



FACULTY OF LAW  
Lund University

Colette Simonne Heefner

The Right to an Environment Free from Toxic Pollution &  
State Obligations to Eradicate Asbestos—*Now is the time*

JAMM07 Master Thesis

International Human Rights Law  
30 higher education credits

Supervisor: Daria Davitti

Term: Spring 2019

Table of Contents:

Abstract

Acknowledgments

Introduction

Structure

Limitations

Chapter One: Asbestos: The Deadly, but Profitable Mineral

1.1 What is Asbestos— *a briefing*

1.2 History of Asbestos

1.3 Impact of Asbestos on Health and the Environment

1.3.1 Asbestosis

1.3.2 Mesothelioma

Chapter Two: The Right to an Environment Free from Toxic Pollution: A case for recognition

2.1 Right to life

2.1.2 Asbestos as an infringement on the right to life

2.2 Right to the highest attainable standard of health

2.2.1 Asbestos as an infringement on the highest attainable standard of health

2.3 Right to an adequate standard of living

2.3.1 Asbestos as an infringement on the right to an adequate standard of living

2.4 Procedural Environmental Rights

2.4.1 The Right to Information

2.4.1.1 Asbestos as an infringement on the right to information

2.4.2 Right to participation

2.4.2.1 Asbestos as an infringement on the right to participation

2.4.2.2 A scenario of injustice

2.4.3 Right to access to justice

2.4.3.1 Asbestos as an infringement on the right to access to justice

2.5 Principle of equality and non-discrimination

2.5.1 Asbestos as an infringement on the principle of equality and non-discrimination

Chapter Three: State Obligations under International Human Rights Law and the Call to Ban

Asbestos

### 3.1 Respect

3.1.1 The State obligation to respect human rights calls for a ban on asbestos

3.1.1.1 Threat on respect for human rights in the United States

3.1.1.2 Threat on respect for human rights in India

### 3.2 Protect

3.2.1 The State obligation to protect human rights calls for a ban on asbestos

3.2.1.1 Adequacy of worker protection from substandard business practice

### 3.3 Fulfil

3.3.1 Fulfillment of human rights calls for a ban on asbestos

3.3.1.1 Lessons from Libby, Montana and beyond—Has the United States fulfilled its human rights obligations?

## Chapter Four: Current Affairs: Asbestos Regulation on a Global Scale

4.1 The Global Pact for the Environment

4.2 The Rotterdam Convention

Conclusion

Bibliography

## Abstract

Asbestos mining and production manufacturing infringes on the right to live free from toxic pollution. Though as this right is not yet formally codified, this thesis will make a case for its recognition and concurrently push for a global ban of this fibrous set of naturally occurring minerals that are extremely hazardous to the human body. Highlighting the grave harms of asbestos as a benchmark throughout, this thesis dissects the components that make up the right to live free from toxic pollution: the right to life, right to the highest attainable standard of health, right to an adequate standard of living, environmental procedural rights and the principles of non-discrimination and equality. Further bolstered by the United Nations Human Rights Council affirmation that hazardous industrial substances may constitute a serious threat to the full enjoyment of human rights and several other accompanying international human rights legal instruments, this paper will additionally discuss the array of obligations vested in States to realize the right to live free from toxic pollution under the tripartite framework: respect, protect, fulfil. As the World Health Organization has affirmed that all types of asbestos cause cancer in humans, it is accordingly illegal to extract, manufacture and/or import asbestos presently in 66 countries as of May 2019. Asbestos is still present in the world market, however, in nations with laxer laws dominated by industry conglomerates justifying its use based on an alleged lack of sufficient scientific research and State resources to follow through with a total prohibition. In light of the continued commercial exploitation of asbestos despite clear evidence of its damaging impact on human health, this thesis addresses these defenses and nonetheless calls on all States to ban asbestos under human rights obligations to all individuals within their jurisdiction.

## Acknowledgments

I was first introduced to the human rights legal regime in a course at Suffolk University Law School in Boston, Massachusetts, USA. On the first day of this course, our professor had each of us stand up and answer this question: “What do human rights mean to you?”

Highly intimidated by this query, and even more so because many of my peers swiftly bestowed considerably sophisticated responses before we even sat for our first lesson, I stuttered at my turn to speak. All I could come up with was, “human rights are what let you be happy”.

Today, after spending approximately the past five years enthusiastically committed to this regime, the last two of which in the International Human Rights Law Master Programme here at Lund University in Lund, Sweden, my answer, indeed, remains the same. I believe that life is about making the best out of the cards that you have been handed, but the roots of genuine happiness are found in a secure environment where one can love and be loved.

I cannot be more grateful to have grown up with means that not only afforded me these elements, but even more so, every opportunity for success. I have my parents and grandparents to eternally thank for that and also dear friends from every corner of the world, an incredible education, my health and I am even inclined to shout out my relatively well-functioning government—we love to hate on the United States of America, but even these days, I do feel rather fortunate to hold my passport.

I am furthermore delighted to thank the selection committee of the Lund University Global Scholarship and additionally the Swedish Women’s Educational Association of Boston for the funding I received from their respective institutions while taking this degree. I also hold a special place in my heart for the time I have spent as President of Jus Humanis and Co-Head of the Travel Committee and Board Member on the Association of Foreign Affairs in Lund.

In writing this thesis, I would like to thank all those who have guided me at the Lund University Law Faculty and those in my second home, the Raoul Wallenberg Institute of Human Rights and Humanitarian Law. I first squabbled with the intricacies of human rights law and toxic exposure as a legal research assistant to UN Special Rapporteur Baskut Tuncak, who recommended the documentary film, *Breathless*, for the Swedish Human Rights Film Festival that took place in March 2019. I was so inspired by this film that I decided to change my topic for this thesis just a few weeks prior to submission. That being said, I am *so* appreciative for my thesis advisor, Daria Davitti, whose vast expertise, meticulous commentary, uplifting energy and extensive encouragement pushed me to the finish line.

I dedicate this endeavor to all those suffering from asbestos-related diseases and their loved ones. While writing this thesis, I would often pause to take a long, deep breath and appreciate the present capacity of my lungs—not everyone can do that.

I furthermore dedicate this endeavor to those living in fear of an asbestos-related disease diagnosis and equally to those who will walk into the doctor’s office with some chest pain one day and walk out with only a few months to live. *Mark my words*, those days will soon be over.

## The Right to an Environment Free from Toxic Pollution & State Obligations to Eradicate Asbestos—*Now is the time*

### Introduction:

Outside Kymore, Madhya Pradesh, India, there are glacier mountains behind deep blue skies that climb to the height of the clouds topped by the whitest snow amongst glimmering icecaps; this place is home to some of the freshest air on our planet. Nirmala Gurung, a retired schoolteacher from Kymore, recently journeyed to relish in this magnificence to meditate, but unfortunately, her breathing capacity is currently diminished by 20 percent.<sup>1</sup> Mrs. Gurung cannot fully enjoy the pure air surrounding these serene mountains because she has contracted a form of asbestosis.

Asbestosis is a chronic disease characterized by scarring in the lungs resulting from the inhalation of fibers that break off from what is known commercially as, *asbestos*.<sup>2</sup> Though once treasured for its fire resistance and durability, medical research in the early 1960s later confirmed widespread disease among those exposed to asbestos.<sup>3</sup> Accordingly, the mining, use and production of asbestos products is banned in 66 countries as of May 2019 and highly regulated in many others—but not Mrs. Gurung's.<sup>4</sup>

In her town in Kymore, there is a factory that has been manufacturing products made with asbestos since 1934 that continues in full operation today.<sup>5</sup> Her husband used to work there, and the husbands of her neighbors work there presently. Her roof is made with asbestos fiber, as is her neighbors as well. Their city is built upon asbestos waste cluttered up around the schoolyard filled

---

<sup>1</sup> *Breathless* (Dancing Dog Productions 2018) directed by David Lambo. This film and its protagonists, in particular, Mrs. Gurung, will be cited throughout this thesis to illustrate the devastating human rights violations as a consequence of the asbestos industry.

<sup>2</sup> *Asbestos*, THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH, <https://www.cdc.gov/niosh/topics/asbestos/default.html>.

<sup>3</sup> Peter W. J. Bartrip, *History of Asbestos Related Disease*, 80 POSTGRADUATE MEDICAL JOURNAL 72, 72 (2004) (citing the unparalleled fireproofing and insulating abilities of asbestos). See also Irving Selikoff et al., *Asbestos Exposure and Neoplasia* 188 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 22 (1964) and Irving Selikoff et al., *Relation Between Exposure to Asbestos and Mesothelioma*, 272 NEW ENGLAND JOURNAL OF MEDICINE 560 (1965) (confirming general medical recognition of the rare and fatal cancer, mesothelioma, as an asbestos-related disease).

<sup>4</sup> Laurie Kazan-Allen, *Current Asbestos Bans*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, last accessed May 27, 2019, [http://ibasecretariat.org/alpha\\_ban\\_list.php](http://ibasecretariat.org/alpha_ban_list.php).

<sup>5</sup> Krishnendu Mukherjee, *The Legacy of the European Asbestos Industry Continues in India*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Oct. 20 2016, <http://www.ibasecretariat.org/km-legacy-of-european-asbestos-industry-continues-in-india.php>.

with young children, many whose parents and grandparents also have lungs wrecked with the fibers of this mineral composition. Mrs. Gurung believes that her rights are being violated by the production of asbestos products in Kymore and this thesis will examine the validity of her allegations.

Under the framework of international human rights law, the following chapters will analyze the array of rights implicated in the case of asbestos mining and product manufacturing. Taking into consideration the major international human rights law treaties, accompanying General Comments from the United Nations treaty monitoring bodies, the mandates of relevant the United Nations Special Rapporteurs and supplementary human rights legal doctrine and scholarship, this thesis will argue that there is an obligation on States to ban asbestos as soon as possible because its commercial use violates numerous human rights. By analyzing the right to life, the right to the highest attainable standard of health, the right to an adequate standard of living, procedural environmental rights, namely rights to information, participation and access to justice and lastly, the principles of non-discrimination and equality, a case will be made to recognize the human right to a healthy environment free from toxic pollution and a subsequent need for a global ban on asbestos.

#### Structure:

The aim of this thesis is to create a case for the cessation of asbestos mining and elimination of asbestos in factories under existing international human rights law. The first chapter of this endeavor will provide a description of the composition of asbestos, the history of its use and the evidence of its devastating impacts on the human body.<sup>6</sup> This chapter will provide the background for the legal analysis carried out in the rest of the thesis and it will serve as a basis to substantiate the case for an international ban on asbestos in line with existing States' obligations under international human rights law.

---

<sup>6</sup> Though asbestos does pose a threat to people, fauna and wildlife alike, the primary focus of toxicological research is on detriments faced by humans. Given the long latency period of asbestos-related disease, asbestos only contributes minimally to the degradation of the ecosystem. Accordingly, this thesis will not examine issues concerning loss of biodiversity. See *Toxicological Profile for Asbestos*, AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY 2 (2001), <https://www.atsdr.cdc.gov/ToxProfiles/tp61.pdf> (explaining that asbestos generally does not break down into other compounds and virtually remains unchanged over long periods in the environment).

As the right to live free from toxic pollution has not yet formally been codified as an independent, self-standing right, the purpose of the second chapter is to examine the normative content of the right and outline the need for its universal recognition.<sup>7</sup> Chapter Two will analyze the applicable international legal framework supporting the case for an international ban on asbestos by describing each individual entitlement comprising the right to live free from toxic pollution individually and its relevance in the context of asbestos. By collectively assessing the individual rights that have previously been codified in different international treaties, this section will lay out the right to a healthy environment from which the right to live free from toxic pollution may be derived.

Chapter Three will analyze the obligations vested upon States under international human rights law to keep individuals from hazardous substances such as asbestos. This section will expound upon the duties on States to respect, protect and fulfil human rights and then apply these duties in the context of the harms arising from the commercial use of asbestos. Different instances of State regulation of asbestos will be illustrated and subsequently questioned as to whether the degree of action has been sufficient to realize according obligations.

To conclude, Chapter Four will reveal the current state of affairs concerning the recognition of the right to live free from toxic pollution and the present standing of asbestos regulation in the global market. This thesis will close by summarizing the harms that asbestos has inflicted on human life and subsequent human rights obligations on States to eradicate these harms by putting an end to its commercial use.

#### Limitations:

This thesis will exclude an in-depth investigation on hearing the asbestos industry as a criminal matter, parent liability for subsidiary corporation wrongdoing nor take a comprehensive look at the many different International Labour Organization (ILO) Conventions that could play a role in eradicating asbestos. Though this thesis will touch on each of these concerns to highlight the substantial litigation and legislative debate arising from the commercial use of asbestos, its

---

<sup>7</sup> Though the right to live free from toxic pollution already exists as a part of other rights, its normative content has not been extended to the point of existing on its own. *But see Objectives*, GLOBAL PACT FOR THE ENVIRONMENT [*hereinafter* Global Pact Objectives], <https://globalpactenvironment.org/en/the-pact/origins/> (proposing the first international treaty on the environment as a whole that is still in its drafting phases).



focus will revolve around the need to codify the right to an environment free from toxic pollution which, in turn, calls for a ban on asbestos.<sup>8</sup> As the continued mining and manufacturing of asbestos products severely infringes on the right to an environment free from toxic pollution, a robust and enforceable recognition of this right could be the solution to end all suffering inflicted by asbestos. Accordingly, the following analysis will take a human-rights-based approach in the face of asbestos litigation and legislative debate in arising from criminal, business and labor matters and analyze how an application of human rights law may impact the outcome. This method will be taken in an effort to make a pure case under international human rights law for the global eradication of asbestos.

## Chapter One: Asbestos: The Deadly, but Profitable Mineral

“*Silent Killer*” or “*Deadly Dust*”—these two phrases are another name for the fibrous minerals that make up what is commercially known as *asbestos*. This section will deliver a brief description of asbestos, an abridged history and evolution of its use in the global market and account the medical research confirming its grave hazard to human health and safety.

### 1.1 What is Asbestos? — *a briefing*

*Asbestos* is the commercial name given to a group of six different naturally occurring silicate minerals that have extraordinary tensile strength, relative resistance to chemical attack and are fire retardant.<sup>9</sup> These are extremely fibrous minerals and are grouped into two different families, *serpentine*, which has fibers that are more flexible and curved and *amphibole*, which has fibers that are generally brittle and often have a rod- or needle like shape.<sup>10</sup> Chrysotile asbestos, also known as white asbestos, is part of the serpentine family and the remaining five minerals, amosite, crocidolite and the fibrous varieties of tremolite, actinolite and anthophyllite make up the amphibole family.<sup>11</sup> Chrysotile asbestos is the most commonly used today, accounting for over 95

---

<sup>8</sup> See *infra*, Chapter Two, Section 2.4.3.1 and Chapter 3, Section 3.3.1.1 for reference to criminal matters; Chapter Two, footnote 150 for parent company liability concerning asbestos-related injury; and Chapter 3, Section 3.2.1.1 for a discussion on ILO regulation.

<sup>9</sup> See *Toxicological Profile for Asbestos*, *supra* note 6, at 1.

<sup>10</sup> *Id.* at 1-2.

<sup>11</sup> *Id.* at 2.

percent of commercial use, and, unless otherwise specified, will be the form of asbestos at issue throughout this thesis.<sup>12</sup>

The danger of all forms of asbestos lies in the thin, friable fibers that break off into microscopic pieces that may be inhaled and have been proven to inflict a severe detrimental effect on human health, particularly the respiratory system.<sup>13</sup> The World Health Organization (WHO) recognizes that all forms of asbestos cause cancer and the most efficient way to eliminate asbestos-related disease is to stop the use of all types of asbestos, however, commercial production and use continue generally unabated on the global scale.<sup>14</sup> In 2018, Russia was the world's leader in asbestos production, followed by Kazakhstan, China and Brazil.<sup>15</sup> China, Russia and India are respectively the top consumers of asbestos products and are amongst over the 120 of the remaining countries where the mineral composition remains legal, including the United States.<sup>16</sup> As the next section will illustrate, asbestos was once believed to be a miracle material, and as such, it has been used for thousands of years.

## 1.2 History of Asbestos

This naturally occurring substance dates back approximately 750,000 years to the Stone Age and appears on every continent.<sup>17</sup> Archeologists believe that as early as 4000 B.C., the fire-resistant qualities of asbestos were used for wicks in lamps and candles and continually throughout time.<sup>18</sup> Embalmed Egyptian pharaohs were wrapped in asbestos woven cloth to prevent decay; in Nordic lands, primal clay pots were discovered with asbestos fibers for strength and fire resistance;

---

<sup>12</sup> *Types of Asbestos*, ASBESTOS.COM, <https://www.asbestos.com/asbestos/types/>.

<sup>13</sup> *Chrysotile Asbestos*, WORLD HEALTH ORGANIZATION (2014) 2, [https://apps.who.int/iris/bitstream/handle/10665/143649/9789241564816\\_eng.pdf;jsessionid=8800F42EB5C212CF7459D33813DEDEE8?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/143649/9789241564816_eng.pdf;jsessionid=8800F42EB5C212CF7459D33813DEDEE8?sequence=1).

<sup>14</sup> *Id.* at 3-4.

<sup>15</sup> *Major Countries in the Worldwide Asbestos Mine Production from 2010 to 2018*, STATISTA, <https://www.statista.com/statistics/264923/world-mine-production-of-asbestos/> (citing Russia produced 690 thousand metric tons of asbestos in 2018).

<sup>16</sup> *Mesothelioma & Asbestos Worldwide*, ASBESTOS.COM, <https://www.asbestos.com/mesothelioma/worldwide/> (showing world map of national asbestos bans and restrictions as of March 2019).

<sup>17</sup> *The History of Asbestos*, HISTORY COOPERATIVE, <https://historycooperative.org/the-history-of-asbestos/>. See also, *Earliest Known Facts About Asbestos*, UNIVERSITY OF MONTANA, [http://www.umt.edu/bioethics/libbyhealth/introduction/background/asbestos\\_timeline.aspx](http://www.umt.edu/bioethics/libbyhealth/introduction/background/asbestos_timeline.aspx).

<sup>18</sup> MELVIN A. BERNARDE, ASBESTOS: THE HAZARDOUS FIBER 3 (2018).

and the ancient Greeks and Romans sewed asbestos fibers into textiles for renowned durability.<sup>19</sup> Quite swiftly, however, these civilizations discovered the harmful effects of the mineral composition, namely those who mined and labored with the raw substance.<sup>20</sup>

Asbestos continued to be used throughout the Middle Ages in items ranging from tablecloths to bank notes and from purses to fire brigade apparel.<sup>21</sup> During the 1800s, the Industrial Revolution brought on steady growth of the asbestos industry for its wide range of practical and commercial uses. As asbestos is highly resistant to chemicals, heat, water and electricity, it made as superior insulation for the machinery that powered the Industrial Revolution and its malleable properties additionally contributed to its effective use in building materials.<sup>22</sup> Asbestos was heavily exploited during the latter portion of the 19th Century, which was when the world's first commercial asbestos mine was established in Canada.<sup>23</sup> Shortly thereafter, the asbestos industry launched into a thriving and lucrative intercontinental enterprise, albeit one that had devastating consequences for human health.

The mining of asbestos and manufacturing of products containing the mineral continued to boom throughout the early to mid-1900s.<sup>24</sup> In 1910, world production of asbestos exceeded 109,000 metric tons—more than three times the total in 1900.<sup>25</sup> The demand for cost-effective and mass-produced construction materials generally only increased during the first half of the 20th Century, which further expanded the asbestos market.<sup>26</sup> After the Great Wars, global demand for asbestos still rose as economies and countries struggled to rebuild following their infrastructural

---

<sup>19</sup> *Id.*

<sup>20</sup> PLINY THE ELDER, THE NATURAL HISTORY, Book XIX, Chapter 4, <http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.02.0137:book=19:chapter=4&highlight=asbestos> (describing an incombustible linen that cleans more brightly when it is burned rather than washed in water). *See also* STRABO, GEOGRAPHY, Book XII, Chapter 3, Paragraph 41, <http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0198:book=12:chapter=3&highlight=pontic> (citing that the air in the mines is deadly and its workmen are plagued by disease and death, though the exact source of the sickness is not disclosed).

<sup>21</sup> *See The History of Asbestos, supra* note 17.

<sup>22</sup> *Id.*

<sup>23</sup> *Jeffery Mine*, MINDAT.ORG, <https://www.mindat.org/loc-581.html> (stating that the first commercial asbestos mine opened in Asbestos, Quebec, Canada in 1879, otherwise known as the “Johns-Mansville Mine”).

<sup>24</sup> *See generally*, Robert L. Virta, *Worldwide Asbestos Supply and Consumption Trends from 1900 through 2003*, UNITED STATES GEOLOGICAL SURVEY (2006) <https://pubs.usgs.gov/circ/2006/1298/c1298.pdf>.

<sup>25</sup> *Id.* at 3.

<sup>26</sup> *Id.* (noting that asbestos production and consumption actually declined during World War I and the Great Depression, but immediately after both events, there was rapid growth in construction that boosted demand).

devastation and myriad of other uses.<sup>27</sup> It is estimated that worldwide asbestos demand peaked in 1977, but by this time, the connection between asbestos exposure and debilitating lung disease plaguing asbestos factory workers was too obvious to ignore.<sup>28</sup> Confirmation of the existence of disease from asbestos exposure brought on the steady implementation of extensive labor regulations.<sup>29</sup> Today, the mining, use and production of asbestos products is banned in approximately one third of countries and highly regulated in many others, but there is still no global ban on the material.<sup>30</sup>

### 1.3 Impact of Asbestos on Health and the Environment

According to the WHO, all forms of asbestos are carcinogenic.<sup>31</sup> When inhaled, asbestos fibers have an indisputable detrimental health effect on the respiratory system and can further inflict injury if swallowed or via entrance through other bodily orifices.<sup>32</sup> Asbestos fibers may become embedded in the tissue they reach following inhalation or ingestion, which renders the human body unable to eliminate them.<sup>33</sup> The carcinogenic nature of asbestos will gradually cause severe inflammation and tissue scarring, that often leads to the chronic lung disease, asbestosis.<sup>34</sup>

#### 1.3.1 Asbestosis

Exposure to asbestos dust cause may cause asbestosis after the airborne fibers lodge within the small sacs in the lungs where oxygen is exchanged for carbon dioxide in the blood.<sup>35</sup> These

---

<sup>27</sup> *Id.* (highlighting great extent that the entire international community praised asbestos up until that time).

<sup>28</sup> *Id.* (finding 25 countries produced a total of almost 4.8 megatons of asbestos in 1977).

<sup>29</sup> See Clean Air Act, 42 USC § 7401 *et seq.* (defining the United States Environmental Protection Agencies responsibilities for protecting and improving the nation's air quality, including workplace exposure to asbestos, which became effective on 28 April 1971). *But see* Edward Merewether & Charles Price, *Report on Effects of Asbestos Dust on the Lungs and Dust Suppression in the Asbestos Industry*, HER MAJESTY'S STATIONERY OFFICE (1930) (providing the first regarded medical research that the United Kingdom used to implement the Asbestos Industry Regulations in 1931, which required only a reduction in the amount of dust in the workplace).

<sup>30</sup> See Kazan-Allen, *supra* note 4.

<sup>31</sup> See *Chrysotile Asbestos*, *supra* note 13, at 3 (urging government officials to use this WHO research on the health consequences of asbestos before taking decisions).

<sup>32</sup> *Id.* at 7.

