

Strategic Human Rights Litigation Due to Historical Environmental Contamination: Comparative Analysis of Two Chilean Cases

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Abstract: *Countless historically contaminated territories currently exist in the world. This problem is even more complex when contaminated territories are located near populated areas, affecting the right to life, health, physical and psychological integrity, and a healthy environment for inhabitants. In this context, litigation has become an important instrument for advancing human rights. Nonetheless, many of these human rights cases do not produce the positive results that are expected, both in the short term and long term. As such, this article examines how the legal system could effectively address historical environmental problems that affect human rights. This article develops a comparative analysis of two well-known cases of historical environmental contamination in Chile that occurred in 2018 and 2019: the Quintero Puchuncaví case and the Copiapó Tierra Amarilla case. Both cases involved a violation of human rights, individual and collective; addressed vulnerable populations and distributive justice; and denounced state omissions. Regardless of these similarities, the processes were carried out differently, with disparate results. This article analyzes the strategies and judicial processes of these cases—and their results to date—and seeks to better understand strategic human rights litigation around historical environmental contamination. Hopefully, this greater comprehension will increase the likelihood of their success and advance the respect and protection of human rights.*

Résumé: *Il existe une quantité incalculable de territoires historiquement contaminés dans le monde. Ce problème se complexifie davantage lorsque les territoires contaminés se situent à proximité de régions habitées, touchant le droit à la vie, à la santé, à l'intégrité physique et psychologique et à un environnement sain. Dans ce contexte, le litige est devenu un outil important dans la promotion des droits humains. Néanmoins, plusieurs de ces affaires en droits humains n'atteignent pas les résultats positifs escomptés, que ce soit à court ou à long terme. Ainsi, cet article examine comment le système juridique pourrait répondre efficacement aux problèmes environnementaux historiques affectant les droits humains. Cet article développe une analyse comparative de deux cas notoires de contamination environnementale historique au Chili qui se sont produits en 2018 et 2019 : l'affaire Quintero Puchuncaví et l'affaire Copiapó Tierra Amarilla. Les deux affaires concernaient une violation des droits humains, individuels et collectifs ; s'intéressaient à des populations vulnérables et à la justice distributive et dénonçaient des omissions de l'État. Malgré ces similitudes, les processus en justice ont été menés différemment, avec des résultats disparates. Cet article analyse les stratégies et processus judiciaires de ces affaires et leurs résultats jusqu'à présent afin de contribuer à une meilleure compréhension du litige stratégique en matière de droits humains concernant la contamination environnementale historique. Avec espoir, cette compréhension approfondie pourra augmenter leurs chances de réussite et promouvoir le respect et la protection des droits humains.*

Titre en français : Le litige stratégique lié à la contamination environnementale historique : analyse comparative de deux affaires chiliennes

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1. INTRODUCTION

Since the industrial revolution, the world has suffered large-scale pollution due to the intensive exploitation of metallic and non-metallic mining resources; coal-based electricity generation; indiscriminate use of chemical products; extraction and consumption of fossil fuels; and other contaminating activities.¹ The industrialization process is so deeply rooted in economic, political, and social structures that generalized air, water, and soil pollution has been understood as inevitable.² Thus, there are countless historically contaminated territories globally. This problem becomes even more complex when contaminated territories are located near populated areas, affecting inhabitants' right to life, health, physical and psychological integrity, and a healthy environment.³ In this context, several groups and institutions, including non-governmental organizations ("NGOs"), demand remedies for polluted areas to improve the living conditions of those affected.

There are different avenues—short, medium, and long term—to advance the respect, protection, and guarantee of human rights. For example, in the short term, street protest and boycotts of those responsible for violations can provide immediate results.⁴ In the medium term, one important avenue is legislation.⁵ The creation of legislation can influence regulations and affect the actions of administrative agencies and nonstate actors, like corporations, with

¹ See generally François Jarrige & Thomas Le Roux, *The Contamination of the Earth: A History of Pollutions in the Industrial Age*, 1st ed (Cambridge, Mass: MIT Press, 2020).

² See Sjuk Smulders & Raymond Gradus, "Pollution abatement and long-term growth" (1996) 12:3 *European J Political Economy* 505.

³ The right to a clean, healthy, and sustainable environment was recognized as a human right in July 2022 by the United Nations General Assembly. See *The human right to a clean, healthy and sustainable environment*, GA Res 76/300, UNGAOR, 76th Sess, UN Doc A/Res/76/300 (2022).

⁴ See Peter Ackerman & Berel Rodal, "The Strategic Dimensions of Civil Resistance" (2008) 50:3 *Survival* 111.

⁵ See Grégoire Webber & Paul Yowell, "Introduction: Securing Human Rights through Legislation" in Grégoire Webber et al, eds, *Legislated Rights: Securing Human Rights through Legislation* (Cambridge, UK: Cambridge University Press, 2018) at 25.

the ultimate goal of securing and promoting human rights.⁶ Educational activities, capacity building, and increasing public awareness can lead to structural improvements for human rights in the long term.⁷

Within this framework, litigation is one of several avenues for advancing human rights. Notwithstanding the criticism that some have directed towards litigation as a device to obtain positive social change, human rights litigation has grown exponentially in the last decade, especially in environmental matters.⁸ However, many human rights lawsuits do not produce their expected positive results.⁹ This article seeks to shed light on how to effectively litigate human rights violations that have resulted from poor historical environmental conditions. This article's main objective is to assist the various institutions that carry out this type of litigation by comparing cases to identify best practices, thus increasing the chances of success of future litigation. In other words, this article seeks to answer the question of how to successfully litigate cases concerning historical environmental contamination that affects human rights.

To this end, this article develops a comparative analysis of two well-known cases of historical environmental contamination in Chile that occurred in 2018 and 2019: the *Quintero Puchuncaví* case¹⁰ and the *Copiapó Tierra Amarilla* case.¹¹ This article will analyze the litigants' strategies, the judicial processes, and the cases' results to date. These Chilean cases are particularly useful because Chile is a middle-income country with a neoliberal economic development model, which has enabled economic activities that have caused pollution.¹² Consequently, there are numerous geographical sectors of high industrial concentration, where establishing industrial centres has been prioritized over people's well-being and environmental protection.¹³

⁶ See David R Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012) at 117–118.

⁷ See Felisa Tibbits, "Human Rights Education" in Monisha Bajaj, ed, *Encyclopedia of Peace Education* (Charlotte, NC: Information Age Publishing, 2008) 99.

⁸ For example, with respect to climate change, only 5 rights-based lawsuits were filed before 2015. Between 2015 and 2020, 39 were initiated: see Joana Setzer & Rebecca Byrnes, "Global trends in climate change litigation: 2020 snapshot" (2020) at 14, online (pdf): *London School of Economics and Political Science* <lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf>.

⁹ See Helen Duffy, *Strategic human rights litigation: understanding and maximising impact* (Oxford, UK: Hart Publishing, 2018) at 5.

¹⁰ See Corte de Apelaciones [Court of Appeals], Valparaíso, 19 February 2019, *Francisco Chahuan Chahuan c Empresa Nacional de Petroleos, ENAP SA*, Poder Judicial, No 7266-2018 (Chile) [QP Appeals Court ruling]; Corte Suprema de Justicia [Supreme Court], 28 May 2019, *Francisco Chahuan Chahuan c Empresa Nacional de Petroleos, ENAP SA*, Observatorio del Principio 10, No 5888-2019 (Chile) [QP Supreme Court ruling].

¹¹ See Corte de Apelaciones [Court of Appeals], Copiapó, 11 October 2019, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 101-2019 (Chile) [CTA Appeals Court ruling]; Corte Suprema de Justicia [Supreme Court], 14 July 2020, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 29799-2019 (Chile) [CTA Supreme Court ruling].

¹² See Miguel A Altieri & Alejandro Rojas, "Ecological impacts of Chile's Neoliberal Policies, with Special Emphasis on Agroecosystems" (1999) 1:1 *Environment, Development and Sustainability* 55 at 55–58.

¹³ Chile, Cámara de Diputados, *Informe comisión especial investigadora sobre causas de alta contaminación ambiental, especialmente en concón, quintero y puchuncaví, y de responsabilidades en ejecución del plan de*

A similar neoliberal policy has been installed in several Latin American countries.¹⁴ This article will therefore be especially useful for these countries, as they can replicate good practices while adapting them to their setting and the characteristics of each particular case.

Both *Quintero Puchuncaví* and *Copiapó Tierra Amarilla* are cases of historical contamination and human rights violations due to state omissions. Moreover, both cases concern vulnerable populations, distributive justice, and were litigated during a similar period. As will be discussed in the following sections, however, the processes were carried out differently, with disparate results. As time has passed since the Supreme Court's rulings, it is now possible to evaluate their different impacts. By assessing the processes and results it will be possible to identify good practices to be replicated in the future.

2. LITIGATION, HUMAN RIGHTS, AND THE ENVIRONMENT

Litigation has often been a controversial matter in the human rights arena. It has sometimes been understood as an inappropriate device to obtain positive social change.¹⁵ For example, some argue litigation is costly and uncertain, and successful outcomes are not guaranteed.¹⁶ Litigation also risks a negative ruling that may set a bad precedent, thus worsening the situation it intends to improve.¹⁷ Moreover, an adverse outcome may damage the image or reputation of individuals or institutions that initiated the litigation, negatively impacting their ability to obtain relief through other strategies.¹⁸

Conversely, in recent years, litigation has been recognized as an important tool for increasing citizen empowerment and creating more just societies.¹⁹ Litigation can generate positive legal precedents. The force of court rulings provides protection and remedies to rights violations. This generates jurisprudence that is increasingly aligned with human rights.²⁰ In addition, the judicial process gives a voice to victims in an official context. Judicial rulings have a different weight and recognition than other pronouncements by authorities, not only because of their binding force, but also because of their important role in the rule of law.²¹

descontaminación [Report on causes of high environmental pollution, especially in Concón, Quintero and Puchuncaví, and responsibilities in the execution of the decontamination plan], (23 December 2019) at 5.

¹⁴ See Werner Baer & William Maloney, "Neoliberalism and income distribution in Latin America" (1997) 25:3 *World Development* 311 at 311.

¹⁵ See generally Ben Schokman, Daniel Creasey & Patrick Mohen, "Short Guide: Strategic Litigation and its Role in Promoting and Protecting Human Rights" (July 2012) at 3, online (pdf): *A4ID: Advocates for International Development* <a4id.org/wp-content/uploads/2016/04/Strategic-Litigation-Short-Guide-2.pdf> [Schokman et al].

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ See "Strategic Litigation Impacts: Insights from Global Experience" (2018) at 13–14, online (pdf): *Open Society Justice Initiative* <justiceinitiative.org/uploads/fd7809e2-bd2b-4f5b-964f-522c7c70e747/strategic-litigation-impacts-insights-20181023.pdf> [Open Society Justice].

²⁰ *Ibid.* at 19.

