose. It makes my eyes water.

Nancy: Is there anything else you would like to say about the trash situation in Cité Soleil?

M.Ca.: The message that I would send is to find a special – like maybe we can find a sponsor to deal with the issue of trash in the country. So when it is raining, after it rains, we can have a

group of people so the mayor would do exactly what he should do to clean the roads and to take all the trash we have after the rain.

Nancy: OK. And so now I am going to ask you about SAKALA. Do you like SAKALA?

M.Ca.: Yes, I love SAKALA a lot.

Nancy: What do you like about SAKALA?

M.Ca.: I like the way that SAKALA works with the kids. SAKALA helps to pay for the school for the kids. And when the parents don't have anything for their kids to do at home they send them to SAKALA and SAKALA helps the kids to do a lot of things.

Nancy: And what are your favorite things to do at SAKALA?

M.Ca.: I like playing chess. And I like to come here for the recycling program. I like to water the plants in the tires (in Jaden Tap Tap, the community garden at SAKALA where tires are used as planters).

Nancy: Is there anything else you would like to say about SAKALA?

M.Ca.: What I would like to say about SAKALA is to say thank you to SAKALA.

Nancy: OK, thank you so much.

Exhibit D: Statement of M.Ch., Age 11

(Interview recorded, conducted, translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, November 18, 2020. Identity of interviewee available upon request by IACHR.)

Nancy: Thank you so much for talking to us today. What is your name?

M.Ch.: My name is [M.Ch.] Nancy: And how old are you?

M.Ch.: I am eleven years old.

Nancy: And how long have you been coming to SAKALA?

M.Ch.: Eight months.

Nancy: Do you go to school?

M.Ch.: Yes.

Nancy: Where do you go to school?

M.Ch.: It's in Project Doulya, it's St. Jean de Bosco.

Nancy: So not too far from Cité Soleil? Is it in Cité Soleil?

M.Ch.: Yes.

Nancy: And do you live in Cité Soleil?

M.Ch.: Yes.

Nancy: When you are walking around Cité Soleil have you noticed a lot of trash in the street?

M.Ch.: Yes, I see trash, I see dirty water.

Nancy: And how do you deal with that situation?

M.Ch.: Sometimes I take blocks [to step on to walk across the canal].

Nancy: Have you also seen trash burning in Cité Soleil?

M.Ch.: Yes.

Nancy: Does this cause any problems?

M.Ch.: When they are burning the trash it gives me a headache and it makes my eyes water.

Nancy: Is there anything else you would like to say about the trash situation in Cité Soleil?

M.Ch.: I would like the people who throw trash in the street to stop and for the mayors to do their job and to stop throwing trash into the canals.

Nancy: Now we will talk about SAKALA a little bit. Do you like SAKALA?

M.Ch.: Yes.

Nancy: What do you like about SAKALA?

M.Ch.: So what I like at SAKALA is when they do the Earth Fridays. I participate in that.

Nancy: Is there anything else you like to do at SAKALA?

M.Ch.: I like how SAKALA teaches the kids, trains the kids, and to let them know how they're doing.

Nancy: And is there anything else you would like to say?

M.Ch.: No.

Nancy: Thank you so much. Mèsi anpil.

Exhibit E: Statement of N.I., Age 15

(Interview recorded, conducted, translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, November 18, 2020. Identity of interviewee available upon request by IACHR.)

Nancy: Thank you so much for speaking with us today.

NI: Thanks to you too.

Nancy: What is your name? N.I.: My name is [N.I.]

Nancy: How old are you?

N.I.: 15.

Nancy: How long have you been coming to SAKALA?

N.I.: Since I was 14 years old. Nancy: Do you go to school?

N.I.: Yes.

Nancy: Where do you go to school?

N.I.: In Tabarre.

Nancy: And that is outside of Cité Soleil?

N.I.: Yes.

Nancy: Do you live in Cité Soleil?

N.I.: Yes.

Nancy: And when you are walking around Cité Soleil, have you noticed a lot of trash?

N.I.: A lot, a lot. (Anpil, anpil.)

Nancy: Does it cause problems for you?

N.I.: Yes, a lot of problems.

Nancy: What happens with all the trash when it rains?

N.I.: When it rains, the trash goes into the canals and stuff the canals and then goes out and into the houses.

Nancy: And is that—has it ever gone into your house?

N.I.: No.

Nancy: Because you live farther away?

N.I.: No, because my house is up higher.

Nancy: Have you ever noticed trash burning in Cité Soleil?

N.I.: Almost every day.

Nancy: Does the burning of the trash cause any problems?

N.I.: Yes, it is a problem for the air that we breathe. And also it is a problem for me because it gives me a headache and I can't escape/avoid the problem.

Nancy: Is there anything else you would like to say about the trash situation in Cité Soleil?

N.I.: Yes. Before they were saying, "we can still save the kids, the little ones." But now we can't save them because everywhere they were living they do not have a place to live because the water takes all of the place.

Nancy: Now we will talk a little bit about SAKALA. Do you like SAKALA?

N.I.: Yes, I like SAKALA.

Nancy: What do you like about SAKALA?

N.I.: I like SAKALA because it makes change for the kids completely, the way we live.

Nancy: What do you like to do at SAKALA? What is your favorite thing?

N.I.: I like playing chess, I like playing (volleyball?), and I like playing checkers. And I learned how to play chess here.

Nancy: So you learned how to play chess at SAKALA?

N.I.: Yes.

Nancy: Is there anything else you would like to say about SAKALA?

N.I.: Yes. SAKALA is doing a great job with education, sports, and with the environment. I like SAKALA because it puts us on our way so we can help others, we can work with others to make things happen.

Nancy: OK, mèsi anpil. Thanks very much.

Exhibit F: Statement of P.J., Age 16

(Interview recorded, conducted, translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, November 18, 2020. Identity of interviewee available upon request by IACHR.)

Nancy: Thank you so much for speaking with us today.

PJ: Thank you too.

Nancy: What is your name?

PJ: My name is [P.J.]

Nancy: How old are you?

PJ: 16.

Nancy: How long have you been coming to SAKALA?

PJ: Since 2017.

Nancy: Do you go to school?

PJ: Yes.

Nancy: Where do you go to school?

PJ: Porto Rico in Boston. (neighborhood in Cité Soleil)

Nancy: Is that in Cité Soleil?

PJ: Yes.

Nancy: Do you live in Cité Soleil?

PJ: Yes.

Nancy: When you are walking around Cité Soleil, coming to SAKALA or going to school, do you see a lot of trash in the streets?

PJ: Yes.

Nancy: And is that a problem?

PJ: Yes, it is a problem.

Nancy: Why is it a problem?

PJ: Because people can't walk on trash.

Nancy: When it rains what happens with the trash?

PJ: When it rains trash gets inside of the houses.

Nancy: How do you deal with that situation?

PJ: When water gets into my house I find a way to put the water out. We have to repeat that many times so if after many tries we see the water won't stay out we just leave it until it dries by itself.

Nancy: You just wait for it to dry. OK. Have you noticed any burning of trash?

P.J.: Yes.

Nancy: And does the burning of the trash cause any problems for you?

P.J.: Yes, because I can smell the smoke.

Nancy: Is there anything else you would like to say about the trash situation?

P.J.: I would like Cité Soleil to find help so we can clean our area and everywhere can be clean.

Nancy: Now we will talk a little bit about SAKALA. Do you like SAKALA?

P.J.: A lot.

Nancy: What do you like about SAKALA?

P.J.: I like everything about SAKALA.

Nancy: What are your favorite things to do at SAKALA?

P.J.: What I like the most is soccer. (Nancy's note: P.J. is an outstanding soccer player.)

Nancy: Is there anything else you would like to say about SAKALA?

P.J.: Yes. I am very happy I am part of SAKALA because there are some things I didn't know before and when I came to SAKALA I learned.

Exhibit G: Expert Report of Dr. Nadège Bélizaire

[Note: My Expert Report adopts the opinions on the conditions and health issues in Cité Soleil; provided by Dr. Kobel Dubique, MD, MMsc-GHD, in his separate Expert Report. We have known each other since we both attended medical school, and have worked as partners to provide medical services to the Haitian poor throughout our professional careers. We live in Port-au-Prince and have two children.]

BACKGROUND

Name and Address

Nadège Bélizaire, MD, MMSc-GHD # 8, Rue Flamant, Delmas 3 Tel Haïti: 509-38097949/50936337948

Email: nadegebelizaire@yahoo.fr nab829@mail.havard.edu

Professional Background

Educational Qualifications

MMSc-GHD, (Masters of Medical Sciences in Global Health Delivery), Harvard University, Cambridge Massachusetts, 2013-2015

Community Health Program at Escuela Latino-Americana de Medicina, 2008- 2010 M.D., Escuela Latino-Americana de Medicina, Santiago, Cuba, 2001-2008

Professional Experience

I have worked since 2018 as a physician and Medical Director at Haiti Clinic, Inc., a U.S. 501(c)(3) non-profit organization dedicated to improving healthcare and health education in Haiti. https://haiticlinic.org/. With my spouse, Kobel Dubique, MD, MMSc-GHD, and Country Director of Haiti Clinic, I provide women's health, maternal and well-baby health, childrens' health, dental and general services to children and adults, including pregnant women, to Cité Soleil and rural communities. As Medical Director, my tasks are to supervise Haiti Clinic health center staff, and ensure that system is place to provide a good quality of care to the people of Cité Soleil. In 2018, Haiti Clinic designed and implemented a woman's and children health program for health education and healthcare support through community health workers in Cité Soleil that launched in 2018. We also provide free testing to patients for HIV and syphilis. In addition, periodically we have launched mass education campaigns on Sexually Transmitted Infections, Cholera, Corona Virus, etc.