<sup>33</sup> See *Toxicological Profile For Asbestos*, *supra* note 6, at 4-5. See also *Causes of Mesothelioma*, MESOTHELIOMA + ASBESTOS AWARENESS CENTER, <https://www.maacenter.org/mesothelioma/causes/>.

<sup>34</sup> *Id.* *Toxicological Profile For Asbestos*, at 5.

<sup>35</sup> *Asbestosis: Symptoms and Causes*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/asbestosis/symptoms-causes/syc-20354637>.

tiny sacs are called *aveoli*, which are irritated by asbestos fibers and subsequently cause stiffness in the lungs.<sup>36</sup> This diminishes breathing capacity and may progress to an extent that lung tissue becomes so stiff that it is no longer able to contract or expand normally and result in long-term breathing complications.<sup>37</sup> In addition to shortness of breath, symptoms of asbestosis are dry and persistent cough, loss of appetite and weight, rounding and flattening of fingertips and toes (known as *clubbing*) and chest tightness or pain.<sup>38</sup> There is no cure for asbestosis and this disease is often a precursor to the aggressive and often fatal cancer, mesothelioma.<sup>39</sup>

### 1.3.2. Mesothelioma

Mesothelioma is a rare and aggressive cancer that occurs in the thin layer of tissue that covers the majority the human body's internal organs, known as the *mesothelium*.<sup>40</sup> Similar to the cause of asbestosis, mesothelioma develops from broken pieces of asbestos dust that are inhaled or ingested that can settle in the lungs, stomach or elsewhere causing inflammation and scarring.<sup>41</sup> These detriments can worsen, however, and result in uncontrolled cell growth leading to mesothelioma.<sup>42</sup> The most common type of mesothelioma is found in the tissue surrounding the lungs, known as *pleural mesothelioma*, which accounts for approximately 75 percent of cases.<sup>43</sup> Rarer types of mesothelioma affect tissue on the abdomen, around the heart and around genitalia.<sup>44</sup>

Asbestos exposure is the primary risk factor for mesothelioma.<sup>45</sup> A long latency period is a significant characteristic of mesothelioma, as symptoms typically appear 20 to 50 years after exposure to asbestos and those working in constructing and manufacturing occupations have a

---

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Malignant Mesothelioma*, NATIONAL CANCER INSTITUTE, <https://www.cancer.gov/types/mesothelioma>.

<sup>41</sup> *What Causes Malignant Mesothelioma?*, AMERICAN CANCER SOCIETY, <https://www.cancer.org/cancer/malignant-mesothelioma/causes-risks-prevention/what-causes.html>.

<sup>42</sup> *Id.*

<sup>43</sup> *See Mesothelioma Statistics*, ASBESTOS.COM, <https://www.asbestos.com/mesothelioma/statistics/> (noting that asbestos usually enters the body via the lungs, which is why pleural mesothelioma is the most common type accounting for 70-79 percent of cases).

<sup>44</sup> *Id.*

<sup>45</sup> *Mesothelioma: Symptoms and Causes*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/mesothelioma/symptoms-causes/syc-20375022>. *See also Malignant Mesothelioma*, *supra* note 40.

greater risk of developing mesothelioma due to increased presence of asbestos in those worksites.<sup>46</sup> In the next chapter, the harms of both asbestosis and mesothelioma will further be revealed alongside how these diseases correlate to an infringement on an individual's human rights.

## Chapter Two: The Right to an Environment Free from Toxic Pollution: A Case for Recognition

Efforts towards ensuring a healthier environment were first made by the international community in the form of a pre-condition to the enjoyment of fundamental human rights, particularly the right to life and the right to the highest attainable standard of health (or, in short, the right to health).<sup>47</sup> The necessity of a healthy environment is the crux of the Stockholm Declaration, adopted in 1972, which established a foundation for linking human rights, health and environmental protection. At this first international conference on the human environment, Principle 1 of the Stockholm Declaration was drawn up, declaring that “[m]an 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”.<sup>48</sup>

Conversely, another rights-based approach to ensuring a better and healthier environment is the view that recognizing certain human rights is essential to achieving environmental protection. In this view, the provision of human rights is a precursor to a healthy environment.<sup>49</sup> Demonstrated in the Rio Declaration on Environment and Development (Rio Declaration) later adopted in 1992, this link is formulated largely via procedural terms declaring that access to information, public participation and remedy should all readily be guaranteed.<sup>50</sup> Principle 10 of the Rio Declaration seeks to ensure that every person has access to information, can participate in the decision-making process and has access to justice in environmental matters with the aim of safeguarding the right to a healthy and sustainable environment for future generations.

---

<sup>46</sup> *Id.*

<sup>47</sup> Dinah Shelton, *Human Rights, Health and Environmental Protection: Linkages in Law and Practice* (2002) 3, [https://www.who.int/hhr/Series\\_1%20%20Sheltonpaper\\_rev1.pdf](https://www.who.int/hhr/Series_1%20%20Sheltonpaper_rev1.pdf).

<sup>48</sup> Stockholm Declaration of the United Nations Conference on the Human Environment [*hereinafter* Stockholm Declaration], U.N. Doc. A/CONF.48/14/Rev.1, Jun. 16, 1972.

<sup>49</sup> Puneet Pathak, *Human Rights Approach to Environmental Protection*, 7:1 ONTARIO INTERNATIONAL DEVELOPMENT AGENCY INTERNATIONAL JOURNAL OF SUSTAINABLE DEVELOPMENT 17, 18-19 (2014) (echoing the three different approaches to environmental law).

<sup>50</sup> Rio Declaration on Environment and Development [*hereinafter* Rio Declaration], U.N. Doc. A/CONF.151/26, Aug. 12 1992.

The most recent approach to ensuring the human right to live free from toxic pollution is to view the links as indivisible and inseparable.<sup>51</sup> By accepting that human rights, health and environmental protection are conjoined, the right to a safe and healthy environment becomes an independent substantive human right on its own.<sup>52</sup> In addition to the Stockholm Declaration and the Rio Declaration, there are several additional international legal instruments, specialized organs and agencies at the global and regional levels to respond to issues directly or indirectly concerned with the right to live free from toxic pollution, but the right in itself is still not yet formally recognized.<sup>53</sup>

The primary argument in favor of the right to a safe and healthy environment is that such a right will elevate the entire spectrum of environmental issues to a fundamental value of society and would ideally rise to a level equal amongst other rights and superior to ordinary legislation.<sup>54</sup> In the absence of codified global recognition, however, this right may be derived from a collective view of many of the major international human rights law treaties presently in force and the affirmation of the United Nations Human Rights Council that hazardous toxic substances may constitute a serious threat to the full enjoyment of human rights.<sup>55</sup> The right to a healthy environment is the culmination of acknowledging the large and interdependent collection of civil, political, economic, social and cultural rights that are implicated when toxic substances are placed into the environment.<sup>56</sup>

In the quest for formal recognition of the right to live free from toxic pollution and a complementary global regulatory framework, the following section will highlight the foremost human rights affected by the mining and use of asbestos. Each right will be defined and accompanied by its place within the human rights legal framework, namely, the right to life, the

---

<sup>51</sup> See Shelton, *supra* note 47, at 4.

<sup>52</sup> *Id.*

<sup>53</sup> See Need to Ensure a Healthy Environment for Individuals, U.N. Doc A/RES/45/94, Dec. 14, 1990 (recalling the language of the Stockholm Declaration and stating that a “better and healthier environment can help contribute to the full enjoyment); Draft World Charter for Nature, U.N. Doc A/Res/35/7, Oct. 30, 1980 (recognizing need for international cooperation with respect to nature).

<sup>54</sup> See Shelton, *supra* note 47, at 24.

<sup>55</sup> Report of the Human Rights Council on its Eighteenth Session concerning Mandate of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes, U.N. Doc A/HRC/18/2, Nov. 18, 2011, 30.

<sup>56</sup> Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes on Guidelines to Good Practices, U.N. Doc A/HRC/36/41, Sept. 5, 2017, paras. 7-23.

right to health, the right to an adequate standard of living, the procedural environmental rights concerning rights to information, meaningful participation and access to justice and lastly, the principles of non-discrimination and equality. An assessment on how the presence of asbestos results in violations of these rights will follow each description to bolster the case for a worldwide ban on asbestos under international human rights law.

## 2.1 Right to life

The right to life has been considered the ‘supreme human right’.<sup>57</sup> According to the Universal Declaration of Human Rights (UDHR), ‘[e]veryone has the right to life, liberty and security of person.’<sup>58</sup> The International Covenant on Civil and Political Rights (ICCPR) also explicitly enshrines the ‘right to life’ and establishes that ‘no one shall arbitrarily be deprived of his life’.<sup>59</sup> Though most frequently cited in the context of the death penalty, extrajudicial, summary and arbitrary executions and torture<sup>60</sup>, the right to life may also be violated under grave environmental conditions that have resulted in death.<sup>61</sup>

Realizing the right to life in the context of a healthy environment has gained considerable traction in light of the proposal of the Global Pact for the Environment that was launched in June 2017 to fill the gaps in international environmental law and to contribute to the emergence of a global legal framework to address environmental issues.<sup>62</sup> Article 1 of the proposed international convention elaborates on the “right to an ecologically sound environment”, stating that “[e]very person has the right to live in an environment adequate for their health, well-being, dignity, culture and fulfillment”.<sup>63</sup> Shortly thereafter the Global Pact for the Environment was announced, the United Nations Human Rights Committee revisited the General Comment on the right to life, holding that State obligations to ensure the right to life depends on measures taken to protect the

---

<sup>57</sup> United Nations Human Rights Committee [*hereinafter* HRC], General Comment No. 36 on article 6 of the International Covenant on Civil and Political Rights, on the right to life [*hereinafter* General Comment No. 36], CCPR/C/GC/36, Oct. 30, 2018, para. 2.

<sup>58</sup> Universal Declaration of Human Rights [*hereinafter* UDHR], 993 U.N.T.S. 3, Dec. 10, 1948, art. 3.

<sup>59</sup> International Covenant on Civil and Political Rights [*hereinafter* ICCPR], 999 U.N.T.S. 171, Dec. 16, 1966, art. 6(1).

<sup>60</sup> See NIGEL S RODLEY, *Integrity of the Person*, in INTERNATIONAL HUMAN RIGHTS LAW 174, 184-93 (Daniel Moeckli et al. eds., 2d ed. 2014).

<sup>61</sup> See A/HRC/36/41, *supra* note 56, para. 8.

<sup>62</sup> See GLOBAL PACT FOR THE ENVIRONMENT, *supra* note 7.

<sup>63</sup> *Draft Global Pact for the Environment*, GLOBAL PACT FOR THE ENVIRONMENT, <https://globalpactenvironment.org/uploads/EN.pdf>.



environment from pollution caused by both public and private actors.<sup>64</sup> Of further relevance, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean healthy and sustainable environment presented a report on the right to breath clean air and noted the right to life as the primary right infringed concerning poor air quality.<sup>65</sup> These developments have not only further established the right to life specifically in the context of the environment, but also have more generally established the right to a healthy environment from which the right to live free from toxic pollution may be derived.

Concerning specifically children, the Convention on the Rights of the Child (CRC) provides that every child has the inherent right to life and that states “shall ensure to the maximum extent possible the survival and development of the child”.<sup>66</sup> The CRC also requires that attention be paid to the best interests of the child and consider “the dangers and risks of environmental pollution”.<sup>67</sup> Additionally, the International Covenant on Economic, Social and Cultural Rights (ICESCR) provides that its state parties commit, *inter alia*, to diminish child and infant mortality.<sup>68</sup> Under a human-rights based approach to ameliorating the risks of hazardous substances and wastes, children receive a heightened protection of their right to life as they are a member of a class more vulnerable to violation of their rights.<sup>69</sup>

To illustrate how severe an impact that an unhealthy environment is to human life, the WHO estimates that in 2012, the deaths of 12.6 million people were attributable to an unhealthy environment, including exposure to toxic and otherwise hazardous substances—this number equates to one out of every four deaths.<sup>70</sup> Of those deaths, 8.2 million were attributable to non-communicable diseases linked to exposure to toxics and this is likely an under estimation.<sup>71</sup>

### 2.1.2 Asbestos as an infringement on the right to life

---

<sup>64</sup> See HRC General Comment No. 36, *supra* note 57, at para. 62.

<sup>65</sup> Issues of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, U.N. Doc A/HRC/40/55, Jan. 8, 2019, paras. 51-52.

<sup>66</sup> Convention on the Rights of the Child [*hereinafter* CRC], 1577 U.N.T.S. 3, Nov. 20, 1989, art. 6.

<sup>67</sup> *Id.* at art. 24(2)(c). See also, A/HRC/40/55, *supra* note 65, at paras. 55-56.

<sup>68</sup> International Covenant on Economic Cultural and Social Rights [*hereinafter* ICESCR], 993 U.N.T.S. 3, Dec.16, 1966, art. 12(2)(a).

<sup>69</sup> See A/HRC/36/41, *supra* note 56, at para. 4.

<sup>70</sup> *An Estimated 12.6 Million Deaths Each Year are Attributable to an Unhealthy Environments*, WORLD HEALTH ORGANIZATION, Mar. 15, 2016, <https://www.who.int/news-room/detail/15-03-2016-an-estimated-12-6-million-deaths-each-year-are-attributable-to-unhealthy-environments>.

<sup>71</sup> *Id.*

The mining of asbestos and manufacturing products containing the mineral composition infringes on the right to life because these processes have a direct correlation to the loss of human life from the consumption of asbestos dust. The most immediate violation on the right to life concerning the exposure to asbestos is the linkage to developing mesothelioma. As cited in Chapter One, mesothelioma is an aggressive form of cancer and exposure to asbestos is the only established risk factor known to be causally related to the disease.<sup>72</sup> The average life expectancy for mesothelioma patients is 12 to 22 months with treatment and on average patients diagnosed at age 69 live less than 12 months.<sup>73</sup> As only ten percent of those diagnosed live longer than five years, a significant drop in life expectancy is indeed associated with the diagnosis.<sup>74</sup> Moreover, medical research surmises that the worst is yet to come in terms of death tolls resulting from mesothelioma through 2025.<sup>75</sup> As mesothelioma and other asbestos-related diseases may take many decades to develop, it is likely that a significant number of cases have not yet been diagnosed.

Childhood exposure to asbestos dust additionally infringes on the right to life because mesothelioma and other asbestos-related diseases still have a likelihood of developing in the following decades.<sup>76</sup> As the impacts of asbestos exposure are not immediately sufferable, an issue for action is posed because those who come in contact with asbestos dust do not fall ill not within days or months, but only years after. Children grow into adults by the time of diagnosis and, therefore, exposure to asbestos dust is not readily viewed as an infringed right of the child. Those under the age of majority living near asbestos factories, however, are certainly still subject to environmental exposure to asbestos dust in the air surrounding their homes, schoolyards and recreational fields.

To highlight the infringement that asbestos poses on the right to life of children, an example can be made out of the children of Françoise Jonckheere, the women who refused ‘hush-money’

---

<sup>72</sup> See *infra*, Chapter 1, Section 1.3.2. See also, Curtis W. Noonan, *Asbestos Exposure and Risk of Mesothelioma*, 5:11 ANNALS OF TRANSLATIONAL MEDICINE 234 (2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5497111/pdf/atm-05-11-234.pdf>.

<sup>73</sup> *Mesothelioma Life Expectancy*, ASBESTOS.COM, <https://www.asbestos.com/mesothelioma/life-expectancy/>.

<sup>74</sup> *Id.*

<sup>75</sup> Tara Strand, *Mesothelioma Cases Expected to Increase Through 2025*, MESOTHELOMIA.COM, Jul. 7, 2017, <https://www.mesothelioma.com/blog/mesothelioma-cases-expected-to-increase-through-2025.htm>.

<sup>76</sup> See *Toxicological Profile for Asbestos*, *supra* note 6, at 7-8 (citing children intentionally eat asbestos-contaminated soil and dust via hand-to-mouth activities whether outside the home or inside from asbestos that was carried home on clothing).

and instead took the asbestos industry firm to court from which she developed and shortly thereafter died from mesothelioma via environmental exposure.<sup>77</sup> Death not only resulted in adult exposure, but also from childhood exposure to asbestos dust in Kappelle-op-den-Bos, Belgium when two out of her five her sons died from mesothelioma shortly after she too passed away from the disease.<sup>78</sup> Pierre-Paul and Stephane Jonckheere died at ages 43 and 44, respectively, after growing up a few blocks away from an asbestos factory during their childhood years and beyond.<sup>79</sup> Two of Françoise Jonckheere's other sons now live with asymptomatic pleural plaques, markers of asbestos exposure, and all of her remaining sons live in fear of a life cut short as a result of their childhood exposure to the mineral composition. Living up to its moniker as the 'silent killer', asbestos does not distinguish between the age of its victims, leaving all persons at risk to its lethal effects.

## 2.2 Right to the highest attainable standard of health

The right to the highest attainable standard of health is guaranteed as a part of the UDHR, which is read in terms of the individual's potential, the social and environmental conditions affecting health of the individual and in terms of health services.<sup>80</sup> The ICESCR and the CRC additionally echoes the right of everyone to enjoy the highest attainable standard of health.<sup>81</sup> This right is also expressed in the first article of the WHO Constitution, stating its objective and purpose: "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being".<sup>82</sup> Due to genetics, individually risky behavior, no fault-accidents and amongst other factors, there is no human right to be healthy, but envisioned is the best possible environment physically available to accommodate a full and long life.<sup>83</sup>

---

<sup>77</sup> See *Jonckheere v. Eternit II* (Brussels Court of Appeal decision in Flemish), 2012/AR/1747, Mar. 28, 2017, [http://www.abeva.eu/documents/2017\\_03\\_28\\_arrest.pdf](http://www.abeva.eu/documents/2017_03_28_arrest.pdf) (holding after 17 year-long case that Eternit had known asbestos was a carcinogenic substance since the 1970s, but had failed to protect workers and local people from hazardous exposure).

<sup>78</sup> See also Laurie Kazan-Allen, *Asbestos Victory in Belgium*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Mar. 30, 2017, <http://ibasecretariat.org/lka-asbestos-victory-in-belgium.php>.

<sup>79</sup> *Id.*

<sup>80</sup> See UDHR, *supra* note 58, art. 25. See also, ASBJØRN EIDE, *Adequate Standard of Living*, in INTERNATIONAL HUMAN RIGHTS LAW 195, 205 (Daniel Moeckli et al. eds. 2d ed. 2014).

<sup>81</sup> See ICESCR, *supra* note 68, at art. 12 and CRC, *supra* note 66, at art. 24.

<sup>82</sup> Constitution of the World Health Organization, 14 U.N.T.S. 185, Jul. 22, 1946.

<sup>83</sup> United Nations Committee on Economic, Social & Cultural Rights [*hereinafter* CESCR], General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12) [*hereinafter* General

The heart of this right lays the foundations for the provision of an environment where each individual has the ability to live to their fullest potential without hindrance. The goal is to eliminate all avoidable obstructions that would inhibit one from living their healthiest life possible. The Committee on Economic Social and Cultural Rights (CESCR) has stated that the main elements for fulfilling this right concern not only the availability, accessibility, acceptability and quality of health facilities, goods and services,<sup>84</sup> but also the provision of basic shelter, housing, sanitation and an overall healthy environment.<sup>85</sup>

### 2.2.1 Asbestos as an infringement on the highest attainable standard of health

Asbestos inhibits one from achieving the right to health because most of the debilitating effects that it has on the human body are preventable by simply using the comparable alternatives to asbestos that are available on the market today. Asbestos is not a necessary component to daily function and it imposes significant health risks that do not outweigh its benefits to society. Today, there is medical research confirming the direct correlation that asbestos has with disease and death and there are abundant sufficient substitutions to replace asbestos products, so the need for asbestos is not justifiable in the present age.<sup>86</sup>

Before the medical research was confirmed, however, the long-term risk to asbestos factory workers and asbestos product consumers was not unreasonably deemed to be more than offset by the reduction in the risk of harm for its low-price, strength and most vitally, flame-retardant properties.<sup>87</sup> During World War II, the United States Navy stockpiled asbestos as a strategic

---

Comment No. 14], U.N. Doc E/C.12/2000/4, Aug. 11, 2000, para. 8. *See also*, EIDE, *supra* note 80, at 204-205.

<sup>84</sup> *Id.* CECSR General Comment No. 14, para. 12.

<sup>85</sup> *See* EIDE, *supra*, note 80, p. 206.

<sup>86</sup> Emily Goswami et al., *Domestic Asbestos Exposure: A Review of Epidemiological and Exposure Data*, 10:11 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 5629 (2013) (finding an elevated risk of mesothelioma in populations exposed domestically to asbestos from a worker employed in a traditionally high risk occupation involving exposure to amphibole asbestos); Małgorzata Krówczyńska & Ewa Wilk, *Asbestos Exposure and the Mesothelioma Incidence in Poland* 15:8 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 1741 (2018) (affirming asbestos is carcinogenic to humans and stressing that the peak of asbestos consumption in Poland was a decade later than other European countries, likely accounting for its comparatively lower rate of malignant mesothelioma). For a summary on the alternative products, *see* John Bouwman, *Asbestos Substitute Materials Building a Safer Future*, AIRSAFE, Apr. 21, 2015, <https://www.airsafe.net.au/news/asbestos-substitute-materials-building-safer-future>.

<sup>87</sup> Paul D. Carrington, *Asbestos Lessons: The Unattended Consequences of Asbestos Litigation*, 26:3 REVIEW OF LITIGATION 584, 587 (2007).

resource needed to reduce fire hazard on thousands of vessels constructed for use in combat.<sup>88</sup> It is not unlikely that tens or even hundreds of thousands of human lives were spared a scorching death because of the use of asbestos in buildings and ships. Though many of those exposed to asbestos in the process of handling it and while at sea later died as a result of that exposure, the question of whether there would have been less overall suffering if asbestos had been taken off market when some initial knowledge of its possible effects first materialized is a question left for debate.

Further medical research gradually revealed that the risks associated with the inhalation of asbestos fibers had been underestimated due to the latency of its harm. At the present moment, however, it is well-known that if even the slightest exposure to asbestos enters the equation of factoring human health, the probability of one's longevity and well-being are greatly diminished.<sup>89</sup> When asbestos is inhaled and caught in the lungs, the fibers will eventually stiffen in the lungs and result in coughing, discomfort and the 'crackling sound' associated with asbestosis.<sup>90</sup> Another symptom of asbestosis is shortness of breath, which is the result of less oxygen being delivered to the blood.<sup>91</sup> As the human body relies on oxygen for energy, chronic breathing difficulties lead to fatigue and weight loss. Pulmonary hypertension may also form upon exposure, which is an advanced symptom and the result of the formation of scar tissue constricting arteries that impedes the pumping of blood out of the heart and into the lungs.<sup>92</sup> Treatment options include supplemental oxygen from a portable oxygen tank upon significant reduced lung capacity.<sup>93</sup>

These considerably serious health issues can be avoided by using asbestos product alternatives. Substitutes for asbestos include: polyurethane foams, flour fillers, cellulose fibers, thermoset plastic flour, amorphous silica fabrics.<sup>94</sup> These products arose from the dangerous dust associated with asbestos and subsequent laws instated in many countries banning the retail of products that contain the mineral compilation. Though some are slightly less durable and cost more

---

<sup>88</sup> *Id.* at 586.

<sup>89</sup> See *Chrysotile Asbestos*, *supra* note 31, at 4 (stressing there is no evidence for a threshold for the carcinogenic effect of asbestos).