²¹ See Neil MacCormick, *Rhetoric and the rule of law: a theory of legal reasoning* (Oxford: Oxford University Press, 2005) at 3–4.

Also, litigation can generate significant extrajudicial impacts, such as media coverage placing the problem in the public sphere.²²

These weaknesses and strengths of human rights litigation extend to environmental litigation.²³ A further limitation in the environmental context is that the time frame associated with litigation may prevent it from effectively addressing environmental issues.²⁴ Environmental problems affecting human rights are diverse and dynamic, requiring timely responses. Litigation is often slow, and remedies arrive late. Nonetheless, litigation can influence more ambitious environmental governance by states.²⁵ In addition, studies have identified that strategic litigation has exposed environmental gaps in corporate governance structure, changed predatory business models, and expanded corporate environmental liability.²⁶

Although litigation is not perfect, it is useful and can have a positive impact.²⁷ Due to its limitations, it is best understood as one of several tools that must be deployed in a complementary manner to remedy human rights abuses and generate positive social change. In this sense, “[litigation] is an instrument that becomes more effective when combined with other tools of change.”²⁸ With this in mind, the following sections analyze the processes and results of two strategic human rights litigation, with the aim of highlighting good practices and the positive results they have had to date.

3. METHODOLOGY

The complexities of evaluating the results of strategic human rights litigation are well known globally.²⁹ Indeed, “the impacts of strategic litigation tend to be unpredictable, unclear

²² See Schokman et al, *supra* note 15 at 3.

²³ On the limitations and complexities of environmental litigation, see Juan Sebastián Lloret, *Manual de Litigación en Casos Civiles Complejos Medioambientales* [Litigation Manual for Complex Civil and Environmental Cases] (Santiago, Chile: Centro de Estudios de Justicia de las Américas, CEJA, 2021) at 21–24; Johanna Cilano Pelaez, “Limitaciones legales e institucionales en el acceso a la justicia ambiental: las enseñanzas de dos casos de la industria petrolera en Veracruz [Legal and institutional constraints in access to environmental justice: lessons from two cases of the oil industry in Veracruz]” in Édgar García Valencia, ed, *La Justicia Denegada: Ensayos sobre acceso a la justicia en Veracruz* [Justice denied: Essays on access to justice in Veracruz] (Veracruz, Mexico: Universidad Veracruzana, 2018) 193 at 196.

²⁴ See A Dan Tarlock, “The Future of Environmental ‘Rule of Law’ Litigation” (2002) 19:2 Pace Envtl L Rev 575 at 600–601.

²⁵ See Louis Kotzé & Alexander Paterson, *The role of the judiciary in environmental governance: Comparative perspectives* (Alphen aan den Rijn, The Netherlands: Kluwer Law International, 2009) at 23–24.

²⁶ See Mark B Taylor, “Counter Corporate Litigation: Remedy, Regulation, and Repression in the Struggle for a Just Transition” (2021) 13:19 Sustainability 1 at 2, 15–18; Lisa Benjamin, “The responsibilities of corporations: new directions in environmental litigation” in Veerle Heyvaert & Leslie-Anne Duvic-Paoli, eds, *Research Handbook on Transnational Environmental Law* (Cheltenham, UK: Edward Elgar Publishing, 2020) 229 at 230.

²⁷ For a more detailed description of the strengths and weaknesses of strategic human rights litigation, see Scott L Cummings & Deborah L Rhode, “Public Interest Litigation: Insights from Theory and Practice” (2009) 36:4 Fordham Urb LJ 603.

²⁸ Open Society Justice, *supra* note 19 at 28.

²⁹ *Ibid* at 26–29.

... and difficult to measure.”³⁰ Litigation’s impact assessment and appreciation is often subjective.³¹ Furthermore, causal problems generate doubts in attributing medium and long term social and political changes to litigation. Because of this complexity, several human rights scholars have raised concerns about evaluating this type of litigation. As Corey Barber of the European Centre for Constitutional and Human Rights highlights, “[e]valuation is usually criticized on three fronts – it is never complete; activities change as they are being monitored; and evaluators inevitably influence their evaluations.”³²

Despite these concerns, studying this form of litigation will better prepare future human rights cases. A multidimensional evaluation that recognizes the complex nature of strategic human rights litigation should supplant the binary evaluation of “winner” and “loser” associated with traditional litigation.³³ Indeed, a binary analysis restricts litigation success to the mere outcome of the ruling. This is inadequate for human rights cases because it reduces the visibility of positive, extrajudicial impacts and successes.³⁴

Strategic human rights litigation is “multi-dimensional, multi-disciplinary, multi-stakeholder, iterative, and longitudinally segmented.”³⁵ It aims not only to affect positive legal change, but also political and social change.³⁶ Thus, its impacts are much broader than traditional litigation, and many escape the courtroom. In highly complex matters, such as cases of historical environmental contamination, the desired change is not easy nor fast. What is at stake is much more than a technical legal problem; it is a political, social, and equity issue.

Considering the above, this article applies the model proposed by the Open Society Foundations³⁷ (“OSF”) to evaluate the results of the two Chilean cases. This model recognizes three types of impacts: material, instrumental, and nonmaterial.³⁸ Material impact refers to direct changes as a result of litigation.³⁹ In cases of historical environmental contamination, material impacts could include direct, court-ordered measures to restore a contaminated area. Instrumental impacts are those of an “indirect but quantifiable” nature, such as changes in the country’s environmental regulations, law, or policy.⁴⁰ Finally, nonmaterial impacts are those

³⁰ *Ibid* at 28.

³¹ *Ibid* at 26–29.

³² Catherine Corey Barber, “Tackling the evaluation challenge in human rights: assessing the impact of strategic litigation organisations” (2011) 16:3 *Intl JHR* 411 at 416.

³³ See Duffy, *supra* note 9 at 37–49.

³⁴ *Ibid*.

³⁵ Open Society Justice, *supra* note 19 at 42.

³⁶ See Corey Barber, *supra* note 32 at 411.

³⁷ The Open Society Foundations is a globally recognized foundation that has worked for decades to promote human rights, including deliberative democracy, education, economic equity, anti-discrimination, and health. The OSF was founded in 1993 and is active in more than 120 countries. In addition, the OSF releases dozens of publications every year, being a major institution in the human rights arena: see “Open Society Foundations” (last visited 22 July 2022), online: *Open Society Foundations* <opensocietyfoundations.org/>; “Open Society Foundations (OSF)” (last visited 4 October 2022), online: *InfluenceWatch* <influencewatch.org/non-profit/open-society-foundations/>.

³⁸ See Open Society Justice, *supra* note 19 at 19, 27, 43.

³⁹ *Ibid* at 46.

⁴⁰ *Ibid* at 43, 49.

that are indirect and not quantifiable. These include changes in the behavior and attitude of citizens, such as empowerment and social cohesion, and authorities, with respect to the situation in question or those affected.⁴¹

OSF designed this model in 2018 following hundreds of interviews with different actors around the world working in the field of human rights, with the aim of establishing a broad and inclusive impact framework.⁴² Given its extensive nature, this model allows for a full appreciation of all possible types of strategic litigation impacts.⁴³ This classification—broad and complex—enables the comprehensive inclusion of results of differing nature and scale.

4. THE CASES

4.1. THE *QUINTERO PUCHUNCAVÍ* CASE

In the 1950s and 1960s, three large industries were installed along the bay between the municipalities of Quintero and Puchuncaví, Valparaíso Region, Chile: an oil refinery, a coal-fired thermoelectric plant, and a copper smelter.⁴⁴ This gave rise to the Ventanas Industrial Park, which was conceived at that time as an image of economic development and an important source of employment.⁴⁵ In the following years, additional industries began operating in the bay, including some classified as polluting or hazardous.⁴⁶ Companies at Ventanas Industrial Park unload and store fuels and industrial chemicals, produce cement, and stockpile and ship copper concentrate.⁴⁷

The Ventanas Industrial Park was made up of a wide range of companies, both public and private, national and international. Some of these companies included the multinational Shell plc, the U.S. Aes Corporation, the Chilean state-owned company Corporación Nacional del Cobre, the conglomerate Puerto Ventanas S.A., the Italian state-owned multinational Ente nazionale per l'energia elettrica, and Gasmar S.A., which is currently owned by the international investment company Arroyo Energy Investors LLC.⁴⁸ Given the lack of environmental regulation at the time and the absence of proper land-use planning, this industrial center

⁴¹ *Ibid* at 43–44, 60.

⁴² *Ibid* at 43.

⁴³ *Ibid*.

⁴⁴ See Pablo Saravia Ramos et al, “El derrame de petróleo en Quintero, V región de Chile: Una mirada desde las organizaciones sociales [Oil spill in Quintero Bay, Chile’s V region: A look from social organizations]” (2016) 23:2 *Población & Sociedad* 179 at 187–88.

⁴⁵ See Luis Eduardo Espinoza Almonacid, “El polo industrial Quintero-Ventanas: ¿Hacia dónde fue el desarrollo? [The Quintero-Ventanas industrial park: Where did development go?]” (2015) 2:3 *Millcayac: Revista Digital de Ciencias Sociales* 245 at 258.

⁴⁶ See Flavia Liberona Céspedes & Hernán Ramírez Rueda, “Antecedentes y reflexiones sobre la zona de sacrificio de Quintero y Puchuncaví [Background and reflections on the sacrifice zone of Quintero and Puchuncaví]” (2019) 59:1 *Cuadernos Médico Sociales* 21 at 22.

⁴⁷ *Ibid* at 23.

⁴⁸ See Paola Bolados García, “Conflictos socio-ambientales/territoriales y el surgimiento de identidades post neoliberales (Valparaíso-Chile) [Social-environmental/territorial conflicts and the emergence of post neoliberal identities (Valparaíso-Chile)]” (2016) 31 *Izquierdas* 102 at 119.

quickly created a contaminated zone.⁴⁹ Despite clear evidence that these industries generate significant pollution, they were not subjected to an environmental impact assessment.⁵⁰ Moreover, they were located near residential areas, schools, and hospitals, thus affecting the environment and the health of the population.⁵¹

A study conducted by Flavia Liberona and Hernán Ramírez in the Quintero and Puchuncaví area identified high concentrations of sulfur dioxide, particulate matter, and volatile organic compounds in the air.⁵² The study also concluded that the bay's water quality is seriously contaminated with high nutrient content, organic matter, fecal coliforms, and heavy metals such as aluminum, iron, molybdenum, and chromium.⁵³ Additionally, this study identified a significant presence of cadmium, arsenic, copper, and mercury in the soil—all toxic compounds that affect biodiversity and the health of the population.⁵⁴ Although this situation originated decades ago, the contamination has not only persisted but worsened. Between 2014 and 2016, three oil spills and more than one hundred coal strandings have occurred in the Quintero Bay.⁵⁵ Coal stranding is marine pollution that occurs when a significant amount of coal is deposited in the sea, affecting marine biodiversity.⁵⁶ These pollution events are easily identifiable as the tide leaves a layer of coal on the coastal edge.⁵⁷

The pollution in Quintero and Puchuncaví reached a critical point in 2018. Between August and September of that year, an episode of massive contamination affected hundreds of people. The pollution's exact origin could not be determined but this incident forced all companies in the Ventanas Industrial Park to temporarily reduce their operations.⁵⁸ More than 1,600 people required emergency health services for symptoms such as nausea, headaches, dizziness, loss of sensation in the extremities, and unconsciousness.⁵⁹ Children living within a short distance of the Ventanas Industrial Park were the most affected demographic and were exposed to high concentrations of toxic air pollutants such as arsenic and sulfur dioxide.⁶⁰ While this incident

⁴⁹ See Liberona Céspedes & Ramírez Rueda, *supra* note 46 at 22.

