

Abra Pampa: a Community Polluted, a Community Ignored

The Struggle for Environmental and Health Rights in Argentina



Metal Huasi, Abra Pampa (November 2008)

**HUMAN
RIGHTS
CLINIC**

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This report does not represent the official position of the School of Law or of The University of Texas, and the views presented here reflect only the opinions of the individual authors and of the Human Rights Clinic.

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Executive Summary

Too little too late summarizes the Argentinean State response to the environmental and health crisis produced by mining activity in Abra Pampa, a town with roughly 12,000 indigenous residents in the Northwestern province of Jujuy, Argentina. The lead smelting plant Metal Huasi operated in the center of the town of Abra Pampa for roughly 30 years before closing definitively in the late 1980s. Large quantities of heavy metal smelting waste were left throughout the town after Metal Huasi ceased to operate, including a 15- to 20-ton pile of waste remaining at the smelter site in the town center. As a result, the majority of Abra Pampa residents have been overexposed to lead in the town's air, soil, and water. Health studies have demonstrated that 81% of the town's children contain levels of lead in their blood that exceed those deemed "acceptable" by international health standards. Numerous residents of Abra Pampa have endured physical ailments as a consequence of the widespread lead contamination.

Despite decades of governmental awareness of the pervasive lead contamination in Abra Pampa and of its chronic health implications, local and national Argentinean governmental officials have consistently downplayed the gravity of the health and environmental situation in the town and have neglected to provide meaningful medical treatment to the affected residents, educate the community on the devastating health consequences of exposure to toxic heavy metal waste, or even take proactive measures to avoid continued lead contamination in the future. Although in recent months Argentinean officials have begun to remove portions of the toxic waste from certain locations in the town, an effective plan to carry out a thorough environmental remediation of Abra Pampa has yet to be offered to the community, which on the whole has not been consulted prior to the small measures that have been taken to remediate Abra Pampa thus far.

The Clinic's investigation and findings have revealed an absolute lack of urgency from the Argentinean State concerning the health of Abra Pampa residents, the majority of whom have been affected by the presence of lead and heavy metals since the period in which the foundry Metal Huasi was open and operating. The residents continue to endure the legacy of lead contamination even after the closure of Metal Huasi, when smelter waste was left in close proximity to – and even beneath – houses and businesses in the town. There is currently no comprehensive, cohesive plan to treat those affected by lead contamination, despite the fact that various studies have demonstrated dangerously high blood-lead levels among Abra Pampa residents. Community members who met with the Clinic delegation reported that study results are often not presented clearly, medical treatment is offered inconsistently and insufficiently, and the provincial government's plan to monitor residents' health has been both sporadic and haphazard. While lead contamination produces adverse, irreversible physical and psychological effects in all those exposed to toxic waste, children are particularly vulnerable. A study conducted in 2006 by the Institute for Applied Chemistry Research (*Instituto de Química Aplicada*, or INQA) from the University of Jujuy revealed that 81% of 234 children between the ages of 6 and 12 had blood-lead levels higher than 5 µg/dL (micrograms per deciliter), the level at which adverse medical effects begin to occur. The fact that no health remediation plan has been put into effect, despite the alarming figures and known effects of lead contamination, signals a violation of the Abra Pampa residents' right to health.

While various governmental agencies at the provincial and federal levels began an environmental remediation process in 2007 to remove and dispose of Metal Huasi smelter waste, the plan has so far been administered haphazardly. In fact, actions undertaken in the initial stages of this remediation process have likely aggravated existing problems associated with lead contamination,

violating Abra Pampa residents' constitutionally-guaranteed rights to a healthy environment. In November 2007, Argentina signed a US\$40 million loan contract with the Inter-American Development Bank (IDB) with the objective of "help[ing] [to] make production-related activities environmentally sustainable"¹ including a remediation program for Abra Pampa. To date, roughly 10,000 tons of waste have been removed from Abra Pampa, yet no IDB funds have been released to subsidize this activity nor were IDB standards followed. Instead, waste removal has been performed with very little transparency or accountability under the auspices of the privately-funded Chamber of Mining (*Cámara Minera*) of the Province of Jujuy. The largest pile of waste, which had accumulated in the town center, was removed by January of 2009, but little has been done to protect residents from or inform them of the dangers associated with waste cleanup, particularly of stirring up highly-toxic oxidized lead dust in the process. Additionally, no action has been taken to clean up a second large pile of heavy metal waste which sits immediately beside and beneath some homes in the neighborhood Barrio 12 de Octubre, where children play in toxic waste runoff and residents breathe in lead particles that are stirred up in the town's characteristically strong winds.

The lack of an aggressive health plan to care for the residents of Abra Pampa, as well as the various problems created by a belated, slow-moving environmental remediation plan, have signaled not only a lack of urgency from the government to provide a healthy environment for Abra Pampa residents, but also a critical lack of engagement with the community. Community members report governmental attempts to stifle community mobilization on the issue, and most residents have been denied any point of entry due to lack of transparency and the absence of positive measures to inform the community of the risks to which it has been exposed as a result of mining activity and of the environmental cleanup efforts to date. Attempts to hold the government accountable through a series of lawsuits have not been met with an adequate response, and the provincial government is notorious for failing to provide residents with information on its activities. These obstacles have left the community disenfranchised on issues that critically affect members' livelihoods.

The report that follows discusses these health and environmental consequences of unchecked mining activity affecting the residents of Abra Pampa, focusing on the State's failure at all levels to enforce and protect the residents' rights to health and a healthy environment that are guaranteed under the Argentinean Constitution and international law. From late 2008 through April 2009, the Clinic members documented the situation in Abra Pampa by maintaining contact with community members and their advocates, following national and independent media sources, and consulting public documents on environmental remediation. The Clinic also collaborated with the Buenos Aires-based Association for Civil Rights (*Asociación por los Derechos Civiles*, or ADC) in order to file a series of public information requests to the Secretaries of Health, Mining, and the Environment, as well as to the Ombudsman, at both the provincial and federal levels. In April 2009, a group of five students from the Human Rights Clinic traveled to Argentina as a fact-finding delegation to meet with community members in Abra Pampa, officials at the national and provincial level from the Secretary of Mining (*Secretaría de Minería*), Secretary of Health (*Secretaría de Salud*), Secretary of Environment (*Secretaría de Medio Ambiente*), the Ombudsman (*Defensoría del Pueblo*), and the IDB. Additionally, the Clinic met with public information experts at the ADC, environmental policy advocates at the Foundation for the Environment and Natural Resources (*Fundación Ambiente y Recursos Naturales*), federal Congresswoman Fernanda Reyes, and journalists in Jujuy.

¹ Inter-American Development Bank, Loan Contract for the Environmental Management Program for Sustainable Production in the Productive Sector, para. 2.11.