<sup>90</sup> *Asbestosis*, ASBESTOS.COM, <https://www.asbestos.com/asbestosis/>.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> *Id.*

<sup>94</sup> Barry Castleman, *Substitutes for Asbestos-Cement Construction Products*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Oct. 8, 2009, [http://ibasecretariat.org/bc\\_subst\\_asb\\_cem\\_constr\\_prods.php](http://ibasecretariat.org/bc_subst_asb_cem_constr_prods.php).

to produce than asbestos products, they generally do not pose a threat to human health.<sup>95</sup> The new technologies developed in recent years are also “greener” in nature, providing a safe alternative for the environment as well as for the individuals coming into contact with the product.<sup>96</sup>

As the harmful health impacts from asbestos have been confirmed and these substitute products named above are readily available, one is inhibited from living in an environment that can provide the highest attainable standard of health if at risk to asbestos exposure. The use of asbestos is not obligatory in any sector because there are comparable alternatives to use in lieu of asbestos products.<sup>97</sup> Though the right to health is variable and has ranges of achievement in different countries, it is nonetheless still unjustified to support the mining and use of this deadly mineral composition, even in States with minimal resources and relatively weak infrastructures.<sup>98</sup> The affordability of asbestos roofing and siding is cited as a primary reason for its continued presence in the relatively poor city of Kymore, India and throughout the country, though economic profit should not be valued over human life human life in this context.<sup>99</sup> Even accepting that there are reasonably different expectations on different States in the international community concerning the realization of the right to health, taking into consideration the wealth and stability of a State, the harms are too well established to outweigh the risks to permit the mining and use of asbestos.

### 2.3 Right to an adequate standard of living

The right to an adequate standard of living calls for all persons to be able to enjoy their basic needs under conditions of dignity.<sup>100</sup> In the UDHR, it is the overarching right that encompasses the right to the highest attainable standard of health and food, clothing and housing.<sup>101</sup> The right to an adequate standard of living is strengthened by the ICESCR, echoing

---

<sup>95</sup> Seung-Hyun Park, *Types and Health Hazards of Fibrous Materials Used as Asbestos Substitutes* 9:3 SAFETY AND HEALTH AT WORK 360 (2018) (noting non-asbestos substitute can still pose a threat to human health depending on their size, durability and shape).

<sup>96</sup> See Bouwman, *supra* note 86.

<sup>97</sup> See, e.g., *Top Five Asbestos Alternatives*, ICEASBESTOS, <https://www.iceasbestos.com/blog/top-5-asbestos-alternatives> (listing polyurethane foams, flour fillers, cellulose fibers, thermoset plastic flour, amorphous silica fabrics as best substitute products to replace asbestos with).

<sup>98</sup> See *infra*, Chapter Three, Section 3.3 (discussing the importance of available State resources when assessing State obligations to fulfil economic, social and cultural rights more in depth, as put forth in ICESCR Article 2(1)).

<sup>99</sup> See *Breathless*, *supra* note 1 (highlighting considerably how much less expensive it is to reinforce one’s home during hurricane season using asbestos siding than an alternative material).

<sup>100</sup> See EIDE, *supra* note 80, at 196.

<sup>101</sup> See UDHR, *supra* note 58, at art. 25(1).

that an adequate standard of living includes the same provisions and, moreover, the continuous improvement of living conditions.<sup>102</sup> The CRC additionally entitles ‘every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development’.<sup>103</sup>

For the purpose of this thesis, this section will focus on the right to housing as it falls under the right to an adequate standard of living because the threats of asbestos are most notably present in the construction of homes and surrounding living areas. Though asbestos dust can still inflict harm on those by way of naturally occurring asbestos contamination in food, water and para-occupational exposure via deposits on clothing, the occurrence of asbestos cement as roofing, siding and insulation is the gravest danger imposed at this time.<sup>104</sup>

The right to housing forms part of the guarantees set out in the UDHR and the ICESCR.<sup>105</sup> The relevant provisions in these instruments are read to require more than mere shelter in the sense of having a roof over one’s head. The right to adequate housing is the right to live somewhere in security, peace, and dignity. Furthermore, the right to adequate housing is either expressly referred to or implied in other international instruments such as the CRC Article 27(3); Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) Article 14(2)(h); the Convention on the Elimination of All Forms of Racial Discrimination (CERD) Article 5(e)(iii); and the Convention and Protocol Relating to the Status of Refugees Article 21.<sup>106</sup> The CESCR has additionally elaborated on the content concerning the right to housing with concerns of habitability, stating that housing must protect inhabitants from threats to health and disease vectors.<sup>107</sup>

At the regional level, the right to housing is contained in the European Social Charter to ensure its effective exercise.<sup>108</sup> There is also an implied right to housing in the African Charter on Human and Peoples’ Rights (African Charter) that was confirmed by the African Commission on

---

<sup>102</sup> See ICESCR, *supra* note 68, at art. 11.

<sup>103</sup> See CRC, *supra* note 66, at art. 27.

<sup>104</sup> See Noonan, *supra* note 72, at Figure 1.

<sup>105</sup> See UDHR, *supra* note 58, at art. 25 and ICESCR, *supra* note 68, at art. 11.

<sup>106</sup> Convention on the Elimination of All Forms of Discrimination Against Women [*hereinafter* CEDAW], 1249 U.N.T.S. 13, Dec. 18 1979; International Convention on the Elimination of All Forms of Racial Discrimination [*hereinafter* CERD], 660 U.N.T.S. 195, Dec. 21, 1965; Convention Relating to the Status of Refugees, 189 U.N.T.S. 137, Jul. 28, 1951.

<sup>107</sup> CESCR General Comment No. 4: The Right to Adequate Housing (Art. 11(1) of the Covenant), U.N. Doc E/1992/23, Dec. 13, 1991, para. 8.

<sup>108</sup> European Social Charter (revised), ETS 163, May 3, 1996, art. 31.

Human and Peoples' Rights in its 2001 decision in *Social and Economic Rights Action Center and Center for Economic and Social Rights v. Nigeria*.<sup>109</sup> The Commission found that Nigeria violated the African Charter by condoning and facilitating environmentally degrading polluting practices of oil companies in traditional lands by military force.<sup>110</sup> Albeit an explicit right to housing is not provided under the African Charter, the Commission found that these actions collectively infringed on the provisions protecting the rights to the highest attainable standard of mental and physical health, property and family life.<sup>111</sup>

### 2.3.1 Asbestos as an infringement on the right to an adequate standard of living

The presence of this naturally occurring mineral infringes on the right to an adequate standard of living because residing amongst the immediate threat of asbestos exposure deprives one of their human dignity. As human rights are based on the assumption that individuals are rational and have good social conscience, its practice is therefore wholly concerned with the dignity of others.<sup>112</sup> This fundamental right to an adequate standard of living provides that no one should live under conditions whereby the only way to satisfy their needs is degrading or by deprivation of basic freedoms and living amongst asbestos does just this. Undoubtedly interdependent, the right to an adequate standard of living is linked with the right to the highest attainable standard of health when addressing asbestos because of the seriously debilitating effects that it has on the body may greatly diminish one's quality of life. The respiratory illnesses primarily associated with asbestosis lead from shortness of breath, to a bed-bound state and eventually to an untimely death, which undoubtedly infringes on one's human dignity when then are obliged to live or work amongst it. Those in these positions are often uninformed of the risks associated with the mineral composition, living in economically disadvantageous regions, or a combination of both categories.<sup>113</sup>

---

<sup>109</sup> Decision Regarding Communication 155/96 (*Social and Economic Rights Action Center/Center for Economic and Social Rights v. Nigeria*, Case No. ACHPR/COMM/A044/1 (African Commission on Human and Peoples' Rights May 27, 2002), para. 60.

<sup>110</sup> *Id.*

<sup>111</sup> *Id.*

<sup>112</sup> See EIDE, *supra* note 80, at 196.

<sup>113</sup> See *infra*, Chapter Two, Sections 2.4.1 and 2.5, for more detail on the vulnerability of under-privileged populations in the context of the right to information and the principle of equality and non-discrimination, respectively.



Concerning the normative content of the right to an adequate standard of living, the right to housing is most seriously infringed when one is forced to live amongst asbestos. As environmental exposure is harmful enough to the human body, daily and repeated exposure to one's intimate and private quarters poses even more heightened threats of toxicity and a consequent further retreat from a life with dignity. The present-day operation of highly unregulated asbestos factories and accompanying asbestos-cement housing provided by factory management demonstrates a clear disregard and contempt for human rights.

A stark example of those subject to this degradation are the asbestos factory workers in Kymore, India who presently live in housing constructed in whole by asbestos cement that has been provided by factory management.<sup>114</sup> Their work alone puts them in constant danger to exposure and this danger is grimly amplified by the conditions of their housing. Even if those regularly exposed to asbestos had knowledge of the risks it posed and made a well-informed decision to live in an environment amongst those risks, this would still be a violation of the right to an adequate standard of living because the workers would be unable to afford opposing these conditions. The provision of procedural environmental rights in Kymore, India, however, does not appear to be afforded.

## 2.4 Procedural Environmental Rights

Procedural environmental rights are measures put in place to facilitate the protection of the environment in a technical and bureaucratic manner and are based on three pillars: a right to information, a right to participate and a right to access to justice. These rights are an expression of democracy and of fundamental importance in the protection of the environment as they give both individuals and civil society as a whole rights to influence, shape and evaluate state activities, which may have an adverse impact on the environment.<sup>115</sup> With support for procedural environmental rights, transparency in environmental matters and the fulfilment of environmental justice may be achieved. Environmental justice requires that all people and communities receive equal protection of environment and public health under the laws and should have an equal and meaningful voice in decisions related to their environment.<sup>116</sup> In the context of this thesis,

---

<sup>114</sup> See *Breathless*, *supra* note 1.

<sup>115</sup> MALGOSIA FITZMAURICE, *Environmental Degradation*, in INTERNATIONAL HUMAN RIGHTS LAW 590, 603 (Daniel Moeckli et al. eds. 2d ed. 2014).

<sup>116</sup> *Id.* at 604-606.

environmental justice entails informed consent before submitting to asbestos exposure and effective remedy for those whose rights may have been violated from exposure.

The doctrines that primarily address environmental procedural rights are the Rio Declaration and the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention).<sup>117</sup> After the Rio Declaration, which states in Principle 10 that “environmental issues are best handled with participation of all concerned citizens” and that individuals should have decision-making processes and appropriate access to judicial and administrative proceedings, the Aarhus Convention went into force in 2001, which links the substantive right to a clean environment to procedural rights. Though drafted within the UN Economic Commission for Europe, any member state of the UN can accede to the Aarhus Convention, which at the time of writing, has 47 predominantly European state parties.<sup>118</sup> The remainder of this section will touch upon each of the specific Aarhus Convention pillars, further develop the normative content of each right set forth and how each applies to asbestos exposure.

#### 2.4.1 The right to information

The Aarhus Convention provides a very broad definition of environmental information that demands the disbursement of data concerning the state of elements of the environmental, factors that could be used in environmental decision making and conditions of life, health and safety.<sup>119</sup> The general public need not prove a special interest to access this information, it should be received expediently and only refused if manifestly unreasonable or with other good purpose that has been explicitly listed.<sup>120</sup> The Aarhus Convention additionally sets forth the right to impose an obligation on states to collect and disseminate information with an emphasis on transparency and accessibility by the general public.<sup>121</sup>

---

<sup>117</sup> See Rio Declaration, *supra* note 50. Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters [*hereinafter* Aarhus Convention] 2161 U.N.T.S. 447, Jun. 25, 1998.

<sup>118</sup> *Id.* For more on Aarhus Convention ratification, see UNITED NATIONS TREATY COLLECTION, [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-13&chapter=27&lang=en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-13&chapter=27&lang=en).

<sup>119</sup> *Id.* at art. 3(a-c) for definition of ‘environmental information’.

<sup>120</sup> *Id.* at art. 4.

<sup>121</sup> *Id.* at art. 5

The enjoyment of the right to information is critical in the context of toxics for it is essential in order to prevent adverse impacts, ensure the realization of freedom of expression and enable effective participation in decision-making and remedy-seeking processes.<sup>122</sup> The right to information is the foundation to taking meaningful and legitimate action in any arena as informed decisions are made only with full knowledge of the most updated data and reports. At the moment, however, there is no global information sharing system, but only a patchwork of global treaties that does not require countries to assess information on their obligation to respect and protect human rights.<sup>123</sup> This significant shortcoming has resulted in an inadequacy of information, inability to access information, and only moderately useful information with respect to the dangers confronting those who are most at risk of harm from hazardous substances and wastes.<sup>124</sup>

In practice, the right to information demands readily available, accessible and functional information delivered in a manner so that no one is excluded through direct or indirect discrimination.<sup>125</sup> Public awareness of availability is a key element in this equation because many may not even know of the possibility to make an inquiry. This information should furthermore be designed for the layperson to comprehend, as information is not functional unless it works to prevent harm, to enable democratic decision-making and to ensure accountability, access to justice and an effective remedy.<sup>126</sup>

#### 2.4.1.1 Asbestos as an infringement on the right to information

Those at risk of exposure to asbestos have a right to information on the harms that the substance can inflict in the long-term. The right to information is imperative in the context of

---

<sup>122</sup> See A/HRC/36/41, *supra* note 56, para. 20. See also ICCPR, *supra* note 59, at art. 19 (stating the right to freedom of expression) and at art. 25 (stating the right to take part in public affairs, both from which the right to information derives).

<sup>123</sup> Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes on the Right to Information, U.N. Doc A/HRC/30/40, Jul. 8, 2015, paras. 10-11. See also *Strategic Approach to International Chemicals Management*, UNITED NATIONS ENVIRONMENTAL PROGRAM (2006), <http://www.saicm.org/Portals/12/documents/saicmtxts/SAICM-publication-EN.pdf> para. 21 (pledging of stakeholders to facilitate public access to appropriate information and knowledge on chemicals throughout their life cycle, including the risks that they pose to human health and the environment). *But see, Draft Global Pact for the Environment*, *supra* note 63, at art. 9 (affirming everyone person to have the right to information impacting their environment).

<sup>124</sup> *Id.* A/HRC/30/40 at paras. 10-11.

<sup>125</sup> *Id.* at paras. 33-37.

<sup>126</sup> *Id.* at para. 35.

asbestos specifically because no one inhales one breath of asbestos and dies or even loses breath, which leads one to believe there is no risk in exposure. Since the detrimental effects are not immediately noticeable and impairment takes many months and more often decades to develop, persons subject to asbestos exposure have no reason to believe their health is at risk until it is too late. Other situations of hazardous substance exposure, for example, chemical fumes and crude oil, may be immediately sensed and the damage inflicted may be somewhat or even completely remediated, but the harms of asbestos are irreversible once the fibers embed into the lungs. To inhibit the “silent killer” from inflicting anymore harm, the international community must fulfil the right to information concerning the harmful effects of this substance, which will hopefully expedite active and meaningful public participation that will lead to the banning of its use.

At the moment, in some places in the world, and particularly in Kymore, India, asbestos cement is consumed without a warning label or from cursory glance, without any label at all.<sup>127</sup> Asbestos advertisements outside Kymore illustrate a tall, robust man resembling the Roman god, Hercules, who is known for his great strength and invincibility.<sup>128</sup> This depiction purports the durability of asbestos cement products and instills a sense of safety in those who are keen to consume them. In the context of hazardous substances and wastes, particularly asbestos exposure, information gaps such as this create a fundamental impediment to realizing the right to active and meaningful public participation by individuals who are ultimately misinformed about the harms they are being exposed to.<sup>129</sup>

#### 2.4.2 Right to participation

The second pillar of the Aarhus Convention provides an expansive and comprehensive participatory right in environmental decision-making with a focus on mineral extraction, amongst other industries impacting the environment.<sup>130</sup> As every citizen has the right and opportunity to take part in the conduct of public affairs at all stages, the Aarhus Convention furthermore calls for

---

<sup>127</sup> See *Breathless*, *supra* note 1. In the documentary, asbestos siding is shown being sold at a small, local, open air shop that also sells candies and fruits in close proximity.

<sup>128</sup> *Id.* While touring through India, the producers point out multiple advertisements of asbestos cement products accompanied by this “strong man” depiction.

<sup>129</sup> See A/HRC/30/40, *supra* note 123, at para. 24.

<sup>130</sup> See Aarhus Convention, *supra* note 117, at art. 6(1) (directing to Annex 1, subsection 3, which specifically cites regulation on “installations for the production of asbestos and the manufacture of asbestos products”).

public participation during the preparation of plans and programs relating to the environment<sup>131</sup> and also provides that states strive to promote effective participation while options are still open before the inclinations of those in power have been implemented.<sup>132</sup> This second pillar, however, has proved more difficult to implement than the first pillar concerning the right to information.<sup>133</sup>

The foundation for the second pillar of the Aarhus Convention arises from the UDHR, stating that “everyone has a right to take part in the government of his country” and also in the ICCPR, stating that “[e]very citizen shall have the right to and opportunity ... [t]o take part in the conduct of public affairs, directly or through freely chosen representatives”.<sup>134</sup> The UN Declaration on the Right to Development also sets forth the meaning of participation by significantly broadening its definition to include that participation should be “active, free and meaningful”.<sup>135</sup>

#### 2.4.2.1 Asbestos as an infringement on the right to participation

Individuals presently living or working in an environment where there is risk or potential risk of exposure have the right to actively and meaningfully participate in the public affairs that concern the continuation of new projects that may involve toxic exposure. Public participation is indispensable because the act of civil society voicing its opinions and furthermore partaking in government affairs is the heart of a democracy. As a democracy is a system of government *by the whole population*, a State cannot hold itself out as democratic if the right of participation is denied from its citizens.<sup>136</sup> Human rights and democracy are intrinsically linked as both regimes hold value in not only the will of the majority, but also the voice of the minority. In this case, hearing the voice of the whole population is the fulfilment of environmental justice. The scenario below illustrates how an environmentally unjust outcome may arise in the context of exposure to asbestos,

---

<sup>131</sup> *Id.* at art. 7

<sup>132</sup> *Id.* at art. 8.

<sup>133</sup> See FITZMAURICE, *supra* note 115, at 605.

<sup>134</sup> See UDHR, *supra* note 58, at art. 21 and ICCPR, *supra* note 59, at art. 25.

<sup>135</sup> Declaration on the Right to Development, U.N. Doc A/RES/41/128, Dec. 4, 1986, art. 2(3). See also, Dubai Declaration, *supra* note 123, paras. 18-19 (making a commitment to strengthening participation among States, the private sector and civil society).

<sup>136</sup> See Miriam-Webster Dictionary, *democracy*: 1(b): a government in which the supreme power is vested in the people and exercised by them directly or indirectly through a system of representation usually involving periodically held free elections.

even if the right of participation is exercised and the whole community seemingly has a seat at the table.

#### 2.4.2.2 A scenario of injustice

If a fully informed population had an educated discussion on the presence of an asbestos mine or production plant in their community, points on health hazards would be debated alongside the effectiveness and value of asbestos. For the sake of this argument, set the scene in a highly developed democratic nation with a considerably functional infrastructure, like the United States, where asbestos has not been mined since 2002, but is presently still legal and home to operational factories.<sup>137</sup> Present at this deliberation would be medical professionals detailing the well-documented devastation from asbestos-related diseases and lobbyists affirming the great advantage of its strength, durability and fire-resistant properties. A truly informed debate would also have representation from designers, manufacturers and market distributors of asbestos-product alternatives to highlight the non-asbestos based products available<sup>138</sup> and, to counter, the company of scientific research attesting to the safety of asbestos if used and contained in appropriate manners.<sup>139</sup> All parties would have a seat at this forum and each member of the

---

<sup>137</sup> Richard A. Lemen & Philip J. Landrigan, *Toward an Asbestos Ban in the United States*, 14:11 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 1302 (2017). *See also*, *Fighting for a U.S. Asbestos Ban*, MESOTHELIOMA + ASBESTOS AWARENESS CENTER, <https://www.maacenter.org/asbestos/ban/>.

<sup>138</sup> *What We Make: Advanced Fibers*, DOMTAR, <https://www.domtar.com/en/what-we-make/biomaterials/advanced-fibers>. Domtar is a North American wood products company developing fiber cement market using wood pulp. *See also*, e.g., *Asbestos Alternative Tape Suppliers*, THOMAS, <https://www.thomasnet.com/products/asbestos-alternative-tapes-83560656-1.html>. This is an international search engine for contractors where one can easily find alternatives to asbestos products.

<sup>139</sup> John Bridle & Sophie Stone, *Castile, The New Asbestos: Time to Clear the Air and Save 20 Billion GBP*, CHRYSOTILE INSTITUTE, <http://www.chrysotile.com/data/Casitile,%20The%20New%20Asbestos%20Revised.pdf> (urging regulations should be loosened on a building material that contains a form of asbestos in an effort to save money). *See also About Us*, ASBESTOS WATCHDOG, <http://www.asbestoswatchdog.co.uk/about-us>. One of the authors from the study above, John Bridle, is named as the chief inspector of Asbestos Watchdog, a forum founded in 2003 in response to surveyors and contractors spending “crippling sums of money on sometimes wholly unnecessary asbestos removals”. *But see About ICEASBESTOS*, ICEASBESTOS, <https://www.iceasbestos.com/about> (detailing its foundation in 2010 to carefully and responsibly remove asbestos with the support of a long-term license from the United Kingdom Health and Safety Executive). Comparing these two British based websites is particularly interesting because their format, logo and color scheme are almost exactly the same. It is unclear as to whether this is a coincidence or intentional.

community would have the opportunity to ask questions and offer their remarks on the continuation or establishment of this proposed factory.

At the close of this hearing, indeed, participants would learn that developments in technology have improved safety conditions where asbestos products are manufactured, particularly in developed nations. They would additionally gain knowledge on the potential greater expense and lower efficiency of alternative fiber products compared to asbestos-based products. Participants may also be convinced by some of the medical research purporting that low exposure to pure chrysotile asbestos is “probably not hazardous”.<sup>140</sup> If the community has not yet been personally touched by the devastating effects of mesothelioma and other asbestos-related diseases and furthermore dubious of para-occupational and naturally occurring and environmental exposure, they could quite plausibly vote in favor of the establishment or continuation of the factory in their community.

Before a vote on the erection of a nuisance or creation of a disturbance, however, the phrase “not in my backyard” has been uttered countless times concerning the potential exposure to hazardous wastes and chemicals. This phrase stipulates the acceptance of some level of environmental risk and/or harm may be offset by necessity in one’s the community, but, concurrently, demands those dangers be placed at a considerable distance from one’s personal residence in that community. Environmental justice, on the other hand, dictates that if risks are deemed to be in everyone’s interests, they should be shouldered equally by everyone. Placing hazards in one particular locality and none in another is a privilege of the powerful and particularly unjust when those who reap the greatest benefits also bear the least risk of harm. As those in disadvantageous social and financial situations are at a higher probability of exploitation by the state, it would be no surprise if this factory was established in an area of the community that was underprivileged.<sup>141</sup> Though the weight of the benefits and social utility of an asbestos mine or

---

<sup>140</sup> David Martin Bernstein, *Understanding Chrysotile Asbestos: A New Perspective Based upon Current Data*, CHRYBOTILE INSTITUTE (2005), [http://www.chrysotile.com/data/1\\_Bernstein%20IOHA%202005%20PILANESBERG%20Paper%20J3%20Understanding%20Chrysotile%20Asbestos%20A%20New%20Perspective%20Based%20Upon.pdf](http://www.chrysotile.com/data/1_Bernstein%20IOHA%202005%20PILANESBERG%20Paper%20J3%20Understanding%20Chrysotile%20Asbestos%20A%20New%20Perspective%20Based%20Upon.pdf) (stressing the kinetic and pathological difference between chrysotile asbestos and other forms that allow fibers to dissolve and clear more rapidly from the lungs).