In addition to my work through Haiti Clinic, in 2019 I worked on a research project funded by USAID and the Haitian Ministry of Health on the Classification and Quantification of Unusable Pharmaceutical Products (UPPs) that surveys the inventory of unusable pharmaceutical products in approximately 200 health care facilities throughout Haiti. In 2012 and 2013, I worked as an HIV specialist in Cité Soleil. Following the Haiti earthquake in January 2010, in which hundreds of thousands of Haitians died or were displaced, I served as an assistant medical site coordinator

for Partners in Health/Zanmi Lasante ("PIH"). While at Harvard University, where I received my Masters in Medical Science in Global Health Delivery, I investigated the experiences of women seeking care for breast cancer in Haiti.

Familiarity with Cité Soleil and the SAKALA Community Center

Cité Soleil

For over 10 years, I have provided healthcare services and researched medical conditions in Cité Soleil. Cité Soleil is located in the Port-au-Prince metropolitan area in Haiti at the western end of the runway of Toussaint Louverture International Airport and near the ocean. Cité Soleil is an extremely impoverished and densely populated community of an estimated 300,000 to over 500,000 residents, the overwhelming majority of whom live on less than \$1 (USD) per day and cannot afford to eat everyday. Cité Soleil is the largest and most dangerous slum in Haiti, literally known as a Red Zone due to level of insecurity. The government provides barely any services in Cité Soleil and there is no sanitation program, which affects the health of the residents. Trash is never collected and removed from the streets and canals by the government, and the residents are not educated on the disposal of trash. There are also water contamination issues caused by the frequent flooding. For instance, when it rains, the rainwater generally floods the houses and the streets, causing disease. There is also widespread malnutrition and respiratory illnesses such as acute asthma, caused by burning of the waste and nearby industries. I treat other conditions like diarrhea, malaria, typhoid worms, and dengue fever. There are virtually no medical clinics or other healthcare providers except through non-profit organizations like Haiti Clinic, and child mortality is very high.

With Dr. Dubique, I visited the SAKALA Community Center on Monday, October 26, 2020, to examine the medical conditions of the children caused by the environmental conditions and living in Cité Soleil generally. I saw the trash and waste in the canals and the streets that surrounds SAKALA. Despite the deplorable living conditions in Cité Soleil, Sakala provides a place for children to play, eat one meal, do their homework, learn skills and to understand that they are children like any others and should be valued.

Based on your experience and knowledge:

What are some of the medical ramifications to prolonged, continuous exposure to waste/trash in a community with no formal trash removal system?

Waste pollutes the environment, and when it is burned, it produces large-scale risks to the people that live and spend time near these burning sites. It produces other health risks when water collects around the trash, which includes human waste. Child mortality and illness is very high in a place like Cité Soleil. For children under five, the first cause is respiratory diseases, and second is diarrhea. When trash, including plastic, rubber from the tires, is burned, the respiratory system is affected, causing conditions like asthma bronchitis, asthma, (which is an inflammatory respiratory disease caused by allergies. The collection of water in the trash and the buildings when it rains and touches the body can lead to skin diseases like scabies and tiňa capitis, or worsen existing infections like vaginal infections, and STIs. The water may be used for cooking

and lead to diarrhea. The water also breeds mosquitoes that bite the individual, and cause that cause malaria and dengue fever, and others. Most of the children in Cité Soleil do not eat every day and many have malnutrition, so their bodies are not strong enough to fight off illness. Some of the diseases are treatable, such as scabies, but others like diarrhea can lead to death. The children that live within these conditions often have mental health issues due to the dangerous and unhealthy conditions.

How does inhalation from burning trash/plastic affect the body? Does one have to be physically close to smoke from burning trash/plastic in order to be harmed by it?

The dioxins, the tetrachlorodibenzo-p-dioxin and the carbon dioxide that are inhaled from the burning trash are lethal. Commonly known as Agent Orange, these chemicals provide a toxic compound for the organism that cause cancer and neurological, thyroid function and respiratory system damage. Thus, the burning of plastic wastes increases the risk of heart disease, aggravates respiratory ailments such as asthma and emphysema, and can cause rashes, nausea or headaches, and damage to the nervous system.

A person does not need to be physically close to the smoke from burning trash/plastic in order to be harmed by it. Toxicological studies on dioxin showed the potential health risks within 26 feet of the source of waste burning source from just 15 minutes of burning. It is recommended to burn trash, if at all, at least 50 ft from houses and individuals, yet this does not occur in Cité Soleil.

What are the most cost-effective remedies to cure infectious diseases commonly spread through unsanitary living conditions?

The most-effective remedies to cure infectious diseases commonly spread through unsanitary living conditions is firstly, to remove plastic products, and secondly, to educate the population how to keep their environment clean and healthy. Finally, the government should take responsibility to have a sanitation system available for the people to put their waste and have them schedule a time to pick them up. If the government does not provide a sanitation system, the population can learn to transform waste into usable products and recycle them, and to cultivate a sense of voluntarism.

What are effective ways to stay sanitary in conditions where there is no running water?

As a child, my mother used to fill up buckets and other containers with raining water to use because we lived far from running water. Using water tanks to save raining water is other option. In reality, many Haitians digs holes to find water.

What would be the general annual cost of providing access to general medical treatment to an individual within an impoverished community of Port-au-Prince?

In a community like Cité Soleil children and adults go to see doctor more often than the general population due to their living conditions. The annual cost of providing access to general medical treatment to an individual living in Cité Soleil varies depending of their medical conditions, and

whether hospitalization needed or not. We estimate that \$100-300 US annually is necessary a general medical treatment that does require hospitalization.

What are the general added medical costs for an individual who is suffering from the common illnesses associated with prolonged exposure to waste and inhalation of burning trash debris?

Long time exposure to waste inhalation of burning trash debris can provoke mild to severe symptoms or illness. As some of the Cité Soleil citizen lack access to medical care, they often tried home-based remedies before seeking medical care. Also, informal medical facilities are widely spread which make Cité Soleil citizens delayed good quality care. And, sometimes, for severe symptoms or late stage diseases that are treatable and preventable patients who are treated at Haiti Clinic must be referred to other well-qualified facilities for their specific problem. Therefore, the cost for an individual who is suffering from the common illness associated with prolonged exposure to inhalation of burning trash varies on the medical conditions and the facility that he would be referred to. The care is often not free, and patients must pay.

What preliminary steps must be taken to ensure that conditions are suitable for allowing larger methods of medical relief to come in and work within the area?

There should be a national awareness campaign on the disposal of trash. The trash comes from all over Haiti, not just Cité Soleil. For instance, the trash that collects in the canals in Cité Soleil is conveyed by the rains from the higher areas near Kenscoff, Laboule, Petion-Ville, etc., to Cité Soleil, which is located at a lower level near the sea. It is a national problem.

In your expert opinion, are the significant cases of infectious diseases, long-term respiratory conditions (such as asthma, lung cancer, etc.), and general high mortality rate for those living in Cité Soleil directly caused by massive accumulation of waste and the improper/unmonitored methods of its removal through general trash fires?

Yes.

Signed by:

Nadège Betraire, MD, MMSc-GHD

Exhibit H: Expert Report of Dr. Kobel Dubique

[Note: My Expert Declaration also adopts the opinions on the conditions and health issues in Cité Soleil provided by Dr. Nadege Belizaire, MD, MMSc-GHD, in her separate Expert Report. We have known each other since we both attended medical school, and have worked as partners to provide medical services to the Haitian poor throughout our professional careers. We live in Port-au-Prince and have two children.]

BACKGROUND Name and Address

Kobel Dubique, MD, MMSc-GHD # 8, Rue Flamant, Delmas 3
Email: kobel dubique@post.harvard.edu tikob2dubique@yahoo.fr

Educational Qualifications

MMSc-GHD (Masters of Medical Sciences in Global Health Delivery), Harvard University, Cambridge Massachusetts, 2013-2015

Community Health Program at Escuela Latino-Americana de Medicina, Santiago Cuba, 2008-2010

M.D., Escuela Latino-Americana de Medicina, Santiago, Cuba, 2001-2008 Professor, Université de la Fondation Dr. Aristide

Professional Experience

I have worked since 2018 as a physician and Medical Director at Haiti Clinic, Inc., a U.S. 501(c)(3) non-profit organization dedicated to improving healthcare and health education in Haiti. https://haiticlinic.org/. With my spouse, Nadège Bélizaire, MD, MMSc-GHD, who is the medical director in Cité Soleil and myself as the new country director of Haiti Clinic, we provide women's health, maternal and well-baby health, childrens' health, dental and general services to children and adults, including pregnant women, to Cité Soleil and rural communities. As Country Director, my tasks are to recruit Haiti Clinic health center staff, and to coordinate local clinic trips and mobile clinic trips in remote areas in Haiti. In 2018, Haiti Clinic designed, implemented, and launched a woman's and children health program for health education and healthcare support through community health workers in Cité Soleil. We also provide free testing to patients for HIV and syphilis. In addition, periodically we have launched mass education campaigns on Sexually Transmitted Infections, Cholera, Corona Virus, etc.

Prior to my work with Haiti Clinic, in 2013 with Dr. Bélizaire I launched a community-based organization, "Aksyon Sosyal Entegre pou Devlopman Kominote (ASEDK)" in Cité Soleil to provide medical and social support services for local residents, such as assistance with burials. Following the Haiti earthquake in January 2010, I served as a medical site coordinator for Partners in Health/Zanmi Lasante ("PIH/ZL") in the displaced camps, where I implemented a model of care known as "accompaniment," which means empowering the residents in the

Internally Displaced Persons (IDPs) camps through humanitarian aid to change their living conditions until they were relocated. My thesis for the Master's degree in Medical Sciences of Global Health Delivery and Social Medicine MMSc-GHD at Harvard Medical School has explored the humanitarian aid after the 2010 Haiti earthquake: the case of accompaniment to promote better collaboration and partnership between the government, the citizens of Cité Soleil, the NGOs, and the agencies. See Dubique, Kobel, "Humanitarian Aid After the 2010 Haitian Earthquake; The Case of Accompaniment", 2014.