Recommendations

The consistent failure to take positive measures to inform Abra Pampa residents on health and environmental crises, carry out an effective remediation plan to address their plight, and respond to legal claims has exacerbated the human rights problems already present in the town. Residents have been left with little – and muddled – information on the extent and nature of environmental contamination, and so far none of the attempts at legal action on the issue have produced the desired and necessary results. There is still no comprehensive health plan to treat those affected by lead poisoning, no economic reparations have been provided to any Abra Pampa residents, and the State has not cleaned up toxic waste as quickly, thoroughly, nor as carefully, as the situation merits. The end result is that neither individuals, nor private companies, nor State institutions have been held civilly, administratively, or criminally accountable for the gradual contamination of much of the Abra Pampa population, nor for the lack of oversight on any actions taken in the town. This disregard for the dire situation of Abra Pampa reflects deep-rooted social exclusion faced by the town and entire region – an attitude that perpetuates impunity for the failure to address urgent health and environmental crises.

Below, the Clinic offers a series of recommendations to those entities with the capacity to ensure that the human rights violations in Abra Pampa are stopped and that proper reparations are implemented. These recommendations are also intended to serve as models for the future adoption of policies and plans of action for the prevention of similar violations.

To the Provincial Government of Jujuy:

-To the Governor of Jujuy

- a. Take all necessary steps to ensure that all remaining smelter waste and affected materials are removed from the grounds of Barrio 12 de Octubre, Metal Huasi, and the Arroyo Tabladitas. This should be carried out using “best practices” for environmental remediation, with the prior consultation of and educational programs for all individuals potentially impacted.
- b. Take all possible steps to ensure that provincial agencies such as the Ministry of Health, Ministry of Environment, and Ministry of Mining and Development have the resources and executive support to ensure that the health and environmental situation facing the people of Abra Pampa is fully addressed and resolved. To the extent possible, facilitate communication and cooperation between these ministries to provide a more efficient and complete remediation plan.
- c. Involve the Governor not only in all stages of removing affected wastes and addressing the healthcare needs of Abra Pampa, but also in ensuring the installation of potable waters systems and the establishment of preventative measures for residual waste in homes.
- d. Develop, in consultation with Abra Pampa residents and in conjunction with federal authorities, a plan to economically compensate the residents for the contamination of which they were and are victims.

-To the Ministry of Health

- a. Provide immediate and all possible health services to children and adults affected by lead poisoning in Abra Pampa. All children and adults known to have been affected by lead poisoning at a level of greater than 5 µg/dL – the standard recognized by the most current medical literature to cause irreversible physical and mental harms – should be provided with integral, permanent treatment free of cost.
- b. Ensure the Ministry of Health’s involvement in all processes surrounding the development and implementation of environmental remediation plans in Abra Pampa. Involvement should include

assessing the risks of lead poisoning from atmospheric exposure and the types of precautions that can be taken, and providing other involved State institutions with clear information about the health risks involved in remediation.

- c. Hold open public forums and distribute educational information throughout neighborhoods in Abra Pampa about the risks of lead poisoning and preventative measures that can be taken, ensuring that all individuals and families in Abra Pampa have access to information about the current problems and issues associated with lead poisoning.
- d. Evaluate and hold a discussion with the proper authorities about the health problems associated with the lack of a sewage treatment facility and adequate trash disposal system in Abra Pampa.
- e. Complete a serious “georeference” study on locations of contamination, and once the study is complete, inform Abra Pampa residents of the results and make it available to the general public.
- f. Inform all Abra Pampa residents who have been tested for lead poisoning of the results of these tests.

-To the Secretary of Mining and Production

- a. Ensure that human rights standards- including prior consultation and community participation- are implemented in all stages of the remediation plan carried out in Abra Pampa.
- b. Coordinate with the Ministry of Health, the Ministry of Environment, and the Ministry of Human Rights to ensure that all health, environmental, and human rights standards are applied throughout the remediation process in Abra Pampa and all future mining activities. Remediation plans should be carried out as soon as possible, with all precautions and positive measures taken to protect the residents of Abra Pampa.
- c. Ensure the independence of monitoring groups from the Secretary of Mining and private businesses involved in mining and smelting in all stages of evaluation, activity, and remediation. Neither the Argentinean Geological Mining Service (SEGEMAR) nor the Mining Police (*Policía Minera*) should be involved in environmental monitoring or evaluation.

-To the Secretary of Environment

- a. Be proactive in the process of remediation in Abra Pampa, imposing strict standards for environmental protection and coordinating with the Secretary of Mining and Secretary of Health.
- b. Make remediation plans public and conduct a thorough information campaign in Abra Pampa to inform all residents of the environmental risks in the town and how to protect themselves from the contamination.
- c. Monitor all existing smelting plants in the Province of Jujuy, such as the lead smelting plant and steel foundry in Palpalá consistently and effectively.

-To the Provincial Legislature

- a. Amend Law 444 to ensure open access to all public information in the Province of Jujuy.
- b. Ensure the creation of a provincial legal framework for the effective and independent monitoring of all mining activities in Jujuy.
- c. Compensate for the absence of national legislation regulating the closure and remediation of mining projects by creating provincial legislation that requires mining companies to carry out an environmental remediation of all projects in accordance with international standards for best practices.
- d. Ensure that provincial legislation fully recognizes and protects the rights of indigenous communities to prior consultation with respect to all mining or smelting projects that may potentially impact them.
- e. Allocate the funds needed to finance a plan to economically compensate the residents for the contamination of which they were and are victims.

-To the Provincial Courts

a. Decide all cases regarding environmental harms and the right to health in accordance with international human rights standards.

-To the Provincial Ombudsman

a. Actively pursue rights claims involving the Right to a Healthy Environment and the Right to Health in the Province of Jujuy.

b. Monitor potential rights violations stemming from the mining industry in Jujuy, in particular with respect to environmental and health rights, as well as the rights of prior consultation guaranteed to indigenous communities under international human rights law.

To the Federal Government:

a. Provide public information regarding the reasons why the IDB loan was not executed during the first stage of the remediation process in Abra Pampa.

b. Develop, in consultation with Abra Pampa residents and in conjunction with provincial authorities, a plan to economically compensate the residents for the contamination of which they were and are victims.

-To the Secretary of Mining

a. Ensure the full implementation of and respect for international human rights standards- including prior consultation and community participation- for all communities affected by mining and processes involved in mining activity in Argentina.

b. Work to establish new standards for monitoring environmental remediation and protection within mining projects, including the creation of a national law for full environmental remediation at the closure of all mining projects.

c. Guarantee a system for strong and *independent* oversight during all stages of mining activity.

d. Provide easy access to all public information on mining projects, including environmental impact studies, and environmental and health risks associated with all new and existing mining projects. Environmental impact reports for all new projects, for example, could be made accessible online through the Secretary of Mining's website.