<sup>141</sup> See e.g., Cheryl Katz, *Unequal Exposures: People in Poor Neighborhoods Breathe More Hazardous Particles*, ENVIRONMENTAL HEALTH PERSPECTIVE (2012). This article also focuses on communities of color, with low education and high unemployment rates.

factory arguably zeros out to null, this scenario above illustrates how the right of participation in the context of exposure to asbestos could still lead to an unjust outcome.

### 2.4.3 Right to access to justice

The third pillar that completes the set of environmental procedural rights is the provision of access to justice. This right affords an unobstructed opportunity to initiate proceedings for appropriate redress before a competent court or other adjudicator in accordance with legal rules and procedures.<sup>142</sup> Under the Aarhus Convention, rights are granted to access national courts to challenge decisions relating to the provision of its first two pillars, the right to information and the right to participation concerning environmental matters.<sup>143</sup> Access to justice under the Aarhus Convention and in relevant scenarios of environmental wrongdoing takes into consideration a balancing of interest between government and society.<sup>144</sup>

The principle of accountability dictates that States and other duty bearers must answer to rights holders. Duty bearers must comply with the legal norms and standards enshrined in the core international human rights instruments, namely the UDHR and ICCPR, which explicitly cite the right to effective remedy against violations of fundamental rights.<sup>145</sup> Though the ICESCR does not contain a similar provision obliging state parties to develop possibilities of judicial remedy, it provides that its State parties must undertake steps to the maximum of their available resources to fully realize the rights recognized in the Covenant.<sup>146</sup> In countries with high functioning judicial mechanisms, realizations of the ICESCR could be made via court systems providing access to justice. Similarly, the CRC does not explicitly cover effective remedy, but does demand that all appropriate measures be taken to fulfil its quest to protect children from injury, including judicial involvement.<sup>147</sup>

As the recognition of any right would be worthless without access to the means of enforcing claims arising from the right, access to justice is inherently fundamental to the entire human rights regime and interdependent on the realization of all rights. Though, in the context of exposure to

---

<sup>142</sup> See A/HRC/36/41, *supra* note 56, para. 17.

<sup>143</sup> See Aarhus Convention, *supra* note 117, art. 9.

<sup>144</sup> See FITZMAURICE, *supra* note 115, p. 605.

<sup>145</sup> See UDHR, *supra* note 58, art. 8 and see ICCPR, *supra* note 59, art. 2(3).

<sup>146</sup> See ICESCR, *supra* note 68, art. 2(1).

<sup>147</sup> See CRC, *supra* note 66, art. 19.



toxics, most victims have little to no effective remedy because of the burden of proving their cause of illness, the insurmountable costs of judicial remedy, corporate structures, global and devolved supply chains and other factors complicating the realization of justice.<sup>148</sup> Those who have specifically been injured by asbestos, however, have made considerable headway in their fight for remedy.

#### 2.4.3.1 Asbestos as an infringement on the right to access to justice

Victims of asbestos have a right to access to justice. Those who have suffered or are presently suffering from the harms of asbestos dust must be provided the availability of accessible, affordable, timely and effective means of redress or remedies. In some cases, this means one's day (or several years) in court.

For better or worse, asbestos dust is potentially the most well-documented industrial toxin in history and has brought on abundant litigation providing amelioration for harms its inflicted, but many actual and potential victims still remain with no semblance of effective remedy because of the complexity of each case.<sup>149</sup> Absent a robust international legal framework in force to address toxic exposure and impose accountability, asbestos victims have primarily gained access to justice in their domestic courts.<sup>150</sup> Upon understanding the substantial intricacies of asbestos litigation, this should, at a minimum, encourage the establishment of a global framework for toxins and even more desirably, access to justice in the form of a global ban on asbestos.<sup>151</sup>

---

<sup>148</sup> See A/HRC/36/41, *supra* note 56, para. 17.

<sup>149</sup> See Lemen & Landrigan, *supra* note 137, citing David Rosner, *Deregulating Safety: The Case of the Effort to Ban Asbestos* (op. ed.) 95:3 MILBANK QUARTERLY 257, 257 (2017).

<sup>150</sup> *Borel v. Fibreboard Paper Products Corporation*, 493 F.2d 1076 (5th Cir. 1973) (finding for first asbestos-related disease victory based in both negligence for a failure to warn and strict liability in the United States); *Chandler v. Cape*, [2012] EWCA (Civ) 525 (deciding the metaphorical “veil of incorporation” is a secondary consideration in determining when a shareholder owes a duty of care to a victim of its company's torts in landmark English case concerning asbestos injury); *Lanzo v. Johnson & Johnson Consumer, Inc. and Imerys Talc America, Inc.* (2018) (holding that the United States based baby powder producing corporate giant failed to adequately warn about asbestos contamination and additionally finding there was also a safer alternative design for the product resulting in 117 million USD combined punitive and compensatory damages).

<sup>151</sup> Baskut Tuncak, UN WEB TV, Oct. 25, 2018, <http://webtv.un.org/watch/mr.-baskut-tuncak-special-rapporteur-on-the-implications-for-human-rights-of-the-environmentally-sound-management-and-disposal-of-hazardous-substances-and-wastes-press-conference-25-october-2018/5853390478001/> (proclaiming need for global framework to regulate toxic substances).

In the numerous asbestos cases that have been brought worldwide, each and every individual claim presents a set of scientific questions bearing the nature and extent of the plaintiff's harm and the relationship of that harm to the likelihood it was caused from the inhalation of asbestos fibers.<sup>152</sup> These are scientific issues that demand expert testimony on both arms of the adversary, which, in each case, could potentially take several days to educate a jury or a trial judge on the intricacies of the science bearing on any individual claim.<sup>153</sup> Additionally, as asbestos-related injuries generally take decades to arise, further complications concern the accuracy of the reconstruction of events. The latency of the harm furthermore creates statute of limitations issues concerning exactly when a defendant acquired knowledge about the dangers of asbestos on the premises of their workplace or elsewhere. Assessment of damages to award compensation also proves difficult because factors other than asbestos could have also contributed to or been the sole cause of sickness, like cigarette smoke, another cause of air pollution or asbestos exposure from a source other than the defendant. The fact that asbestos was used to protect lives from risk of fire is also an argument for the mitigation of liability, among many others.<sup>154</sup>

A case that profoundly exemplifies these struggles is the 15 year and counting investigation and accompanying litigation of the corporate management behind the asbestos factory in Casale Monferrato, Italy.<sup>155</sup> The factory was built in 1906 and operated by the asbestos conglomerate, Eternit, and situated only 100km from the largest chrysotile asbestos mine in western Europe.<sup>156</sup> Described as the “perfect” location in the countryside of an impoverished city filled with families elated to take on the well-paid jobs with fixed and decent working hours offered by the asbestos industry, local workers arrived in droves to begin new careers in the *polvere* (Italian for “dust”).<sup>157</sup> After decades of defending Eternit in the name of capitalism, the “bringer of wealth, comfort and

---

<sup>152</sup> See Carrington, *supra* note 87, at 590.

<sup>153</sup> *Id.*

<sup>154</sup> *Id.* at 591. Another interesting argument is the case of the United States Navy that contracted the building of boilers for their ships entailing specifications that required the use of asbestos. Should the company that was hired to build these products be held liable for the injuries that resulted from asbestos exposure or should the Navy be held responsible for knowing the risks and still requiring the use of asbestos to build their product?

<sup>155</sup> *Eternit Lawsuit (Re: Asbestos Exposure in Italy)*, BUSINESS AND HUMAN RIGHTS RESOURCE CENTER, <https://www.business-humanrights.org/en/eternit-lawsuit-re-asbestos-exposure-in-italy>.

<sup>156</sup> FABRIZIO MENI, *The Eternit Factory at Casale Monferrato in Eternit in Italy* in ETERNIT AND THE GREAT ASBESTOS TRIAL 31, 31 (David Allen & Laurie Kazan Allen eds. 2012), <http://www.ibasecretariat.org/eternit-great-asbestos-trial-chap-5.pdf>.

<sup>157</sup> *Id.*

progress”, the factory in Casale Monferrato finally closed its doors in 1986 due to the proven correlation between asbestos and mesothelioma and the stark mortality rate from asbestos-related disease in Casale Monferrato compared to the rest of Italy.<sup>158</sup>

Taking into account the long latency period of asbestos-related diseases, investigations in Turin, Italy began in 2004 relating to the death of a man who died of mesothelioma and was a former employee of Eternit.<sup>159</sup> This action spurred the launch of a wider investigations, which eventually led to a trial that opened in 2009 charging of two major former stakeholders of the Eternit asbestos factory with causing the death or physical injury of hundreds of victims as the alleged consequence of asbestos exposure.<sup>160</sup> After approximately three years of proceedings, the court initially sentenced these two asbestos industry tycoons to imprisonment of 16 years for intentionally omitting to put measures in place to prevent asbestos damage in Italy and more than 50 million USD in fines.<sup>161</sup> The Italian Supreme Court, however, later overturned the lower court decision in 2014 and acquitted one of the Eternit executives on the grounds that the statute of limitations had passed and charges were dropped on the other because he has died shortly after his sentencing.<sup>162</sup>

In July 2015, the saga continued when the Constitutional Court of Italy assessed if the remaining defendant could be tried for voluntary manslaughter in lieu of the negligence charges that were dropped, but the high court ruled that he could not be tried for deaths that have already been subject to other proceeding against him.<sup>163</sup> Later in 2015, the charges brought by the prosecution were subsequently changed from manslaughter to involuntary manslaughter, but were

---

<sup>158</sup> *Id.* at 33-34.

<sup>159</sup> See *Eternit Lawsuit (Re: Asbestos Exposure in Italy)*, *supra* note 155.

<sup>160</sup> *Id.*

<sup>161</sup> Judgement of the Court of Turin (Court decision title translated from Italian to English), N. 24265/04 R.G. n.r., Feb. 13, 2012, <https://www.business-humanrights.org/sites/default/files/media/documents/dispositivo-sentenza-eternit-2012.pdf> (naming the defendants, two Eternit directors: Stefan Schmidheiny and Jean-Louis de Cartier de Marchienne (now deceased) who together held a majority of the company’s shares). See also, Nadia Coggiola, *Asbestos Cases in the Italian Courts: Duelling with Uncertainty*, INDRET 1, 8 (2009) (noting the higher number of criminal prosecutions for asbestos damage in the Italian judicial system because the State is under a legal duty to prosecute offenders, offenders can be liable for compensation if the victim requests it, there is generally a tactical advantage of increased media coverage and lastly, a greater sense of satisfaction in Italian collective psychology of justice being served when a court convicts a defendant).

<sup>162</sup> See *Eternit Lawsuit (Re: Asbestos Exposure in Italy)*, *supra* note 155.

<sup>163</sup> *Id.*

again fraught with statute of limitations issues.<sup>164</sup> A new case was opened in Italy against the remaining defendant by an investigating judge in January 2019 and the hearing began in April 2019.<sup>165</sup>

Tribulations of this lengthy case is an emblem of the overwhelming uncertainty plaguing asbestos litigation that is fatal to the realization of a victim's right to access justice. The sentence of acquittal in 2014 has been described as an "insult to the memory of those who are no more and the dignity of family members who have never stopped asking for truth and justice".<sup>166</sup>

In light of this trial and many others, a small bit of comfort may reside in the fact that the European Commission has banned asbestos use in every Member State, but knowing that asbestos is still in the world market to great extent is troubling to those in Casale Monferrato and beyond.<sup>167</sup>

## 2.5 Principle of equality and non-discrimination

The international human rights system is founded on the premise that all human beings, regardless of their status or membership of a particular group, are entitled to a set of rights.<sup>168</sup> As proclaimed in the very first article of the UDHR: "All humans are born free and equal in dignity and human rights".<sup>169</sup> Further elaborated on in the UDHR, these entitlements must be provided 'without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status'.<sup>170</sup> Almost identical language is specified in non-discrimination clauses contained in both the ICCPR and the ICESCR.<sup>171</sup> Of the other major international human rights treaties, three are specifically devoted to addressing certain forms of discrimination: CEDAW, CERD and the Convention on the Rights of Persons with Disabilities (CRPD).<sup>172</sup> The principles of equality and non-discrimination are furthermore

---

<sup>164</sup> *Id.*

<sup>165</sup> *Id.*

<sup>166</sup> *Asbestos Damages in Casale Monferrato by Eternit, Italy*, ENVIRONMENTAL JUSTICE ATLAS, Feb. 2 2015, <https://ejatlas.org/conflict/eternit-asbestos-damages-in-casale-monferrato>.

<sup>167</sup> Directive of the European Commission 1999/77/CE banned asbestos use in every European Union Member State by 1 January 2005.

<sup>168</sup> DANIEL MOECKLI, *Equality and Non-Discrimination*, in INTERNATIONAL HUMAN RIGHTS LAW 157, 160 (Daniel Moeckli et al. eds. 2d ed. 2014).

<sup>169</sup> See UDHR, *supra* note 58, at art. 1.

<sup>170</sup> *Id.* at art. 2.

<sup>171</sup> See ICCPR, *supra* note 59, at art. 2(1) and ICESCR, *supra* note 68, at art. 2(2).

<sup>172</sup> See CEDAW and CERD, *supra* note 98; Convention on the Rights of Persons with Disabilities, 2515 U.N.T.S. 3, Dec. 13, 2006.

guaranteed by all major regional human rights instruments and, at the very least, have been accepted as a part of customary international law.<sup>173</sup> The Inter-American Court of Human Rights has even surmounted the right to equality and non-discrimination to the non-derogable status of *jus cogens*, holding that the entire structure of national and international public order rests on this fundamental principle from which permeates all laws.<sup>174</sup>

The international human rights regime also affords particularly special protection to those who are the most at risk of the infringement of their rights.<sup>175</sup> A human-rights based approach designs laws and policies to protect the most vulnerable, notably, children, the poor, workers, persons with disabilities, older persons, indigenous peoples, migrants and minorities, all while also taking gender-specific risks into consideration.<sup>176</sup> Particularly in the context of the highest attainable of health, the CECSR in General Comment 14 states that the fulfilment of this right requires states to adopt and implement measures ensuring the right of access to the highest attainable standard of health on a non-discriminatory basis, including vulnerable or marginalized people or groups that otherwise might not have such access.<sup>177</sup> By virtue of this cross-cutting right and the inherent dignity of each person, all individuals must have equal protection from the harms presented by toxic substances.<sup>178</sup>

### 2.5.1 Asbestos as an infringement on the principle of equality and non-discrimination

The harms inflicted by the asbestos industry have violated the principle of equality and non-discrimination for the uneven distribution of harms it has inflicted, particularly on workers and those of lower socio-economic classes. In many cases, especially in the assessment of the

---

<sup>173</sup> See Li Weiwel, *Equality and Non-Discrimination Under International Human Rights Law*, Norwegian Center for Human Rights 19 (2004), <http://www.corteidh.or.cr/tablas/r08121.pdf> (referring to regional recognition and asserting universal acceptance of UDHR and its status as a part of the customary law of nations).

<sup>174</sup> Juridical Condition and Rights of Undocumented Migrants, Advisory Opinion, Inter-American Court of Human Rights, (Series A) No. 18, Sept. 17, 2003, para. 101 (elaborating that “no legal act that is in conflict with this fundamental principle is acceptable”).

<sup>175</sup> See CESCR General Comment No. 20: Non-discrimination in Economic, Social and Cultural Rights (art. 2, para. 2, of the ICESCR) [*hereinafter* General Comment No. 20], U.N. Doc. E/C.12/GC/20, Jul. 2, 2009, para. 27 (recognizing a flexible approach to the discriminatory ground cited as ‘other status’ under ICESCR 2(2) to reflect the experience of social groups that are vulnerable and have suffered and continue to suffer marginalization). See also, A/HRC/36/41, *supra* note 56, at para. 24.

<sup>176</sup> *Id.* A/HRC/36/41, at para. 24.

<sup>177</sup> See CESCR General Comment No. 14, *supra* note 83, at para. 18

<sup>178</sup> See A/HRC/36/41, *supra* note 56, at para. 15.

present-day, asbestos victims fall into both categories of vulnerable persons. As those who are in a state of poor finance cannot afford scrupulous vetting of their potential employment because of their immediate need earn a living, they are all the more likely to submit to undesirable positions.

To illustrate this predicament, asbestos industry laborers in Kymore, India will either die of starvation if they decline employment or die from asbestos-related diseases from working in the factory.<sup>179</sup> Since it is likely one will live longer if one opts out of starving themselves and their family and instead exposes themselves to asbestos, workers are forced to choose what appears to be the lesser of two evils in this case. Disguised as a choice, asbestos industry workers from economically disadvantaged backgrounds are forced into these dangerous and often lethal conditions. As without work, there is no means to earn money and without money, there is no means to live—an infringement likewise on the right to life.

This highly troubling scenario faced by workers in Kymore, India and undoubtedly in other locations across the globe that have not yet banned the mineral composition, adds weight to the studies showing that high poverty communities face greater health risks.<sup>180</sup> According to this research, low-income communities and communities in transition are targeted by industries that follow the path of least resistance when deciding where to locate hazardous waste sites and other polluting facilities.<sup>181</sup> This research follows that those in disadvantageous financial situations are at a higher probability of exploitation by the state. They are more easily marginalized in their unfavorable economic position as they have a lesser opportunity to initially voice their trepidation and, thereafter, an equally harsh prospect of remedying their injury. Furthermore, as low-income communities have fewer resources and political clout to oppose the siting of unwanted facilities, residents of low-income communities have far less choice in the manner which they are able to voice their potential mistreatment by the state.

The large collection of civil, political, economic, social and cultural rights outlined above prescribe the right to live free from toxic pollution. The elements comprising this right dictate that individuals are entitled to a healthy environment by way of the fundamental rights previously

---

<sup>179</sup> See *Breathless*, *supra* note 1 (accounting an interview with Kymore respiratory disease doctor on the choice presented to his patients).

<sup>180</sup> See *e.g.*, Katz, *supra* note 141 (focusing additionally on communities of color, with low education and high unemployment rates).

<sup>181</sup> *Id.* See also Jim Erickson, *Targeting Minority, Low-income Neighborhood Hazardous Waste Sites*, UNIVERSITY OF MICHIGAN, Jan. 19, 2016, <https://news.umich.edu/targeting-minority-low-income-neighborhoods-for-hazardous-waste-sites/>.

recognized under international human rights law. Pulling together from the core international human rights legal framework, the entitlements that embrace the right to live free from toxic pollution will, with hope, soon formally be codified. The existence of law alone, however, does not deter its breaking; efforts to officially recognize the right to live free from toxic pollution must also be met with efforts to implement this right.

### Chapter Three: State Obligations under International Human Rights Law and the Call to Ban Asbestos

Human rights obligations have a special status in international law because the commitments that States ascribe to in human rights treaties are to the persons within their jurisdiction as opposed to vis-à-vis other states.<sup>182</sup> This “special character” arises from the focus on the individual as the beneficiary.<sup>183</sup> Before the formation of the human rights regime, international legal instruments only created obligations between states and this was often at the expense of individuals. A binding commitment specifically to human rights, on the other hand, imposes a supranational standard of behavior on States to provide an environment fit to yield a livelihood with dignity for their citizens. This commitment is vertical in nature as a submission to human rights principles generally does not entail the horizontal act of bargaining between states.<sup>184</sup>

Furthermore, as the origins of the international human rights law regime are rooted in the values of state sovereignty and state voluntarism, it notable to highlight that these concepts may fall at odds with the very idea and purpose of the human rights system.<sup>185</sup> The principle of sovereignty grants States supreme authority within their territorial borders and this is found in conflict with the limits that human rights law places on states concerning how they can treat their

---

<sup>182</sup> FRÉDÉRIC MÉGRET, *Nature of Obligations*, in INTERNATIONAL HUMAN RIGHTS LAW 96, 96-97 (Daniel Moeckli et al. eds. 2d ed. 2014).

<sup>183</sup> Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide, Advisory Opinion, 1951 I.C.J. Rep. 15 (May 28), para. 23. (distinguishing between ordinary treaties and those of a human rights character for the first time).

<sup>184</sup> See MÉGRET, *supra* note 182, at 105-106. If a State is generally committed to the human rights values of a given treaty, but finds issue with a particular provision, that State has the opportunity to make a reservation, understanding or declaration upon ratification to limit the application of that provision. Absent a variance that undermines the object and purpose of the treaty, this flexibility is tolerated to encourage states to ratify treaties even when they are not in a position to accept their entirety.

<sup>185</sup> *Id.* at 96-97.

citizens.<sup>186</sup> Moreover, the principle of voluntarism dictates that States are bound by the obligations only to which they have consented and does not accept a picking and choosing of commitments. As international law emerged from slow, maturing customary practice in a highly flexible arena and the acceptance of human rights law is comparatively strict and demands acquisition in entirety, the proclamations of the human rights regime greatly influenced and redefined the concepts associated with classical sovereignty.

In the acceptance of the broad and complex character of human rights law, States became the primary duty-bearer to respect, protect and fulfil its provisions.<sup>187</sup> This chapter will describe the birth and bearing of each of these duties in the context of realizing the right to live free from toxic pollution and specifically focus on how these duties prescribe States to ban asbestos. The obligation on States to fulfil human rights will further be broken down with regard to the nature of the rights at hand. As civil and political rights may generally be distinguished from economic, social and cultural rights concerning the immediacy and expectation of their implementation, the obligations on States to realize particular rights may differ.

### 3.1 Respect

International human rights law lays down obligations that States are bound to respect. By becoming parties to international treaties, States assume obligations and duties under the basic legal principle of *pacta sunt servanda*, which states that “every treaty is binding upon the parties to it and must be performed by them in good faith”.<sup>188</sup> Translated from Latin, the phrase means “agreements must be kept” and further follows that once a State signs a treaty, that State is obliged to bind itself in good faith to ensure that nothing is done that would defeat the object and purpose of the international instrument while a decision on ratification is pending.<sup>189</sup>

Upon the signing and ratification of a human rights treaty, the obligation on States to respect the confines of a treaty demands that States keep from interfering with or curtailing the

---

<sup>186</sup> Christian Reus-Smit, *Human Rights and the Social Construction of Sovereignty*, 27 REVIEW OF INTERNATIONAL STUDIES 519, 519 (2001).

<sup>187</sup> See generally, HENRY SHUE, BASIC RIGHTS: SUBSISTENCE, AFFLUENCE AND US FOREIGN POLICY (1980) (developing the “respect, protect, fulfil” human rights law concept for the first time). See also, MÉGRET, *supra* note 182, at 101.

<sup>188</sup> Vienna Convention on the Law of Treaties, 1155 U.N.T.S. 331, May 23, 1969, art. 26.

<sup>189</sup> *Id.* at art. 18.



enjoyment of human rights.<sup>190</sup> To respect human rights means simply not to interfere with their enjoyment; States have a negative obligation to refrain from taking any measures that result in a violation of a given right.<sup>191</sup> If the organs or agents of a State consciously take action that violates the rights of its citizens, that would likely result in the failure to respect human rights.