Familiarity with Cité Soleil and the SAKALA Community Center

Cité Soleil

I was born in Cité Soleil and lived there until I went to medical school. I have been recognized as a respected community leader and activist. With my wife Dr. Nadège Bélizaire MD, MMSc-GHD, I have provided medical services in Cité Soleil since I returned to Haiti after medical school in Cuba (The Latin American School of Medicine, ELAM). Cité Soleil is the largest and most populated slum in Port-au-Prince. This city has been created to host the poor people who immigrated to Port-au-Prince to work at the factories to produce sandals, t-shirts, jeans, baseball balls, and other types of manufacturing items, materials, and clothes to sell in Haiti and other countries. Those people are now underpaid for their work and live in inhuman conditions and have only limited access to basic services for themselves, their families, and their kids (health, education, safe home, food, sanitation, safe water drinking). Their living environment is affected by trash, gang violence, and poverty putting everyone at risk of disease, gender based violence, and premature death.

SAKALA Community Center

I am familiar with SAKALA, in Kreyol Sant Kominotè Altenativ pou Lapè. SAKALA, and in English, the Alternative Community Center for Peace, which is located nearby the big water cistern in Cité Soleil on National Road Number 1, whose mission is to create a safe environment for the kids to grow and progress. They are involved in many activities such agriculture, physical sport, games, education, and leadership. This initiative has been created by community leaders like Daniel Tilias to promote peace among the 34 neighborhoods of Cité Soleil through the sense of living and sharing together. I visited SAKALA with Dr. Bélizaire on Monday, October 26, 2020 where I have witnessed that this community center was surrounding of trash and this situation could affect the kids and their mentors.

Based on your experience and knowledge:

What are some of the medical ramifications to prolonged, continuous exposure to waste/trash in a community with no formal trash removal system?

We have to understand first the context of Cité Soleil and it location with respect to wealthy neighborhoods. The richest areas are located above Port-au-Prince, while Cité Soleil is located in downtown Port-au-Prince near the sea. Cité Soleil is linked to these wealthy neighborhoods by the canals more than the roads. The section of a canal in a wealthy neighborhood is large, paved,

and well-built, while the same canal in Cité Soleil is small and not paved, with contaminated water. As a result, the waste, trash, and water that flow from the wealthy neighborhoods down to Cité Soleil produce in Cité Soleil a mixed salad of trash that includes human waste, medical waste, industrial waste such as plastic bottles, plastic plates, syringes, and more. Every day the minimal quantity of trash produced in Port-Au-Prince is estimated approximately to 6,000 m3 while only 30 % is collected by the Haitian solid trash office (SGNRS) because of lack of removal means. Major part of this 30 % will be deposited to Truitier in Cité Soleil (the biggest discharge site of 250 hectares) and the rest will take the routes of canals and the capital roads to end up again in Cité Soleil. In conclusion, trash takes formal and informal routes to arrive to Cité Soleil.

With no formal system to remove the trash, people from Cité Soleil are more likely to die from diseases and floods than from hunger and gang violence. When the canals are full of trash during raining seasons the trash and dirty waters inundate the communities and the households, causing malaria, typhoid, cholera, acute diarrhea, worms, and skin diseases.

To remove or destroy the trash, the residents burn it, which can exacerbate asthma, causing acute asthma episodes, and produce acute distress respiratory issues and death mostly in children who live in houses where there is no space and enough rooms to bring in fresh air.

How does inhalation from burning trash/plastic affect the body? Does one have to be physically close to the smoke from burning trash/plastic in order to be harmed by it?

Inhalation from burning trash /plastic in Cité Soleil is affecting not only the health of the people but also affects them socially. When people in Cité Soleil respire the burning trash, it makes them more likely to develop asthma. This has directly exacerbated the growing deadly asthma crisis in Haiti.

Socially, people become less productive when they are sick, but also become stigmatized by the community when their clothes and body smell constantly smell like the burning chemicals, not only from the burning trash but also from the factories that produce hazardous chemicals that send outside smoke.

You don't need to be directly next to burning trash and plastic to be affected because the smoke invades the environment and all in Cité Soleil are adversely affected. In Haiti, much of the trash includes plastic bottles and otherwise recyclable plastic material. When we burn this plastic trash close to the community, it puts the residents at heightened risk to develop several different types of cancer.

We need to understand how the social determinants of health gets into and affects the body, particularly the poor, which is what the co-founder of PIH, Paul Farmer, calls "embodiment". The growing trash problem affects the residents of Cité Soleil in all aspects of their life: physically, mentally, and socially. One example of how the smoke pollution affects the residents' physical can be seen in how a pregnant woman who inhales smoke can affect the neural tube. This is especially detrimental to the embryonic development of the child because the neural tube is responsible for brain development and toxic pollution from burning trash can produce congenital malformation.

Another example that speaks to the social impact of the trash problem is seen whenever a child is stricken with malaria, typhoid or scabies. Whenever this happens to a child, they cannot play with their friends or go to school, so they are forced to stay home and are deprived of interaction with other children. Socially, when you live in these neighborhoods that are infected with disease from the growing trash problem, it is difficult to show your friends your home and bring them to visit you. Your clothes are often dirty and smell of meat, fish or smoke because it is impossible to live in Cité Soleil with trash and dirty water that inundate your house and your community and manage to stay hygienic. Sincerely, it is not easy to cohabit with trash in Cité Soleil.

What are the most cost-effective remedies to cure infectious diseases commonly spread through unsanitary living conditions?

The most important thing is prevention. Prevention is more cost effective than continuously having to treat and cure for the same issues. It is important to educate the population and also to provide them with the necessary resources needed to properly remove growing trash from their homes and move it to a central place for the State Trash Office to take it away from the neighborhood. The most important thing is to provide the people with the simple methods needed to make it as easy as possible for the State Trash Office to remove the overall buildup from the community and away from the people.

What are the most effective methods for staying sanitary among deplorable impoverished conditions?

This is best achieved through advocacy, community engagement and participation when community members and leaders are doing voluntary work to clean the canals and the neighborhood. It is also important to provide waste bins throughout the community so that the residents know where to put their trash. And also it important to sensitize the government, the private manufacturing factories, the Ministry of Health and environment, the National Service for Solid Residuals management (SNGRS), and the different Mayors offices specially the mayor office in Cité Soleil on the trash concerns to develop a better policy plan for management and removal.

What are effective ways to stay sanitary in conditions where there is no running water?

One thing that can be done is to provide health education and running water to the people and give the community the means and materials to remove the trash at the local level. At the governmental level, the State needs to improve their waste removal system with a more specialized transportation process that is specialized towards eliminating waste where it is creating the biggest problem. We must also try to find other places to store the trash where it is farther away from the community than the community of Truitier in Cité Soleil, where trash is currently being compiled among a living population. If the community leaders have the means and the necessary training, they can take care of their community at the local level and ensure access to running water. There also needs to be greater awareness on the topic and the involvement of all the sectors. Where there is problem, there is opportunity too. If the

government cannot properly manage this growing problem, it should be delegated to outside companies or agencies who are able to deal with the issue.

What would be the general annual cost of providing access to general medical treatment to an individual within an impoverished community of Port-au-Prince?

I am not an economist, but I assume that the general annual cost of providing access to general medical treatment to an impoverished community of Port-au-Prince would be less than 4 million dollars USD of the Petro Caribe money (Venezuela has loaned money to Haiti with tax and it was mismanaged by the Haitian officials). These funds could be used to help repair and run the hospital Sainte Catherine and the CHAPI health center, as well as build two additional health centers. Funds being brought into Haiti for other reasons would go to much greater use if it were re-directed towards combating the growing waste issue. These funds would be helpful to decrease the incidence of diseases, hunger, and gang violence in Cité Soleil and improve the living conditions.

The \$12 million USD that is paid annually to the company of SOGENER for the purpose of providing electricity that doesn't exist for many residents would be more than enough alone to create significant change in Cité Soleil. Another example would be to redirect the funds received from Dermalog, a German company, for the purpose of implementing a new identification card system. Yet this system does not work, and that same fund could have been put to very essential use to clean up Cité Soleil and complete the Louino Robillard's Library project (Konbit Bibliotek). Another idea would be to tax the factories and industries that produce significant pollution and are responsible for the sanitary conditions. Doing so could decrease some health and socio-economic problem in Cité Soleil or at least generate funds to help alleviate the issue.

For example, at Haiti Clinic, where we provide medical care in Cité Soleil patients only pay or contribute to 50 gourdes (40 cents in US Dollar) and they have access to medical consultation, lab exams, and treatment. And we are a small organization with limited support and without UN agencies and USAID funding. I assume that a general annual cost of providing access to general medical treatment to an individual within an impoverished community of Port-au-Prince like Cité Soleil would be less than 100 US dollars which is not a big deal for the government, the manufacturing companies, the NGOs, and the agencies to support.

What preliminary steps must be taken to ensure that conditions are suitable for allowing larger methods of medical relief to come in and work within the area?

In short, increased advocacy worldwide, particularly in the United States, would be the best way to bring the level help and support to Cité Soleil that is needed to adequately resolve the growing issue. Research is also important to generate knowledge and understand the context and the reality of Cité Soleil.

I have experience working in this specific field within Cité Soleil, both before and after the 2010 Haiti earthquake. After the 2010 Haiti earthquake, I was just finishing my social service task. This is a process within Haiti where new physicians are required to provide one-year of medical services to the Haitian government and the Haitian Ministry of Health to cover the national need

for medical staff across the country. After finishing my social service in December 2009, the earthquake happened and I was in charge of mobilizing the community and the camp committee to provide aid. My team, including my wife and I have reached out to many NGOs to provide assistance in Cité Soleil, but all were reluctant to enter the area because they were afraid [of the conditions in the area] and did not want to work there.

Eventually, we were able to find Partners in Health, headed by Paul Farmer and Joia Mukherjee, Louise Ivers who agreed to support the camp committee and provide two-year's worth of medical care to Haitians living in Central Plateau. This became a reality thanks to the support of many Partners In Health funders, specifically the Abundance Foundation lead by Stephen Khan.