⁵⁰ *Ibid* at 23, 28.

⁵¹ *Ibid* at 22.

⁵² *Ibid* at 25.

⁵³ *Ibid* at 27.

⁵⁴ *Ibid* at 24.

⁵⁵ See Bolados García, *supra* note 48 at 107; Hernán Ramírez Rueda, “Minuta relativa al registro de varamientos de carbón en caleta Ventanas año 2020 [Report on the record of coal strandings in the Ventanas cove, year 2020]” (February 2021) at 2, online (pdf): [Fundación Terram <media.elmostrador.cl/2021/07/Minuta-Varamientos-CarboCC81n-Ventanas-2020.pdf>](https://www.terram.cl/2021/07/Minuta-Varamientos-CarboCC81n-Ventanas-2020.pdf) [Terram report].

⁵⁶ See “No hay tiempo Para el negacionismo: Balance ambiental 2021 [No time for denial: Environmental balance 2021]” (2021) at 6, online (pdf): [Fundación Terram <terram.cl/descargar/balance_ambiental/Balance-Ambiental-2021-No-hay-tiempo-para-el-negacionismo.pdf>](https://www.terram.cl/descargar/balance_ambiental/Balance-Ambiental-2021-No-hay-tiempo-para-el-negacionismo.pdf).

⁵⁷ Terram report, *supra* note 55 at 1.

⁵⁸ See Liberona Céspedes & Ramírez Rueda, *supra* note 46 at 28.

⁵⁹ Hernán Ramírez, “El panorama que no cambia: Quintero y Puchuncaví a dos años de las intoxicaciones masivas [The panorama that does not change: Quintero and Puchuncaví two years after the massive intoxications]”, *El Mostrador* (20 August 2020), online: [elmostrador.cl/destacado/2020/08/20/el-panorama-que-no-cambia-quintero-y-puchuncavi-a-dos-anos-de-las-intoxicaciones-masivas/>](https://www.elmostrador.cl/destacado/2020/08/20/el-panorama-que-no-cambia-quintero-y-puchuncavi-a-dos-anos-de-las-intoxicaciones-masivas/).

⁶⁰ *Ibid*.

in 2018 was critical, it was not new to the community since the environmental problems in that territory date back 50 years and it is known as an area of historical environmental contamination.

4.1.1. THE QUINTERO PUCHUNCAVÍ LITIGATION PROCESS

During the 2018 health and environmental emergency, the Chilean National Institute of Human Rights (“INDH”) and the Ombudsman for Children of Chile—both autonomous agencies of the state administration—filed a constitutional protection action against the Ministries of Environment and Health, among other public institutions.⁶¹ Additionally, similar actions were filed by a state senator, important national and international environmental NGOs (including Greenpeace), the mayors of Quintero and Puchuncaví, and dozens of inhabitants within the municipalities.⁶² This joint litigation featuring different actors allowed each to assume a unique role, giving strength to the beginning of the process. For example, the INDH acted as a human rights expert, the Ombudsman for Children reported on the special negative effects on children and the need for enhanced protection, and the environmental NGOs provided information on technical environmental matters.⁶³

These actions were based mainly on the state’s failure to protect and guarantee the citizens’ rights to physical and mental health and their right to a healthy environment.⁶⁴ The

⁶¹ See Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Contreras c Ministerio del Medio Ambiente, Ministerio de Salud y Superintendencia del Medio Ambiente*, Poder Judicial, No 8030-2018 (Plaintiff’s claim) (Chile) [INDH claim]; Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Defensora de la Niñez c Ministro de Salud, Dirección Regional de Onemi y Dirección Nacional de Onemi*, Poder Judicial, No 8036-2018 (Plaintiff’s claim) (Chile) [Ombudsman for Children claim].

⁶² See Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Ilustre Municipalidad de Quintero c ENAP Refinerías SA*, Poder Judicial, No 7412-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Municipalidad de Puchuncaví c ENAP SA*, Poder Judicial, No 7475-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Maria Fabiola Rosinelli Navarro y otros*, Poder Judicial, No 7468-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Ruth Vaccaro Saavedra y Familia*, Poder Judicial, No 7469-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Galarce c Fisco de Chile, Consejo de Defensa del Estado*, Poder Judicial, No 7837-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Jara c Ministro del Interior y Seguridad Pública e Intendente de la Región de Valparaíso*, Poder Judicial, No 8061-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Cárdenas c Ministerio de Medio Ambiente, Subsecretaría del Medio Ambiente*, Poder Judicial, No 8132-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Sindicato de trabajadores independientes pescadores artesanales buzos mariscadores y ramos similares*, Poder Judicial, No 8127-2018 (Plaintiff’s claim) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Costa c Servicio de Evaluación Ambiental*, Poder Judicial, No 8223-2018 (Plaintiff’s claim) (Chile) [FIMA claim].

⁶³ See generally INDH claim, *supra* note 61; Ombudsman for Children claim, *supra* note 61; FIMA claim, *supra* note 62.

⁶⁴ See Texto refundido, coordinado y sistematizado de la Constitución Política de la República de Chile [Consolidated, Coordinated and Systematized Text of the Political Constitution of the Republic of Chile], Chile 2005, supreme decree no 100, translated by Anna I Vellvé Torras, Adela Staines & Jefri J Ruchti, art 19, ss 1, 8.

constitutional protection action (also known as *amparo* in Argentina⁶⁵ or *acción de tutela* in Colombia⁶⁶) primarily aims to urgently remedy violations, disturbances, or threats to constitutional rights. Due to the seriousness and urgency of this action, it must be filed directly before the court of appeals within 30 days of the act or omission that provoked the violation of constitutional rights.⁶⁷ The nature and purpose of the constitutional protection action is relevant, as it was an important part of the plaintiffs' strategy. Indeed, the INDH waited for the occurrence of an emergency situation and notorious media coverage to initiate the lawsuit. This decision allowed the INDH to use the constitutional protection action as a litigation tool, which by its nature only proceeds for emergency cases that require an urgent solution.

In contrast, the defendants argued that the constitutional protection action was an inappropriate action to solve this environmental problem, since the plaintiffs were arguing a rights violation due to a historical, permanent situation, and not an emergency per se.⁶⁸ In this sense, the defendants did not deny the historical and ongoing nature of contamination, but rather argued that this highly complex issue was beyond the scope of this type of litigation.⁶⁹ Likewise, the defendants argued that as the constitutional protection action concerns urgent issues, it can only provide immediate solutions, which would not be suitable for solving a complex, historical environmental problem.⁷⁰

The INDH had been monitoring and conducting impact assessments in the Quintero and Puchuncaví territory for several years prior to the litigation process. The INDH carried out the first observation mission in 2011, from which it concluded that this zone “constitutes a situation of evident environmental injustice, since the benefits it generates are diffusely distributed among society as a whole, while the environmental costs are borne by people in a situation of social and economic vulnerability.”⁷¹ The INDH conducted a second observation

⁶⁵ See *Ley no 24.430, Constitución de la Nación Argentina* [Argentina Constitution Act], INFOLEG, 3 January 1995, art 43.

⁶⁶ See *Constitución Política de la República de Colombia* [Political Constitution of the Republic of Colombia], Congreso de la República de Colombia, 4 July 1991, art 86.

⁶⁷ For more information on the constitutional protection action in Chile, see Emilio Pfeffer Urquiaga, “El recurso de protección y su eficacia en la tutela de derechos constitucionales en Chile [The protection recourse and its efficacy in the guardianship of constitutional rights in Chile]” (2006) 4:2 *Estudios Constitucionales* 87.

⁶⁸ See e.g. Corte de Apelaciones [Court of Appeals], Valparaíso, 19 February 2019, *Francisco Chahuan Chahuan c Empresa Nacional de Petroleos, ENAP SA*, Poder Judicial, No 7266-2018 (Factum of the Respondent Chilean National Copper Corporation at 2–5) (Chile).

⁶⁹ See e.g. Corte de Apelaciones [Court of Appeals], Valparaíso, 19 February 2019, *Francisco Chahuan Chahuan c Empresa Nacional de Petroleos, ENAP SA*, Poder Judicial, No 7266-2018 (Factum of the Respondent ENAP Refinerías SA at 6–16) (Chile).

⁷⁰ See e.g. Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Contreras c Ministerio del Medio Ambiente, Ministerio de Salud y Superintendencia del Medio Ambiente*, Poder Judicial, No 8030-2018 (Factum of the Respondent Ministry of Environment at 34–36) (Chile); Corte de Apelaciones [Court of Appeals], Valparaíso, 12 November 2018, *Galarce c Fisco de Chile, Consejo de Defensa del Estado*, Poder Judicial, No 7837-2018 (Factum of the Respondent AES GENER SA at 7–11) (Chile).

⁷¹ “Informe Misión de Observación Zona de Quintero y Puchuncaví [Quintero and Puchuncaví Zone Observation Mission Report]” (2018) at 5, online (pdf): *Instituto Nacional de Derechos Humanos* <minrel.gob.cl/minrel_old/site/artic/20171114/asocfile/20171110145451/Informe_Mision_Observacion_

mission in 2014, where it collected and analyzed more information on the pollution situation of the Ventanas Industrial Park.⁷²

In 2017, the INDH integrated the Quintero and Puchuncaví territory into its map of socio-environmental conflicts.⁷³ The map of socio-environmental conflicts is a registration system of environmental and social disputes in Chile from a human rights perspective. This platform provides important information, such as: the circumstances in which the conflicts are triggered, the parties involved, the territories where they occur, the human rights invoked, and the disputes' trajectories over time. The incorporation of a conflict in the INDH socio-environmental conflicts map implies a thorough study of the situation, including: (i) delimitation of the conflict, (ii) clear identification of the actors involved, (iii) study of its public sphere and continuity (i.e., that it is not a private or isolated event), and (iv) obtaining means of verification to ascertain not only its existence, but also its public visibility and longevity.⁷⁴

The INDH had been collecting information on Quintero-Puchuncaví contamination and human rights violations in this way for more than six years. Consequently, the INDH had a significant amount of information on the situation before the litigation began. The amount of information was particularly relevant, given that—as discussed below—the constitutional protection action is a form of fast-track litigation, which lacks an evidentiary stage. The constitutional protection action's unique procedure necessitates thorough investigation before initiating such litigation.