Regarding the right to a healthy environment, States have an obligation to refrain from unjustifiable interference with the enjoyment of the rights implicated by toxic pollution.<sup>192</sup> The core of these rights, as outlined above, are the rights to life, the highest attainable standard of health, an adequate standard of living, procedural rights and the principle of equality and discrimination. States have a duty to resist any inclination to violate these rights via causing or allowing environmental harm.<sup>193</sup> For example, this obligation requires States to respect existing laws concerning the right to a healthy environment and not establish any new legislation that would impede on these rights individually or as a whole. This includes a commitment to non-retrogressive measures unless there are strong justifications to pull back from the status quo.<sup>194</sup> Conscious violation could consist of law or conduct that would result in a deprivation of access to a pollution free environment by lifting existing restrictions in place that provide for clean air and the responsible management of hazardous substances.

### 3.1.1 The State obligation to respect human rights calls for a ban on asbestos

---

<sup>190</sup> *International Human Rights Law*, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS, <https://www.ohchr.org/en/professionalinterest/pages/internationallaw.aspx>.

<sup>191</sup> *What Kinds Of Human Rights Obligations Are There?*, UN PRACTITIONER'S PORTAL ON HUMAN RIGHTS BASED APPROACHES TO PROGRAMMING, <https://hrbaportal.org/faq/what-kinds-of-human-rights-obligations-are-there>.

<sup>192</sup> See A/HRC/36/41, *supra* note 56, para. 4.

<sup>193</sup> *Framework Principles on Human Rights and the Environment*, UNITED NATIONS HUMAN RIGHTS SPECIAL PROCEDURES (2018) para. 4, <https://rwi.lu.se/app/uploads/2018/02/Framework-Principles-on-Human-Rights-and-the-Environment.pdf> (elaborating on Principle 2: "States should ensure a safe, clean, healthy and sustainable environment in order to respect, protect and fulfil human rights").

<sup>194</sup> Frequently Asked Questions on Economic, Social and Cultural Rights, Fact Sheet No. 33 [*hereinafter* ESC Rights Fact Sheet], UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS (2008) 15-16, <https://www.ohchr.org/Documents/Publications/FactSheet33en.pdf> (naming non-retrogressive measures as one of five State obligation concerning economic, social and cultural rights that should be implemented immediately, irrespective of State resources). The other immediate obligations, namely, the elimination of discrimination, economic social and cultural rights to subject to progressive realization, the obligation to "take steps" and minimum core obligations, will be developed later in Section 3.3.

States have an obligation not to interfere with environmental human rights, which includes rolling back on laws and support for limiting the uses of asbestos or banning it entirely. Absent substantial proof from the scientific community countering the abundance of evidence citing the harmfulness of asbestos at any increment of exposure, respect for human rights in this context provides that governments not undue the hard work of the past in this arena. Two cases of States risking heightened exposure to asbestos are the United States in its April 2019 federal regulation that falls short of a total ban of asbestos in the country and India in its 2013 reversal on its stance to regulate asbestos at the Conference of the Parties of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention).<sup>195</sup>

#### 3.1.1.1 Threat on respect for human rights in the United States

On 25 April 2019, the United States Environmental Protection Agency (EPA) set forth a rule to ensure that any discontinued uses of asbestos cannot re-enter the marketplace exclusive of EPA review with the intention to close any loophole in the regulatory regime for asbestos.<sup>196</sup> Known as the April 2019 Final Rule, this legislation has been enacted to ensure that asbestos products that are no longer on the market cannot return to commerce without an evaluation and an opportunity to put in place any necessary restriction or prohibiting use by the EPA.<sup>197</sup> The issue here lies, however, with the laxer version of this rule that was first proposed in June 2018, which would have left open new uses of asbestos without EPA review if accepted as designed.<sup>198</sup> Initially, the proposed rule included fifteen specific uses that would trigger a federal assessment and critics of this rule argued that limiting the review to only these fifteen uses meant that other potential uses would avoid examination.<sup>199</sup> These critics pointed to the fact that the EPA could not anticipate all future uses of asbestos, and therefore, risked letting some uses take place without being weighed

---

<sup>195</sup> Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade [*hereinafter* Rotterdam Convention], 2244 U.N.T.S. 337, Sept. 10, 1998.

<sup>196</sup> Restrictions on Discontinued Uses of Asbestos; Significant New Use Rule [April 2019 Final Rule], 40 C.F.R. § 9 and 721 2019.

<sup>197</sup> *EPA Actions to Protect the Public from Exposure to Asbestos*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos>.

<sup>198</sup> Asbestos; Significant New Use Rule [June 2018 Proposed Rule], 40 C.F.R. § 721 2018.

<sup>199</sup> Lisa Friedman, *E.P.A. Staff Objected to Agency's New Rules on Asbestos Use, Internal Emails Show*, NEW YORK TIMES, Apr. 10, 2018, <https://www.nytimes.com/2018/08/10/climate/epa-asbestos-rule.html>.

for safety risks.<sup>200</sup> In response to these stern critiques and public comments, however, the EPA expanded the scope of the proposed rule to include an additional four categories of products and a “catch all” category to ensure that *all* asbestos products that are no longer on the market are covered by this April 2019 Final Rule.<sup>201</sup>

Though the EPA had apparent intentions to toughen oversight of asbestos in its 2018 proposition, its articulation left great room for debate that it could have actually facilitated a more widespread use of asbestos.<sup>202</sup> If accepted as proposed, the initial rule would have threatened citizens to new uses of asbestos exposure, therefore, this retrogressive action would have pulled away from a respect for human rights. One of the world’s largest producers and sellers of asbestos, Russian industry firm, Uralabest, also picked up on the potential of the 2018 EPA proposition and subsequently featured President Donald J. Trump’s face on its packaging of raw asbestos along with the words: “Approved by Donald Trump, 45th President of the United States” in Cyrillic script.<sup>203</sup> This clash in views over the 2018 proposition exposes the tensions within the EPA over the Trump Administration’s efforts to roll back environmental rules and rewrite other regulations that industries have long fought.<sup>204</sup> As United States holds a sincere awareness that asbestos adversely impacts health and human life and has still yet to ban it entirely, this suspect legislative debacle reveals a threat on respect for human rights in the United States.

### 3.1.1.2 Threat on respect for human rights in India

Another example highlighting a conscious impediment to the realization of human rights is the action of India during the sixth Conference of the Parties (COP) of the Rotterdam Convention when the country flip-flopped its stance to restrict asbestos trade on a global scale in 2013. The Rotterdam Convention is a multilateral treaty that promotes shared responsibilities in a relation to

---

<sup>200</sup> Email exchange between EPA staff members concerning proposed rule on asbestos between 25 April 2018 to 2 May 2018, *released by* NEW YORK TIMES, <https://int.nyt.com/data/documenthelper/147-epa-asbestos-emails/367a5f246d37b60f5697/optimized/full.pdf#page=1>.

<sup>201</sup> *Frequently Asked Questions Regarding EPA’s Final Asbestos Rule*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, [https://www.epa.gov/sites/production/files/2019-04/documents/asbestos\\_final\\_rule\\_faq.pdf](https://www.epa.gov/sites/production/files/2019-04/documents/asbestos_final_rule_faq.pdf).

<sup>202</sup> *US EPA Issues Final SNUR for Asbestos*, CHEMICAL WATCH, Apr. 18, 2019, <https://chemicalwatch.com/76690/us-epa-issues-final-snur-for-asbestos>.

<sup>203</sup> Uralabest, *Donald is on Our Side* (Title of post translated from Russian to English), FACEBOOK, Jun. 25, 2018, <https://www.facebook.com/Uralasbest/posts/531137150617873>.

<sup>204</sup> See Friedman, *supra* note 199. See also DONALD J. TRUMP AND KATE BOHNER, TRUMP: THE ART OF THE COMEBACK (1997) (opining that asbestos is “100% safe, once applied” and that it just “got a bad rap”).

the trade of hazardous chemicals and chrysotile asbestos has been subject of its debate since the treaty went into effect.<sup>205</sup> The Convention requires exporting countries to advise importing countries about the toxicity of substances so that importers can give prior informed consent (PIC) for trade and these particular substances are listed under Annex III of the Convention.<sup>206</sup> Hazardous substances find their way to Annex III upon a vote at the COP that has predominantly been held in Geneva, Switzerland every second year since the treaty went into force in 2004 and in 2013, India made a retrograde move by opposing the listing of chrysotile asbestos after voting in favor of its listing at the previous meeting in 2011.<sup>207</sup> The Indian delegation cited the constructive utility of the substance, increased trade costs associated with the PIC procedure and the findings of domestic studies to support its decision.<sup>208</sup>

Concerned with these reasons and the efficacy of one of India's studies in particular, medical researchers took a comprehensive look at its design, methodology and interpretation of results and found substantial flaws in each section.<sup>209</sup> The study was vehemently discredited by almost one hundred different environmental and public health research organizations and professionals worldwide who have subsequently called for India to withdraw its conclusion, citing it "does not hold up to any credible scientific scrutiny".<sup>210</sup> Appalled by India's citation to the discredited study, health science representatives have speculated that the asbestos industry lobby "bought" the Indian delegates of this meeting as they appeared to be "clueless" about the COP

---

<sup>205</sup> See Rotterdam Convention, *supra* note 195. Pursuant to Article 5 of the Rotterdam Convention, the Chemical Review Committee at its first meeting, otherwise known as "CRC I", recommended the listing of chrysotile asbestos in Annex III to the Convention (UNEP/FAO/RC/CRC.1/28, Annex I, Section B).

<sup>206</sup> *Id.* Rotterdam Convention, at art. 13 (outlining information that is to accompany any import and export of certain hazardous chemicals).

<sup>207</sup> See Soma Basu, *India Reverses Stand on Asbestos at Rotterdam Convention Meet*, DOWN TO EARTH, Aug. 17, 2015, <https://www.downtoearth.org.in/news/india-reverses-stand-on-asbestos-at-rotterdam-convention-meet-40990>.

<sup>208</sup> *Study of Health Hazards/ Environmental Hazards Resulting from Use of Chrysotile Variety Asbestos in the Country*, INDIAN COUNCIL OF MEDICAL RESEARCH, [https://chemicals.nic.in/sites/default/files/Asbestos\\_%20NIOH\\_May%202012\\_0.pdf](https://chemicals.nic.in/sites/default/files/Asbestos_%20NIOH_May%202012_0.pdf). See also, Basu, *id.* (recounting exchange with Indian delegation at the Rotterdam Convention COP in 2013 on reasons for change in stance).

<sup>209</sup> For study, see *id.* For opposition to study, see *Statement of Scientists on the 'Scientific' Study by National Institute of Occupational Health (India) titled 'Study of Health Hazards/ Environmental Hazards Resulting from Use of Chrysotile Asbestos in the Country' [hereinafter Statement of Scientists]*, Mar. 21, 2015, <https://central.bcwebinc.com/~rightcan/wp-content/uploads/2015/03/Statement-of-scientists-re-chrysotile-asbestos-March-21-2015.pdf>.

<sup>210</sup> See *id.* Statement of Scientists.

procedures.<sup>211</sup> In light of the grave and overwhelming findings of the greater scientific community accompanied by any truth to the speculation of the health science professionals, India's withdrawal of support for asbestos regulation under the Rotterdam Convention based on this suspiciously flawed research would constitute a conscious violation of the human right to an environment free from toxic pollution. If India based its decision to revoke its support to list chrysotile asbestos under Annex III on study it had knowledge was flawed, the country interfered with its human rights obligations and accordingly failed in its duty to respect human rights.

### 3.2 Protect

The protection of human rights places a positive obligation on States to implement legislation and other measures that prevent influential non-States actors from undermining the rights of others; States must proactively ensure the protection of individuals and groups against human rights abuses.<sup>212</sup> This duty demands that States take steps to ensure that third parties do not interfere with their enjoyment.<sup>213</sup> As opposed to the prohibitive nature of the duty to respect human rights that more concerns the conduct of States in their own actions towards their citizens, the duty to protect human rights is proactive in nature and calls for States to create a safe space where rights may be enjoyed and untrampled upon by others. Though a State does not become liable for all adverse interference with individuals' rights from other sources, a State will be held liable for those failures to uphold human rights that can be traced to its shortcomings in protecting those within its jurisdiction.<sup>214</sup> If a State adopts a law that makes a violation of human rights possible or has failed to take action that would have prevented an injury, this State will likely be found liable for damages.<sup>215</sup> In accordance with this overarching principle, States must protect against harmful environmental interference with human rights, including infringement on rights from business enterprises, other private actors and even natural causes.<sup>216</sup>

Interwoven with the origins of the obligation to respect, States have a duty to protect human rights in regard to the environment from non-State actor infringement that requires them to enact

---

<sup>211</sup> See Basu, *supra* note 207 (citing Gopal Krishna of the non-profit Toxics Watch Alliance and Mr. Jayakumar C., director of Thanal Conservative Action and Information Network, respectively).

<sup>212</sup> See MÉGRET, *supra* note 182, at 102.

<sup>213</sup> See *International Human Rights Law*, *supra* note 190.

<sup>214</sup> See MÉGRET, *supra* note 182, at 102.

<sup>215</sup> *Id.*

<sup>216</sup> See *Framework Principles on Human Rights and the Environment*, *supra* note 193, at para. 4.

and enforce necessary laws and policies on toxics.<sup>217</sup> A human rights based-approach to environmental protection accordingly demands that States preserve and defend the environment from pollution caused by public and private actors that could infringe on the right to life.<sup>218</sup> To illustrate this duty, the State obligation to protect from environmental harm was challenged under human rights law for the first time in May 2019 by the indigenous people of the Torres Strait Islands against the Australian federal government concerning analogous harms resulting from climate change.<sup>219</sup> The peoples of the small islands off the northern tip of Queensland, Australia brought a complaint to the United Nations Human Rights Committee asserting the federal government failed to take adequate action to reduce harmful emissions and fund coastal defense to prevent erosion, which has resulted in the infringement of not only their right to life, but also the rights to culture and right to family and under the ICCPR.<sup>220</sup> Though not a case in the face of harm from toxic pollution, this is a comparative example which demonstrates the State obligation to protect persons in their environment and the potential for liability via omission.

### 3.2.1 The State obligation to protect human rights calls for a ban on asbestos

States have a duty to protect human rights in regard to the deadly harms resulting from asbestos exposure by way of banning the substance in full, or, at a minimum, instituting effective and meaningful regulations to curtail its danger. In the absence of a total ban, business enterprises handling asbestos have violated the human rights of individuals within the jurisdictions that they operate in and also in the jurisdictions to which they export their products. Though environmental exposure continues to be a growing and measurable component of disease risk, the vast majority of global mesothelioma cases are attributed to occupational exposure occurring under the direction of these business enterprises.<sup>221</sup> As workers are frequently unable to obtain functional information on precautions or health risk related, acquire the quality of equipment necessary to shield themselves from hazard and access effective remedy because the health impacts from chronic

---

<sup>217</sup> See A/HRC/36/41, *supra* note 56, at para. 4.

<sup>218</sup> See HRC General Comment No. 36, *supra* note 57, at para. 62.

<sup>219</sup> *Human Right and Climate Change: World-first Case to Protect Indigenous Australians*, CLIENTEARTH, May 12, 2019, <https://www.clientearth.org/human-rights-and-climate-change-world-first-case-to-protect-indigenous-australians/>.

<sup>220</sup> *Id.* See also, ICCPR, *supra* note 59, at arts. 6 (right to life), 27 (right to culture) and 17 (right to family life).

<sup>221</sup> See Noonan, *supra* note 72, at 8 (surmising that the steady global production and industrial use of asbestos will continue to impact more vulnerable populations).

occupational exposure generally do not manifest for years, workers fall in a category that is particularly vulnerable in the context of asbestos entitling them to heightened human rights protections.<sup>222</sup> The remainder of this section will specifically focus on the injuries suffered by factory-setting employees of asbestos business enterprises and further bring to light the obligations on States to protect workers by mandating and adhering to stringent industrial hygiene and emission control business practices.<sup>223</sup>

### 3.2.1.1 Adequacy of worker protection from substandard business practice

Insufficient State regulation concerning the mining and use of asbestos has led to its exposure becoming the leading cause of work-related death in in the world.<sup>224</sup> As the most fatal occupational hazard, the risk of asbestos exposure undoubtedly infringes on not only the right to an environment free from toxic pollution outlined in Chapter 2, but also the right to just and favorable working conditions provided for in the ICESCR.<sup>225</sup> A fundamental aspect of this right, and also and highly associated with the right to the highest attainable standard of health, is the prevention of occupational threats and ensuing disease.<sup>226</sup> Accordingly in line with the State duty to protect, national policies should be adopted to ensure broad participation of workers, employers and their respective representative organizations in the formulation, implementation and review of regulations concerning the prevention of work-related asbestos diseases.<sup>227</sup> This degree of

---

<sup>222</sup> See A/HRC/36/41, *supra* note 56, at para. 34.

<sup>223</sup> See also *Guiding Principles on Business and Human Rights*, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS (2011), [https://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr\\_eN.pdf](https://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr_eN.pdf) (clarifying and elaborating on provisions of international human rights standards and adding greater depth to the State duty to protect against human rights abuses within its territory, particularly from business enterprises). Though the Guiding Principles on Business and Human Rights is not an instrument that can be ratified by states nor does it create new legal obligations. For this reason, the remainder of this section will focus on binding legal instruments to enforce human rights obligations.

<sup>224</sup> *Asbestos Facts*, ASBESTOS.COM, <https://www.asbestos.com/asbestos/statistics-facts/>.

<sup>225</sup> ICESCR, *supra* note 68, at art. 7.

<sup>226</sup> CESCR General Comment No. 23 on the Right to Just and Favorable Conditions of Work (Article 7 of the ICESCR) [*hereinafter* General Comment No. 23], U.N. DOC E/C.12/GC/23, Apr. 27, 2016, para. 25 (describing safe and healthy working conditions as a part of the normative content formulating the right to just and favorable conditions of work). See also, CESCR General Comment No. 18 on the Right to Work (Article 6 of the ICESCR) [*hereinafter* General Comment No. 18], U.N. Doc E/C.12/GC/18, Feb. 6, 2006, para. 12(c) (asserting that acceptability of quality of working conditions concerns itself with safety in particular).

<sup>227</sup> See CESCR General Comment No. 23, *id.* at para. 25 citing ILO Occupational Safety and Health Convention, 1981 (No. 155), art. 4(1).

workers' rights is crucial in respect to social justice providing for fair and equitable relations between the individual (the worker) and society (the asbestos industry profiteers).<sup>228</sup> In addition to the respective international human rights instruments covering workers' entitlements, the International Labour Organization (ILO) also plays a key role in setting, implementing and monitoring international minimum standards of labor to uphold social justice.

Though the ILO was not overtly established within the human rights regime, the roots of labor rights are found in the quest for dignified living conditions, which is similarly at the heart of the human rights law agenda and the one explicit underlying value comprising the International Bill of Human Rights.<sup>229</sup> As the Preamble of the ILO Constitution holds for the adoption of humane conditions of labor in all nations, it unsurprisingly has devoted greater attention to human rights issues gradually over time in its endeavors to achieve social justice.<sup>230</sup> Following suit in 1989, the ILO Asbestos Convention went into force to prevent and control occupational exposure to asbestos.<sup>231</sup> Written collectively by representative governments, workers and employers, the ILO Asbestos Convention lays out specific protective measures to safeguard workers from the harms of airborne asbestos dust that could be inhaled or ingested in the workplace.<sup>232</sup> Though the ILO Asbestos Convention is not written in the rhetoric of human rights, it is a sharp legal tool within an international mechanism fit to offer remedy to workers harmed by asbestos.<sup>233</sup> Injured workers, however, are only able to bring complaints against the 35 countries that have ratified the treaty, which eschews its 152 other member States from accountability within the ILO legal framework.<sup>234</sup> As major players like China, the United States and India have not ratified the ILO

---

<sup>228</sup> FONS COOMANS, *Education and Work* in INTERNATIONAL HUMAN RIGHTS LAW 238, 249 (Daniel Moeckli et al. eds. 2d ed. 2014) (recounting the international community's reaction to the negative consequences of globalization sparked a social justice movement that called for the promotion and protection of working conditions).

<sup>229</sup> *Id.* at 252 (recounting there was traditionally little cooperation between international labor circles and the human rights movement). Respect for human dignity is invoked in the preambles of the UDHR (1948), ICCPR (1966) and the ICESCR (1966), which all came well after the first industrial revolution.

<sup>230</sup> The ILO Constitution was adopted by the Paris Peace Conference on April 1, 1919 and became part XIII of the Treaty of Versailles on June 28, 1919. For full text, see INTERNATIONAL LABOUR ORGANIZATION, [https://www.ilo.org/dyn/normlex/en/f?p=1000:62:0::NO:62:P62\\_LIST\\_ENTRIE\\_ID:2453907:NO#A1](https://www.ilo.org/dyn/normlex/en/f?p=1000:62:0::NO:62:P62_LIST_ENTRIE_ID:2453907:NO#A1).

<sup>231</sup> Convention Concerning Safety and the Use of Asbestos (No. 162) [*hereinafter* ILO Asbestos Convention], 1539 U.N.T.S. 315, Jun. 24, 1986, art. 3.

<sup>232</sup> *Id.* at arts. 9-19 (specifying State party asbestos regulation requirements).

<sup>233</sup> *Id.* at arts. 26-34 (governing complaint procedure).

<sup>234</sup> *Id.* For more on ratification of the ILO Asbestos Convention, see INTERNATIONAL LABOUR ORGANIZATION,



Asbestos Convention, demands from the international community on States must persist in the quest for protection from the harms of asbestos.

On a hopeful note, the State obligation to protect from asbestos was realized in Brazil, formerly the world's third largest producer of asbestos in November 2017.<sup>235</sup> Pressure from anti-asbestos advocates gave way when the Ministers of the Federal Supreme Court of Brazil handed down a 7 – 2 decision prohibiting the mining, processing, marketing and distribution of chrysotile asbestos on the grounds that there was no safe use of asbestos at any level of exposure.<sup>236</sup> Citing the value of life, human health and the environment, human rights based reasoning found its way to the highest legal body in Brazil in its decision to ban asbestos.<sup>237</sup> Additionally, the Supreme Federal Court held a strong position in favor of the supralegal status of the ILO Asbestos Convention in order to declare the unconstitutionality of the federal law that had permitted chrysotile asbestos, which marked a heightening of the Court's consideration for international law as a whole.<sup>238</sup> In light of this landmark case, anti-asbestos activists, victims, trade unionists and medical and legal experts alike in remaining producer and consumer countries now have even more solid ground to stand on to encourage their domestic governments to follow through with their obligation to protect from asbestos-related human rights violations and ban asbestos.

### 3.3 Fulfil

The obligation to fulfil human rights requires further positive steps to promote human rights and the adoption of appropriate measures towards the realization of human rights in its entirety; the State must take substantial steps to ensure that rights are equally enjoyed by all in

---

[https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300\\_INSTRUMENT\\_ID:312307:NO](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312307:NO).

<sup>235</sup> Laurie Kazan-Allen, *Brazil Bans Asbestos!*, INTERNATIONAL BAS ASBESTOS SECRETARIAT, Dec. 1, 2017, <http://www.ibasecretariat.org/lka-brazil-bans-asbestos.php#1>.

<sup>236</sup> *Id.* citing Amanda Rossi, *Supreme Court Prohibits Asbestos in Brazil* (Title translated from Portuguese to English), TERRA, Nov. 29, 2017, <https://www.terra.com.br/noticias/brasil/stf-proibe-amianto-no-brasil,1a0a4b9231eae2ee3aecc9a4e9f1a0c03r9yt49.html>.