It was hard for the Cité Soleil community to see these people leave because they thought that they would stay. Other organizations like MSF and MDM used to work there but they don't stay. I have made previous comment to this in my Master's thesis at Harvard University entitled: The Humanitarian after the 2010 Haiti earthquake: The Case of Accompaniment (attached). After I completed my Masters degree in 2014, even though there had been organizations providing postearthquake relief in Haiti, many of them chose not to continue with their projects because of the overwhelming nature of the issue.

For example, in 2019 a friend from my Harvard medical school program visited me at my home in Haiti. I wanted to take her to Cité Soleil to show her my work and the conditions that exist in the area, but the chief-organizer of her work mission did not want her to go because Cité Soleil had been labeled as a "red zone" and the most dangerous places in the world.

The lack of attention to this urgent and growing problem is a violation of human rights, as well as the humanitarian principles that the world hold as fundamental. The lack of attention to this issue has only created additional suffering to those living among the conditions because they are forced to cry for more social justice and equality, but are continued to be discriminated against because of where they live.

I have been hired by Haiti Clinic, a Florida-based organization in the United States that began providing aid to Cité Soleil in 2007. I was attracted to Haiti Clinic because they share my same vision for Cité Soleil in how they provide aid and strengthen the community. Throughout my six years with Haiti Clinic, the organization did not have any support from big, well-funded agencies such as USAID or any United Nations agencies. Despite any lack of assistance, Haiti Clinic continues to provide healthcare in Cité Soleil, thanks solely to the continued passionate efforts of the staff and US board members such as Dirk Parvus, Jim Dale, Kevin Browngoehl, and Neil Heskel, Lisa Clark, and Jennifer Tossie.

In addition to advocacy and research, activism is essential. Activism doesn't have to be specific to cleaning up the trash in order to make a difference. Meeting with the residents, especially the children, conferencing with them and hearing their pain is important. Providing outlets for children such as programs for art, dance, sports and behavioral growth/development would do so much to change attitudes of the residents and the stereotypes they face from outsiders.

In regards to the children living in Cité Soleil, everything possible should be done ensure that they are provided access to all basic essential services. Haitians are incorrectly labeled violent, but this is not true. Haitians are desperate for jobs, shelter, education, healthcare, basic sanitation and access to food. These are all basic needs. Anyone in the United States, France or any wealthy country would be desperate if they were deprived of these needs. Really, the people who are violent are the ones who impede access for long time to these basic services to those who require it most. In consequences this privation of basic services generates trash depot, hunger, social suffering, diseases, gang violence, and premature death in Cité Soleil. This what we call at the department of Global Health and Social Medicine at Harvard Medical School "Structural Violence".

What are the general added medical costs for an individual who is suffering from the common illnesses associated with prolonged exposure to waste and inhalation of burning trash debris?

The following are all general medical costs incurred by individuals suffering from illnesses associated with prolonged exposure to waste and inhalation of burning trash pollution:

First to be considered is the cost of inaction. Every day that this issue remains ignored, the number respiratory diseases among the Cité Soleil community increases. Respiration diseases and infections are the leading causes of death among children. In this community, aluminum is commonly used to make metal utensils to cook. When this aluminum is thrown out and then burned, those nearby are at heightened risk to harm their respiratory systems as inhalation of burning aluminum can easily cause lung cancer with chronic exposure.

Another cost that is incalculable is the cost of premature death and loss of human capital for development. In Cité Soleil, people always die young. Between 0-5 years, a child could easily die due to of lack of access to vaccinations, sanitary conditions, lack of parents, lack of health education, and food insecurity. If a child is lucky enough to live through these fragile early years of development, he or she could easily die from hunger, armed conflict, sexually-transmitted diseases, or lack of basic essential services. I have personally seen a lot of young leaders with great potential lose their lives too early and this affects Cité Soleil's ability to grow and progress.

Cité Soleil has limited access to healthcare, as only the Sainte Catherine Hospital and the CHAPI health center provide care to the entire population. In this regard, the Haitian government, big industries and factories in the area and the United Nations should work to provide better living conditions and greater access to health centers for residents.

By providing the resources necessary to remove the trash and increase general access to healthcare, this urgent issue can be resolved in one effort as opposed to having to continue to pay for the healthcare of each individual who will continue to suffer the same as they remain exposed to the same conditions.

12.	In	your	expert	opinion,	are	the	significa	ant	cases	of	infectious	disea	ases, 1	ong-t	erm
re	spirat	ory co	ndition	s (such as	asth	ıma,	lung car	icer	; etc.),	and	d general lo	ow m	ortalit	y rate	for
th	ose li	iving	in in C	ité Soleil	dire	ectly	caused	by	massi	ve a	ccumulatio	on of	waste	and	the
in	prop	er/unn	nonitore	d method	s of i	ts re	moval th	rou	gh gen	eral	trash fires?	?			

Yes.

Signed by:

Kobel Dubique, MD, MMSc-GHD

Date:

11/22/2020

Witnessed by:

Exhibit J: Declaration of Daniel Tillias, Founder and Chair, SAKALA

My name is Daniel Tillias. I am the actual chairman of the Board of SAKALA: Community Center for Peaceful Alternatives, a center located in Cité Soleil, a district in the city of Port-au-Prince, Haiti. I co-founded SAKALA in 2006 with some childhood friends.

Cité Soleil

The community now known as Cité Soleil was originally developed as Cité Simone, named after Ovide Simone, the wife of the Haitian ruler known as Papa Doc. The main purpose of developing Cité Simone at that time was to have accessible labor near to a new industrial area of sweatshops for imported goods, located between the airport and the shore. At the time, it was part of Delmas, another big city that makes up much of Port-au-Prince. In its early days, this new community was populated by people who were looking for a new place to live, or the only place that they could afford after arriving in Port-au-Prince.

The poor people who lived in Cité Simone were the most marginalized in the city. They were either encouraged to migrate to the city or were just tricked into leaving their land to come looking for a better life and sometime lost it by looking so hard. In 1986, when the people managed to overthrow the government after 30 years of dictatorship, the first thing that happened with the community was the change of its name: the people named it after the sun, the City of the Sun.

Personal History

I was born 28 September 1977. My first days of breathing air were in Cité Soleil. I ended up here as my mom who was from the south and my dad who was a technician who was working to develop the nearby electric plant wanted to be close to their work. I was born there, was baptized in a church there, was doing everything there until it was time for school and I would leave the community every morning to go to school. I went to elementary school outside of Cité Soleil. Early at age 6, I was already told that this is a place to leave. I was like many who were in transit there on the move or set to go. This is why my parents tried their best to get me to school outside so I will be ready to leave when it will the right time to do so.

I was very lucky to be growing up in a house that I consider as a house of service. I was learning from my dad, the little hardware store guy, and my mom who had the largest water reservoir in the community to sell water to everyone. I could experience first-hand what it is to have some and not having much or have nothing at all. I understood very early as a child that for some people what they were facing everyday was not justice. There was no dignity for many people there who lack so much and had to live in conditions that I would qualify even so young as unjust.

So many did not have the very little that I had that it inspired me to join the cause of defending the rights of those who have less. I knew first-hand what it was to be treated with less regard because of what you have and what you look like. At school, I was bullied because I was the one coming from Cité Soleil. It was quite an incentive to be on the side of the marginalized and I decided that when I became an adult, I would go to law school to defend the rights of the forgotten.

After high school I went to Law School with my strong desire to become the lawyer that will help my community against all the injustice that I saw first-hand that the people there experience. However, in law school I had the sad experience of seeing that the judicial system was the real injustice against the people from Cité Soleil.

I decided it was not the best way to support my community. It was already too late to do something about all the injustices. Friends were already killed in the crowded jails, the doctors were no longer coming to the clinic there, the schools were already closed, the parents were no longer there to support their children. I had to do something that was not with the black robe that I see lawyers wearing in the courts. It was too much of a sign of mourning for a system that could not rise from its death.

I decided to drop law school. My interest had shifted toward social work. With this new approach I co-founded the community center in Cité Soleil as a safe space where every child in the community would be the welcome to breathe new air and to be away for a short moment of the day from the injustices of the outside wall.

I later attended an undergraduate program for community development and peace building through the Graduates School Future Generations. It was my way to bring justice to my community – not the justice from the courts but the real justice that everyone deserve that goes beyond what I saw as the caprice of a judge.

Now I see myself as a community agent who help the others to reach out to their full potential through alternatives that the space creates for them. This is an important step as I continue to see this community as an underserved community, a neglected community that the ones in charge are avoiding and don't even want to talk about.

The Story of SAKALA

This was the main purpose of creating SAKALA: so I could have this alternative for the kids – an alternative from gang recruitment, the lack of educational opportunity, the despair from the piles of trash that burn on their faces or the flooding canal kicking them out from their own homes.

The mission at SAKALA is to "serve as Cité Soleil's only youth community center, to develop children and young adults through athletics, agronomy, and education. Founded as a peacebuilding project, Sakala builds people of courage and character, to strengthen the families and communities of Cité Soleil."

In depth, SAKALA is really helping parents with no opportunity and being so neglected by the government to see that it is still possible to do the right thing for these children. What we want for these children is to receive their full rights and dignity as human being. It is something we believe they all deserve.

My role in all this is to continue to remain a model for these children who lack model and mentors and this community. I work with partners to find alternatives for these children to know there is other form of existence that have more dignity in them. But also, as the chairman, I am everywhere trying to reach out to find resources, both human and financial, that can help make a difference to keep this effort going on behalf of respect and dignity for all people in Cité Soleil.

My hope is that one day, the powerful stakeholders in the country will open their eyes to see these alternatives at work in Cité Soleil, to end the image they have that Cité Soleil is just a place where nothing works.

SAKALA now has 300 members enrolled in the program every year. They are benefiting from all kind of tools and support to lead them to a path of becoming the future leaders who will make a difference in the country.