The INDH conducted a new observation mission in 2018, which was composed of an interdisciplinary team of 17 people.⁷⁵ The mission aimed to gather further information on the environmental and health crisis of this historically contaminated territory. During this work, the INDH collaborated with various local organizations, including the citizen organization *Mujeres de Zona de Sacrificio en Resistencia* that recorded all instances of inhalation of toxic fumes in schools between 2008 and 2018.⁷⁶ Working with the local community not only allowed the INDH to obtain more information to generate strong and persuasive evidence, but also to strengthen ties with the victims and relevant actors, involving them early in the litigation process. Early involvement with local actors gave a voice to those directly affected and allowed the plaintiffs to put faces to the litigation.⁷⁷

Quintero_Puchuncavi_2018.pdf> [Quintero and Puchuncaví Zone Observation Mission Report] [translated by author].

⁷² See “Informe Anual 2014: Situación de los Derechos Humanos en Chile [Annual Report 2014: Human Rights Situation in Chile]” (December 2014), online (pdf): *Instituto Nacional de Derechos Humanos* <bibliotecadigital.indh.cl/handle/123456789/740>.

⁷³ See “Mapa de conflictos socioambientales de Chile [Map of socio-environmental conflicts in Chile]” (last visited 22 July 2022), online: *Instituto Nacional de Derechos Humanos* <mapaconflictos.indh.cl/>.

⁷⁴ *Ibid.*

⁷⁵ See Quintero and Puchuncaví Zone Observation Mission Report, *supra* note 71.

⁷⁶ See Valeria Carrasco Carreño et al, “Feminismo Popular y Territorios en Resistencia: La lucha de las Mujeres en la Zona de Sacrificio Quintero - Puchuncaví [Popular Feminism and Territories in Resistance: The Struggle of Women in the Quintero - Puchuncaví]” (2020) at 19–20, online (pdf): *Heinrich-Böll-Stiftung* <cl.boell.org/sites/default/files/2020-03/Feminismo%20Popular%20y%20Territorios%20en%20Resistencia%20%282020%29.pdf>.

⁷⁷ On the importance of victims' participation in the process see Duffy, *supra* note 9 at 258–260.

As the constitutional protection action is urgent in nature, once the action is filed, the process only allows for oral arguments before the judgment is issued. This poses a significant difficulty for the plaintiffs, who do not have an evidentiary stage to prove the rights violations. Thus, plaintiffs must have sufficient, reliable, and convincing information to present within the action; otherwise, they risk an early rejection. In the *Quintero Puchuncaví* case, this risk materialized when the court of appeals rejected the action, concluding that: “[w]e are, therefore, facing a particularly complex problem, in which it is necessary to determine responsibilities regarding a situation that may have many causes, all of which require thorough investigations and evidence to determine what they are in particular, what is the order of importance of each one in the final result of the atmospheric pollution crisis and who are actually responsible for those acts, all of which—already a priori—seems much more appropriate for a trial, than for an emergency action, which does not contemplate an evidentiary stage.”⁷⁸

In response to this rejection, the INDH and other plaintiffs filed an appeal before the Supreme Court, requesting that oral arguments be granted. Normally, because of the urgent nature of the constitutional protection action, the Supreme Court resolves the appeals immediately, without hearing the parties.⁷⁹ Nevertheless, this case had a high profile because of the extensive media coverage and large number of plaintiffs and defendants, and involved matters of special technical complexity (both scientific and legal). For these reasons, the Supreme Court exceptionally authorized the presentation of oral arguments.⁸⁰ This allowed the plaintiffs to humanize the conflict in the courtroom.

Since the emergency involved different private actors (the polluting companies) and public agencies (state agencies responsible for their regulation), 14 litigants sought to quash the appeal. In view of the multiple litigants arguing for rejection, the separate filings of appeals by the INDH, the Children’s Ombudsman’s Office, the environmental NGOs, the municipalities of Quintero and Puchuncaví, and some of the inhabitants of the municipalities was particularly relevant. 11 appeals were filed separately which allowed multiple arguments in favor of granting the action. The Supreme Court ruled that both the plaintiffs and defendants should appoint, according to their respective interests, a common legal defense for the purpose of making their oral arguments. Five oral arguments were made in favor of the action and four against it.⁸¹ Thus, there was a balance between the number of pleadings in favor of the action and against it.

⁷⁸ QP Appeals Court ruling, *supra* note 10 at para 6 [translated by author].

⁷⁹ See Humberto Nogueira Alcalá, “El Recurso de Protección en el Contexto del Amparo de los Derechos Fundamentales Latinoamericano e Interamericano [The Protection Action in the Context of the Latin American and Inter-American Protection of Fundamental Rights]” 2007 13:1 *Revista Ius et Praxis* 75 at s 3.6.4.

⁸⁰ *Ibid*; “Crisis en Quintero y Puchuncaví: terminan alegatos por recursos de protección en Corte Suprema [Crisis in Quintero and Puchuncaví: arguments for protection appeals in the Supreme Court have concluded]” (5 March 2019), online: *Fundación Terram* <terram.cl/2019/05/crisis-en-quintero-y-puchuncavi-terminan-alegatos-por-recursos-de-proteccion-en-corte-suprema/>.

⁸¹ See Corte Suprema de Justicia [Supreme Court], 28 May 2019, *Francisco Chahuan Chahuan c Empresa Nacional de Petroleos, ENAP SA*, Poder Judicial, No 5888-2019 (Certification of oral arguments at 1) (Chile).

In addition, the international NGO Human Rights Watch filed an *amicus curiae* brief before the court, “encouraging Chile’s Supreme Court to consider international law, human rights standards, and the environment as it considered whether the right to a pollution-free environment—guaranteed in Chile’s national constitution—had been violated.”⁸² *Amicus curiae* briefs are particularly relevant in litigation because they generally have an important influence on the court.⁸³ In this particular case, it also provided the Supreme Court with relevant technical grounds on which it could rule.⁸⁴

On May 28, 2019, the Supreme Court granted the constitutional protection action, ordering several measures to protect and guarantee the right to physical and psychological integrity and the right to a healthy environment for those affected.⁸⁵ The results of this litigation—including the content of the judgment—will be analyzed in the next section. It must be noted that this litigation process is ongoing. There is a continued pursuit to ensure the timely and effective implementation of the Supreme Court’s ruling. This includes the presentation of reports on compliance with the judgment in 2020 and 2021 by the Ministry of Environment and the Ministry of Health before the court of appeals, and the filing of a complaint against the court of appeals to prevent the case from being closed, which is currently pending in the Supreme Court.⁸⁶ Additionally, some of the plaintiffs have filed two complaints before the Second Environmental Court of Santiago arguing that the Ministry of Environment has not complied with measures ordered by the Supreme Court. These complaints are also pending.⁸⁷ Beyond the outcome of these complaints, the plaintiffs’ subsequent efforts have been instrumental in ensuring the defendants implement and fulfill the court’s orders.

⁸² “Chile’s ‘Clean Air’ Ruling Offers Hope on World Environment Day”, online: *Human Rights Watch* <hrw.org/news/2019/06/05/chiles-clean-air-ruling-offers-hope-world-environment-day>. For the full brief, see “Amicus Curiae Brief Regarding Human Rights and the Environment before the Honorable Supreme Court of Chile: Case No. 5888-2019, Captioned Francisco Chahuan Chahuan versus Empresa Nacional de Petróleos, ENAP S.A”, online (pdf): *Human Rights Watch* <hrw.org/sites/default/files/supporting_resources/quintero_amicus_brief_english.pdf>.

⁸³ See Joseph D Kearney & Thomas W Merrill, “Influence of Amicus Curiae Briefs on the Supreme Court” (2000) 148:3 U Pa L Rev 743 at 745.

⁸⁴ See “Chile: la Corte Suprema decide caso de contaminación masiva del aire [Chile: Supreme Court decides massive air pollution case]” (11 April 2019), online: *Human Rights Watch* <hrw.org/es/news/2019/04/11/chile-la-corte-suprema-decide-caso-de-contaminacion-masiva-del-aire>.

⁸⁵ See QP Supreme Court ruling, *supra* note 10 at 74–78.

⁸⁶ See Corte Suprema de Justicia [Supreme Court], 3 May 2022, *Francisco Chahuan Chahuan c Empresa Nacional de Petróleos, ENAP SA*, No 154690-2020 (Chile) [Case No 154690-2020].

⁸⁷ See Segundo Tribunal Ambiental [Second Environmental Tribunal], Santiago, 14 October 2020, *Alonso Raggio, Katta Beatriz y otros c del Ministerio del Medio Ambiente* (2021), 110 Actualidad Jurídica Ambiental 136 at 1–2, No 210-2019 (Chile) [Case No 210-2019]; Segundo Tribunal Ambiental [Second Environmental Tribunal], Santiago, 10 March 2022, *González Romo Mercedes Agustina y otros c del Ministerio del Medio Ambiente*, Tribunal Ambiental Santiago Chile at 4–7, No 285-2021 (Chile) [Case No 285-2021]. The complaint in Case No 210-2019 was rejected by the Second Environmental Tribunal, but the plaintiffs have filed an appeal to the Supreme Court, which is currently pending: see Corte Suprema de Justicia [Supreme Court], 2020, *Alonso c Ministerio del Medio Ambiente (A)*, Poder Judicial, No 149171-2020 (Chile).

Table 1: Litigation Process in the *Quintero Puchuncaví* Case

Before	Clear identification of the pollution problem and human rights affected
	Continuous data collection
	Start of a new emergency
	Significant media coverage
	Contact with the community and local social organizations
During	Multiple plaintiffs (INDH, Ombudsman for Children, and recognized NGOs)
	Oral arguments before the Supreme Court
	Involvement of affected persons
	Amicus curiae brief
After	Continuous follow-up and monitoring
	Complaint against court of appeals before the Supreme Court
	Complaints against the Ministry of Environment before the Second Environmental Court

4.1.2. RESULTS

While it is difficult to evaluate and quantify the results of strategic human rights litigation, it is possible to identify litigation’s material, instrumental, and nonmaterial impacts. On May 28, 2019, the Supreme Court granted the constitutional protection actions. The ruling explicitly acknowledged the serious pollution of the Quintero and Puchuncaví bay and the state’s failure to resolve it. Indeed, the Supreme Court stated that: “[a]s has been established in the foregoing, the several failures to act committed by the bodies of the Executive Branch, these are, the Ministry of Environment [and] the Ministry of Health ... constitute serious illegal omissions that ... at the same time, have violated the rights invoked by the plaintiffs and which are guaranteed by the Constitution.”⁸⁸

In the ruling, the Supreme Court recognized that the inaction of public bodies dates back many years, and that this inaction has constituted a failure to guarantee the physical and psychological well-being of the residents of the Quintero and Puchuncaví territory. There was a judicial vindication and a truth previously known only to the inhabitants of the area became a national reality: there is serious historical contamination in this territory and the

⁸⁸ QP Supreme Court ruling, *supra* note 10 at para 32 [translated by author].

state abandoned the territory's inhabitants.⁸⁹ Consequently, the ruling had an important nonmaterial impact, namely establishing new truths and narratives. Indeed, the new reality modified the cultural, social, and political narrative by expanding the concept of "sacrifice zone" in Chilean discourse.⁹⁰ The notion of sacrifice zones establishes a direct relationship between environmental precariousness and human rights. During the litigation and subsequent ruling, this concept became generalized. Due to the expansion of this concept, other territories have been identified as sacrifice zones.⁹¹

Additionally, the Supreme Court's ruling incorporated different principles of international and national environmental law. The well-known precautionary and preventative principles of environmental law were directly applied in the judgment. Likewise, the principle of "sustainable development" was explicitly recognized as a normative element (a primary rule).⁹² From these principles, the Supreme Court concluded that economic development in the Ventanas Industrial Park had been carried out without implementing appropriate environmental

⁸⁹ The judgment transcribes verbatim the following excerpt from the Report of the Investigating Commission of the Chilean Chamber of Deputies: "[...] the population affected by the contamination of Puchuncaví and Quintero has been subject to environmental discrimination by bearing disproportionate environmental burdens, and it is the duty of the State and society to take responsibility for decades of neglect" [translated by author]: *ibid* at para 22.