-To the Secretary of Health

a. Guarantee the residents of Abra Pampa access to integral, permanent treatment for all health issues related to lead poisoning.

b. Participate in the environmental remediation process in Abra Pampa, ensuring that international health standards are respected in all stages of the project. Play an integral role in establishing preventative health measures in Abra Pampa.

c. Initiate a study about the health implications of the mining industry in Argentina, investigating remaining health issues from former mining projects and the health and environmental health issues stemming from new mining projects in the country.

d. Establish clear forms of collaboration with the Secretary of Mining, becoming involved in evaluation of environmental impact studies required for the approval of mining concessions and projects.

-To the Secretary of Environment and Sustainable Production

- a. Collaborate with the Secretary of Mining, becoming involved in the evaluation of environmental impact assessments required for the approval of mining concessions and projects.
- b. Ensure that the Secretary of Mining and all other groups involved in the remediation process comply with human rights standards for community participation, as well as best practices for environmental remediation.
- c. Provide accessible public information on environmental remediation projects, and take positive measures to inform residents living in communities near mining activity sites of the health and environmental risks of projects being carried out there.

-To the National Congress

- a. Adopt a comprehensive law to promote maximum disclosure of information in the public interest, to guarantee the right of everyone to access information, and to provide for effective mechanisms to secure that right.
- b. Adopt a comprehensive law to regulate mine closures and environmental liabilities.

-To the National Ombudsman (Defensoría del Pueblo de la Nación)

- a. Continue monitoring the environmental and health situation in Abra Pampa, so that the national Secretaries of Mining, Environment, and Health recognize the rights issues facing communities impacted by mining and mining-related practices.
- b. Establish clear forms of collaboration with the Secretary of Mining, becoming involved in evaluation of environmental impact assessments required for the approval of mining concessions and projects.

-To federal prosecutors

- a. Adopt all the necessary measures to pursue the criminal actions against those responsible for the pollution in Abra Pampa.

To the Inter-American Development Bank:

- a. Ensure that the remediation plan carried out by the Secretary of Mining and the IDB fully complies with international human rights standards for the participation of indigenous people, including prior consultation about all stages of the environmental remediation process. In the event that remediation efforts in Abra Pampa continue to fail to respect these standards, refrain from funding the remediation project being carried out by the Secretary of Mining.
- b. Ensure that all IDB funded environmental remediation plans are administered in accordance with best practice health and environmental safeguards.
- c. Make public the reasons for why the IDB did not fund the initial stages of the environmental remediation carried out by the national office of the Secretary of Mining and provincial-level institutions in Jujuy.

Introduction

“Nunca vino nadie. Nunca nos dijo nadie que estábamos viviendo completamente envenenados por el plomo.” -Abra Pampa community member

“No one ever came. No one ever told us that we were living completely poisoned by lead.”



Smelter Slag at Metal Huasi (August 2008)

When the Metal Huasi lead smelting plant finally ended its operations during the late-1980s, it didn't leave much for the town of Abra Pampa: a few more people without jobs and an impressive mountain of its toxic heavy metals waste.

The people of Abra Pampa, a small town in Argentina near the Bolivian border, had been concerned about local contamination stemming from Metal Huasi when the smelter was in operation, but they were never told about early health reports from provincial health authorities confirming that local

residents suffered from dangerous levels of lead poisoning. For over two decades, Abra Pampa residents were left to live amidst the environmental and health hazards that this waste presented for their community. The smelter slag was deposited across the town, left beside homes, and placed along riverbeds and atop the town's soccer field. An entire neighborhood was even built on top of and beside some of the most dangerous waste. Much of this waste remains in the community today, continuing to pose grave threats to residents' health and human rights.

It was not until the mid-2000s, however, that people in Abra Pampa gradually became more aware of the true costs of lead contamination. Blood tests on several community members, carried out by various studies, revealed dangerous levels of lead poisoning and prompted local residents to gradually begin making claims about their health problems. Among the residents who made claims was Raúl García, a local farmer and mason, who found out that his children had levels of lead contamination in their blood almost five times the level deemed by international standards to cause major neurological and physical harm, 10 $\mu\text{g}/\text{dL}$. He began talking to other people in the community about the issue and filed civil legal actions with the support of private lawyers and with the Ombudsman of the Province of Jujuy in 2003 and 2005, respectively. However, there was little public concern before the publication of a 2006 study carried out by INQA at the National University of Jujuy, which revealed that 81% of children in the town had level of lead in their blood that most contemporary medical literature deems harmful: 5 $\mu\text{g}/\text{dL}$.² Upon entering the

² This level has been selected based on the consensus of the medical community today, despite the fact that current international standards have set 10 $\mu\text{g}/\text{dL}$ as the “highest acceptable” amount of lead that can be present in the bloodstream.

bloodstream, lead can remain in the body indefinitely and causes irreversible harm, and children are most susceptible to the harmful effects of lead poisoning.

Abra Pampa has since received more attention from national media and government authorities, though most State institutions responsible for addressing the problems with lead contamination in Abra Pampa have demonstrated a blatant lack of concern for the health and environmental crisis there. Concern for and citizen mobilization around the situation even prompted the initiation of an environmental remediation plan that was to begin in 2007, partially funded by the IDB and led by the National Secretary of Mining. However, no IDB funds for the plan have been disbursed, and cleanup efforts have been haphazard and funded by a private mining board with little transparency and no independent oversight on development of the remediation plans. For community members in Abra Pampa, efforts made by State agencies have fallen short - not only of promises made to the community, but also of international human rights and environmental protection standards voluntarily adopted by the Argentinean State. Community members have consistently been misled, denied public information, and further exposed to health risks due to the lack of implementation of environmental protections and remediation. Additionally, although the vast majority of Abra Pampa's residents are indigenous, State authorities have failed to adequately provide processes of prior consultation and community participation, as required under international human rights and domestic environmental laws. Despite numerous legal actions, community protest, and heightened media attention, State authorities have yet to make meaningful efforts or enact an effective plan addressing the grave health situation facing the residents of Abra Pampa.

Unfortunately, this situation is not unique to Abra Pampa, and is similarly replicated in communities near mining and smelting activity in Argentina and throughout the world. Abra Pampa exemplifies a pattern of human rights violations stemming from extractive and industrial activity throughout Jujuy and Argentina, particularly concerning the environmental health problems that result when State institutions fail to provide a meaningful system of accountability or comply with national and international standards for the protection and participation of people living near sites of operation.