<sup>237</sup> *Id.*

<sup>238</sup> Ranieri Lima Resende, *The Judicial Ban on Asbestos in Brazil: A Turning Point in the Relationship between International Law and Collective Fundamental Rights*, BLOG ON THE JOURNAL OF CONSTITUTIONAL LAW, Jan. 10, 2018, [http://www.iconnectblog.com/2018/01/the-judicial-ban-on-asbestos-in-brazil-a-turning-point-in-the-relationship-between-international-law-and-collective-fundamental-rights/#\\_edn18](http://www.iconnectblog.com/2018/01/the-judicial-ban-on-asbestos-in-brazil-a-turning-point-in-the-relationship-between-international-law-and-collective-fundamental-rights/#_edn18) (highlighting the Court's reliance on international human rights law and international environmental law in *Asbestos* case and lack thereof in a previous similar case).

both law and circumstance.<sup>239</sup> Building off the duties to respect and protect, these are steps of a wider variety to facilitate the enjoyment of human rights and often include the allocation of appropriate resources to satisfy human rights obligations.<sup>240</sup> States are obliged to investigate situations concerning human rights violations and serve justice accordingly whether judicially or administratively.<sup>241</sup> As the overall fulfilment of human rights is the ultimate goal of the regime, this duty entails obligations of means and conduct and focuses on the end result of State action.

Furthermore, it is integral to note the nature of particular human rights when assessing their realization because some rights may be more readily implemented than others depending on the resources of a State.<sup>242</sup> Though rights were looked at collectively when the regime began, a distinction was swiftly made between the compilation of civil and political rights versus the compilation of economic, social and cultural rights.<sup>243</sup> The primary reason that rights have been divided into two categories is because the nature of States parties' obligations differs between them: the ICCPR prescribes the fulfilment of respecting and ensuring civil and political rights as an *immediate* obligation and the ICESCR acknowledges the constraints due to limited available resources to secure economic, social and cultural rights and therefore provides for the *progressive realization* of those rights.<sup>244</sup> Though individual freedoms comprising civil and political rights also require investment for their full realization in the form of well-functioning infrastructures, economic, social and cultural rights generally require higher levels of investment to ensure their full enjoyment.<sup>245</sup> Accordingly, the international human rights community accepts that economic,

---

<sup>239</sup> See MÉGRET, *supra* note 182, at 103.

<sup>240</sup> See ESC Rights Fact Sheet, *supra* note 194, at 11.

<sup>241</sup> See MÉGRET, *supra* note 182, at 103. See also Velásquez Rodríguez v. Honduras, Merits, Inter-American Court of Human Rights (Series C) No. 4, Jul. 29, 1988, para. 176 (elaborating on the State obligations to respect, protect and fulfil in landmark case that concerned the forced disappearance by unidentified abductors of a student activist in Honduras).

<sup>242</sup> THEO VAN BOVEN, *Categories of Rights*, in INTERNATIONAL HUMAN RIGHTS LAW 143, 144 (Daniel Moeckli et al. eds. 2d ed. 2014).

<sup>243</sup> See ESC Rights Fact Sheet, *supra* note 194, at 9 (citing historical tensions between capitalist and socialist values as a reason this distinction was first drawn).

<sup>244</sup> See VAN BOVEN, *supra* note 242, at 144. See ICCPR, *supra* note 59, at art. 2 and ICESCR, *supra* note 68, at art. 2.

<sup>245</sup> See ESC Rights Fact Sheet, *supra* note 194, at 9 (highlighting examples of investments that fulfil civil and political rights: functioning court systems, legal aid and free and fair elections).

social and cultural rights may not be achieved straightway and reasonably gauges a State's ability to fulfil its human rights commitments.<sup>246</sup>

States with weak infrastructures, engaged in war, facing economic hardship or any other imaginable struggle posing an impediment to human rights implementation, however, may not name these hardships as an excuse to abandon their human rights obligations under the concept of progressive realization; the flexibility of this provision reflects the realities and difficulties that trouble countries, but this give must not be misinterpreted as to deprive human rights obligations from their meaningful content.<sup>247</sup> The human rights regime wholly recognizes that not all economic, social and cultural rights are subject to progressive realization, and has pointed to a large handful of those that should be implemented immediately, for instance, the right to join a trade union and the obligation to protect children and young persons from economic exploitation. Along with a commitment to non-retrogressive measure, this is another grouping of economic, social and cultural rights that must be implemented immediately.

A third immediate action on all States concerning the implementation of economic, cultural and social rights is the elimination of discrimination.<sup>248</sup> As described in Chapter Two, the principle of non-discrimination and equality is a cross-cutting right and should not require the expenditure of any resources to implement.<sup>249</sup> The human rights regime fully comprehends, for example, that the medical services needed to fulfil the right to health require State investment and that is not immediately possible in some cases, but it does not accept any capacity of discrimination as to who is entitled to use these services for any length of time. This mandate is arguably the immediate obligation with the least constraints on a State to fulfil.

All States are furthermore expected to make every effort to meet the minimum provisions of human rights, known as “minimum core obligations”, a fourth immediate action concerning the implementation of economic, cultural and social rights.<sup>250</sup> The minimum core obligations of States are generally in the form of low-cost and targeted programs with the purpose to assist the most in

---

<sup>246</sup> CESCR General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), [*hereinafter* General Comment No. 3], U.N. Doc E/1991/23, Dec. 14, 1990, para. 1.

<sup>247</sup> *Id.* at para. 9.

<sup>248</sup> See ESC Rights Fact Sheet, *supra* note 194, at 9.

<sup>249</sup> Chapter Two, *supra* Section 2.5 on the principle of non-discrimination and equality.

<sup>250</sup> DARIA DAVITTI, *Protection of ESC Rights and the Right to Water* in INVESTMENT AND HUMAN RIGHTS IN ARMED CONFLICT 119-135 (2019) (providing detailed discussion on the origins of the concept of “minimum core obligation”).

need.<sup>251</sup> To fulfil its minimum core obligations, a State is required to allot the few funds it may have to programs providing the bare essentials of life, for example, food, water and basic medical services, to those stricken in poverty. Human rights realization must be understood in light of its overall objective and thus impose expeditious and efficient implementation of human rights at a pace relative to a State's means.<sup>252</sup> Accordingly, States must still strive to ensure the widest possible enjoyment of relevant rights under the prevailing circumstances even if its resources are objectively inadequate.<sup>253</sup>

Relatedly, even States that are struggling monetarily to the greatest extent must still have a realistic national action plan in place with the aim of eventually achieving human rights protections beyond the provision of the absolute bare essentials, commonly referred to as the “obligation to ‘take steps’”, the fifth and final immediate obligation concerning economic, social and cultural rights.<sup>254</sup> Regardless of resources, all States have a duty to generate deliberate and concrete plans to fulfil their human rights obligations, adopt legislative strategies to put these plans into action and monitor them—every little step counts in this case.<sup>255</sup> International human rights law requires States to look forward and understand that their duties to those within their territories do not cease in times of hardship. Constant efforts to improve the enjoyment of economic, social and cultural rights must be made, no matter the financial or other debilitating status of a State.

In the context of exposure to toxic substances, a State's fulfillment of its human rights obligations requires sufficient recognition of the harms that toxics can impose in laws and policies and positive action to realize the human rights that may be implicated specifically by toxic pollution, most notably via budgetary allocations to support efforts preventing excess exposure or eradicating risks entirely.<sup>256</sup> With respect to civil and political rights, immediate attention must be paid to environmental procedural rights because those can generally be afforded with quite minimal resources. Then, in the economic, social and cultural category, particularly concerning rights to health, adequate standard of living and just and favorable working conditions, all

---

<sup>251</sup> See CESCR General Comment No. 3, *supra* note 246, at para. 10 (explaining that the deprivation of essential foodstuffs, the most primary healthcare or basic shelter would constitute as a failure to discharge State obligations under the ICESCR).

<sup>252</sup> *Id.* at para. 9.

<sup>253</sup> *Id.* at para. 11.

<sup>254</sup> ESC Rights Fact Sheet, *supra* note 194, at 9.

<sup>255</sup> See DAVITTI, *supra* note 250 (affirming that States are under an obligation to show active progression towards the goal of full human rights realization and not just a dimension of the rights).

<sup>256</sup> See A/HRC/36/41, *supra* note 56, at para. 4.

individuals must be afforded the bare minimum threshold of basic necessities. For example, States that still support the asbestos industry *must* ensure that appropriate safety gear is provided to factory-setting workers, as this is the bottom-line of protection for them. State obligations do not stop once the relevant equipment is sourced, however, because States still then must move expeditiously towards the *full* realization of just and favorable working conditions.<sup>257</sup> Acknowledging the seriousness and inevitability of asbestos-related diseases, States must keep moving forward to the extent of their maximum available resources and eradicate it entirely. This could be in the form of a timeline set with goals towards lessening dependency on asbestos by shifting to use of substitute products and other “steps” in the right direction away from the toxicity of the mineral composition.

In all categories of rights, however, eliminating all forms of discrimination impacting victims of exposure is of immediate obligation. In fulfilling this obligation, States must also take into consideration that removing formal barriers to equality does not necessarily guarantee that disadvantaged groups will in fact have the same opportunities as those in more favorable socio-economic positions.<sup>258</sup> As just because there are no laws on the books stating that chemical waste facilities must be placed in low-income or minority communities, this does not automatically prevent this from happening repeatedly.

The remainder of this chapter will analyze the fulfillment of human rights specifically taking into consideration State resources alongside persons’ susceptibility to discrimination based on their socio-economic status in the context of exposure to asbestos. This section will discuss the successes and failures of States with variable levels of resources and laws valuing formal equality and assess whether their efforts to protect individuals from asbestos-related diseases is of comparable satisfaction. In this light, the case for a worldwide ban on asbestos will continue to be made by calling sincere attention to the realistic capacity of States to take on this endeavor. The saga of Libby, Montana, USA, will act as a baseline for this analysis, a city that was poisoned by asbestos like Kymore, India, but situated in a State with far more resources to take action against big industry and aid its people upon a rights violation.

---

<sup>257</sup> See CESCR General Comments No. 23 and No. 18, *supra*, note 226 and accompanying text.

<sup>258</sup> See A/HRC/36/41, *supra* note 56, at para. 5. See also, MOECKLI, *supra* note 168, at 159 (supporting the “not in my backyard” social discourse).

### 3.3.1 Fulfillment of human rights calls for a ban on asbestos

A State fulfils its human rights obligations by working towards their realization in entirety and in the context of asbestos, this takes the form of national legislation requiring its total eradication.<sup>259</sup> As asbestos is a proven carcinogen and no level of exposure to asbestos is safe, the only action that will effectively end the global pandemic of asbestos-related disease is a complete ban on all of its use and manufacture.<sup>260</sup> Acknowledging that States could have some significant economic dependence on the industry, however, a degree of flexibility may be afforded concerning the expediency of employing national bans under the human rights regime.

As a State's wealth, stability and infrastructure are all collectively considered when assessing State obligations, and a State's market economy, perhaps like India's, could arguably suffer if a ban was mandated, mere heightened regulation of asbestos may suffice to fulfil a State's human rights duty in this scenario as opposed to a total ban.<sup>261</sup> Though even with stricter regulation, the continuation of production and sales of asbestos would likely have the harshest impact on the poorest in the country because it is improbable that this group of persons would opt for the more expensive substitute products. As those living in poverty would likely not have the means to purchase anything but the cheapest item on the market, risk of State dependency on asbestos still continues in this case, along with the "buy now, die later" mentality.

Other States have contended that it is their sovereign right to handle asbestos, like Canada, which had requested greater respect from the international community concerning its entitlement to opt for the controlled and responsible use of chrysotile asbestos via a democratically informed decision up until at least 2011.<sup>262</sup> By way of its formerly government-funded non-profit

---

<sup>259</sup> See *Framework Principles on Human Rights and the Environment*, *supra* note 193, para. 5. See also, e.g., CESCR General Comment No. 14, *supra* note 83, at para. 33 (outlining the kinds of measures that may be taken to fulfil the right to health).

<sup>260</sup> Joseph LaDou et al., *The Case for Global Ban on Asbestos*, 118:7 ENVIRONMENTAL HEALTH PERSPECTIVE 897 (2010) (concluding on medical and scientific grounds that an international ban on chrysotile asbestos is necessary).

<sup>261</sup> See *Breathless*, *supra* note 1 (revealing interview with Indian diplomat at COP in 2017 citing India's economy was not yet ready to support listing asbestos to Annex III). *But see*, Lucy P. Allen et al., *Trends and the Economic Effect of Asbestos Bans and Decline in Asbestos Consumption and Production Worldwide* 13:3 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 532 (2018) (finding no significant effect on GDP following an asbestos ban).

<sup>262</sup> *Controversy: Rotterdam Convention*, CHRYSOTILE INSTITUTE, <http://www.chrysotile.com/en/chrysotile/controversy/rotterdam.aspx> (holding Canadians had to choose between supporting the asbestos industry or the loss of hundreds of "safe" jobs). See also, Laurie Kazan-Allen, *The Rise and Fall of the Chrysotile Institute*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, May

organization, the Chrysotile Institute, Canada had additionally cited its ratification of the stringently regulated ILO Asbestos Convention and the country's good-faith commitment to upholding safe workplace practices and living conditions to bolster its decision to keep asbestos legal.<sup>263</sup> Though as of December 30, 2018, Canada has put in force regulations that almost entirely ban asbestos absent the existence of feasible alternatives.<sup>264</sup>

As human rights ideology does not fall in line with Canada's former strict safeguard of cardinal sovereignty, this conundrum illuminates the incompatibility between the regime that human rights law has evolved into and its foundations in traditional international law.<sup>265</sup> These arguments ultimately question the validity of medical science research supporting that there *is* a safe manner to use asbestos in the face of opposition from numerous studies; if, in fact, there is a wholly safe method to contain the harms of asbestos from inflicting significant danger to human life, would Canada's adoption of this method have satisfied the fulfillment of its human rights obligations? Mindful consideration must also account for international trade and not only domestic consumption, as all of these safeguards prove moot for importing countries that do not yet regulate the toxic substance.<sup>266</sup> What about a State that has a wealth of resources and has not ratified the ILO Asbestos Convention and is accordingly not bound to its minimum international standards nor its enforcement mechanism?

---

1, 2012, <http://ibasecretariat.org/lka-rise-and-fall-of-chrysotile-institute.php> (detailing the close of Canada's government funded organization to promote the safe and responsible use of asbestos after almost 30 years); and *Thought Asbestos was Fully Banned in Canada? Not Until 2018*, CANADIAN BROADCASTING COMPANY, Jan. 24, 2017, <https://www.cbc.ca/radio/thecurrent/the-current-for-december-15-2016-1.3896671/thought-asbestos-was-fully-banned-in-canada-not-until-2018-1.3896765> (announcing Canada's intention to ban asbestos and revealing that up until 2011 the Canadian government actively supported asbestos mining sales and exports "often to poor countries where regulations were lacking").

<sup>263</sup> See *id.* *Controversy: Rotterdam Convention* (arguing that the adding chrysotile asbestos to Annex III of the Rotterdam Convention is unjust because it is already highly regulated by the ILO Convention No. 162).

<sup>264</sup> Prohibition of Asbestos Products Containing Asbestos Regulations, SOR/2018-196, Published by the Canadian Minister of Justice, <https://laws-lois.justice.gc.ca/PDF/SOR-2018-196.pdf>. See also, *Canada Publishes Final Asbestos Regulations*, CHEMICAL WATCH, Oct. 23, 2018, <https://chemicalwatch.com/71203/canada-publishes-final-asbestos-regulations> (noting exceptions in the chlor-alkali industry until 2030 and in building new road infrastructure and import, sale or use of military equipment serviced outside of Canada with an asbestos containing product with no time-limit).

<sup>265</sup> See MÉGRET, *supra* note 182, at 97.

<sup>266</sup> CESCR General Comment No. 24 on State Obligations Under the ICESCR in the Context of Business Activities, U.N. Doc, E/C.12/GC/24, Aug. 10, 2017, para. 26 (reinforcing that State obligations under the ICESCR do not stop at their territorial borders and State parties are obligated to prevent human rights violations abroad by corporations domiciled in their territory).

The United States presently fits the bill of a country that is not dependent on asbestos, possesses substantial means and infrastructure and has not ratified the ILO Asbestos Convention nor the Rotterdam Convention.<sup>267</sup> Though the United States has recently implemented what ultimately became stricter regulation of the asbestos industry at the federal level under the April 2019 Final Rule, the United States has still refused to ban the mineral composition completely, knowing the WHO has confirmed its status as a carcinogen and dozens of its most accomplished medical and scientific professionals have come to the same conclusion.<sup>268</sup> Furthermore, the prevalence of environmental discrimination is stark, as multiple studies have shown that vulnerable groups are far more susceptible to the adverse impacts of toxic pollution in the United States.<sup>269</sup> Pollution stemming from a number of toxic sources has detrimentally impacted human health throughout the nation and asbestos has been a considerable contributor to this damage.<sup>270</sup>

Chief among the sites containing asbestos hazards has been Libby, Montana, USA, home to the first Public Health Emergency declared by the EPA.<sup>271</sup> Libby, Montana is where more than 400 asbestos-related deaths have been documented, where hundreds more are afflicted with disease

---

<sup>267</sup> *Asbestos Statistics and Information 2019*, UNITED STATES GEOLOGICAL SURVEY, <https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/files/mcs-2019-asbes.pdf> (citing record levels of asbestos imported into the United States have dropped from 803,000 to about 330 tons a year over the last five decades due to related health and liability issues indicating non-reliance).

<sup>268</sup> See LaDou et al., *supra* note 260 (imploing a global ban on asbestos from 16 specialized scientists of which eight are from the United States). Each of the authors of this article are a member of the Collegium Ramazzini, which is an independent international academy comprised of experts in the field of occupational and environmental health. See *Asbestos Is Still With Us: Repeat Call for Universal Ban*, 15 COLLEGIUM RAMAZZINI 1 (2010).

<sup>269</sup> See Ihab Mikati et al., *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status*, 108:4 AMERICAN JOURNAL OF PUBLIC HEALTH 480 (2018) (finding an uneven distribution of environmental pollution in areas populated by people of color and limited means); Paul Mohau & Robin Saha, *Which Came First, People or Pollution? Assessing the disparate siting and Post-citing Demographic Change Hypotheses of Environmental Injustice*, 10 ENVIRONMENTAL RESEARCH LETTERS (2015) (concluding that racial discrimination and sociopolitical explanations best reconcile present-day inequities).

<sup>270</sup> See *National Priorities List Sites*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/superfund/national-priorities-list-npl-sites-site-name> (listing present sites overseen by the EPA receiving resources to clean up hazardous waste from the Comprehensive Environmental Response, Compensation and Liability Act known as the “Superfund” established in 1980). See also, *Asbestos Superfund Sites*, ASBESTOS.COM, <https://www.asbestos.com/asbestos/superfunds/> (finding there were 16 asbestos contaminated Superfund sites in 2017).

<sup>271</sup> *Superfund History*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/superfund/superfund-history-printable-version> (recounting June 17, 2009 was the first time the EPA exercised its authority to make such a declaration under the Superfund law). David McCumber, *As the Asbestos Cleanup Gets Done, the Dying Continues*, GREAT FALLS TRIBUNE, Oct. 6, 2018, <https://eu.greatfallstribune.com/story/news/2018/10/06/libby-asbestos-cleanup-gets-done-dying-continues/1553592002>.



from the ‘dust of death’ and its remaining citizens are anticipating a diagnosis from exposure in their yards, houses, baseball fields, forests or anywhere else the mineral particles fell after more than six decades of worth of mining nearby.<sup>272</sup> This final section will examine what has been called “the worst case of industrial poisoning of a whole community in American history” and assess the degree to which the United States has fulfilled its human rights obligations in the face of this tragedy.<sup>273</sup>

### 3.3.1.1 Lessons from Libby, Montana and beyond—Has the United States fulfilled its human rights obligations?

The rural beauty of Libby is situated in northwestern Montana between the Cabinet Mountains and the Kootenai River in the United States. Libby is a small town with a population of about 2,600 persons where a business in the oxygen-carrying backpack industry now thrives after lung disease began to plague its inhabitants upon years of asbestos exposure from a local mine.<sup>274</sup> Reigning prior to the oxygen tank business in Libby was W.R. Grace, a chemical conglomerate that faced over 129,000 asbestos injury claims before filing for bankruptcy in the United States. After nearly 13 years of reorganization proceedings, W.R. Grace & reemerged from bankruptcy in 2014 and today operates worldwide with annual revenue of over 1.72 billion USD.<sup>275</sup> The overall economy of Libby, Montana, on the other hand, (notwithstanding the oxygen tank business) is not doing so well. The poverty rate in Libby is almost 2 percent higher than the national average; 14.9 percent of Libbians live in poverty and the average annual income in Libby is 26,049 USD, almost 35 thousand USD below the national average.<sup>276</sup>

---

<sup>272</sup> *Id.* McCumber (announcing EPA efforts are winding down though the country still has the highest asbestos-related disease rate in the country).

<sup>273</sup> Jonna Walters, *Welcome to Libby, Montana, the Town that was Poisoned*, THE GUARDIAN, Mar. 8, 2009, <https://www.theguardian.com/world/2009/mar/08/usa-mining-libby-montana> (quoting the United States federal prosecution team in the criminal trial against the corporate giant that owned the source of the asbestos dust).

<sup>274</sup> *Libby, Montana*, DATA USA, <https://datausa.io/profile/geo/libby-mt/>. See also *Travel Oxygen*, NORCO, <https://www.norco-inc.com/TravelOxygen> (boasting a product that will “[b]reathe new life into your adventures!” that can be found in the heart of downtown Libby, Montana).

<sup>275</sup> *W. R. Grace Revenue 2006-2019*, MACROTRENDS, <https://www.macrotrends.net/stocks/charts/GRA/wr-grace/revenue>. See also, *Grace History: A Story of Innovation and Change*, W. R. GRACE & CO., <https://grace.com/en-us/history/Pages/grace-history.aspx> (recalling that W.R. Grace filed under Chapter 11, Title 11 United States Code upon a declaration of bankruptcy and reemerged on 3 February 2014).

<sup>276</sup> See *Libby, Montana*, *supra* note 274.

The source of asbestos contamination that transpired in Libby, Montana came from a mine that was operating for the purpose of extracting another mineral, vermiculite.<sup>277</sup> Though pure vermiculite is non-toxic, the Libby mine vermiculite had significant traces of asbestos in it from the amphibole family, the more toxic classification of asbestos because of the shape of its needle like-fibers that can more easily slide in and penetrate human tissue, known as *tremolite*.<sup>278</sup> Garnering further attention for its toxicity in the Johnson & Johnson talc powder suits, tremolite asbestos has been the perpetrating cause of thousands of cancer cases alongside its slightly less poisonous, but much more commonly used cousin, chrysotile asbestos.<sup>279</sup> Though both Johnson & Johnson and W. R. Grace have made sizable payouts to those they have poisoned as a result of their corporate direction, swaths of asbestos victim claims have been rejected or resulted in mistrials in United States courts against Johnson & Johnson and the three former top executives of W.R. Grace were acquitted in 2009 leaving spectators bewildered as to how they had “gotten away with murder”.<sup>280</sup>

The picture of impoverished and polluted Libby versus wealthy and powerful corporate giant W.R. Grace is not the first David v. Goliath painting that has been scrutinized by the human rights law regime. Both inside and outside the context of asbestos remedy and regulation, it has been repeatedly proven that corporate environmental rights violators are more likely to follow the path of least resistance when contemplating their business strategy. Like the residents of Kappelle-

---

<sup>277</sup> *Libby Asbestos Site*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0801744#bkground>.