As a positive initiative, SAKALA has turned one of the trash piles into a community garden, the Jaden Taptap (named after the informal taxis of Haiti). It was done with the intention to show life to the children. To create a place where children can continue to breathe well, to dream big, and to get inspired. A place where there will be leaves to make the next herbal tea. This is a model space to send a powerful message on behalf of these children to say that the children in Cité Soleil deserve something better; a way to say that they will not have to live on pile of trash forever. We believe these children deserve to see more than green next door. We want them to see an actual garden. The children of Cité Soleil need to breathe good air.

Environmental Conditions Around SAKALA

We provide the means for motivation so the children would not be outside where they are exposed to the limitless violence and also many precarities and environmental degradation that impacts their mental health as much as their physical health.

The various environmental precarities have been a constant threat on the work of SAKALA over the years. The children who come to SAKALA have to cross piles of trash to get to the Center. Sometimes, they have to fight blind spots because of heavy smoke that invade the entire community. Other times, they must cross the canals that overflows and flood their homes and the path to the neighborhood.

Since the creation of Cité Soleil, because of its location downstream on the coast, up to 7 huge canals that are 10-feet to 20-feet-wide and almost 2 miles long lead to the ocean. These canals that were built to channel used water to the ocean can no longer serve this purpose. Over the years they have become clogged with waste; now they are only a huge long reservoir fill with aggregates, plastic, and trash. All the water from upstream cities like Delmas, Pétion Ville, and Tabarre is mixed with solid waste from the street. With the first drop of rain anywhere in these

cities, everything flows directly to the ocean through Cité Soleil but because of the clogged canals, the waste does not find its way to the ocean but makes its way instead to the tables and the beds of the households where children live, chasing them from their own rooms for hours and sometime days until the water recedes. The canals are no longer a channel to let thing go through but more of a reservoir to hold a lot of solid waste.

The people of Cité Soleil are left on their own with this problem, as they can not remember the last time there was a real cleaning of the approximately 2 miles of these canals that are now one now with the street.

By themselves, there is a limit on how much the people of Cité Soleil can do. Very often, the solutions to mitigate the disaster of the poor management of this waste is actually burning everything. But that creates an even bigger threat on what people (and mostly children) have to breathe there. As the houses are on the canals or very close to them, disposing of the waste in this way itself becomes a threat to public health in the entire community and the communities nearby.

The Impacts on Children of Environmental Waste

As the condition worsens, more trash piles are built and Cité Soleil seems to become the City of Trash and the children there continue to be bullied in school as the trash kids of the country.

The poor management of waste can become emotional disease or physical disease for the children. We know it is devastating for a child life to have only trash as their decoration. They can only dance on the mud and trash that take away their sense of humanity. The way the trash is disposed of now in the canals is just like the children there had no other destiny and had no dignity. Because of this, you hear them say too often say that they have no existence. A young boy told me once he was already dead, they just can not find a grave for him yet, this is why he is still among us. When the sense of despair is so bad, the children there in Cité Soleil are then ready for any big loss. They have no real reason to live, they are ready not to be a real human being, their only dignity becomes the dignity of dying that at least everyone share.

These are awful situations for children who are children like any other children. When we know how much these children can be gifted and would wish to have a better neighborhood that would allow them to be just children.

So many children are dying there or will be die soon because of the waste situation in Cité Soleil. But not enough attention is raised to talk about this. This whole situation reminds me of this song in the neighborhood about all of these stars that are off and could brighten such a new future for the community. We know what children mean for the future of a country, we know the kind of light these children could shine on the future of this country. But they will not if the dignity to be in a place where the most fundamental of rights is not guaranteed.

As much as the canals will continue to be clogged, so many young lungs will be clogged the same. The smoke that dissipates in the air is the same as the dreams of children dissipating in the

air. Children whose parents have to choose between sending them to school or to a clinic. Children should not be expose to this.

We want eyes to be open, voices to whisper hope on behalf of these children so that our efforts to create a cleaner environment for these children could also be an effort for dreams to come true.

We want these children to fly and know their potential. We have through this action a special thought for these children from SAKALA who have died already, suddenly, without having the time to tell us what they were suffer from, and for those who are still suffering from breathing a smoke that is toxic.

We want to see our children becoming children again without having to deal with so much trash all around them.

This is the reason of this action. This is so the children there can become who they were born to be. So they can fully live with dignity that life intended for. It is starting with the children because they are the future, they will be our adults of tomorrow. This is the only way we can have the real world, the real peace on earth. Letting this go is like forgetting about our humanity, it is forgetting we deserve something better.

The Restitution these Children Deserve

When considering all that was taken from this community, there are two things that come to mind. First, the very bad condition of waste management needs to stop. Second, the children need to be compensated for the loss that assemble over the years, that take away from so many of these children their real rights for dignity to live in a community that serve them with respect. We are not talking about money that someone will get in a civil litigation. We believe the best compensation for so many years of degradation is extra service for this community.

We know of so many children who had to stop school because they were sick and their parents could not afford to pay both health care costs and education costs and they had to choose. So this is the time when there should be new education programs that are adapted to the needs of the community that can help them find jobs that will help them take care of themselves.

So many of these children remain sick from experiencing so much poor management of the waste. There is a time to start providing free health care in the community. Many parents did not choose to spend all their saving in the heavy cost of treating their kids. This is now time for them to get support to start a small business that will help them stand back on their feet.

Sakala as a place need to be serving more children. There is a need to develop more green space in the community where children can play and where they can enjoy fresh air. So Sakala would need a special assistance to achieve this.

There is no way this community can forget all they have been through with the environmental degradation that they were exposed to. But with some support to fix some broken areas of life there, it will bring back a sense of dignity that was lost there. More than ever this community

deserves this and with some joint effort with alliance with law school and advocacy from human rights group we should create a precedent where children any where would know when it comes to their dignity the world will never stay blind.

Signed by:

Daniel Tillias

Daniel Tillias

Chairman of Board, Sakala Community Center

Date: Jan. 21, 2021

Witnessed by: Nancy Young

Exhibit K: Declaration of Felder Jean Paul, Executive Director, SAKALA

My name is Felder Jean Paul, I was born in Croix-des-Bossals the biggest Haitian open market in Haiti on May 05, 1981. When I was one and half year old, my parents moved to Cité Soleil, (Cité Lumière) three months later we move to another house close to the canal "Rigol Grès" at Cité Soleil where I spent fourteen years. It was a terrible experience for me and my family because personally I was victim to the bad condition people leaving in Cité Soleil. I missed a school year because I was infected by a microbe. I could not wear pants for some time when I was about eight years old. The wall of my house was part of the canal. But I believed education is the key to pass this situation. I studied management, Entrepreneurship and Administration. Now I am doing a master international cooperation and humanitarian Aid.

I thought it is very selfish if I use my skills just to solve for myself and my family. Then I start thinking how to use my knowledge to serve other people too. I said to myself my life is in Cité Soleil, where I spent my childhood. I started formal work with SAKALA in 2010 as administrator, but now I am the Executive Director of SAKALA. Before I was a consultant for Daniel and helped in preparing grants and reports. As director, I prepared the annual plan with budget for the center, direct the staff. I participated in grant writing more in the budget and control the work of the staff. I personally work with the youth in the program and the Junior Staff in giving them management skills and disciplines. I also coach youth that interested in doing business.

SAKALA is an acronym with means Sant Kominotè Altanatif ak Lapè or in English Community Center for peace Alternative. We serve about 300 kids. We registered as an NGO which a nonprofit organization. We have revenue from grants or donations. Now we have a staff of 11 people and a junior staff of 8 people. Our program has three axes which are Sport, Education and Agriculture.

For Education we provide school tuition and facilities for after school program. We also provide food in the after-school program and drinking water is also available for them too. The children come at 1 PM after school and release at 6 PM. We have different sports like Volleyball, Soccer, Basketball, ping pong... we have the best urban garden in the Haiti which a big success for the country and attracts a positive vibe to Cité Soleil.

SAKALA shows that an alternative is possible in Cité Soleil. We have acceptance in the community even though we look like a Paradise in Hell. It is just a way to say in our community kids are facing a lot of challenges, like education problems, health problems, sexual abuse, and so on. The children are not living in dignity and respect. Their right is violated all the way. It is the base of a lot of problem they are facing. No school, no water, no food. Tons of trash, tons of dirty water, mosquitoes, and microbes. People just try anything to protect themselves.

If we want to say something about justice. It's terrible. I can say only one word it does not exist. All the rights are violated, right to live, to educate, to eat, to have water access and so on.

Signed by:

Felder Jean Paul

Felder Jean Paul

Executive Director, Sakala Community Center

Date: January 26, 2021 Witnessed by: Nancy Young

Exhibit L: Declaration of Dr. Mackenson Saint Fort (with C.V.)

Health, environment and state responsibility

Physical, neuropsychological and mental health is a sacred right of the populations for which the State must vouch. The latter must implement a public health system that works in the prevention and correction of anything that can threaten the physical and psychological integrity of the people, hindering their well-being.

Links between health and environment

There is a vital interconnection between man and his environment. The survival of one depends directly on the other and vice versa. We must see in this interdependence the analogy of the visceral connection via the umbilical cord which unites a mother to her child. During intraembryonic life, the affections of the mother whether or not induced by irresponsible or toxic behavior will have direct repercussions which may lead to the loss of the embryo or the fetus. It is just as true that in the toxemia of pregnancy (preeclampsia), it is the product of conception (embryo or fetus) that represents a threat compromising the vital prognosis of the mother. Ironically, the systemic and visceral complications of this pathology can be fatal to both the mother and the child as the survival of this latter depends on her. In other words, the well-being of man depends on the environment he lives in and how he treats it. One of the prerogatives of state officials is to ensure that the populations under their responsibility can evolve in a healthy environment guaranteeing them a fulfilling and healthy life.

Health, environment, Cité-Soleil and state responsibility, where are we?

1- The environmental reality of Cité-Soleil

Cité-Soleil, a community of Port-au-Prince of around 400,000 inhabitants, the majority of whom live in absolute promiscuity and the most extreme poverty with less than 2 US dollars / day. The socio-economic and environmental degradation of the last 60 years in Haiti's largest slum, has transformed it into an unhealthy area of lawlessness where gratuitous crime, generalized insecurity and the most abject poverty rule.