This report details the grim story of contamination, illness, and social exclusion facing the people of Abra Pampa. It shows how, despite knowledge of the serious nature of these problems for over twenty years, State authorities at the municipal, provincial, and national levels have failed to provide community members with a response that adequately addresses the human rights violations they endure. The report then explores how the story of Abra Pampa fits within a broad pattern of environmental injustice, lack of social accountability, and exclusion from community participation. After underlining the institutional, political, and social problems at the root of the situation facing Abra Pampa, the report makes recommendations to State and international institutions involved in the financing and enforcement of the current environmental remediation process taking place. It calls attention to the alarming lack of urgency – or even plans – to resolve the health crisis in the town, and recommends a more systematic, immediate plan for medical treatment of Abra Pampa residents.

The information presented in this report is the product of the Human Rights Clinic at the University of Texas School of Law, where an interdisciplinary group of law and graduate students work on human rights projects and cases from the advocate's perspective. Under the guidance of Clinic Director Ariel Dulitzky, students affiliated with the Clinic began work on the situation in Abra Pampa during 2008, made visits to Abra Pampa to meet with community members during August and November 2008, and maintained contact with Abra Pampa residents and local health experts.

From late 2008 until April 2009, Clinic members documented the situation in Abra Pampa by maintaining contact with community members and advocates working with them, by following national and independent media sources, and by consulting public documents on environmental remediation. The Clinic also collaborated with the Buenos Aires-based ADC to make a series of public information requests to the Secretaries of Health, Mining, and the Environment, as well as the Ombudsman, at both the provincial and federal levels.

In April 2009, a group of five students from the Human Rights Clinic traveled to Argentina as a fact-finding delegation to meet with community members in Abra Pampa, officials at the national and provincial level from the Secretary of Mining, Secretary of Health, Secretary of Environment and the Ombudsman, and the IDB. Additionally, the Clinic met with public information experts at the ADC, environmental policy advocates at the Foundation for the Environment and Natural Resources, federal Congresswoman Fernanda Reyes, and journalists in Jujuy. The Clinic has consulted with experts in the environmental and health fields in the United States for guidance on the report, namely the Environmental Law Clinic at the University of Texas, Dr. Francisco Pérez of the Department of Geography and the Environment at the University of Texas, Dr. Susannah Sirkin of Physicians for Human Rights, and professionals at the Pan-American Health Organization. The purpose of these interviews and consultations in Argentina and the United States was to obtain governmental, community, and advocacy perspectives on the health and environmental situation in Abra Pampa, with the aim of obtaining more details on remediation plans to better gauge what has been done in Abra Pampa – and, as this report outlines, the significant challenges that remain to clean up the town and treat its residents. The Clinic would like to thank everyone involved for sharing their experience and knowledge.

Abra Pampa in Context: A Story of Social Exclusion and Environmental Crisis

“Minería. Pan de hoy, hambre de mañana.” -Abra Pampa community member

“Mining. Bread today, hunger tomorrow.”



Children playing by a sign at the entry of Abra Pampa:

*“Contaminated Zone: Entry prohibited. High concentrations of lead. Take care of your health.”
Municipality of Abra Pampa*

The health and environmental crises facing the town of Abra Pampa must be understood within a context of social exclusion, reflecting the types of problems facing many poor rural communities in Argentina. Abra Pampa, with 12,000-13,000 inhabitants, is one of the poorest towns in one of Argentina’s poorest provinces. The province of Jujuy, located in Argentina’s extreme northwest, forms part of what the United Nations Development Program (UNDP) has been labeled Argentina’s “critical region”: the set of provinces marked by high levels of poverty and a need for policy innovation.³

According to measurements taken in 2004, poverty affects 60% of the region’s population, compared to 44% nationwide. Abra Pampa suffers from a staggering unemployment rate of 70%, leaving local families reliant on State assistance programs, employment in the public sector, and a few jobs available in nearby mines⁴ - all of which must be supplemented by traditional forms of agriculture and

livestock herding.

The dire social exclusion seen in Abra Pampa – only partially reflected in these statistics – must be understood within the historical context in which these problems are situated. The province of Jujuy, among the most politically and economically marginalized provinces in Argentina, has historically been a locus of Argentina’s mining industry due to its natural mineral wealth. Yet, while officials continue to hail mining activity in Jujuy as a foundation for economic development and local employment, its legacy is one of poverty entrenchment, environmental degradation, and health hazards – harsh realities that many residents of Jujuy province face on a daily basis. Indeed, although the question of lead contamination is among the most critical issues for residents of Abra Pampa, the town suffers from other immediate environmental health hazards. Due to a lack of a sewage deposit or treatment facility, all human waste from the town flows into and gathers in a

³ United Nations Development Program (UNDP/PNUD). “Informe sobre Desarrollo Humano,” Buenos Aires, Argentina, 2005.

⁴ UNDP/PNUD, “Informe sobre Desarrollo Humano.”

field less than 100 meters from the edge of town. Nor is there any trash facility, leaving residents with an informal dump within a few hundred meters of residential areas of the town.

As mentioned above, mining companies such as the nearby Mina Aguilar and the recently re-opened Mina Pirquitas provide one of the only sources of employment for local residents. At the same time, mining remains a source of conflict within communities of the province, who are divided in their acceptance of the mining presence and the tradeoffs it presents. Residents of the region often feel that they are forced to compromise the physical well-being of the communities exposed to mining-associated health risks, in exchange for a minimal number of local jobs and the chance to provide food for their families. Given that the mining industry offers nearly all private sector employment opportunities in this rural area, the boom and bust cycle of mining has served to perpetuate and deepen the problems of social and economic exclusion in Abra Pampa.

The mining industry's toll on Abra Pampa residents- throughout the past century and until today- has also had significant cultural ramifications. The majority of Abra Pampa's residents identify as Kolla, an indigenous people that has long occupied the Altiplano region of Northern Argentina and Southern Bolivia. While the Kolla have sought to maintain a strong relationship with and use of the lands that they have occupied for centuries by cultivating potatoes, corn, quinoa and herding alpaca, sheep, and goats, they have been forced to struggle to endure a legacy of social, economic, and cultural exclusion within the Argentinean State. Though nearly all those who interviewed with the Human Rights Clinic delegation acknowledged that Abra Pampa's population is mostly Kolla, it is clear that State institutions do not respect their identity. Instead of receiving recognition as indigenous peoples with a special set of rights under international law, the Kolla people are viewed as poor miners and recipients of government handouts, when in reality they are victims of centuries of policies that have failed to respect their rights. Meanwhile, pronounced local class and economic hierarchies in Jujuy have only served to deepen the social and political exclusion that the province's indigenous communities face. This condition of invisibility and discrimination reflects a larger pattern of vulnerability that indigenous peoples face within Argentinean society, which has also dampened their ability and willingness to claim their identity and the special protections they are guaranteed.