<sup>278</sup> *Serpentine vs Amphibole Asbestos: Uses and Dangers*, FIBER CONTROL, INC., Jun. 22, 2018, <https://fibercontrolinc.com/serpentine-vs-amphibole-asbestos-uses-and-dangers>.

<sup>279</sup> See *Lanzo v. Johnson & Johnson Consumer, Inc. and Imerys Talc America, Inc.*, *supra* note 150. See also Lisa Girion, *Johnson & Johnson Knew for Decades that Asbestos Lurked in its Baby Powder*, REUTERS, Dec. 14, 2018, <https://www.reuters.com/article/us-johnson-johnson-cancer-special-report/special-report-jj-knew-for-decades-that-asbestos-lurked-in-its-baby-powder-idUSKBN1OD1RQ> (revealing that lab reports as early as 1957 found tremolite in Johnson & Johnson baby powder).

<sup>280</sup> *Johnson & Johnson Wins Trial Over California Talc-Cancer Claim*, CLAIMS JOURNAL, Apr. 8, 2019, <https://www.claimsjournal.com/news/national/2019/04/08/290269.htm> (citing Johnson & Johnson is facing a payout of 4.69 billion USD to 22 women with ovarian cancer that is presently on appeal, but has been able to win reversals of three of the first five jury awards in its asbestos trials). *Jury Acquits Grace Executives in Asbestos Case*, THE SPOKESMAN-REVIEW, May 8, 2009, <http://www.spokesman.com/stories/2009/may/08/wr-grace-jury-reaches-verdict/> (revealing that prosecutorial misconduct was an issue in the case that may have contributed to the acquittal on 8 May 2009). For a better understanding of the intricacies of the case, see Beth Brennan & Andrew King-Ries, *A Fall from Grace: United States v. W.R. Grace and the Need for Criminal Discovery Reform*, 20:2 CORNELL JOURNAL OF LAW AND PUBLIC POLICY 313 (2010).

op-den-Bos, Belgium, Libby, Montana residents welcomed the humongous multinational firm to their small community with open arms, thrilled to accept the employment opportunities and generous contributions that the corporation voluntarily bestowed; Libbians quickly became loyal to W.R. Grace because the firm appeared to be taking care of the little town that possessed few opportunities other than their offerings.<sup>281</sup> In reality, however, W.R. Grace exploited Libby because the firm had knowledge that their ore was harmful and proceeded without informing their employees nor the surrounding community of the risks.

Another related issue falls on the socioeconomic status of low-income communities and their relative inability to generate political clout over environmental issues such as the asbestos contamination in Libby. If Libby residents were in fact informed of the hazards emitting from the mines, is it likely that they would have been able to swiftly resolve the issue? Judging by the fact that it took 11 years from the time of the close of the mine until Libby was able to get the attention of its Governor to visit and offer state funding, the answer is likely negative.<sup>282</sup>

In response to the acquittal of the W.R. Grace in the criminal case brought on behalf of the United States government, Washington State Senator Patty Murray had some wise words to offer to the American public:

*“Today’s disappointing verdict is a reminder of the urgent need to ban asbestos in America. The families of Libby, Montana, have suffered enough and my thoughts are with them today. The terrible sacrifices they have endured are shared by the families of more than 10,000 Americans who die every year from asbestos-related diseases – deaths that are preventable. Asbestos destroys lives and the tragedy at Libby has shown that it can devastate entire communities. We must move forward to protect America’s workers and families once and for all.”*<sup>283</sup>

In this statement, Senator Murray voices the heart of the human rights concern over this issue, echoing the sentiments of the Collegium Ramazzini: the profound tragedy of the asbestos

---

<sup>281</sup> See Libby, Montana (High Plains Films 2004) directed by Drury Gunn Carr & Doug Hawes-Davis (highlighting the generosity of W. R. Grace in Libby, Montana while the company operated the Zonolite mine).

<sup>282</sup> *Governor Gives in to Pleas for Libby Superfund-site Trip*, BILLINGS GAZETTE, Jul. 17, 2001, [https://billingsgazette.com/news/local/governor-gives-in-to-pleas-for-libby-superfund-site-trip/article\\_50ad027c-31ae-59b3-8aaa-16419cb3728a.html](https://billingsgazette.com/news/local/governor-gives-in-to-pleas-for-libby-superfund-site-trip/article_50ad027c-31ae-59b3-8aaa-16419cb3728a.html) (Former Governor Judy Martz made a highly anticipated visit to Libby for the first time on Aug. 8, 2001).

<sup>283</sup> See *Jury Acquits Grace Executives in Asbestos Case*, *supra* note 280.

pandemic is that all illnesses and deaths related to asbestos are preventable.<sup>284</sup> Furthermore, with substantial knowledge that vulnerable communities are at a heightened risk of exposure, the duty to these persons is even more pronounced.<sup>285</sup> In accordance with these conclusions, the only way for the United States, and for that matter, all other nations, to fulfil its human rights obligations is to eradicate commercial use of asbestos at the earliest possible opportunity. At the present moment, however, the fulfillment of the call on all countries of the world to join in the international endeavor to ban the mining, manufacture and use of all forms of the toxic substance does not appear to be on the near horizon.

#### Chapter Four: Current Affairs: Asbestos Regulation on a Global Scale

The current state of affairs concerning the recognition of the right to live free from toxic pollution and the present standing of asbestos regulation in the global market is an array of strides and setbacks. Though there seems to be a steady push for the codification of a single and enforceable international environmental rights treaty to bring together its currently fragmented doctrine, State action to ban asbestos has generally not been faring well. The following section will briefly recount the status of the draft of the Global Pact for the Environment that was released in June 2017 and also the outcome of the Rotterdam Convention concerning chrysotile asbestos that took place in May 2019.

##### 4.1 The Global Pact for the Environment

The objective of the Global Pact for the Environment is to consolidate and harmonize environmental rights on an international scale and concurrently create an accompanying dynamic legal framework.<sup>286</sup> As there are a handful of international agreements that cover specific sectors of environmental law, *i.e.*, the Rotterdam focusing strictly on hazardous chemicals and no other threats, the goal of the Global Pact for the Environment is to touch on all of the existing technical and sectorial treaties in force today to bring together one cross-cutting and broadly applicable agreement. The draft document recognizes the rights to live in a healthy environment, the duty to

---

<sup>284</sup> See LaDou et al., *supra* note 260, at 900 and accompanying text.

<sup>285</sup> See Mikati et al. and Mohau & Saha, *supra* note 269. See also A/HRC/36/41, *supra* note 56, at para. 24.

<sup>286</sup> See Global Pact Objectives, *supra* note 7.

take care of the environment, the fundamental principles of prevention and remediation and amongst others.<sup>287</sup>

In terms of a timeline, the efforts of those behind the treaty seem to be moving swiftly. In May 2018, less than one year from the reveal of its draft text, the United Nations General Assembly adopted the resolution titled “Towards a Global Pact for the Environment” by a strong majority, which launched the negotiations between States.<sup>288</sup> The working groups established by the United Nations General Assembly Resolution held a first organizational meeting in September 2018 and just completed a fourth after a series held in Nairobi, Kenya during January, March and May 2019.<sup>289</sup> Also in the first half of 2019, the Cambridge Centre for Environmental, Energy and Natural Resource Governance published a lengthy compilation of legal support for the endeavors.<sup>290</sup> Optimistic foresight perceives that in light of these successful negotiations, the Global Pact for the Environment could be adopted and open for ratification in a few short years.<sup>291</sup> Though it appears the international community is in good spirits and ready to welcome this long-awaited, unified treaty for a health environment, the true test of a treaty is not the road to ratification, but the success of its implementation. This is a crucial issue felt by State parties to the Rotterdam Convention at the moment in their efforts to regulate chrysotile asbestos.

#### 4.2 The Rotterdam Convention

The Rotterdam Convention is a binding multilateral agreement that was designed to protect human health and advance environmental justice by imposing controls on the import and export of dangerous substances.<sup>292</sup> The purpose of the treaty is not to ban particular hazardous substances, but to facilitate control of international trade by way of PIC procedure that ensures informed

---

<sup>287</sup> See *Draft Global Pact for the Environment*, *supra* note 63, arts. 1 (right to an ecologically sound environment), 2 (duty to take care of the environment) and 5-11 (concerning the prevention of environmental harm and remediation).

<sup>288</sup> Towards a Global Pact for the Environment, U.N. Doc A/72/L.51, May 7, 2018. 142 States voted for the resolution, 5 voted against (United States, Russia, Syria, Turkey and the Philippines) and 7 abstained (Saudi-Arabia, Belarus, Iran, Malaysia, Nicaragua, Nigeria and Tajikistan).

<sup>289</sup> *Where Are We Now?*, GLOBAL PACT FOR THE ENVIRONMENT, <https://globalpactenvironment.org/en/the-pact/where-are-we-now/>.

<sup>290</sup> A GLOBAL PACT FOR THE ENVIRONMENTAL: LEGAL FOUNDATIONS (Yann Aguila & Jorge E. Viñuales eds. 2019) (delivering 281 pages of support for the treaty, including a chapter from the UN Special Rapporteur on Human Rights and the Environment, David Boyd).

<sup>291</sup> See *Where Are We Now?*, *supra* note 289.

<sup>292</sup> See *supra*, notes 195, 205, 206, 207 and accompanying text for further description of the Rotterdam Convention.

decisions before a State party allows for the import of a hazardous substance.<sup>293</sup> The COP convened for the ninth time between April 29 to May 10, 2019 and tensions were high as this was the seventh time that chrysotile asbestos was recommended for inclusion on Annex III by the Rotterdam Convention Chemical Review Committee.<sup>294</sup> To the great dismay of the anti-asbestos community, however, efforts to list the hazardous substance were again ultimately unsuccessful.<sup>295</sup>

As the core work of the Rotterdam Convention is adding hazardous substances to Annex III to follow PIC procedure, its purpose has been gravely discredited for these repeated failures to list the chrysotile asbestos.<sup>296</sup> The roadblock in the way of adding the fibrous mineral to Annex III is the requirement for consensus of the parties and there is a small minority with vested interests in the industry that want to keep the substance unregulated.<sup>297</sup> In an effort to tackle this procedural issue, the COP took an unprecedented step and voted in favor of creating a new annex, Annex VII, to set out new procedural mechanisms, which leaves some hope for the next COP that will take place in 2021 to break this deadlock.<sup>298</sup>

The vote to add chrysotile asbestos to Annex III took place on Wednesday, May 8, 2019, one of the last days this COP session, after a series of demonstrations from both anti- and pro-chrysotile delegations.<sup>299</sup> Though the anti-asbestos groups were again sternly disappointed by the outcome of the vote that afternoon, they were not surprised. Of the 161 parties to the Rotterdam Convention, only ten countries led by the Russian Federation voted down adding chrysotile to

---

<sup>293</sup> *Id.*

<sup>294</sup> *Summary of the Meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions: 29 April – 10 May 2019* [hereinafter *Rotterdam Summary 2019*], 15:269 EARTH NEGOTIATIONS BULLETIN 1, 24 (May 13, 2019) <http://enb.iisd.org/download/pdf/enb15269e.pdf>.

<sup>295</sup> *Id.*

<sup>296</sup> *Open Letter: An Appeal to the 161 Parties at the COP 9 of the Rotterdam Convention*, Apr. 20, 2019, INTERNATIONAL BAN ASBESTOS SECRETARIAT <http://ibasecretariat.org/open-letter-appeal-to-the-161-parties-at-cop-9-of-the-rotterdam-convention.pdf> (demanding reform is necessary to “salvage” the Rotterdam Convention). See also *Rotterdam Convention Discredited as Chrysotile Asbestos Fails to be Listed*, INDUSTRIALL, May 3, 2017, <http://www.industriall-union.org/rotterdam-convention-discredited-as-chrysotile-asbestos-fails-to-be-listed> (quoting National President of the Australian Manufacturing Workers’ Union, Andrew Dettmer, “[f]ailure to list chrysotile asbestos on Annex III once again is an absolute disgrace...”).

<sup>297</sup> See Rotterdam Convention, *supra* note 195, at art. 22.

<sup>298</sup> See Rotterdam Summary 2019, *supra* note 294, at 25-26.

<sup>299</sup> Omana George & Laurie Kazan-Allen, *The Rotterdam Convention 2019*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, May 10, 2019, <http://www.ibasecretariat.org/og-lka-the-rotterdam-convention-2019.php> (offering a play-by-play of the 2019 COP).

Annex III.<sup>300</sup> In the face of this outcome that escapes international regulation under the Rotterdam Convention for at least two more years, the ball is now back in both the literal and figurative courts of individual States to take action in their national legislations if inclined to eradicate asbestos.

#### Conclusion:

The foundations of the human rights regime are rooted in the wish for all persons to live a life with dignity. This is a livelihood unimpeded by preventable troubles in an environment where basic necessities are well within reach. A life with dignity is one free from fear of life-threatening illness developing from the composite building materials of one's home, the ballfields where children play, the workplace and the air, food and water that all persons must consume to stay alive; a life with dignity is a life free from toxic pollution.

The human rights regime turns to State governments to provide this environment to those within its jurisdiction. It puts an obligation on States to keep not only the State itself from interfering with this right, but also to keep other third parties from infringing on the space provided to live a life with dignity. This duty furthermore extends until one's human rights are fully secured. In the context of the right to a healthy environment and one free from toxic pollution, this equates to taking steps, even if they are relatively small and incremental, to eradicate the commercial use of the toxic mineral asbestos in its entirety.

Asbestos has proved difficult to regulate due to the initial belief that it was a miracle substance—fireproof, super strength, cheap, abundant—many thought that this dusty rock was going to save to world. Sickness in those who were exposed to asbestos, however, became too obvious to ignore in the latter half of the 20th Century. During this time, States squabbled over the efficacy of the science backing its carcinogenic nature and pressures from big business still boasting the great utility it served to the market economy. It also did not help the case of those pushing for asbestos regulation back then that one could lick asbestos dust off their table and not immediately get sick, not even for months or years.

Today, however, it is 2019 and the research directly linking asbestos to mesothelioma and other asbestos-related diseases is plentiful and many of the businesses that once lobbied for lax

---

<sup>300</sup> *Id.* at 24 (naming Kazakhstan, Syria, Zimbabwe, Kyrgyzstan, Pakistan, India as other countries that outright opposed addition and Venezuela, Cuba, and Iran as countries calling for further discussion on the rationale of those outright opposing).

regulation are now bankrupt from an array of negligence claims and the like for failing to uphold due care to those who they were responsible for exposing to the toxic substance. Some of these businesses, on the other hand, have weathered this asbestos litigation storm in their respective jurisdictions and are still thriving. Though instead of going after these businesses, this endeavor has called on States to solve this problem by banning asbestos in the form of a national regulation—*the time is now*.

For the people of Libby, Montana, Kappelle-op-den-Bos, Belgium, Casale Monferrato, Italy, Mrs. Gurung and all others in Kymore, India and beyond, the call for an international ban on asbestos must be fulfilled. Under the international human rights law regime, the social discourse that once perhaps warranted the “not in my backyard” mindset is no longer to be tolerated. State obligations extend to eliminate socio-economic discrimination in this context and provide an environment free from toxic pollution *for all*. In the light of the budding prospects of the Global Pact for the Environment and the fruitless Rotterdam Convention Environment, the State obligation to fulfil the human right to a healthy environment in the form of a ban on asbestos is more present than ever.



## Bibliography:

### International and Regional Agreements:

International Labour Organization Constitution, Apr. 1, 1919 as a part of the Treaty of Versailles, June 28, 1919.

Constitution of the World Health Organization, 14 U.N.T.S. 185, Jul. 22, 1946.

Universal Declaration of Human Rights, 993 U.N.T.S. 3, Dec. 10, 1948.

Convention Relating to the Status of Refugees, 189 U.N.T.S. 137, Jul. 28 1951.

International Convention on the Elimination of All Forms of Racial Discrimination, 660 U.N.T.S. 195, Dec. 21, 1965.

International Covenant on Civil and Political Rights, 999 U.N.T.S. 171, Dec. 16. 1966.

International Covenant on Economic Cultural and Social Rights, 993 U.N.T.S. 3, Dec.16, 1966.

Vienna Convention on the Law of Treaties, 1155 U.N.T.S. 331, May 23, 1969.

Convention on the Elimination of All Forms of Discrimination Against Women, 1249 U.N.T.S. 13, Dec. 18 1979.

Convention Concerning Occupational Safety and Health and the Working Environment (No. 155), 1331 U.N.T.S. 279, Aug. 11, 1983.

Convention Concerning Safety and the Use of Asbestos (No. 162), 1539 U.N.T.S. 315, Jun. 24, 1986.

Convention on the Rights of the Child, 1577 U.N.T.S. 3, Nov. 20, 1989.

European Social Charter (revised), ETS 163, May 3, 1996.

Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, 2161 U.N.T.S. 447, Jun. 25, 1998.

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, 2244 U.N.T.S. 337, Sept. 10, 1998.

Convention on the Rights of Persons with Disabilities, 2515 U.N.T.S. 3, Dec. 13, 2006.

### United Nations General Comments:

CESCR General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), U.N. Doc E/1991/23, Dec. 14, 1990.

CESCR General Comment No. 4: The Right to Adequate Housing (Art. 11(1) of the Covenant), U.N. Doc E/1992/23, Dec. 13, 1991.

CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12), U.N. Doc E/C.12/2000/4, Aug. 11, 2000.

CESCR General Comment No. 18 on the Right to Work (Article 6 of the ICESCR), U.N. Doc E/C.12/GC/18, Feb. 6, 2006.

CESCR General Comment No. 20: Non-discrimination in Economic, Social and Cultural Rights (art. 2, para. 2, of the ICESCR), U.N. Doc. E/C.12/GC/20, Jul. 2, 2009.

CESCR General Comment No. 23 on the Right to Just and Favorable Conditions of Work (Article 7 of the ICESCR), U.N. DOC E/C.12/GC/23, Apr. 27, 2016.

CESCR General Comment No. 24 on State Obligations Under the ICESCR in the Context of Business Activities, U.N. Doc, E/C.12/GC/24, Aug. 10, 2017.

HRC General Comment No. 36 on article 6 of the International Covenant on Civil and Political Rights, on the right to life, CCPR/C/GC/36, Oct. 30, 2018.

#### Other United Nations Documents:

Draft World Charter for Nature, U.N. Doc A/Res/35/7, Oct. 30, 1980.

Need to Ensure a Healthy Environment for Individuals, U.N. Doc A/RES/45/94, Dec. 14, 1990.

Report of the Human Rights Council on its Eighteenth Session: Mandate of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes, U.N. Doc A/HRC/18/2, Nov. 18, 2011.

Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes on the Right to Information, U.N. Doc A/HRC/30/40, Jul. 8, 2015.

Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes on Guidelines for Good Practices, U.N. Doc A/HRC/36/41, Sept. 5, 2017.

Towards a Global Pact for the Environment, U.N. Doc A/72/L.51, May 7, 2018.

Issues of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, U.N. Doc A/HRC/40/55, Jan. 8, 2019.

#### Non-Binding Legal Doctrine:

Stockholm Declaration of the United Nations Conference on the Human Environment, U.N. Doc. A/CONF.48/14/Rev.1, Jun. 16, 1972.

Declaration on the Right to Development, U.N. Doc A/RES/41/128, Dec. 4, 1986.

Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26, Aug. 12 1992.

*Guiding Principles on Business and Human Rights*, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS (2011), [https://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr\\_eN.pdf](https://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr_eN.pdf).

*Strategic Approach to International Chemicals Management*, UNITED NATIONS ENVIRONMENTAL PROGRAM (2006), <http://www.saicm.org/Portals/12/documents/saicmtxts/SAICM-publication-EN.pdf>

*Framework Principles on Human Rights and the Environment*, UNITED NATIONS HUMAN RIGHTS SPECIAL PROCEDURES (2018), <https://rwi.lu.se/app/uploads/2018/02/Framework-Principles-on-Human-Rights-and-the-Environment.pdf>.

*Draft Global Pact for the Environment*, GLOBAL PACT FOR THE ENVIRONMENT, <https://globalpactenvironment.org/uploads/EN.pdf>.

### International and Regional Jurisprudence:

Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide, Advisory Opinion, 1951 I.C.J. Rep. 15 (May 28).

Decision Regarding Communication 155/96 (Social and Economic Rights Action Center/Center for Economic and Social Rights v. Nigeria, Case No. ACHPR/COMM/A044/1 (African Commission on Human and Peoples' Rights May 27, 2002).

Velásquez Rodríguez v. Honduras, Merits, Inter-American Court of Human Rights (Series C) No. 4, Jul. 29, 1988.

Juridical Condition and Rights of Undocumented Migrants, Advisory Opinion, Inter-American Court of Human Rights, (Series A) No. 18, Sept. 17, 2003.

### National Jurisprudence:

Jonckheere v. Eternit II (Brussels Court of Appeal decision in Flemish), 2012/AR/1747, Mar. 28, 2017, [http://www.abeva.eu/documents/2017\\_03\\_28\\_arrest.pdf](http://www.abeva.eu/documents/2017_03_28_arrest.pdf). (Belgium)

Judgement of the Court of Turin (Court decision title translated from Italian to English), N. 24265/04 R.G. n.r., Feb. 13, 2012, <https://www.business-humanrights.org/sites/default/files/media/documents/dispositivo-sentenza-eternit-2012.pdf>. (Italy)

Chandler v. Cape, [2012] EWCA (Civ) 525. (United Kingdom)

Borel v. Fibreboard Paper Products Corporation, 493 F.2d 1076 (5th Cir. 1973). (United States)

Lanzo v. Johnson & Johnson Consumer, Inc. and Imerys Talc America, Inc. (2018). (United States)

### Sub-International and National Laws:

Prohibition of Asbestos Products Containing Asbestos Regulations, SOR/2018-196, Published by the Canadian Minister of Justice, <https://laws-lois.justice.gc.ca/PDF/SOR-2018-196.pdf>. (Canada)

Directive of the European Commission 1999/77/CE. (European Union)

Clean Air Act, 42 USC § 7401 *et seq.*, 1963. (United States)

Asbestos; Significant New Use Rule [June 2018 Proposed Rule], 40 C.F.R. § 721, 2018. (United States)

Restrictions on Discontinued Uses of Asbestos; Significant New Use Rule [April 2019 Final Rule], 40 C.F.R. § 9 and 721, 2019. (United States)

### Legal Journal Publication and Scholarship:

Beth Brennan & Andrew King-Ries, *A Fall from Grace: United States v. W.R. Grace and the Need for Criminal Discovery Reform*, 20:2 CORNELL JOURNAL OF LAW AND PUBLIC POLICY 313 (2010).

Paul D. Carrington, *Asbestos Lessons: The Unattended Consequences of Asbestos Litigation*, 26:3 REVIEW OF LITIGATION 584 (2007).

Nadia Coggiola, *Asbestos Cases in the Italian Courts: Duelling with Uncertainty*, INDRET 1 (2009).

Puneet Pathak, *Human Rights Approach to Environmental Protection*, 7:1 ONTARIO INTERNATIONAL DEVELOPMENT AGENCY INTERNATIONAL JOURNAL OF SUSTAINABLE DEVELOPMENT 17 (2014)

Ranieri Lima Resende, *The Judicial Ban on Asbestos in Brazil: A Turning Point in the Relationship between International Law and Collective Fundamental Rights*, BLOG ON THE JOURNAL OF CONSTITUTIONAL LAW, Jan. 10, 2018, [http://www.iconnectblog.com/2018/01/the-judicial-ban-on-asbestos-in-brazil-a-turning-point-in-the-relationship-between-international-law-and-collective-fundamental-rights/#\\_edn18](http://www.iconnectblog.com/2018/01/the-judicial-ban-on-asbestos-in-brazil-a-turning-point-in-the-relationship-between-international-law-and-collective-fundamental-rights/#_edn18).