⁹⁰ *Ibid* at para 57. The QP Supreme Court ruling, and paragraph 57 in particular, has been reproduced by different media when referring to sacrifice zones. See e.g. Rodrigo Aliaga & Andrea Bustos, "El sacrificio es el mismo: Quintero y Puchuncaví a un año del fallo de la Corte Suprema [The sacrifice is the same: Quintero and Puchuncaví one year after the Supreme Court ruling]", *Diario Uchile: Radio Universidad de Chile* (27 May 2020), online: <radio.uchile.cl/2020/05/27/el-sacrificio-es-el-mismo-quintero-y-puchuncaví-a-un-año-del-fallo-de-la-corte-suprema/>; Natalia A Ramos Miranda, "Las 'zonas de sacrificio medioambiental' en Chile buscan respiro en una nueva Constitución [Chile's 'environmental sacrifice zones' seek relief in a new Constitution]", *Reuters* (22 December 2020), online: <reuters.com/article/chile-ambiente-constitucion-idLTAKBN28W1CX>; Marie Claude Plumer & Rocío Parra Cortés, "Fallo de la Corte Suprema por Quintero-Puchuncaví: algo más que una victoria pírrica [Supreme Court ruling for Quintero-Puchuncaví: more than a pyrrhic victory]", *El Mostrador* (1 June 2019), online: <elmostrador.cl/noticias/opinion/columnas/2019/06/01/fallo-de-la-corte-suprema-por-quintero-puchuncaví-algo-más-que-una-victoria-pírrica/>. See also Pilar León Pardo, *Tierra Amarilla, Zona de Crisis Medioambiental: Problemas y consecuencias en sus habitantes* [Tierra Amarilla, environmental crisis zone: Problems and consequences for its inhabitants] (Instituto de Comunicación e Imagen, Universidad de Chile, 2021) [unpublished] at 5; Alejandra Donoso Cáceres, "Zonas de sacrificio y justicia ambiental: comentario a la sentencia de la Corte Suprema Rol No 5.888-2019 [Sacrifice zones and environmental justice: commentary on the Supreme Court decision No 5.888-2019]" (2019) 1 *Anuario de Derecho Público* Universidad Diego Portales 209. For more information on the notion of sacrifice zones see Cristián Opazo, "Zonas de sacrificio: Tú amarás, de Pablo Manzi [Sacrifice Zones: Tú amarás [You will love], by Pablo Manzi]" (2021) 68 *Taller de Letras* 239.

⁹¹ See "Las cinco zonas de sacrificio de Chile [Chile's five sacrifice zones]" (last visited 06 October 2022), online: *Fundación Terram* <terram.cl/carbon/2019/06/las-cinco-zonas-de-sacrificio-de-chile/>.

⁹² For more details on the use of environmental principles in the judgment, see Natalia Labbé Céspedes & Pedro Palma Calorio, "Comentario Jurisprudencia: Excelentísima Corte Suprema. Rol 5888-2019 Caratulado 'Francisco Chahuan Chahuan contra Empresa Nacional de Petroleos, Enap S.A.' [Case Commentary: Supreme Court. No.5888-2019 Captioned 'Francisco Chahuan Chahuan Chahuan against Empresa Nacional de Petroleos, Enap S.A.']" (December 2019) 11 *Justicia Ambiental y Climática* 249 at 266–268.

protection measures, and that the Park had been an important source of pollution for the environment of these communities, generating episodic and continuous contamination.⁹³

The direct application of environmental principles in the ruling had an important instrumental impact: it generated a legal precedent regarding the role environmental principles play in the judicial sphere, and modified the strategies of actors who litigate environmental human rights claims. In other words, the ruling created new jurisprudence regarding the relevance of the founding principles of environmental law, which influences the structure of current litigation strategies. Indeed, after the decision, litigators began to articulate and frame their arguments around the precautionary and preventative principles.⁹⁴ In addition, given that the Supreme Court granted the action, the ruling—in conjunction with others issued by the Supreme Court during this period of time—prompted increased use of the constitutional protection action for socio-environmental conflicts.⁹⁵

Regarding the material impacts of the ruling, the Supreme Court ordered the state—specifically the Ministry of Environment and Ministry of Health—to implement several measures to decontaminate the area. The Court structured the measures in three stages: (i) clearly identifying the existing pollutants in the area and their sources, (ii) evaluating appropriate measures to control the pollutants, and (iii) implementing the identified measures.⁹⁶ Although full and effective compliance with the ruling is the subject of ongoing litigation,⁹⁷ the ruling has had an immediate impact on the state, which has responded with various actions related to air, soil, and water quality in the Quintero Puchuncaví territory.

For example, the Ministry of Environment has implemented a monitoring network for atmospheric pollutants and an atmospheric decontamination plan for the area,⁹⁸ and is currently preparing a new environmental quality standard for sulfur dioxide.⁹⁹ Additionally,

⁹³ See QP Supreme Court ruling, *supra* note 10 at paras 33–34.

⁹⁴ See e.g. Corte de Apelaciones [Court of Appeals], Santiago, 28 October 2020, *Fundación Terram c Subsecretaría de Salud Pública*, Poder Judicial at 4, 9, No 59034-2020 (Chile); Corte de Apelaciones [Court of Appeals], Valdivia, 3 June 2021, *Varens c Servicio Nacional de Pesca y Acuicultura*, Poder Judicial at 5–6, No 155-2021 (Chile); Corte de Apelaciones [Court of Appeals], Arica, 5 July 2021, *Colque c Bogado Ingenieros Consultores SA*, Poder Judicial at 24–26, No 114-2021 (Chile).

⁹⁵ On the expansion of the constitutional protection action for socio-environmental conflicts see Pedro Harris, “El desarrollo jurisprudencial del recurso de protección ambiental y su vigencia frente a la jurisdicción especializada [The jurisprudential development of the environmental protection action and its validity before specialized jurisdiction]” (2021) at 5–7, online (pdf): *Biblioteca del Congreso Nacional de Chile (BCN)* <obtienearchivo.bcn.cl/obtienearchivo?id=repositorio/10221/32240/1/Informe_PH_recurso_de_proteccio_n.pdf>.

⁹⁶ See QP Supreme Court ruling, *supra* note 10 at 74–78.

⁹⁷ See Case No 154690-2020, *supra* note 86; Case No 210-2019, *supra* note 87; Case No 285-2021, *supra* note 87.

⁹⁸ See “Nueva Red de Monitoreo para las comunas de Concón, Quintero y Puchuncaví comienza su implementación a partir del segundo semestre [New Monitoring Network for the municipalities of Concón, Quintero and Puchuncaví]” (15 February 2021), online: *Ministerio del Medio Ambiente* <mma.gob.cl/nueva-red-de-monitoreo-para-las-comunas-de-concon-quintero-y-puchuncavi-comienza-su-implementacion-a-partir-del-segundo-semester/>.

⁹⁹ See “Portal de Planes y Normas [Plans and Standards Electronic Platform]” (last visited 22 July 2022), online: *Ministerio del Medio Ambiente* <planesynormas.mma.gob.cl/>.

the Ministry of Environment is creating an air quality standard for volatile organic compounds and a water quality standard for the bay of Quintero and Puchuncaví.¹⁰⁰ These are only some of the new regulations that the Ministry of Environment is developing to improve environmental quality in the Quintero and Puchuncaví area.¹⁰¹

Some legal scholars consider the measures ordered by the Supreme Court to be an “interference” with executive power over the design and implementation of environmental public policies.¹⁰² In this regard, some criticize the Supreme Court as having appointed itself as a super-authority of the executive branch.¹⁰³ Moreover, the ruling has been criticized as having distorted the constitutional protection action, which is intended to provide concrete and immediate remedies.¹⁰⁴ Notwithstanding these concerns, these measures have had a positive environmental and social impact. There are already evaluations demonstrating the improvements in the area’s air quality.¹⁰⁵

After this litigation, the state also began to pay special attention to the environmental management of other territories identified as sacrifice zones, such as Huasco, Coronel, Tocopilla, and Mejillones.¹⁰⁶ This is an important nonmaterial impact, although it is difficult to establish a direct causal link between the litigation and the state’s new regulatory approach. It is clear, however, that media coverage gave national visibility to historical environmental injustices in other regions of the country.

Finally, the *Quintero Puchuncaví* case has had the nonmaterial impact of raising collective awareness among the inhabitants in the Valparaíso region of the importance of environmental protection for the full enjoyment of human rights. This is evidenced by the latest gubernatorial elections. The recently elected governor of Valparaíso, Rodrigo Mundaca Cabrera, is a well-

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*

¹⁰² For an analysis of the judgment from a division of powers perspective, see Edesio Carrasco Quiroga & Consuelo Toresano Kuzmanic, “El caso Quintero-Puchuncaví y la eficacia de la acción de protección como mecanismo institucional de solución de conflictos socioambientales [The Quintero-Puchuncaví case and the effectiveness of the constitutional remedy as an institutional mechanism of socio-environmental conflicts resolution]” (2019) 4 *Revista de Derecho Aplicado LLM UC* 1.

¹⁰³ See Luis Alejandro Silva Irrazábal, “Jueces y política [Judges and politics]”, *La Tercera* (1 June 2019), online: <latercera.com/opinion/noticia/jueces-y-politica-4/680051/>.

¹⁰⁴ See Carrasco Quiroga & Toresano Kuzmanic, *supra* note 102 at 11–13.

¹⁰⁵ The Chilean Ministry of Environment has set up an online platform for continuous assessment of air quality in the area: see “¿Cómo está la Calidad del Aire ahora? Concón - Quintero - Puchuncaví [What is the Current Air Quality? Concón - Quintero - Puchuncaví]” (last visited 22 July 2022), online: *Ministerio del Medio Ambiente* <airecqp.mma.gob.cl/> [CQP air quality platform].