Metal Huasi: An Environmental and Health Crisis

During its approximate 35 years of operation in Abra Pampa, the Metal Huasi foundry contributed to the town's initial growth and subsequent sanitary, environmental, and economic decline. In 1955, the Metal Huasi smelter was constructed near the center of town – only three blocks away from the town plaza, and as the closing of the neighboring Pirquitas mine provoked an influx of people to Abra Pampa in search of employment, new residential areas of town grew to surround the foundry. From the beginning, Metal Huasi's operations acted as a source of local contamination, exposing those who lived near the smelter to unsafe levels of heavy metal pollution. A woman from Abra Pampa who lived for many years beside the Metal Huasi plant told the Clinic delegation of how the soot, smoke, and particles from the smelters operations would cover all the houses nearby, and the effects it had on those beside the plant. "You could feel it in your eyes and nose, and your throat would burn," she said.

Abra Pampa residents that met with the Human Rights Clinic delegation noted that starting in 1979, the smelter changed owners and began operating intermittently, employing residents of Abra Pampa only occasionally. But by the time the Metal Huasi plant closed definitively around 1987, a 15 to 20 thousand ton pile of accumulated heavy metal waste, at least 9 tons of which contained high concentrations of lead,⁵ was left behind in the town center. Two additional smaller piles were distributed to other areas of the town: beside a river bed in the Arroyo Tabladitas and alongside a vacant public lot and the neighborhood soccer field in the Barrio 12 de Octubre, both of which led to severe health problems in the town. The large deposit in the Arroyo Tabladitas served as a barrier to flash flood waters from the river during times of heavy rains, which subsequently carried the heavy metal waste along the riverbed and towards the town's water supply. In 2000 and 2004, the government recklessly distributed residential land lots for community residents in the Barrio 12 de Octubre beside and on top of existing toxic smelter waste.

As documented in numerous studies that will be discussed in greater detail in sections below, the local environmental hazards presented by the Metal Huasi site have been at the root of the widespread and severe lead poisoning suffered by local residents. The 2006 INQA study, "Evaluation of the Chemical Risk of Toxic Metals in Abra Pampa, Determining Magnitudes and Probabilities of Adverse Effects in the Environment and in the Exposed Child Population," is one of the most frequently cited health studies carried out in Abra Pampa. It determined that over 81% of Abra Pampa's children, the population most susceptible to physical and neurological damage provoked by lead poisoning, live with levels of lead in the blood that exceed 5 µg/dL, which most current medical literature cites as causing serious and irreversible physical and neurological harm. For the thousands of local residents who suffer the daily pains and costs associated with lead poisoning, the principle concern is the health of the town's children and families.

Although national press coverage of the 2006 INQA study in outlets such as the daily *Clarín*, Argentina's most widely read newspaper, generated public discussion on the extent and gravity of the health consequences that Abra Pampa residents suffer⁶, State representatives have known of the health consequences of contamination since at least 20 years prior to the release of current studies. An initial study conducted in 1986 titled "Epidemiological Investigation on Lead Contamination in Abra Pampa, Related to a Lead Smelter Located in the City" and carried out by various health

⁵ "Ordinario por daños y perjuicios: Alejo, Estela G.; Liquín, Vicente C. y Otros c/Municipalidad de Abra Pampa," Application brief, p. 13.

⁶ Camps, Sibila, "En Abra Pampa la mayoría de los chicos tiene plomo en la sangre," *Clarín*, September 2, 2007.

professionals from the National University of Jujuy and of the Province of Jujuy⁷, measured levels of lead in the blood of 6 and 12 year old children of Abra Pampa. The study revealed that roughly 80% of these children had dangerous levels of lead in the blood that exceeded 10 µg/dL. Local residents of Abra Pampa still recall how, in this same year, townspeople blocked a section of the major highway that runs through Abra Pampa to call attention to the environmental contamination caused by Metal Huasi while the plant was still in operation. No measures were taken by the State at that point.

Metal Huasi was finally closed during the late 1980s, but the people of Abra Pampa have been left to endure its environmental contamination and health costs. The region's characteristically strong winds spread toxic dust from oxidized lead waste throughout the community daily, while seasonal rains have caused toxins to run off throughout the town. The various piles of heavy metal waste left in three main sections of town have continually exposed residents to toxic matter. The map below pinpoints the three main areas where waste has been deposited in Abra Pampa.

It was not until 2007 that any governmental remediation plan was devised, initially projected as an IDB-funded cleanup effort, to address the piles of waste left throughout the town. Though IDB funds have yet to be disbursed for this project, the biggest visual reminder of the contamination left by Metal Huasi – a mountain of waste left in the town's center – was removed under governmental – but not independent – supervision by early 2009 using funds from the Province's privately operated and funded Chamber of Mining, comprised of mining company representatives. However, according to the National Secretary of Mining, some 60,000 tons of affected waste and contaminated material remain in the town.⁸ As of May 2009, two of the three most significant pilings of smelter waste remained, with no effective precautions taken to block residents' exposure to the toxic metals present in the piles. This waste continues to present immediate health threats to Abra Pampa residents, and the incomplete, slow-moving remediation plan does little to address the urgency of the situation.

⁷ Canelada, Adrián, María Teresita Mochietti de Maldana, Sara R. Barberis, María Elena Marcoleri de Olgún, Eduardo Emilio Joaquín, and Pilar Navarro, "Investigación epidemiológica sobre contaminación por plomo en la localidad de Abra Pampa en relación con una fundición de plomo ubicada en esa ciudad," San Salvador de Jujuy, December 1986.

⁸ Secretary of Environmental Management from the Federal Ministry of Mining, interview with the Human Rights Clinic delegation, April 27, 2009, Buenos Aires, Argentina.

Map of Abra Pampa



Metal Huasi Waste in Barrio 12 de Octubre (April 2009)



Metal Huasi and surrounding homes (August 2008)



A Community Polluted: Violations of the Right to Health & Healthy Environment

“Ya estamos contaminados. Estamos llenos de plomo. Ahora, la única cosa que queremos es que los hijos de Abra Pampa puedan vivir una vida mejor - sin contaminación, sin estos problemas de salud.”

-Abra Pampa Community Member

“We are already contaminated. We are full of lead. Now, the only thing that we want is that the children of Abra Pampa can live a better life - without contamination, without these health problems.”



Most families in Abra Pampa’s Barrio 12 de Octubre have lived for years in houses that sit directly beside one of the largest remaining mounds of heavy metal slag from Metal Huasi. Although their homes are separated from the waste piles by a 6-foot tall chain-link fence erected by the provincial government to isolate the waste from the rest of the town, the fence offers little reassurance when summer rains produce toxic runoff and afternoon winds carry fine oxidized lead dust throughout the neighborhood. Even when the sun is shining and the air is still, a thick

sulfurous odor hangs around the Barrio 12 de Octubre, serving as a constant reminder of the fact that this neighborhood on the edge of Abra Pampa is built right next to and on top of Metal Huasi smelter waste.