Christian Reus-Smit, *Human Rights and the Social Construction of Sovereignty*, 27 REVIEW OF INTERNATIONAL STUDIES 519 (2001).

David Rosner, *Deregulating Safety: The Case of the Effort to Ban Asbestos* (op. ed.) 95:3 MILBANK QUARTERLY 257 (2017).

Dinah Shelton, *Human Rights, Health and Environmental Protection: Linkages in Law and Practice* (2002), [https://www.who.int/hhr/Series\\_1%20%20Sheltonpaper\\_rev1.pdf](https://www.who.int/hhr/Series_1%20%20Sheltonpaper_rev1.pdf).

Li Weiwei, *Equality and Non-Discrimination Under International Human Rights Law*, Norwegian Center for Human Rights (2004), <http://www.corteidh.or.cr/tablas/r08121.pdf>.

### Medical Journal Publication and Scholarship:

Lucy P. Allen et al., *Trends and the Economic Effect of Asbestos Bans and Decline in Asbestos Consumption and Production Worldwide* 13:3 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 532 (2018).

Peter W. J. Bartrip, *History of Asbestos Related Disease*, 80 POSTGRADUATE MEDICAL JOURNAL 72 (2004).

David Martin Bernstein, *Understanding Chrysotile Asbestos: A New Perspective Based upon Current Data*, CHRYSOTILE INSTITUTE (2005),  
[http://www.chrysotile.com/data/1\\_Bernstein%20IOHA%202005%20PILANESBERG%20Paper%20J3%20Understanding%20Chrysotile%20Asbestos%20A%20New%20Perspective%20Based%20Upon.pdf](http://www.chrysotile.com/data/1_Bernstein%20IOHA%202005%20PILANESBERG%20Paper%20J3%20Understanding%20Chrysotile%20Asbestos%20A%20New%20Perspective%20Based%20Upon.pdf).

John Bridle & Sophie Stone, *Castile, The New Asbestos: Time to Clear the Air and Save 20 Billion GBP*, CHRYSOTILE INSTITUTE,  
<http://www.chrysotile.com/data/Casitile,%20The%20New%20Asbestos%20Revised.pdf>.

Emily Goswami et al., *Domestic Asbestos Exposure: A Review of Epidemiological and Exposure Data*, 10:11 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 5629 (2013).

Cheryl Katz, *Unequal Exposures: People in Poor Neighborhoods Breathe More Hazardous Particles*, ENVIRONMENTAL HEALTH PERSPECTIVE (2012).

Małgorzata Krówczyńska & Ewa Wilk, *Asbestos Exposure and the Mesothelioma Incidence in Poland* 15:8 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 1741 (2018).

Joseph LaDou et al., *The Case for Global Ban on Asbestos*, 118:7 ENVIRONMENTAL HEALTH PERSPECTIVE 897 (2010).

Richard A. Lemen & Philip J. Landrigan, *Toward an Asbestos Ban in the United States*, 14:11 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 1302 (2017).

Edward Merewether & Charles Price, *Report on Effects of Asbestos Dust on the Lungs and Dust Suppression in the Asbestos Industry*, HER MAJESTY'S STATIONERY OFFICE (1930).

Ihab Mikati et al., *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status*, 108:4 AMERICAN JOURNAL OF PUBLIC HEALTH 480 (2018).

Paul Mohau & Robin Saha, *Which Came First, People or Pollution? Assessing the disparate siting and Post-citing Demographic Change Hypotheses of Environmental Injustice*, 10 ENVIRONMENTAL RESEARCH LETTERS (2015).

Curtis W. Noonan, *Asbestos Exposure and Risk of Mesothelioma*, 5:11 ANNALS OF TRANSLATIONAL MEDICINE 234 (2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5497111/pdf/atm-05-11-234.pdf>.

Seung-Hyun Park, *Types and Health Hazards of Fibrous Materials Used as Asbestos Substitutes* 9:3 SAFETY AND HEALTH AT WORK 360 (2018).

Irving Selikoff et al., *Asbestos Exposure and Neoplasia* 188 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 22 (1964).

Irving Selikoff et al., *Relation Between Exposure to Asbestos and Mesothelioma*, 272 NEW ENGLAND JOURNAL OF MEDICINE 560 (1965).

*Asbestos Is Still With Us: Repeat Call for Universal Ban*, 15 COLLEGIUM RAMAZZINI 1 (2010).

*Statement of Scientists on the 'Scientific' Study by National Institute of Occupational Health (India) titled 'Study of Health Hazards/ Environmental Hazards Resulting from Use of Chrysotile Asbestos in the Country'*, Mar. 21, 2015, <https://central.bcwebinc.com/~rightcan/wp-content/uploads/2015/03/Statement-of-scientists-re-chrysotile-asbestos-March-21-2015.pdf>.

### Books:

MELVIN A. BERNARDE, *ASBESTOS: THE HAZARDOUS FIBER* 3 (2018).

THEO VAN BOVEN, *Categories of Rights*, in INTERNATIONAL HUMAN RIGHTS LAW 143, 144 (Daniel Moeckli et al. eds. 2d ed. 2014).

FONS COOMANS, *Education and Work* in INTERNATIONAL HUMAN RIGHTS LAW 238, 249 (Daniel Moeckli et al. eds. 2d ed. 2014).

DARIA DAVITTI, *Protection of ESC Rights and the Right to Water* in INVESTMENT AND HUMAN RIGHTS IN ARMED CONFLICT (2019).

ASBJØRN EIDE, *Adequate Standard of Living*, in INTERNATIONAL HUMAN RIGHTS LAW 195 (Daniel Moeckli et al. eds. 2d ed. 2014).

MALGOSIA FITZMAURICE, *Environmental Degradation*, in INTERNATIONAL HUMAN RIGHTS LAW 590 (Daniel Moeckli et al. eds. 2d ed. 2014).

A GLOBAL PACT FOR THE ENVIRONMENTAL: LEGAL FOUNDATIONS (Yann Aguila & Jorge E. Viñuales eds. 2019), <https://globalpactenvironment.org/uploads/Aguila-Vinuales-A-Global-Pact-for-the-Environment-Cambridge-Report-March-2019.pdf>.

FRÉDÉRIC MÉGRET, *Nature of Obligations*, in INTERNATIONAL HUMAN RIGHTS LAW 96 (Daniel Moeckli et al. eds. 2d ed. 2014).

FABRIZIO MENI, *The Eternit Factory at Casale Monferrato in Eternit in Italy* in ETERNIT AND THE GREAT ASBESTOS TRIAL 31 (David Allen & Laurie Kazan Allen eds. 2012), <http://www.ibasecretariat.org/eternit-great-asbestos-trial-chap-5.pdf>.

DANIEL MOECKLI, *Equality and Non-Discrimination*, in INTERNATIONAL HUMAN RIGHTS LAW 157 (Daniel Moeckli et al. eds. 2d ed. 2014).

PLINY THE ELDER, THE NATURAL HISTORY, Book XIX, Chapter 4, <http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.02.0137:book=19:chapter=4&highlight=asbestos>.

NIGEL S RODLEY, *Integrity of the Person*, in INTERNATIONAL HUMAN RIGHTS LAW 174 (Daniel Moeckli et al. eds., 2d ed. 2014).

HENRY SHUE, *BASIC RIGHTS: SUBSISTENCE, AFFLUENCE AND US FOREIGN POLICY* (1980).

STRABO, GEOGRAPHY, Book XII, Chapter 3, Paragraph 41,  
<http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0198:book=12:chapter=3&highlight=pontic>.

DONALD J. TRUMP AND KATE BOHNER, TRUMP: THE ART OF THE COMEBACK (1997).

### Documentaries:

Breathless (Dancing Dog Productions 2018) directed by David Lambo.

Libby, Montana (High Plains Films 2004) directed by Drury Gunn Carr & Doug Hawes-Davis.

### International Organization and National Government Reports:

*Toxicological Profile for Asbestos*, AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY (2001),  
<https://www.atsdr.cdc.gov/ToxProfiles/tp61.pdf>.

*Asbestos Statistics and Information 2019*, UNITED STATES GEOLOGICAL SURVEY, <https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/files/mcs-2019-asbes.pdf>.

Robert L. Virta, *Worldwide Asbestos Supply and Consumption Trends from 1900 through 2003*, UNITED STATES GEOLOGICAL SURVEY (2006) <https://pubs.usgs.gov/circ/2006/1298/c1298.pdf>.

*Study of Health Hazards/ Environmental Hazards Resulting from Use of Chrysotile Variety Asbestos in the Country*, INDIAN COUNCIL OF MEDICAL RESEARCH,  
[https://chemicals.nic.in/sites/default/files/Asbestos\\_%20NIOH\\_May%202012\\_0.pdf](https://chemicals.nic.in/sites/default/files/Asbestos_%20NIOH_May%202012_0.pdf).

*Chrysotile Asbestos*, WORLD HEALTH ORGANIZATION (2014) 2,  
[https://apps.who.int/iris/bitstream/handle/10665/143649/9789241564816\\_eng.pdf;jsessionid=8800F42EB5C212CF7459D33813DEDEE8?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/143649/9789241564816_eng.pdf;jsessionid=8800F42EB5C212CF7459D33813DEDEE8?sequence=1).

### Definition:

Miriam-Webster Dictionary, *democracy*: 1(b): a government in which the supreme power is vested in the people and exercised by them directly or indirectly through a system of representation usually involving periodically held free elections.

### Web Sources:

John Bouwman, *Asbestos Substitute Materials Building a Safer Future*, AIRSAFE, Apr. 21, 2015,  
<https://www.airsafe.net.au/news/asbestos-substitute-materials-building-safer-future>.

*What Causes Malignant Mesothelioma?*, AMERICAN CANCER SOCIETY,  
<https://www.cancer.org/cancer/malignant-mesothelioma/causes-risks-prevention/what-causes.html>.

*Asbestosis*, ASBESTOS.COM, <https://www.asbestos.com/asbestosis/>.

*Asbestos Facts*, ASBESTOS.COM, <https://www.asbestos.com/asbestos/statistics-facts/>.

*Asbestos Superfund Sites*, ASBESTOS.COM, <https://www.asbestos.com/asbestos/superfunds/>

*Mesothelioma & Asbestos Worldwide*, ASBESTOS.COM, <https://www.asbestos.com/mesothelioma/worldwide/>.

*Mesothelioma Life Expectancy*, ASBESTOS.COM, *available at:* <https://www.asbestos.com/mesothelioma/life-expectancy/>.

*Mesothelioma Statistics*, ASBESTOS.COM, <https://www.asbestos.com/mesothelioma/statistics/>.

*Types of Asbestos*, ASBESTOS.COM, <https://www.asbestos.com/asbestos/types/>.

*Governor Gives in to Pleas for Libby Superfund-site Trip*, BILLINGS GAZETTE, Jul. 17, 2001, [https://billingsgazette.com/news/local/governor-gives-in-to-pleas-for-libby-superfund-site-trip/article\\_50ad027c-31ae-59b3-8aaa-16419cb3728a.html](https://billingsgazette.com/news/local/governor-gives-in-to-pleas-for-libby-superfund-site-trip/article_50ad027c-31ae-59b3-8aaa-16419cb3728a.html).

*Thought Asbestos was Fully Banned in Canada? Not Until 2018*, CANADIAN BROADCASTING COMPANY, Jan. 24, 2017, <https://www.cbc.ca/radio/thecurrent/the-current-for-december-15-2016-1.3896671/thought-asbestos-was-fully-banned-in-canada-not-until-2018-1.3896765>.

*Eternit Lawsuit (Re: Asbestos Exposure in Italy)*, BUSINESS AND HUMAN RIGHTS RESOURCE CENTER, <https://www.business-humanrights.org/en/eternit-lawsuit-re-asbestos-exposure-in-italy>.

*Canada Publishes Final Asbestos Regulations*, CHEMICAL WATCH, Oct. 23, 2018, <https://chemicalwatch.com/71203/canada-publishes-final-asbestos-regulations>.

*US EPA Issues Final SNUR for Asbestos*, CHEMICAL WATCH, Apr. 18, 2019, <https://chemicalwatch.com/76690/us-epa-issues-final-snur-for-asbestos>.

*Controversy: Rotterdam Convention*, CHRYSOTILE INSTITUTE, <http://www.chrysotile.com/en/chrysotile/controversy/rotterdam.aspx>.

*Johnson & Johnson Wins Trial Over California Talc-Cancer Claim*, CLAIMS JOURNAL, Apr. 8, 2019, <https://www.claimsjournal.com/news/national/2019/04/08/290269.htm>.

*Human Right and Climate Change: World-first Case to Protect Indigenous Australians*, CLIENTEARTH, May 12, 2019, <https://www.clientearth.org/human-rights-and-climate-change-world-first-case-to-protect-indigenous-australians/>.

*Libby, Montana*, DATA USA, <https://datausa.io/profile/geo/libby-mt/>.

*What We Make: Advanced Fibers*, DOMTAR, <https://www.domtar.com/en/what-we-make/biomaterials/advanced-fibers>.



Soma Basu, *India Reverses Stand on Asbestos at Rotterdam Convention Meet*, DOWN TO EARTH, Aug. 17, 2015, <https://www.downtoearth.org.in/news/india-reverses-stand-on-asbestos-at-rotterdam-convention-meet-40990>.

*Summary of the Meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions: 29 April – 10 May 2019*, 15:269 EARTH NEGOTIATIONS BULLETIN 1, 24 (May 13, 2019) <http://enb.iisd.org/download/pdf/enb15269e.pdf>.

*Asbestos Damages in Casale Monferrato by Eternit, Italy*, ENVIRONMENTAL JUSTICE ATLAS, Feb. 2 2015, <https://ejatlas.org/conflict/eternit-asbestos-damages-in-casale-monferrato>.

Uralabest, *Donald is on Our Side* (Title of post translated from Russian to English), FACEBOOK, Jun. 25, 2018, <https://www.facebook.com/Uralasbest/posts/531137150617873>.

*Objectives*, GLOBAL PACT FOR THE ENVIRONMENT, <https://globalpactenvironment.org/en/the-pact/origins/>.

*Where Are We Now?*, GLOBAL PACT FOR THE ENVIRONMENT, <https://globalpactenvironment.org/en/the-pact/where-are-we-now/>.

*Serpentine vs Amphibole Asbestos: Uses and Dangers*, FIBER CONTROL, INC., Jun. 22, 2018, <https://fibercontrolinc.com/serpentine-vs-amphibole-asbestos-uses-and-dangers>.

David McCumber, *As the Asbestos Cleanup Gets Done, the Dying Continues*, GREAT FALLS TRIBUNE, Oct. 6, 2018, <https://eu.greatfallstribune.com/story/news/2018/10/06/libby-asbestos-cleanup-gets-done-dying-continues/1553592002>.

Jonna Walters, *Welcome to Libby, Montana, the Town that was Poisoned*, THE GUARDIAN, Mar. 8, 2009, <https://www.theguardian.com/world/2009/mar/08/usa-mining-libby-montana>.

*The History of Asbestos*, HISTORY COOPERATIVE, <https://historycooperative.org/the-history-of-asbestos/>.

*About ICEASBESTOS*, ICEASBESTOS, <https://www.iceasbestos.com/about>.

*Top Five Asbestos Alternatives*, ICEASBESTOS, <https://www.iceasbestos.com/blog/top-5-asbestos-alternatives>.

*Rotterdam Convention Discredited as Chrysotile Asbestos Fails to be Listed*, INDUSTRIALL, May 3, 2017, <http://www.industriall-union.org/rotterdam-convention-discredited-as-chrysotile-asbestos-fails-to-be-listed>

Barry Castleman, *Substitutes for Asbestos-Cement Construction Products*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Oct. 8, 2009, [http://ibasecretariat.org/bc\\_subst\\_asb\\_cem\\_constr\\_prods.php](http://ibasecretariat.org/bc_subst_asb_cem_constr_prods.php).

*Open Letter: An Appeal to the 161 Parties at the COP 9 of the Rotterdam Convention*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Apr. 20, 2019, <http://ibasecretariat.org/open-letter-appeal-to-the-161-parties-at-cop-9-of-the-rotterdam-convention.pdf>.

Laurie Kazan-Allen, *Asbestos Victory in Belgium*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Mar. 30, 2017, <http://ibasecretariat.org/lka-asbestos-victory-in-belgium.php>.

Laurie Kazan-Allen, *Brazil Bans Asbestos!*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Dec. 1, 2017, <http://www.ibasecretariat.org/lka-brazil-bans-asbestos.php#1>.

Laurie Kazan-Allen, *Current Asbestos Bans*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, *last accessed* May 27, 2019, [http://ibasecretariat.org/alpha\\_ban\\_list.php](http://ibasecretariat.org/alpha_ban_list.php).

Laurie Kazan-Allen, *The Rise and Fall of the Chrysotile Institute*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, May 1, 2012, <http://ibasecretariat.org/lka-rise-and-fall-of-chrysotile-institute.php>.

Krishnendu Mukherjee, *The Legacy of the European Asbestos Industry Continues in India*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, Oct. 20 2016, <http://www.ibasecretariat.org/km-legacy-of-european-asbestos-industry-continues-in-india.php>.

Omana George & Laurie Kazan-Allen, *The Rotterdam Convention 2019*, INTERNATIONAL BAN ASBESTOS SECRETARIAT, May 10, 2019, <http://www.ibasecretariat.org/og-lka-the-rotterdam-convention-2019.php>.

W. R. Grace Revenue 2006-2019, MACROTRENDS, <https://www.macrotrends.net/stocks/charts/GRA/wr-grace/revenue>.

*Asbestosis: Symptoms and Causes*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/asbestosis/symptoms-causes/syc-20354637>.

*Mesothelioma: Symptoms and Causes*, MAYO CLINIC, *available at*: <https://www.mayoclinic.org/diseases-conditions/mesothelioma/symptoms-causes/syc-20375022>.

*Causes of Mesothelioma*, MESOTHELIOMA + ASBESTOS AWARENESS CENTER, <https://www.maacenter.org/mesothelioma/causes/>.

*Fighting for a U.S. Asbestos Ban*, MESOTHELIOMA + ASBESTOS AWARENESS CENTER, <https://www.maacenter.org/asbestos/ban/>.

Tara Strand, *Mesothelioma Cases Expected to Increase Through 2025*, MESOTHELOMIA.COM, Jul. 7, 2017, <https://www.mesothelioma.com/blog/mesothelioma-cases-expected-to-increase-through-2025.htm>.

*Jeffery Mine*, MINDAT.ORG, <https://www.mindat.org/loc-581.html>.

*Malignant Mesothelioma*, NATIONAL CANCER INSTITUTE, <https://www.cancer.gov/types/mesothelioma>.

*Asbestos*, THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH, <https://www.cdc.gov/niosh/topics/asbestos/default.html>.

Email exchange between EPA staff members concerning proposed rule on asbestos between 25 April 2018 to 2 May 2018, *released by* NEW YORK TIMES, <https://int.nyt.com/data/documenthelper/147-epa-asbestos-emails/367a5f246d37b60f5697/optimized/full.pdf#page=1>.

Lisa Friedman, *E.P.A. Staff Objected to Agency's New Rules on Asbestos Use, Internal Emails Show*, NEW YORK TIMES, Apr. 10, 2018, <https://www.nytimes.com/2018/08/10/climate/epa-asbestos-rule.html>.

*Travel Oxygen*, NORCO, <https://www.norco-inc.com/TravelOxygen>.

Lisa Girion, *Johnson & Johnson Knew for Decades that Asbestos Lurked in its Baby Powder*, REUTERS, Dec. 14, 2018, <https://www.reuters.com/article/us-johnson-johnson-cancer-special-report/special-report-jj-knew-for-decades-that-asbestos-lurked-in-its-baby-powder-idUSKBN1OD1RQ>.

*Jury Acquits Grace Executives in Asbestos Case*, THE SPOKESMAN-REVIEW, May 8, 2009, <http://www.spokesman.com/stories/2009/may/08/wr-grace-jury-reaches-verdict/>.

*Major Countries in the Worldwide Asbestos Mine Production from 2010 to 2018*, STATISTA, <https://www.statista.com/statistics/264923/world-mine-production-of-asbestos/>.

Amanda Rossi, *Supreme Court Prohibits Asbestos in Brazil* (Title translated from Portuguese to English), TERRA, Nov. 29, 2017, <https://www.terra.com.br/noticias/brasil/stf-proibe-amianto-no-brasil,1a0a4b9231eab2ee3aecc9a4e9f1a0c03r9yt49.html>.

*Asbestos Alternative Tape Suppliers*, THOMAS, <https://www.thomasnet.com/products/asbestos-alternative-tapes-83560656-1.html>.

*International Human Rights Law*, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS, <https://www.ohchr.org/en/professionalinterest/pages/internationallaw.aspx>.

Frequently Asked Questions on Economic, Social and Cultural Rights, Fact Sheet No. 33, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS (2008) <https://www.ohchr.org/Documents/Publications/FactSheet33en.pdf>.

*What Kinds Of Human Rights Obligations Are There?*, UNITED NATIONS PRACTITIONER'S PORTAL ON HUMAN RIGHTS BASED APPROACHES TO PROGRAMMING, <https://hrbportal.org/faq/what-kinds-of-human-rights-obligations-are-there>.

Baskut Tuncak, UN WEB TV, Oct. 25, 2018, <http://webtv.un.org/watch/mr.-baskut-tuncak-special-rapporteur-on-the-implications-for-human-rights-of-the-environmentally-sound-management-and-disposal-of-hazardous-substances-and-wastes-press-conference-25-october-2018/5853390478001/>.

*EPA Actions to Protect the Public from Exposure to Asbestos*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos>.

*Frequently Asked Questions Regarding EPA's Final Asbestos Rule*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, [https://www.epa.gov/sites/production/files/2019-04/documents/asbestos\\_final\\_rule\\_faq.pdf](https://www.epa.gov/sites/production/files/2019-04/documents/asbestos_final_rule_faq.pdf).

*Libby Asbestos Site*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0801744#bkground>.

*Superfund History*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/superfund/superfund-history-printable-version>.

Jim Erickson, *Targeting Minority, Low-income Neighborhood Hazardous Waste Sites*, UNIVERSITY OF MICHIGAN, Jan. 19, 2016, <https://news.umich.edu/targeting-minority-low-income-neighborhoods-for-hazardous-waste-sites/>.

*Earliest Known Facts About Asbestos*, UNIVERSITY OF MONTANA,  
[http://www.umt.edu/bioethics/libbyhealth/introduction/background/asbestos\\_timeline.aspx](http://www.umt.edu/bioethics/libbyhealth/introduction/background/asbestos_timeline.aspx).

*About Us*, ASBESTOS WATCHDOG, <http://www.asbestoswatchdog.co.uk/about-us>.

*An Estimated 12.6 Million Deaths Each Year are Attributable to an Unhealthy Environments*, WORLD HEALTH ORGANIZATION, Mar. 15, 2016, <https://www.who.int/news-room/detail/15-03-2016-an-estimated-12-6-million-deaths-each-year-are-attributable-to-unhealthy-environments>.

*Grace History: A Story of Innovation and Change*, W. R. GRACE & CO., <https://grace.com/en-us/history/Pages/grace-history.aspx>.