¹⁰⁶ Formally identified by the Ministry of Environment as “Environmentally Vulnerable Territories”. See “Programa para la Recuperación Ambiental y Social [Environmental and Social Recovery Program]” (last visited 22 July 2022), online (video): *Ministerio del Medio Ambiente* <pras.mma.gob.cl/>; Enrique Vivanco Font, “Zonas de sacrificio en Chile: Quintero-Puchuncaví, Coronel, Mejillones, Tocopilla y Huasco [Sacrifice zones in Chile: Quintero-Puchuncaví, Coronel, Mejillones, Tocopilla, and Huasco]” (July 2022), online (pdf): *Biblioteca del Congreso Nacional de Chile (BCN)* <bcn.cl/obtienearchivo?id=repositorio/10221/33401/1/BCN_Zonas_de_sacrificio_en_Chile_2022_FINAL.pdf>.

known environmental advocate and spokesperson for the Movement for the Defense of Water, Land, and Environmental Protection.¹⁰⁷

This case had various impacts: material, instrumental, and nonmaterial. These impacts are not limited to the legal sphere; rather, they extend to the social and political sphere. The Supreme Court’s ruling had a significant material impact. Further, the visibility of the case and its media coverage, among other elements, facilitated changes in the way Chileans perceive environmental issues. Now, they are viewed not as a scientific and technical problem but as a social problem, thus enabling an important turn towards human rights.

Table 2: Litigation Results of the *Quintero Puchuncaví* Case

Material im- pacts	Several direct decontamination measures ordered
Instrumental impacts	Constitutional protection action as a viable legal tool for strategic human rights litigation
	Public attention to the issue
	New jurisprudence regarding the relevance of the founding principles of environmental law
Nonmaterial impacts	Affirming the power of victims and others
	Establishing truths and new narratives: illegal omissions by the state and sacrifice zones
	Citizen empowerment
	Pressure on the government to address other sacrifice zones
	Collective consciousness and political impacts (e.g., gubernatorial elections)

¹⁰⁷ See “Elección a Gobernadores 2021 Región de Valparaíso [Election of Governors 2021 Valparaíso Region]” (last visited 22 July 2022), online: *Epicentro Chile* <epicentrochile.com/eleccion-a-gobernadores-2021-region-de-valparaiso_rodrigo_mundaca/>.

4.2. THE *COPIAPÓ TIERRA AMARILLA* CASE

Chile has historically been a mining country, with substantial metallic mine development occurring since the nineteenth century.¹⁰⁸ In 1952, the state-owned company Hernán Videla Lira (“HVL”) installed a smelter in the town of Paipote, between the municipalities of Copiapó and Tierra Amarilla, Atacama Region, Chile. In the following years, several other mining projects were installed in this territory including the *Candelaria* and *Alcaparrosa* projects, owned by the US mining company Freeport-McMoRan; *Ojos del Salado*, owned by the Canadian company Lundin Mining Corporation; *Atacama Kozan*, owned by the Japanese company Nittetsu; and *Cerro Casale*, owned by Canadian mining giants Kinross and Barrick Gold.¹⁰⁹

This industrial expansion continuously increased mining waste in the area. According to official data from the Chilean National Geology and Mining Service—the public agency that monitors mining projects—there are currently 168 mining waste deposits in the Atacama Region,¹¹⁰ more than 20 percent of total Chilean mining waste deposits.¹¹¹ Of the 168 mining waste deposits in the Atacama Region, 123 are located in the territory of Copiapó and Tierra Amarilla.¹¹² Thus, these territories harbor 73 percent of the mining waste deposits in the Atacama Region and more than 15 percent of the country’s total mining waste deposits.¹¹³

Once again, given the lack of environmental regulation when the mining projects began and the absence of proper land-use planning, many of these mining waste deposits—some abandoned—are near populated areas. As some of the deposits are less than one kilometer away,¹¹⁴ they affect not only the environment but also the health of the nearby inhabitants. In the Copiapó and Tierra Amarilla area, these mining operations have caused other environmental problems, including blasting associated with mining activity, spills and water pollution, and indiscriminate use of water and resulting water scarcity.¹¹⁵ The Ministry of Environment has also

¹⁰⁸ See Julio Pinto Vallejos, “Historia y minería en Chile: estudios y fuentes [History and mining in Chile: studies and sources]” (1994) 1:1 *América Latina en la Historia Económica* 65 at 67–78.

¹⁰⁹ There are also the projects Punta del Cobre (“Pucobre”), Mina Carola, Salares Maricunga, Cerro Casale, Mantos de Oro, and Caspiche, among another 75 mining projects: “Catastro de Unidades Fiscalizables [Registry of Fiscal Units]” (last visited 17 August 2022), online: *Sistema Nacional de Información de Fiscalización Ambiental* <snifa.sma.gob.cl/UnidadFiscalizable>.

¹¹⁰ “Catastro de Depósitos de Relaves en Chile [Registry of Tailings Deposits in Chile]” (last modified 10 August 2020), online: *Servicio Nacional de Geología y Minería* <sernageomin.cl/wp-content/uploads/2020/08/CDR_CHILE_10_08_2020.xls>.

¹¹¹ *Ibid.*

¹¹² *Ibid.*

¹¹³ *Ibid.*

¹¹⁴ See Maritza Calderón & Francisco Miranda, “Evaluación ambiental preliminar en los campamentos de Diego de Almagro, Copiapó y Tierra Amarilla próximos a sitios de minería metálica [Preliminary environmental assessment on campamentos of Diego de Almagro, Copiapó and Tierra Amarilla near mining tailings]” (2018) 15:25 *Revista CIS* 35 at 37.

¹¹⁵ See “Informe Misión de Observación: Copiapó y Tierra Amarilla [Observation Mission Report: Copiapó and Tierra Amarilla]” (December 2018) at 63–65, online (pdf): *Instituto Nacional de Derechos Humanos* </bibliotecadigital.indh.cl/bitstream/handle/123456789/1184/mision-copiapo-2018.pdf?sequence=3&isAllowed=y> [INDH Report 2018].

identified high concentrations of sulfur dioxide and particulate matter in the air.¹¹⁶ According to recent air quality studies, these mining operations contribute more than 85 percent of the pollutants affecting the territories of Copiapó and Tierra Amarilla.¹¹⁷

Although this situation originated decades ago, and some measures have been established to control the pollution, these problems have persisted. In 1993, the area was declared contaminated by sulfur anhydride and a decontamination plan was implemented. Nevertheless, the sulfur dioxide level remains high and generates constant health problems in the population.¹¹⁸ In the last decade, there have been continuous episodes of environmental and health emergencies in this territory.¹¹⁹ In 2011, two critical episodes of air pollution (high concentrations of sulfur anhydride and particulate matter) were recorded in two weeks, affecting hundreds of students.¹²⁰ In 2012, 2016, and 2018, new emergency episodes were recorded.¹²¹

The tipping point for the community, however, occurred in 2019. Due to a sudden increase of fumes from the HVL smelter, there was a serious increase in sulfur dioxide pollution.¹²² Almost one hundred people visited emergency services.¹²³ There was a general displeasure among the population of Copiapó and Tierra Amarilla, who could no longer bear to live under these conditions. They protested in large numbers. The mayor of Tierra Amarilla himself summoned more than one hundred people to march in protest of the toxic fumes.¹²⁴ This incident in 2019, although serious, was not new for the community. Like in the *Quintero*

¹¹⁶ See “Antecedentes técnicos medidas de descontaminación para material particulado respirable Copiapó y Tierra Amarilla [Technical background decontamination measures for respirable particulate matter Copiapó and Tierra Amarilla]” (April 2019) at vii, online (pdf): *Ministerio del Medio Ambiente* <catalogador.mma.gob.cl:8080/geonetwork/srv/spa/resources.get?uuid=b1746244-c84b-4b62-b3fb-d5f7348e6906&fname=Informe%20Final_Ant%20Tecnicos%20Descontaminaci%C3%B3n%20Coppo_TAMA.pdf&access=public>.

¹¹⁷ *Ibid.*

¹¹⁸ See “Conflicto: Fundición Paipote [Conflict: Paipote Smelter]” (last visited 23 July 2022), online (pdf): *Instituto Nacional de Derechos Humanos* <mapaconFLICTOS.indh.cl/#/conflicto/28>.

¹¹⁹ *Ibid.*

¹²⁰ *Ibid.*

¹²¹ *Ibid.*; “Fundición de cobre Paipote (Videla Lira), Chile [Paipote Copper Smelter (Videla Lira), Chile]” (last visited October 6 2022), online: *Global Atlas of Environmental Justice* <ejatlas.org/print/fundicion-paipote-videla-lira-chile>; Rodrigo Fuentes, “Fundición de Paipote: vecinos de Tierra Amarilla interponen recurso de protección por daños a su salud [Paipote smelter: residents of Tierra Amarilla file a protection action for health damages]”, *Diario Uchile: Radio Universidad de Chile* (15 May 2019), online: <radio.uchile.cl/2019/05/15/fundicion-de-paipote-vecinos-de-tierra-amarilla-interponen-recurso-de-proteccion-por-danos-a-la-salud/>.

¹²² See Fuentes, *supra* note 121.

¹²³ *Ibid.*

¹²⁴ See “Tierra Amarilla marcharán por la contaminación de Enami [Tierra Amarilla will march against Enami contamination]”, *Enfoque Digital* (18 April 2019), online: <enfoquedigital.cl/tierra-amarilla-marcharan-por-la-contaminacion-de-enami/>; “Marcharán en contra de ENAMI este jueves [March against ENAMI this Thursday]”, *Atacama Noticias* (17 April 2019), online: <atacamanoticias.cl/2019/04/17/marcharan-en-contra-de-enami-este-jueves/?fb_comment_id=2457935027570236_2457997694230636>.

Puchuncaví case, the environmental problems in this territory date back 50 years, making it another area of historical contamination.

4.2.1. THE COPIAPÓ TIERRA AMARILLA LITIGATION PROCESS

At the peak of this health and environmental emergency, the INDH filed another constitutional protection action against the Ministry of Environment, the Ministry of Health, and HVL. Similar to the *Quintero Puchuncaví* case, this action was based mainly on the state's failure to protect and guarantee the right to physical and mental health and the right to a healthy environment for the sector's inhabitants. Strangely, unlike the *Quintero Puchuncaví* case—and despite the significant effects on children and young students—the Chilean Ombudsman for Children did not file an action in this litigation. This body's failure to appear seemed to arise from a lack of coordination between institutions, rather than a lack of will. Neither the mayors of the municipalities of Copiapó and Tierra Amarilla, nor any NGOs, filed an action.