The Legacy of Contamination and Lead Poisoning in Abra Pampa

Abra Pampa residents told the Human Rights Clinic delegation that they live with chronic headaches and with aches in their bones and joints, a near-constant physical reminder of daily exposure to lead waste left by Metal Huasi operations. Lead poisoning causes permanent damage. Lead shares a similar molecular composition to calcium and for this reason is easily absorbed into the bloodstream and bones, where it can remain throughout the life of the victim. It is a neurotoxin, and in high concentrations, it wreaks havoc on the nervous system and neurological function of the afflicted.⁹ Along with neurological effects come behavioral symptoms, including irritability and aggression. Lead also accumulates in soft tissue found in bone marrow, the liver, and the kidneys, thus continually contaminating the bloodstream.¹⁰ As levels of lead in the bloodstream increase, organ systems begin to shut down and the brain, liver, and kidneys all suffer irreparable damage. Ultimately, a high enough level of lead in the blood can lead to coma, and even death of the victim.

⁹ UNEP and UNICEF, “Childhood Lead Poisoning: Information for Advocacy and Action.” United Nations Development Programme (1997).

¹⁰ Center for Disease Control and Prevention (CDC), “Impact of Lead-Contaminated Soil on Public Health”. Charles Xintara, Sc.D. May 1, 1992.

Lead poisoning most severely affects children and fetuses, more susceptible to the effects of lead in the blood than adults.¹¹ Children absorb as much as 50% of the lead to which they are exposed, while adults only absorb about 10-15%.¹² In children, lead accumulates in the bones as they are still developing, which means that children both more easily absorb lead and that the lead absorbed can remain in the bones throughout their entire life. Lead builds up gradually, often reaching unacceptable levels before noticeable symptoms manifest in children, which makes the problem harder to detect.¹³ Most notably, lead poisoning is linked to delayed puberty, impaired vision, and other physical and mental developmental delays. Low levels of lead are correlated with learning disabilities and impaired motor function. As childhood lead levels increase, IQ begins to drop off significantly.^{14 15}

Residents of Abra Pampa continually absorb toxic amounts of lead through the ingestion of airborne soil and dust. The finest particles of lead and lead oxide pose the most serious risks, as they are most easily inhaled - a particular problem given that Abra Pampa is situated in an arid region with regular strong winds. Children are at a particularly high risk to lead exposure as they can absorb large amounts when playing on contaminated soil. Given these conditions and the widely distributed heavy metal waste left by Metal Huasi throughout the town, residents throughout the community told the Clinic delegation of respiratory problems and body aches they experienced that are associated with lead.

Current international standards – used by the US Center for Disease Control and Prevention (CDC) and the World Health Organization (WHO) – set the maximum acceptable blood-lead level at 10 µg/dL. Despite this being an internationally accepted standard, much of current medical literature criticizes this level as unacceptably high. Two studies in the *New England Journal of Medicine* showed evidence of delayed puberty and decreased height at levels as low as 3 µg/dL, as well as a significant decrease in IQ correlated with each increase of 10 µg/dL.¹⁶ The Argentinean Ministry of Health does not seem to set any internal standard, but does reference the WHO's level in official literature.

A series of studies carried out in Abra Pampa have revealed alarming levels of lead in the majority of town residents. The initial 1986 study found higher levels of lead in the blood of children living closer to the smelter site,¹⁷ and while the waste has since been spread to other areas of the town, it is generally accepted that lead contamination results from lead present in the smelter waste. While nearly all of the health professionals and government representatives with whom the Clinic spoke acknowledged the clear links between the waste from Metal Huasi and the high levels of lead poisoning in the town, to the surprise of the Clinic, representatives from the National Secretary of Mining and the Provincial Ministry of Health questioned the existence of a clear vector between the lead smelter's waste and the lead poisoning, suggesting that “the rocks in the area might have

¹¹ UNEP and UNICEF, “Childhood Lead Poisoning,” 5.

¹² UNEP and UNICEF, “Childhood Lead Poisoning,” 8.

¹³ Mayo Clinic, “Lead Poisoning: Symptoms,” April 8, 2009.

¹⁴ Barclay, Laurie, MD and Bernard M. Sklar, MD, “‘Acceptable’ Lead Level Not Low Enough,” *Medscape Medical News*, April 16, 2003.

¹⁵ See also Jusko, Todd A., Charles R. Henderson, Jr., Bruce P. Lanphear, Deborah A. Cory-Slechta, Patrick J. Parsons, and Richard I. Canfield, “Blood Lead Concentrations < 10 µg/dL and Child Intelligence at 6 Years of Age,” *Environmental Health Perspectives*, Vol. 116, No. 2, February 2008.

¹⁶ Barclay and Sklar, “‘Acceptable’ Lead Level Not Low Enough.”

¹⁷ Facultad de Ingeniería de la Universidad Nacional de Jujuy, et al., “Investigación epidemiológica.” Cuadro IV-2 reveals that children aged 6-12 living closest to the smelter (0-200 meters) exhibited the highest average concentrations of lead in the blood, at slightly over 20 micrograms per deciliter.

high levels of lead in them” and that “the Metal Hausi might not be the cause.” No scientific evidence was provided to the Clinic to support these assertions. More alarming still is the fact that, despite the results of these studies, affected Abra Pampa residents have not been treated, and in some cases the government has intervened to block funding for follow-up studies on the issue.

Twenty Years of Inaction: The 1986 study on Abra Pampa

The Metal Huasi smelter plant was still in operation in 1986 when health professionals and academics in Jujuy performed tests on children in Abra Pampa to determine whether pollution from the lead smelter, which was already causing many residents to complain of respiratory problems, was also leaving lead in the blood of this particularly susceptible group.

The 1986 study, titled “Epidemiological Investigation on Lead Contamination in Abra Pampa, Related to a Lead Smelter Located in the City,” found what many residents had expected, that pollution from the Metal Huasi smelter was harming the health of the community’s children. The study tested 120 6-year-olds and 102 12-year-olds, and found that 80% of 6- and 12-year olds in Abra Pampa exhibited levels of lead in the blood in excess of the current standard of 10 µg/dL. At the time, the internationally accepted maximum allowable blood-lead level was 20 µg/dL, which is the standard that was used in the study. The study found that 32% of 6-year-olds and 48% of 12-year-olds exceeded this standard. To provide a comparison, in a 2000 study, the US Department of Health and Human Services found that only 2% of American children had blood-lead levels greater than 10 µg/dL.¹⁸ According to the United Nations Children’s Fund (UNICEF), a level of 45 µg/dL requires treatment within 48 hours.¹⁹ In the 1986 Abra Pampa study, approximately 10 of the children exceeded this level.