Almost without a sewerage and wastewater evacuation system, the open canals available to it are very poorly maintained and completely obstructed by waste of all kinds from Pétion-ville, Delmas and the surrounding areas. These are essentially composed of plastics residues, organic materials, raw sewage, alluvium due to erosion and even faeces. This environmental chaos is a good reason for the frequency of flooding in the area where any seasonal rain is likely to become torrential and deadly.

2- Reality of water, contamination and poisoning.

The contamination of the water table in this commune by the faeces which arrive there either by runoff, or by non-compliant latrines or quite simply because the population does not have any, makes the water unsuitable for safe consumption. The coliform bacilli, parasites, protozoa, fungi and the toxins it contains, transforms it into a dangerous poison for the inhabitants of this area.

Contamination by fecal coliforms, Cryptosporidium oocysts and Giardia are responsible for chronic diarrhea in vulnerable populations with severe complications ... According to data from the Haitian state in 2008, 33% of the population consume dirty water during the rainy season, 23% quench their thirst with cloudy water and only 42% drink clean water. Because of the low coverage in waste and excreta disposal (Dimanche, 1999).

Hydroelectrolyte disorders, caused by diseases due to faecal peril such as: Cholera, typhoid, bacillary dysentery, genitourinary infection especially in girls, helminthiasis, intestinal protozoosis, Bilharzia claim victims in Haiti. Where diarrhea, is one of the two leading causes of morbidity in children under 5 years old in Haiti (MSPP-OPS, MSPP 2004), Cryptosporidiosis represents 17% of acute diarrhea in children under 2 years old and 30% of chronic diarrhea HIV-infected patients (BRAS, 2005). The treatment of water with chlorine by CAMEP and SNEP (DINEPA) because of fecal coliforms is likely to form the carcinogenic substance "Trihalomethane" (Emmanuel et al. 2000)

Water: Salinization by excessive pumping: 50% of the capital's water comes from the aquifers of the Plaine du Cul de Sac (Drouillard, Cité-Soleil), annual rate of salinization 3% per year according to (Emmanuel 2003). This again makes this resource non-potable and unfit for use.

Stagnant water formed by obstruction canals and sewers leads to the proliferation of vectors such: Anopheles, Aedes, Culex, responsible for malaria, dengue, yellow fever, Chikungunya, Zika and filariasis... this stream increases considerably the morbidity and mortality of infectious diseases which have a severe negative impact on the socioeconomic development of areas like Cité-Soleil.

3- Air reality: Atmospheric pollution / Plastics and other T oxics.

The state has no recycling cost plan for the tons of plastics of all kinds it utilizes or receives on a daily basis which are thrown away in the environment. These materials are destroying Cité-Soleil, by intoxicating the air, the water in addition to being responsible for the depletion of the water table by the phenomenon of runoff they produce and the flooding that comes along with it. This accelerates the salinization of the aquifer. Their non-standard combustion get rid of them or their use as a combustible (manufacture of aluminum boilers) release toxic gases into the atmosphere which will have harmful effects on the physical, neuropsychiatric and mental health of the population of this area.

According to Holly (1999), 15% of annual deaths result from bronchial atrophy ... According to SAFFACHE (2001) tens of thousands of poorly tuned vehicle engines evacuating exhaust gases and dust from quarries into the atmosphere oppression and respiratory, neuropsychiatric, digestive, skin diseases and cancers. .. And greenhouse gases promote atmospheric climatic upheavals: cyclones, hurricanes, tornadoes frequent in Haiti and which kill many people ... Soil degradation 1.5 to 2 million m3 of alluvium / year carrying into the sea arable land, therefore lower agricultural production and increase famine. Added to this, the energy constraints of households which caused the excessive use of charcoal in urban areas, including Cité-Soleil further devastate that city. In 1994 according to BME (2001), domestic activities emitted nearly

29Gg of propane, 10Gg of methane, 18Gg of non-methane volatile organic compounds (NMVOC) and 196Gg of carbon monoxide ...

This exponentially increases the incidence of cardio-respiratory diseases.

How does the burning of plastic waste affect health?

There are mainly polyethylene (PE), polypropylene (PP), polyvinyl chloride (PVC), polystyrene (PS) and polyethylene terephthalate (PET). They are emitted in the form of volatile toxicants responsible for many cardio-respiratory diseases.

Plastic material + oxygen \rightarrow CO2 + H2O + various gases which can be toxic

Preliminary investigation result

Put in context

This is a preliminary survey carried out on 15 adolescents from SAKALA in Cité-Soleil, including 12 girls and 3 boys. The age range is between 14 and 17 years old. They are all children in secondary school and the majority between 7th and 3rd secondary. They are beneficiaries of the SAKALA schooling program. They all live in Cité-Soleil near the blocked canals and are exposed to the same environmental degradation and precarious socio-economic conditions mentioned above. They represent a small sample of the population of this area exposed to the harmful effects of atmospheric pollution caused by the non-standard combustion of plastic waste and the massive contamination of the aquifer in their region.

95% of them attend a school in Cité-Soleil, and after class always meet in the afternoon at SAKALA for extracurricular activities and study supervision. As a result, they are constantly exposed to the harmful effects of this environment.

The goal of this clinical research is to evaluate a blink of consultation that i coupled with some laboratory tests and basic imaging, in order to assess the impact of this degraded environment on the health of these adolescents. The analysis and stratification of the data will show us the epidemiological difference or similarity between those of the Cité and the ones collected at the national level Citéd in previous studies.

Here is the clinical and psychosocial assessment sheet used in the survey:

SAKALASANTE / BHACCS, clinical and Psycho-social evaluation form
File number: BHACCS Date and Time:
Last name First Name:
Address:
School and Class:

Academic performance for the last 3 years of study:

1
Opinion: Satisfied Not Satisfied
Why (search for psycho-social and environmental stress)

<u>Generalized Self-efficacy Test</u> <u>by Michelle Dumont, Ralf Schwarzer and Mathias Jerusalem, Berlin, Germany,</u> 2000.

Read each sentence carefully and circle the number that best describes you:

1 = Not at all 2 = Barely true 3 = Moderately true 4 = Completely true

- 1-I can always solve my difficulties if I try hard enough
 - 1234
 - 2- If someone opposes me, I find a way to get what I want
 - 1 2 3 4
- 3- It's easy for me to keep my focus on my goals and accomplish my goals
 - 1234
- 4- I am confident that I can deal effectively with unexpected events
 - 1234
 - 5- Thanks to my resourcefulness, I know how to deal with unexpected situations
 - 1234
- 6- I can solve most of my problems if I invest the necessary efforts
 - 1234
 - 7- I can stay calm when I am faced with difficulties because I can rely on my skills to face the problems
 - 1234
- 8- When I am faced with a problem, I can usually find several solutions
 - 1234
 - 9- If I'm "stuck", I can usually think of what I could do 1 2 3 4

10- No matter what happens I am able to deal with it generally

1234

Assessment of Environmental Distress and Concerns After Exposure to Waste and Toxins:

Rosemarie Bowler and Ralf Schwarzer Environmental Anxiety Test, 1991

Response Format: Read each sentence carefully and circle the number that best describes you:

- 1 = Not at all 2 = Barely true 3 = Moderately true 4 = Completely true
 - 1- I get angry easily when I think of the poisons thrown in my environment.
 - 1234
 - 2- I am experiencing bodily symptoms which may be caused by chemicals in my environment at home or at school.
 - 1234
 - 3- I don't worry about getting sick from chemicals in my home or school environment.
 - 1234
 - 4- The image of being one day a victim of poisoning by toxic waste in my environment often comes to mind.
 - 1234
 - 5- I don't mind living in a polluted environment because I am confident that I will not get sick
 - 1234
 - 6- I am worried about the harmful toxic effects that the pollution of my environment could have on my body, including the loss of some of my intellectual capacities.
 - 1234
 - 7- I have never worried about water pollution.
 - 1 2 3 4
- 8- I wonder if there is radon or other dangerous substances in my house.
 - 1234
 - 9-I'm scared when I think of all the toxic dumps in the world
 - 1234
 - 10-I fear that there is a major nuclear accident or nuclear war in the near future.
 - 1234
 - 11- Many people tend to overreact to the environmental threat.
 - 1234
 - 12- I would have no problem working in an office or a factory

	built with asbestos or other potentially dangerous materials
1234	
13- I n	no longer worry about environmental poisons because science always seems to be successful in finding cures.
1234	
14- Me	emory problems can be the direct result of too much
1 2 2 4	exposure to environmental toxins.
1 2 3 4 15- To	xic waste is a less serious problem than presented in
	the media.
1 2 3 4	
16- Ch	ronic exposure to environmental toxins does not cause serious illness.
1 2 3 4	
17- pe	ople who handle chemical substances do not present increased health risks.
1234	
	d family history:
Functional	review of devices:
OORL — E	yes: Nose and Sinuses: Oral cavity and Throat: Ear:
	·
	ESPIRATORY Palpitations: Fatigue: Weakness: Lung: cough:
NEW POLO	
Motor disor	GICAL Consciousness (GCS): Vigilance: Sensory disorders: ders: Headache: Migraine:
	OGICAL Anxiety: Stress: Feeling of helplessness: Ideas of danger: Loss of concentration: Memory problems:

MUCOSUS Skin lesions: Mucous lesions:
GASTROINTESTINAL Abdominal pain: Nausea Vomiting: Diarrhea: Gastrointestinal haemorrhage
GENITOURINARY Dysuria: Pollakiuria: Leucorrhoea: Genital pruritus: -
PHYSICAL EXAM: VITAL SIGNS: TA HR T FR SAO2 WEIGHT
NOTES: Signature of doctor

Preliminary result of the investigation

- Ø 100% of these children had a complaint related to the respiratory tract ranging from repeated influenza-like illness in the majority of cases, however about 27% of them had signs and symptoms compatible with a serious bronchopulmonary disease.
- Ø 100% of them had a neuro-psychiatric attack which had serious repercussions on their school learning.
- Ø 100% had problems concentrating which could be correlated with attention deficit disorder and hyperactivity disorder. However hyperactivity and impulsivity n' were not always present.
- Ø However, the inability to pay attention to detail Careless mistakes in schoolwork were present in 100% of cases as well as difficulty concentrating on a task and avoidance of work requiring prolonged mental effort.
- Ø About 53% of these children suffered from ongoing anxiety.
- Ø 60% of them had stress and headache on a contine.
- Ø 13.3% of them detected fairly worrying memory problems in them, which in their opinion greatly affected their academic performance.
- Ø Approx. 87% of them presented ophthalmic disorders in the form of eye irritation: red eye, pruritus, excessive tearing, blurred vision ... About 53% had a decrease in visual acuity.
- Ø Almost 53% of them had nasal sinusitis and 60% had irritative pharyngolaryngitis.
- Ø 73.3% had an irritative skin condition ranging from pruritus, erythema, to vesicular, papular, pustular lesions and fungal dermatophytias which create remarkable psychological and aesthetic damage in girls especially.
- Ø Approx. 66.6% have a gastrointestinal disorder such as: Non-surgical periumbilical abdominal pain reminiscent of intestinal parasitosis, diarrhea, vomiting, etc.