Additionally, although the litigation process began in the midst of the emergency, there was no significant media coverage. The situation in the region was dire, but little information was known about the emergency in the rest of the country, largely because these communities are far from the capital and relatively isolated.¹²⁵ The lack of relevant human rights and environmental institutions as plaintiffs and the absence of media coverage meant that the litigation was not as strong at the outset as that of the *Quintero Puchuncaví* case.

Nevertheless, this critical situation of contamination was well-known to the INDH, which had already conducted two observation missions in 2015¹²⁶ and 2018,¹²⁷ during which they investigated human rights violations due to the mining operations in the area. This investigation focused on air and water pollution, as well as the risks associated with the use of hazardous chemicals in production.¹²⁸ The observation mission in 2018 included nine people, significantly less than the group of 17 who carried out the *Quintero Puchuncaví* mission in the same year. During this mission, some social leaders in the affected localities were interviewed. Nonetheless, the INDH did not establish strong links with relevant civil groups and actors to build a coalition that would allow it to collect relevant information on the multiple episodes that had occurred in previous years. This was replicated in the trial: the inhabitants and civil groups affected were not involved at this stage. The lack of involvement of local actors meant that their voices were not present, nor were their faces, which hindered a stronger commitment from the court to the case.

The INDH had, however, collected important information before this incident. During the 2018 observation mission, the INDH concluded that “suspended dust, constant blasting,

¹²⁵ Chile is a unitary state that has suffered from excessive centralism for decades: see Egon Montecino, “Antecedentes sobre la relación histórica centralismo y descentralización en Chile [Background on the historical relationship between centralism and decentralization in Chile]” (2005) 10:31 *Revista Venezolana de Gerencia* 443 at Section 11.

¹²⁶ See “Informe Misión de Observación: Comunas de Copiapó, Tierra Amarilla y Chañaral [Observation Mission Report: Towns of Copiapó, Tierra Amarilla, and Chañaral]” (July 2015), online (pdf): *Instituto Nacional de Derechos Humanos* <bibliotecadigital.indh.cl/bitstream/handle/123456789/883/mision-copiapo-tierra-amarilla.pdf?sequence=3&isAllowed=y> [INDH Report 2015].

¹²⁷ See INDH Report 2018, *supra* note 115.

¹²⁸ *Ibid* at 60.

mining waste, water shortages, among other variables, imply that the right to live in a pollution-free environment is not being safeguarded by the state¹²⁹ and that “there is sufficient empirical evidence to affirm that the presence of contaminants such as lead and mercury in the mining area of the communes of Copiapó and Tierra Amarilla is seriously affecting people’s right to health.”¹³⁰

Since 2015, and with greater clarity in 2018, the INDH had already concluded the intense mining exploitation near Copiapó and Tierra Amarilla seriously violated human rights,¹³¹ but it did not file any legal action at that time. Instead, the INDH waited for a new environmental and health emergency that would allow it to exercise, as in the *Quintero Puchuncaví* case, the constitutional protection action, which by its nature only proceeds for emergency cases that require an urgent solution.¹³²

As mentioned previously, this urgent action involves risks, specifically those associated with the significant evidentiary burden that must be met when filing the action. Once the action has been filed, the court only considers oral arguments and then issues its judgment.¹³³ This poses a significant difficulty for the plaintiffs, who do not have an evidentiary stage to prove the rights violations and the responsibilities of companies and the state. In the *Copiapó Tierra Amarilla* case, this was particularly challenging because, although observation missions were carried out in 2015 and 2018, the information gathered did not refer directly to the events in 2019 that grounded the action.

Moreover, the INDH was the only institution that filed an action during this emergency. Consequently, it could only present the information it had gathered, without the possibility of complementing it with information held by the municipalities, the Children’s Ombudsman’s Office, or human rights NGOs. The *Quintero Puchuncaví* case demonstrates the respective roles of these institutions: the municipality provides detailed information on the local context, the ombudsman’s office emphasizes the seriousness of the situation due to the involvement of children, and the NGOs contribute with their past experiences in other regions or countries.¹³⁴

The Ministry of Environment, the Ministry of Health, and HVL all opposed the action. Each of these actors presented lengthy briefs explaining the complexity of the problem presented to the court, and the reasons why it was not justiciable.¹³⁵ Mainly, these actors argued that the constitutional protection action, due to its urgency, was not the appropriate legal

¹²⁹ *Ibid* at 63 [translated by author].

¹³⁰ *Ibid* at 65 [translated by author].

¹³¹ See INDH Report 2015, *supra* note 126; INDH Report 2018, *supra* note 115.

¹³² See “INDH presenta recurso de protección por contaminación minera con azufre y arsénico en Atacama [INDH files protection action for mining contamination with sulfur and arsenic in Atacama]” (15 May 2019), online: *Instituto Nacional de Derechos Humanos* <indh.cl/indh-presenta-recurso-de-proteccion-por-contaminacion-minera-con-azufre-y-arsenico-en-atacama/>.

¹³³ See Corte Suprema de Justicia [Supreme Court], 17 July 2015, *Acta número 94-2015* (Chile), arts 3–6.

¹³⁴ See INDH claim, *supra* note 61; Ombudsman for Children claim, *supra* note 61.

¹³⁵ See e.g. Corte de Apelaciones [Court of Appeals], Copiapó, 11 October 2019, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 101-2019 (Factum of the Respondent Chilean National Mining Company at 2–40) (Chile).

action to discuss issues of high technical complexity.¹³⁶ Additionally, they claimed that the law provides specific procedures to discuss and challenge the legality of government acts.¹³⁷ Finally, they alleged that evaluating and elaborating environmental and health policies, plans, and standards to address the pollution problem is under the executive branch's power and not that of the judiciary.¹³⁸

The imbalance between the parties was reflected in the oral arguments, where the INDH was the only institution requesting that the action be granted while three strong adversaries requested that it be rejected. In this sense, there were unequal forces in the procedure. On this occasion, no recognized NGO or human rights scholar presented an *amicus curiae* brief to provide background information on the correct application of a human rights approach based on international and national constitutional law, which could have assisted the action.

Approximately one month after the oral arguments, on October 11, 2019, the court of appeals granted the constitutional protection action. It was only granted regarding HVL, however, and did not attribute any responsibility to the Ministry of Environment or the Ministry of Health. The court held that HVL failed to properly maintain the plant's meteorological system, which was necessary for the control of sulfur dioxide emissions, and that it had failed to adopt the necessary operational measures to reduce those emissions.¹³⁹ The court ordered the smelter to correct its meteorological system and to incorporate all necessary technological improvements to avoid the increase of sulfur dioxide.¹⁴⁰

The court ruled that, as the Ministry of Environment and the Ministry of Health had acted with diligence, neither was responsible for the pollution incident.¹⁴¹ Additionally, the court of appeals stated that: “[a]s the protection action is based on the pollution that has historically existed in the area of Tierra Amarilla, it is appropriate to declare the formal inadmissibility of this action because it is not the appropriate way to seek substantive or permanent solutions regarding historical situations of environmental contamination.”¹⁴²

Consequently, from a strictly legal stance, the action was successful. Nonetheless, it only referred to one of the mining companies, and did not hold any state agency accountable. These state agencies are responsible for creating policies, plans, and programs to protect and guarantee

¹³⁶ See e.g. Corte de Apelaciones [Court of Appeals], Copiapó, 11 October 2019, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 101-2019 (Factum of the Respondent Chilean Ministry of Health at 1–5) (Chile) [Copiapó Health Ministry Factum]; Corte de Apelaciones [Court of Appeals], Copiapó, 11 October 2019, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 101-2019 (Factum of the Respondent Chilean Ministry of Environment at 6–10) (Chile) [Copiapó Environment Ministry Factum].

¹³⁷ See Copiapó Health Ministry Factum, *supra* note 136 at 1–5; Copiapó Environment Ministry Factum, *supra* note 136 at 6–10.

¹³⁸ See Copiapó Health Ministry Factum, *supra* note 136 at 1–5; Copiapó Environment Ministry Factum, *supra* note 136 at 6–10.

¹³⁹ See CTA Appeals Court ruling, *supra* note 11 at 30.

¹⁴⁰ *Ibid* at 35.

¹⁴¹ *Ibid* at 33–34.

¹⁴² *Ibid* at 32 [translated by author].

the rights to health and a healthy environment,¹⁴³ which could limit future contamination and consequent violations of these rights.

Both the INDH and the mining company appealed the ruling. The former requested that the ministries be found liable for failing to implement an adequate regulatory framework to prevent further infringement of the rights of the inhabitants of the Copiapó and Tierra Amarilla sectors.¹⁴⁴ The mining company requested the rejection of the action and argued its responsibility could not be different from that of the state agencies that were not found guilty.¹⁴⁵ The smelter also highlighted its consistent compliance with regulations applicable to the mining industry in asserting that it had not acted illegally or unreasonably.¹⁴⁶

On appeal, the INDH requested that the Supreme Court grant oral arguments. This request was not well-founded. The INDH only stated that “the Supreme Court hear arguments from this party, bearing in mind the relevance and complexity of this action for protection,”¹⁴⁷ without explaining the specific relevance and complexity of the subject matter. The Supreme Court ruled without hearing the parties.¹⁴⁸ The absence of oral arguments was clearly a setback in the strategy of the INDH as it could not humanize the conflict by demonstrating that it was not only about norms but about people.

On July 14, 2020, the Supreme Court rejected the INDH’s appeal and granted the mining company’s appeal, completely rejecting the constitutional protection action against all defendants.¹⁴⁹ This does not mean, however, that this litigation has not generated positive impacts, which will be analyzed in the following section.

¹⁴³ See *Ley no 19.300 - Ley sobre bases generales del medio ambiente* [Environmental Act], BCN, 1 March 1995 (Chile), arts 69, 70; *DFL 1 - Fija texto refundido, coordinado y sistematizado del Decreto Ley no 2.763, de 1979 y de las Leyes no 18.933 y no 18.469* [Health Act no. 1], BCN, 23 September 2005 (Chile), art 4.

¹⁴⁴ See e.g. Corte de Apelaciones [Court of Appeals], Copiapó, 11 October 2019, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 101-2019 (Appeal of the Plaintiff INDH at 10–12) (Chile).

¹⁴⁵ See e.g. Corte de Apelaciones [Court of Appeals], Copiapó, 11 October 2019, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 101-2019 (Appeal of the Respondent Chilean National Mining Company at 1–12) (Chile).

¹⁴⁶ *Ibid* at 3–5. The illegality and unreasonableness of the act are essential elements for the constitutional protection action to be granted: see *Constitución Política de la República de Chile* [Constitution Act, Chile], BCN, 17 September 2005, art 20.

¹⁴⁷ Corte Suprema de Justicia [Supreme Court], 14 July 2020, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 29799-2019 (Request to become a party to the proceedings and oral arguments of the Appellant INDH at 1) (Chile).

¹⁴⁸ See Corte Suprema de Justicia [Supreme Court], 14 July 2020, *Instituto Nacional de Derechos Humanos c Superintendencia del Medio Ambiente*, Poder Judicial, No 29799-2019 (Supreme Court Certificate of Agreement) (Chile).