The professionals who performed the 1986 study highlighted the importance of performing clinical studies to diagnose the children of Abra Pampa in order to prevent and treat the effects of lead poisoning.²⁰ However, even with the knowledge of the lead contamination and the dangerous health effects, no one – not even the State -- took any actions to limit exposure or remedy the problem. This was the beginning of what would become a pattern of the government’s demonstrated, quantitative knowledge of the problems in Abra Pampa and failure to respond to them. Indeed, to this day, remediation plans for the proposed IDB project include no plans to resolve the public health crisis in Abra Pampa.

What Metal Huasi left behind: The 2006 INQA Study

The alarming results presented in the 1986 study warned of the serious health problems that would be provoked by continuous exposure to lead, and follow-up studies have revealed a similarly grave situation faced by the people of Abra Pampa.

After a lengthy period during which the situation in Abra Pampa was largely ignored and forgotten, interest in the town was revived in the early 2000’s. The Toxicology Service (*Servicio de Toxicología*) and the University of Buenos Aires performed a new study in 2004. This study tested 144 children between the ages of 5 and 16. This study found that 40% of the children studied had

¹⁸ CDC, “Surveillance for Elevated Blood Lead Levels among Children – United States – 1997-2000,” Pamela A. Meyer, Ph.D. et al., September 12, 2003.

¹⁹ UNEP and UNICEF, “Childhood Lead Poisoning,” 8.

²⁰ However, the Clinic was unable to ascertain whether the parents of the children tested were even notified of the results of their children’s blood tests.

levels higher than 10 µg/dL. The methodology used by the Service to measure the lead levels, however, was tedious and substandard; according to later studies and criticism, the methodology used was not ideal for evaluating a large number of samples, or samples from children because of its tendency towards inaccuracy. This called into question the report's accuracy and effectiveness.²¹ Even with these faulty measures, however, the study acknowledges that a significant percentage of children have high levels of lead in the blood – an urgent problem which still awaits a solution.

As interest in the problem grew over the next few years, so did the need for a more accurate study, one which was eventually performed in 2006 by INQA at the University of Jujuy. This study revealed that of the 234 children between the ages of 6 and 12 tested, 81% had blood-lead levels higher than 5 µg/dL, while 16% exceeded 20 µg/dL. This study also marked the first time that a standard as low as 5 µg/dL, which was closer to the 3 µg/dL suggested by the previously mentioned medical literature, was used to determine an unacceptable level. The parents of the subjects of the 2006 study were notified of the results before INQA received approval from the provincial government to publish the study, which was frowned upon by officials at the provincial Ministry of Health.

A component of the 2006 study investigated the correlation between proximity to the Metal Huasi smelter and blood-lead levels, and generally showed a positive correlation between proximity and levels of lead poisoning. The Ministry of Health of Jujuy has also carried out a “georeference” study in 2008 and 2009 to investigate the same relationship. Results from this study have not yet been published, but an official from the Ministry of Health of the Province of Jujuy told the Clinic delegation that it found no correlation between proximity to smelter waste piles and lead contamination.²² This may be explained, however, by the movement of citizens away from Metal Huasi and around the town in the years since the smelter has stopped operating, as well as by the fact that much of the toxic waste is dispersed throughout the town via exposure to the elements.

Health Crisis and Treatment

Treatment of lead poisoning is difficult, and there is no way to reverse damage already caused. Treatment consists almost entirely of increasing consumption of minerals or agents that will bind to lead and allow it to be removed from the body. This includes consumption of calcium, which reverses the leeching of lead into bones, as well as “chelating agents” in a process called chelation therapy, in which patients ingest a binding agent to remove lead from the bloodstream and soft tissues. Because consumption of calcium helps reduce blood lead levels, doctors and Health Ministry officials suggested increased milk consumption by those afflicted in Abra Pampa; these dietary suggestions have been the main form of “treatment.” Additionally, some of the children were administered chelation therapy. However, despite the study's use of a 5 µg/dL standard and the government's acknowledgment of the 10 µg/dL standard, chelation therapy was not offered to any of the children with levels below 20 µg/dL.²³

²¹ Departamento Cochino Province de Jujuy, “Contaminación por plomo en el pueblo de Abra Pampa,” September 2007.

²² Dr. Daniel Bellone, Ministry of Health, Province of Jujuy, interview by the Human Rights Clinic delegation, April 29, 2009, Jujuy, Argentina.

²³ Dr. Bellone, interview, April 29, 2009; and Mayo Clinic, “Lead Poisoning: Symptoms.”

Despite international standards, treatments provided by the Ministry of Health were only offered to the 16% of victims with lead poisoning exceeding the 20 µg/dL limit.²⁴ According to health officials at the provincial level, care for residents of Abra Pampa includes this abovementioned treatment along with regular visits by a team of five doctors who visit Abra Pampa every 15 days to provide general health treatment to the town. No systematic or comprehensive form of treatment, however, has been dedicated to those affected by lead poisoning, and the Ministry of Health has no plans to provide chelation therapy to those with under 20 µg/dL of lead in the blood. The federal Ministry of Health in Buenos Aires and Dr. Luis Marquez, Director of the Hospital Nuestra Señora del Rosario in Abra Pampa, maintain that the team of medical specialists has routinely visited Abra Pampa since October of 2008 – 20 years after the government admitted knowledge of lead contamination through its studies. However, community members with whom the Human Rights Clinic spoke in Abra Pampa in early May indicated that they knew nothing about the specialists' visits, and had never received any special treatment for their children with lead poisoning. Officials at the provincial Ministry of Health in Jujuy simply cited “vigilance” for any health concerns as the extent of their involvement in the remediation and prevention plan, stating that they expect treatment to be completed in about 10 years.

Even with Ministry “vigilance” there have been several significant challenges in providing medical treatment for the effects of lead poisoning to the residents of Abra Pampa- the vast majority of whom have been affected to some extent.

Dr. Luis Marquez of the Hospital Nuestra Señora del Rosario, Abra Pampa's sole hospital facility, only became acquainted with the health issues facing the Abra Pampa community when he took over the role of hospital director in 2007. The most immediate challenge that Dr. Marquez faced was the lack of complete medical files for Abra Pampa residents' medical history, requiring him to start from scratch when evaluating the medical conditions of each of the patients that he treats.

The lack of documented medical history of patients in the town also extends to numerous other health issues that the doctor has observed, leaving him unable to identify the origin and development of the condition and to determine whether or not the medical conditions are causally related to exposure to lead through contact with skin, ingestion, or respiration. Some of these health trends include infant mortality, infant malnutrition, and physical malformations. The malformations have not been documented as they develop, such that they have proven difficult to follow and study in a meaningful, systematic manner.