Ø Approx. 67% of girls are urogenital infections of diverse etiologies.

The preliminary results of this clinical study on the impact of the precarious environment of Cité-Soleil has on the health of the children of this area portrays the fact as follows:

"The environment is killing these kids not only physisically but it's killing their dreams, it's killing their potential, it's killing their ability to be somebody tomorrow."

"Togeth er we can achieve social, economical and environmental justice. it's a basic human right to live in a safe, clean environment that can help fueling the hope of achieving greatness in one's life. United, we can restore the dignity of every human being but specially the youths like the ones in Cité-Soleil who are the future of the Haiti, the future of the world."

Signed by:

Macken Son Saint Fort, M.D.

Date: 12/3/2020 Filder JEAN Paul. Witnessed by:

DANIEL TILLIAG.

Bibliographie

1-République d'Haiti, Ministère de l'Environnement: Première communication nationale sur les changements climatiques.

Coopération Technique GEF/UNEP No GF/2200-97-16/97-49 Août 2001

2- IMPACTS SUR L'ENVIRONNEMENT ET SUR LA SANTE HUMAINE DE LA COMBUSTION DES DECHETS PLASTIQUES MAI 2012:

COMMUNE DE OUAGADOUGO:

CABINET Projet Stratégie de Réduction des Déchets de Ouagadougou.

Création d'Emplois et de Revenus par des actions de collecte, de tri et de valorisation (PSRDO-CER); 01 BP : 85 Ouagadougou 01 Tél. : 50 35 28 54

3- <u>Impact des déchets sur l'environnement</u> par <u>Sailing for change</u>: Etude de la Fondation Ellen McArthur

4-GEO Haïti 2010:

Le rapport sur l'Etat et les Perspectives de l'environnement: GEO Haïti 2010 a été réalisé avec des fonds du Programme des Nations Unies pour l'Environnement et l'appui du Ministère de l'Environnement d'Haïti avec l'aide technique de l'Université Quisqueya

- 5-Développement Durable et Santé Environnementale
- <u>en Haïti</u> . Proposition pour la Mobilisation de Ressources: Organisation Panaméricaine de la Santé /Organisation Mondiale de la Santé (OPS/OMS), Port-au-Prince, novembre 2003
- 6- République d'HAITI, Ministère de l'Economie et des finances, Institut Haitien de Statistique et d'Informatique: Objectifs du millénaire pour le développement: Etat, Tendances et Perspectives. Décembre 2009
- 7- Cliniques pour adolescents Trousse d'outils pour la santé mentale:

Enfants en santé Manitoba

3^e étage – 332, av. Bannatyne

Winnipeg (Manitoba) R3A 0E2

204 945-2266 ou 1 888 848-0140

Courriel: healthychild@gov.mb.ca www.manitoba.ca/healthychild

- 8- AFP: La crise invisible de la production de l'eau dans le monde projection 2000-2010 AFP: Rapport de la Banque Mondiale publié le 20/09/2019
- 9- Saint Fort, et al.,

https://www.researchgate.net/publication/284013790_A_National_Trauma_Capacity_Assessment of Haiti

10- Saint Fort, et al.,

https://www.researchgate.net/publication/277411175 Estimation of Surgery Capacity in Haiti
Nationwide Survey of Hospitals

11- Saint Fort et al,.

https://www.researchgate.net/publication/276837330 Quantification and characterization of the burden of traumatic injury in Haiti

oct.-20

Curriculum vitae of SAINT FORT Mackenson

Personal Information:

Mackenson SAINT FORT MD, General surgeon, epidemiological researcher in global surgery, professor, philanthropist

Tel: +509-33649753, email: <u>mcson64@yahoo.fr/ mcson64@icloud.com</u>

Spoken languages: Haitian, French, English, Spanish

Academic achievements:

- ➤ General surgeon graduated from the HUEH Department of General Surgery since October 2015
- ➤ MD graduated from the Faculty of Medicine of the « Université d'Etat d'Haïti » since september 2009

Additional Trainings:

Observership at Nicklaus Childen's Hospital in « Pediatric Plastic/Reconstructive Surgery » under the supervision of DR. Chad Perlyn (Chief of the Division of Plastic/Reconstructive Surgery for FIU and President of Miami Society of Plastic Surgeons) in 2017 and in 2014 Observership à Dartmouth Hitchcock Medical Center, Lebanon New Hampshire from October to November 2014 in the « Emergency and trauma department » under the supervision of Dr. Andrew Crockett (Traumatology) et Dr. Sarah Crockett (Emengency)

Certifications in BLS (Basic Life Support, AHA), ACLS(Advance Cardiovascular Life Support, AHA), PALS(Pediatrics Advanced Life Support, AHA/AAP), NRP(Neonatal Resuscitation Program, AHA/AAP) delivered by the AHA(American Heart Association) and AAP(American Academy of Pediatrics)

- ➤ Certificate of completion of « Laparoscopy training course by the « University of Minesota » in coopération with the « Université d'Etat d'Haiti » in association with « Minnesota Institute Minimally Invasive Surgery » and « Hopital Bienfaisance de Pignon »
- ➤ Certificate of Completion of a training course on the treatment of cancers by SHONC « Société Haitienne d'Oncologie » during their 8th International seminary in 2013
- ➤ Certificate of Completion of a training course on the treatment of Cardiovacular disesases by the American Society of Family Medicine in 2012.
- ➤ Certificate of Completion of a training course on nonviolent communication according to the Rosemberg method in 2011
- ➤ Certificate of Completion of a training course on the full management of diabetes, hypertension and endocrine diseases by the FHADIMAC in 2008

➤ Certificate of Completion of a training course on integrated and comprehensive care for PLHIV in October 2008 by ITECH and MSPP

Professional Information:

- Clinical internship monitor at HUEH for FMP/EBMO UEH Since October 2020
- ➤ Manager of the department of surgery for MSF France-Haiti from 10/12/2019 to 20/07/2020
- ➤ University professor at « Université Saint François d'Assise d'Haiti» since October 2019
- ➤ Volunteer Surgeon at the «Centre Hospitalier Sainte Catherine de Labouré » of Cité-Soleil since 2018
- ➤ Hospital practioner surgeon at « Hôpital Rebeka Friedman » at Meyer Croix-des-Bouquets since 2016
- ➤ Volunteer medical and surgical consultant at SAKALA Cité-Soleil since 2018
- ➤ University professor at « Université Royale d'Haïti » since 2014
- ➤ University professor at « Université Mont Everest d'Haiti » since 2014
- ➤ University professor at « Universite Quisqueya » from September 2014 to 2016
- University professor at « Universite Chretienne de la Communaute de Caiman » since October 2014
- Assistant professor at « Faculte de medecine et de Pharmacie de l'Université d'Etat d'Haïti »from 2012 to 2016
- ➤ Trainer in Emergency medical and surgical care, preventive and social community medicine for FAES « Fonds d'Assistance Economique et Social » from 2013 to 2016
- ➤ Backup surgeon for Zanmi Lasante/PIH in : « Hopital Ste Thérèse de Hinche » and « Hopital St Nicolas de Saint Marc » 2014-2015
- ➤ General physician in « Médecin Sans Frontières Espagne », for the treatment of cholera victims at the CTC of Marchand Dessalines from November 2010 to April 2011

Publications:

- A National Trauma Capacity Assessment of Haiti, Journal of Surgical Research published online on October 16, 2015 https://doi.org/10.1016/j.jss.2015.10.018 : Chelsea McCullough, Vincent A. Degennaro, Joel K.Bagley, Mackenson Saint Fort, Jean Hugues Henrys...
- Estimation of Surgery Capacity in Haiti: Nationwide Survey of Hospitals, May 2015-World Journal of Surgery https://doi.org/10.1007/s00268-015-3089-2 Tu Tran, Mackenson Saint Fort, Marie -Jenane Jose, Richard A Gosselin
- ➤ Quantification and characterization of the burden of traumatic injury in Haiti, Feb. 2015-Annals of Global Surgery: Chelsea McCullough, J. Bagley, Mackenson Saint Fort, J. Sharma, Degennaro Vincent ... Annals of Global Health.81 .208-209. 10.1016/j.aogh.2015.02.980.
- ➤ <u>Abstract:</u> Capacity of Emergency and Essential surgical Care in Haiti. Published in Canadian Journal of Surgery, Vol. 56 (4 supply 1) August 2013. SAINT FORT Mackenson, TRAN Tu, PIERRE PIERRE J, HENRYS Hughes, GOSSELIN Richard, M.D Jose. Initiative d'UCHI, HUEH, UNDH.