¹⁴⁹ See CTA Supreme Court ruling, *supra* note 11 at 6.

Table 3: Litigation Process in the *Copiapó Tierra Amarilla* Case

Before	Clear identification of the pollution problem and human rights affected
	Continuous data collection
	Start of a new emergency
	No significant media coverage
	Low contact with the community and local social organizations
During	One plaintiff: INDH (no Ombudsman for Children or recognized NGOs).
	No oral arguments before the Supreme Court
	No involvement of affected individuals and organizations
	No amicus curiae brief
After	No continuous follow-up

4.2.2. RESULTS

In July 2020, the Supreme Court rejected the INDH constitutional protection action and did not attribute any liability to the state.¹⁵⁰ The Supreme Court noted that the public institutions for the environment and health acted in due time and within their powers.¹⁵¹ The Supreme Court indicated that the state carried out inspection activities and took the necessary steps to investigate the origin of the contamination.¹⁵² The Supreme Court also noted that—at the time of the appeal—the smelter was already correcting the operational flaws that caused the environmental emergency.¹⁵³ Therefore, the Supreme Court concluded that there was no illegal act requiring a judicial remedy.¹⁵⁴

In contrast, the ruling had an important dissenting opinion from Judge Sergio Muñoz, who argued that the state failed to fulfill its legal obligations.¹⁵⁵ In his dissenting opinion, Judge Muñoz stated that the public institutions “did not exercise their oversight and sanctioning function with the necessary intensity to avoid or lessen the environmental impacts of the

¹⁵⁰ *Ibid.*

¹⁵¹ *Ibid* at 1–3.

¹⁵² *Ibid.*

¹⁵³ *Ibid* at 4–6.

¹⁵⁴ *Ibid* at 5–6.

¹⁵⁵ *Ibid* at 6–15.

[mining] sector, which resulted in the violation of the physical, mental and social well-being of the population of Tierra Amarilla, in breach of their own legal obligation to act with due diligence by the state.”¹⁵⁶ Thus, the ruling serves as a warning to the Ministry of Health and the Ministry of Environment, of which they seem to have taken note.

After the ruling, the Superintendency of the Environment, the agency responsible for overseeing and sanctioning noncompliance with environmental regulations—which reports directly to the Ministry of Environment¹⁵⁷—deployed various oversight efforts on the mining companies operating in the area. In December 2020, five months after the ruling, the Superintendency of the Environment declared Tierra Amarilla a priority area for environmental inspection and signed an agreement with the municipality to cooperate in monitoring the area.¹⁵⁸ From the date of the ruling, 13 inspection processes have been carried out against the mining companies located in these areas¹⁵⁹ and several companies face sanctions, including HVL. The dissenting opinion identified the faults in the environmental oversight and sanctioning of the Copiapó and Tierra mining industrial complex, which had a clear instrumental impact and generated a new attitude from the state agency.

The ruling had another instrumental impact on the behavior of the Ministry of Environment. Territories considered sacrifice zones must be correctly managed, as there is a direct relationship between environmental precariousness, the vulnerability of the population, and human rights violations. After the ruling, the Ministry of Environment made significant progress in monitoring the air quality for particulate matter and sulfur dioxide in Copiapó and Tierra Amarilla.¹⁶⁰ The Ministry of Environment developed environmental studies, executed technical instruments related to local meteorological conditions, and collected background information on the evolution of the atmospheric environment and emission activities located in the area.¹⁶¹

In October 2021, the Ministry of Environment determined that Copiapó and Tierra Amarilla were contaminated by particulate matter, and—in conjunction with the Ministry of Health—issued the corresponding supreme decree declaring the area saturated.¹⁶²

¹⁵⁶ *Ibid* at 10.

¹⁵⁷ See *Ley no. 20.417 - Crea el Ministerio, el Servicio de Evaluación Ambiental y la Superintendencia del Medio Ambiente* [Law creating the Ministry of Environment, the Environmental Assessment Service and the Superintendency of the Environment], BCN, 12 January 2010 (Chile), art 2(1).

¹⁵⁸ See “Superintendencia del Medio Ambiente Firmó Convenio con Municipalidad de Tierra Amarilla [Superintendency of the Environment Signs Agreement with the Municipality of Tierra Amarilla]” (4 December 2020), online: *Superintendencia del Medio Ambiente* <portal.sma.gob.cl/index.php/2020/12/04/superintendencia-del-medio-ambiente-firmo-convenio-con-municipalidad-de-tierra-amarilla/>.

¹⁵⁹ See “Sistema Nacional de Información de Fiscalización Ambiental [National Environmental Oversight Information System]” (last visited 22 July 2022), online: *SNIFA* <snifa.sma.gob.cl/Fiscalizacion/Resultado>.

¹⁶⁰ See “Estación Tierra Amarilla [Tierra Amarilla Station]” (last update 2015), online: *Sistema de Información Nacional de Calidad del Aire* <sinca.mma.gob.cl/index.php/estacion/index/id/224>.

¹⁶¹ *Ibid*.

¹⁶² See “Zona Saturada Copiapó-Tierra Amarilla publicada en el Diario Oficial: 90 días para elaborar resolución de inicio del Anteproyecto de Plan de Descontaminación [Copiapó-Tierra Amarilla Saturated Zone Published in the Official Gazette: 90 Days to Prepare a Resolution to Initiate the Draft Decontamination Plan]” (19 October 2021), online: *Ministerio del Medio Ambiente* <mma.gob.cl/zona-

Accordingly, the Ministry of Environment started a decontamination plan for the area.¹⁶³ The decontamination plan will contain, among other measures, emission limits for all mining companies in the zone and a time frame in which emissions reduction should be achieved.

From a strictly legal perspective, the ruling was negative as it did not condemn the state and the mining companies for the historical contamination situation. Nevertheless, there were positive impacts, mainly nonmaterial and instrumental. Indeed, there has been a clear change in the attitude of the Superintendency of the Environment towards mining companies. There was complicit passivity before the ruling, but after the ruling, the Superintendency began to conduct inspections and sanction processes against the companies. This is a clear change in the state's behavior. For its part, the Ministry of Environment made greater efforts to monitor the air quality in the area and has started a decontamination plan.

Table 4: Litigation Results of the *Copiapó Tierra Amarilla* Case

Instrumental impacts	Public attention to this problem
	Post-litigation monitoring and elaboration of decontamination plan
Nonmaterial impacts	Citizen empowerment
	Pressure on the government to manage other sacrifice zones: greater oversight and sanctions for mining companies

5. CONCLUSION

Litigation is an avenue for advancing human rights that has grown exponentially in the last decade. This avenue's increased use has prompted heightened scrutiny of its processes and impacts. Due to the multidimensional nature of human rights litigation, this evaluation is not easy. Regarding evaluation, there are concerns about the ability to establish causal links between litigation and material and nonmaterial impacts. Others argue that impacts vary with time and constantly change. Given the complex nature of litigation impacts, others argue assessing litigation requires a high degree of subjectivity.

saturada-copiapo-tierra-amarilla-publicada-en-el-diario-oficial-90-dias-para-elaborar-resolucion-de-inicio-del-anteproyecto-de-plan-de-descontaminacion/>.

¹⁶³ See "Se inició procedimiento para elaboración del Anteproyecto del Plan de Descontaminación Copiapó-Tierra Amarilla [Procedure Initiated to Prepare a Preliminary Draft of the Copiapó-Tierra Amarilla Decontamination Plan]" (25 January 2022), online: *Ministerio del Medio Ambiente* <mma.gob.cl/se-inicio-procedimiento-para-elaboracion-del-anteproyecto-del-plan-de-descontaminacion-copiapo-tierra-amarilla/>.

These concerns should not prevent progress in studying litigation. On the contrary, deepening our knowledge in evaluating litigation can help identify best practices and the various positive effects of human rights litigation. From this study, it is clear that human rights litigation has an iterative nature: its effects begin well before the trial and do not end with the ruling. Consequently, the binary evaluation of the “winner” and “loser” within traditional litigation is ineffective. Moreover, many of the impacts of human rights litigation extend beyond the legal realm, and many are achieved in social and political arenas, as they seek to achieve structural changes in society.

The *Quintero Puchuncaví* and the *Copiapó Tierra Amarilla* cases demonstrate the comprehensive processes behind strategic human rights litigation. Some practices should be implemented even before the litigation itself. For example, in both cases it was essential to carry out prior activities with multidisciplinary teams to gather historical and current information on the pollution at issue, and to strengthen ties with the community by involving them early in the process. In addition, the analysis of both cases shows the importance of joint litigation between different actors. This requires early coordination and collaboration between several influential stakeholders, such as autonomous state agencies, NGOs, decentralized authorities, and local actors.

Another good practice in cases of historical environmental contamination is to strategically wait for an environmental emergency. This will give strength to the initiation of litigation and garner greater media coverage. Moreover, oral arguments are especially important in these proceedings. If those that are directly affected are present during an oral argument, it humanizes complex issues that otherwise become too “technical.” Likewise, amicus curiae briefs are particularly important as they influence courts and provide them with relevant technical grounds on which to rule.

Post-litigation activities are also necessary to realize social change. In the *Quintero Puchuncaví* case, those who litigated three years ago continue to work on ensuring the execution of the ruling and actions of the state to solve the contamination problem. This has held the state accountable in complying with the judgment. Presently, there has been a significant change in the air quality of the area.¹⁶⁴ The improvement in air quality does not resolve all of the area’s environmental problems (including soil and water pollution in the bay), but it is certainly a step forward for the well-being of Quintero and Puchucaví inhabitants.

The *Quintero Puchuncaví* case has had important positive impacts beyond the material ones. For example, there were relevant instrumental impacts, such as the recognition of the constitutional protection action as a viable legal avenue for strategic human rights litigation and new jurisprudence on the important role of environmental law principles in resolving these matters. In addition, this litigation had several relevant nonmaterial impacts, such as the creation of new narratives about the sacrifice zones and the need for the government to address them. Likewise, the litigation generated a greater collective awareness, which was reflected in a recent political election where a well-known environmental advocate was elected as the region’s governor.

Although the Supreme Court rejected the INDH’s claim in the *Copiapó Tierra Amarilla* case, the litigation still had positive nonmaterial and instrumental impacts. After the litigation,

¹⁶⁴ See CQP air quality platform, *supra* note 105.

the Superintendency of the Environment increased its inspections of mining companies that contribute the most to air pollution in the sector. Further, the Ministry of Environment improved air quality monitoring and is currently preparing an air decontamination plan.

These good practices and impacts must be made visible, as this type of litigation is far from over. Due to the current widespread contamination of the planet and its impact on people's well-being, strategic human rights litigation concerning historical environmental contamination is becoming increasingly common. As such, the *Quintero Puchuncaví* and *Copiapó Tierra Amarilla* cases illustrate important strategies in environmental claims, processes, and outcomes, and offer lessons for future litigation that aims to advance the respect and protection of human rights.