International Conferences:

- ➤ Guest Speaker representing Haiti at the << Fifth Meeting of the World Health Organisation>> Global Initiative for for Emergency and Essential Surgical Care (GIEESC) 14-15 of October 2013 at Port Of Spain Trinidad and Tobago.
- Speaker at the << 13th Annual Bethune Round Table>>, Integrating Surgical Care Initiatives with National Health Care Priorities, 10-12 Mai 2013 at Vancouver General Hospital: Vancouver, British Columbia, Canada. On the "Baseline Capacity of Emergency and essential Surgical care in Haiti"

Global and Community Health Activities:

- ➤ General practioner and surgeon for << Lifeclinic>> a humanitarian team from Pennsylvania USA n their biannual outreach medical mission in the remote areas of Haiti since 2011 under the coordination of Julie Berger.
- ➤ General practioner and surgeon for << Friends of Haiti>> since 2012 in their outreach medical mission in Thomazeau in Morne Boulay, Noailles Haiti. Team coordinator: Father Larry Canaverra.
- Former Secretary General of HELPr Alumni, a charity made up of former HELP(Haitian Education and Leadership Program) grant holders to support the mission of this latter.
- ➤ Past Chair of HELP's Student committee and iniator of the « Project of supervision of Juvenile Offenders for a better social reintegration » in collaboration with PRODEV
- ➤ Volunteer teacher at AVJ (Association Voisin Jacquet) elementary school in 2005-2006

Reference:

- ✓ Dr. Guito Alexis Medical Director of « Hopital Rebeka Friedman » tel : 38396647
- ✓ Felder Jean Paul Executive Director of SAKALA tel: 36125314/41538207
- ✓ <u>Dr. Julien Evins Medical Director CHOSCAL Centre Hospitalier Sainte Catherine</u> Laboure tel: 37548670/33922463
- ✓ <u>Dr Jude MILCE, Vicc Dean of « Faculté de Médecine et de Pharmacie de l'UEH » tel :</u> 38498750
- ✓ Dr. Chad Perlyn (Chief of the Division of Plastic Surgery for FIU and President of Miami Society of Plastic Surgeons)
- ✓ <u>Dr Jacques PIERRE_PIERRE member of the board of Directors and head of Department of Orthopedics of HUEH: 34582108</u>
- ✓ <u>Dr Hugues HENRYS Former Dean of the School of Medicine of « Université Notre Dame d'Haïti » 34010883.</u>
- ✓ Dr. Tu TRAN, University of California and Duke University, +19162031031.

The following are transcriptions of video interviews of members of SAKALA and others, translated from French or Creole. The interviews were conducted in September 2019. The authors of the Petition and SAKALA are in possession of the original videos, which are not included in the Petition to protect the witnesses, but can be made available for *in camera* review.

Exhibit M: Testimony of SAKALA Intern, Witness #1

(Outside of SAKALA, September 1, 2019)

(Translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, Identity of interviewee available upon request by IACHR.)

Witness #1 (an Intern at SAKALA):

My name is [Witness #1] and I live in Cité Soleil. This is the situation we live in in Cité Soleil (shows trash). From here we can see the canal St. George which is in a very difficult situation, kind of like in a disaster.

Before, in the 1980s, there used to be some big loaders and tractors coming to clean the canal, but it has been more than ten years now since then and Cité Soleil has been completely neglected and forgotten. No one comes to clean the canal and this is the situation people live in in Cité Soleil right now.

Erin Daly: What is in the waste?

Witness #1: Most of the waste there is from erosion, residue, sand, soil -- so 70 percent I would say is construction material.

Erin Daly: Most of the material in this canal, is it from this community or somewhere else?

Witness #1: No, no, I don't think so. I think it comes from other areas and different parts of town, because Cité Soleil is downstream and these are upstream and they feed Cité Soleil with all the waste. We are talking about cities like Delmas and Petionville that feed Cité Soleil all their waste.

TRANSCRIBED VIDEO TESTIMONIAL OF WITNESS # 1 AT THE OPEN DUMP, SEPTEMBER 1, 2019

Witness #1: Now we are in a neighborhood in Cité Soleil, this neighborhood is a dump site. They collect the waste everywhere, like Delmas, Petionville and Port-au-Prince and they bring it and throw it away in Cité Soleil. And there is a soccer field next door and people are living there and children should be playing there.

James R. May: And the ocean, it's there?

Witness #1: And over there is the ocean behind a big pile.

Exhibit N: Testimony Of SAKALA Intern, Witness #2

(SAKALA, September 3, 2019)

(Translated and transcribed from Kreyòl by volunteer Ms. Nancy Young, at SAKALA, Identity of interviewee available upon request by IACHR.)

Witness #2 (an Intern at SAKALA):

Bonjour, my name is [Witness #2]. I am an administrative intern at SAKALA.

The problem that we have here in Cité Soleil is very difficult for us because it is all about trash. When it rains, all the trash comes down from Delmas and all this trash comes through Cité Soleil and that way the people when it's raining all the trash comes into their houses. We live close to the sea so when it's raining all the trash comes down. We face pollution we face flooding. This is a really bad situation every time it rains. And this environment creates a lot of disease and also there is a lot plastic, organic trash, and everything just comes to us and it is not very good for our children and the future generations.

When it rains, the water takes over all the streets and sometimes the kids cannot even come to SAKALA because there is a lot of water in the streets. They have to be able to walk in the water in the streets to be able to come to SAKALA. And every time there are a lot of mosquitos that bite them. They get sick because there are all kinds of mosquitoes that give them fever. They get colds. So every time it is raining it is like a big problem for the city of Cité Soleil.

The worst part of it is that sometimes it doesn't have to rain in Cité Soleil to get all this trash. Sometimes it rains in Petionville or other cities or up in the mountains and we just wake up and see all the trash is coming down with water but we don't know where it is coming from. We just know it rained yesterday. So we have a big issue dealing with that because when it comes the water and trash gets inside the houses and people have to sleep outside or spending days trying to clean up all the mess that all the trash and the water brought.

Another issue that we face is to have access to clean water because of when it's raining because the treatment system we have to give us clean water when it rains the dirty water gets inside and mixes with the clean water. And the water we take from the treatment system is really not clean and we use it for food, to drink and sometimes we do not even know if it is infected and so we eat it and we get the disease and that is another big issue that we are facing because of this trash problem and this rain problem.

We have been dealing with this our whole life. Right now we don't know what can be done and that's why we are looking for help. We really want the government to do something for us but you know sometimes they are not concerned with this problem. We have seen that canal full of trash our whole lives and we want it to change. That is why we are asking for help right now because this is not good for us and it should be done.

Thank you.

Exhibit O: Testimony Of Nancy Young

(SAKALA Resident, Volunteer and Board Member)

SAKALA, September 3, 2019

My name is Nancy Young. I am a US citizen who is a volunteer and board member for the SAKALA community center in Cité Soleil. I have been coming to SAKALA since April 2010 and it has always been an example of what can be achieved under even the harshest and seemingly most hopeless conditions.

SAKALA is a center of learning, play, safety and opportunity for the youths of Cité Soleil. It is a green space of peace and calm.

As such it is also a place that is in stark contrast with the environmental disaster that surrounds it, encroaches on it, and threatens it and the children here every day.

When I am in Haiti, I live at SAKALA, just above what is nominally a drainage canal, but which is really the opposite as it is a cause of flooding rather than a solution for it.

The canal is always stuffed many feet deep with trash. It used to be that the road adjacent to the canal flooded every time it rained. Now, the flooded conditions are seemingly permanent, rain or shine.

As I write this, I smell smoke from trash burning. It could be from the trash canal below my window. Or it could be from any number of unofficial street dumps that circle SAKALA.

Adding to the injustice of the situation, most of this trash did not even originate in Cité Soleil. It either flows down from communities higher up in the hills or is trucked in from other places -- as if the community of Cité Soleil is a municipal dump and not a place where people live.

The smoke is a constant here at SAKALA and in Cité Soleil, so much so that sometimes I don't notice it. The people burn the trash because it is the main option for them to control the overwhelming volume of it.

Sometimes when there are high winds the air is thick with dark smoke from trash fires. My room fills up with it and becomes noticeably hotter even though I am far above the canal and not just feet away, like the homes that line it and the children that play near it.

Sometimes there is so much smoke that it makes me sick with bad headaches, deep fatigue, and body aches that takes a day or more to abate. If I happen to catch even a minor cold, the air quality here gives me a cough that can last months. I can't prove it because it is a subtle thing, but I am pretty sure the smoke here also causes a temporary shortening of my attention span, which thankfully returns to normal when I go back to the US.

I feel a little ashamed mentioning the effects on me – because that is not important. And I can always leave.

I mention the physical effects on me only because they are a shadow of what children growing up here – who can't just pick up and leave -- are experiencing. For them headaches, asthma, fatigue, a short-circuited attention span-- all are just normal. Feeling sick is just normal for them, especially on the back of malnutrition and trauma, which our kids here also suffer from.

I also mention the effects on me because my background, I imagine, is similar to most of those people who would be reading this report, who would be attending a professional conference in a nice hotel. As a child I had the benefit of growing up with clean air and plenty of healthy food and water. I got to go to school and then college and then graduate school. To me that was normal

When I am here at SAKALA, which I consider the most beautiful place in the world and the people here the best in the world, I am aware of how much in my life I have taken good health and basic opportunity for granted.

And despite everything they face, the children and youths here at SAKALA, are smart and talented and kind and have taught me so much. They are "bon moun," Haitian Creole for "good people."

So it of course makes me angry to see them deprived of their basic human rights that keep them from leading happy, healthy, and productive lives.

I invite you to come to SAKALA. You don't have to live here like I do. But come and see the garden and the sports and entrepreneurial programs. Play chess with the children (if your ego can stand to be beaten).

Then just over the wall, take a look at the trash canal. Maybe walk across it. Get your shoes dirty. Feel a little nervous that maybe it can't hold your weight and you might sink in the trash and sewage. Then imagine that you can't just leave on the next plane. That this is your life now.

Get overwhelmingly angry that this environmental disaster is here. That children live here. That bon moun live here.

And, then, like the people at SAKALA, do something about it.

Thank you for your time.