Dr. Marquez expressed to the Clinic delegation that treatment should be administered according to the level of lead poisoning, another challenge of providing medical attention to victims of lead contamination in Abra Pampa. In a conversation with Dr. Bellone from the Ministry of Health in Jujuy, the Clinic delegation learned that preference has been given to those found to have extremely high levels of lead in the bloodstream, a distinction that is problematic given that medical reports demonstrate that low levels of contamination also cause severe problems. No efforts have been made to treat individuals with such levels of contamination. What is more, there is no “safe” level of exposure to lead. Despite the claim that those individuals found to have high levels of lead concentration are the priority recipients of chelation therapy, the Clinic met with Abra Pampa families whose children, suffering from levels of lead poisoning between 20 µg/dL and 40 µg/dL, had received no treatment.

²⁴ This level was probably chosen because the WHO's standard at the time of the original 1986 study was 20 µg/dL, although it has been reduced significantly in the intervening years.

One of the frequently cited challenges to providing medical treatment to residents of Abra Pampa suffering from lead poisoning is the costliness of the treatment and the limited hospital funds that are available. While the current method of treatment for children involves the consumption of 1 kilo of powdered milk/month so that calcium will “counteract” the effects of lead, future treatment over the projected 10-year treatment plan involves routine administration of chelating agents, along with the increased calcium consumption. According to Dr. Marquez, the municipality of Abra Pampa is in particular need of financial assistance from the federal government because the provincial government denies the gravity of the problem of lead contamination. In the context of extreme poverty, families in Abra Pampa are in no condition to provide sustained treatment to their children without public assistance. Thus far, the federal, provincial and municipal governments have failed to provide Abra Pampa residents with much-needed assistance to address the health crisis in the town.

The Right to Health and Healthy Environment in Argentina

It is vital that the government correct these abovementioned problems and break the cycle of inactivity surrounding the situation in Abra Pampa, especially when the health and environmental circumstances are considered in light of the standards for the Right to Health and a Healthy Environment guaranteed to Argentinean citizens.

Article 42 of the Argentinean Constitution guarantees the “health, safety, and economic interests” of all consumers. Although this provision seems to guarantee such a right in only an economic context, other constitutional provisions and court cases have made it clear that the right to health is protected even outside of the consumer context. Article 75.22 of the Constitution of Argentina establishes that international legal standards and treaties stand above constitutional law, and specifically mentions many of the international treaties and pacts to which the country is party.²⁵ Article 75, for example, incorporates the International Convention on Economic, Social, and Cultural Rights (ICESCR) which guarantees “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.” Furthermore, Article 10 of the San Salvador Protocol of the American Convention on Human Rights, which Argentina ratified in 2003, guarantees the right to health, defined as “the highest level of physical, mental and social well-being.” This protocol also requires parties to take certain affirmative steps to ensure this right to health, including “essential health care” and particular attention to “those whose poverty makes them most vulnerable” to health problems. This last provision is particularly salient for Abra Pampa, as the poverty and marginalization of the town have been major contributing factors to the ongoing health crisis.

²⁵ Article 75.22 of the Argentine Constitution states that: “...Treaties and concordats have a higher hierarchy than laws. The American Declaration of the Rights and Duties of Man; the Universal Declaration of Human Rights; the American Convention on Human Rights; the International Pact on Economic, Social and Cultural Rights; the International Pact on Civil and Political Rights and its empowering Protocol; the Convention on the Prevention and Punishment of Genocide; the International Convention on the Elimination of all Forms of Racial Discrimination; the Convention on the Elimination of all Forms of Discrimination against Woman; the Convention against Torture and other Cruel, Inhuman or Degrading Treatments or Punishments; the Convention on the Rights of the Child; in the full force of their provisions, they have constitutional hierarchy, do not repeal any section of the First Part of this Constitution and are to be understood as complementing the rights and guarantees recognized herein. They shall only be denounced, in such event, by the National Executive Power after the approval of two-thirds of all the members of each House.”

Domestically, key legal decisions such as *Campodónico de Beviacqua*, have explicitly recognized the existence of the right to health and its status as a *positive* right. Thus according to *Campodónico de Beviacqua*, and in accordance with the San Salvador Protocol, the right to health is one that the government must proactively provide to citizens. This is particularly relevant to the case of the community of Abra Pampa, because it ensures that all of the community members suffering from the effects of lead poisoning are guaranteed the healthcare they need. Under domestic Argentinean law, the government is required to provide the care necessary for these community members to achieve the “highest attainable standard” of health.

As Argentinean citizens, residents of Abra Pampa affected by lead poisoning are also guaranteed the right to a healthy environment under both international and domestic law. In its 1994 Constitution, Argentina recognizes the right to live in a healthy environment (Article 41), while the right to health is established through the constitutional obligation to comply with instruments of international law and to which Argentina is party.²⁶ Similarly, the Constitution of the Province of Jujuy in Article 22 reaffirms the right of all the residents of the province to enjoy a healthy environment, including provisions to eliminate all elements that cause contamination and can affect the population.²⁷

Some International Standards for Right to Health and Healthy Environment

Article 12 of the International Covenant of Economic, Social, and Cultural Rights

1. The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.
2. The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for:
 - (a) The provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child;
 - (b) The improvement of all aspects of environmental and industrial hygiene;
 - (c) The prevention, treatment and control of epidemic, endemic, occupational and other diseases;
 - (d) The creation of conditions which would assure to all medical service and medical attention in the event of sickness.

²⁶ Among the international instruments establishing the right to health are the American Declaration on the Rights and Duties of Man (Articles VII and XI); the Universal Declaration of Human Rights (Articles 3, 8, and 25); the International Covenant on Economic, Social, and Cultural Rights (Article 12); the International Covenant on Civil and Political Rights (Article 6, 7, and 24, among others); the American Convention on Human Rights (Article 4, 5, 19, and 26) and the Convention on the Rights of the Child (Articles 6, 23, 24, and 26).

²⁷ Constitución de la Provincia de Jujuy, Article 22.

Article 24 of the Convention on the Rights of the Child

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

2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:

- (a) To diminish infant and child mortality;
- (b) To ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care;
- (c) To combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution;
- (d) To ensure appropriate pre-natal and post-natal health care for mothers;
- (e) To ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents;
- (f) To develop preventive health care, guidance for parents and family planning education and services.

Article XI of the American Declaration of the Rights and Duties of Man

Every person has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources.

Articles 10 and 11 of the San Salvador Protocol

Article 10- Right to Health

1. Everyone shall have the right to health, understood to mean the enjoyment of the highest level of physical, mental and social well-being.

2. In order to ensure the exercise of the right to health, the States Parties agree to recognize health as a public good and, particularly, to adopt the following measures to ensure that right: a. Primary health care, that is, essential health care made available to all individuals and families in the community; b. Extension of the benefits of health services to all individuals subject to the State's jurisdiction; c. Universal immunization against the principal infectious diseases; d. Prevention and treatment of endemic, occupational and other diseases; e. Education of the population on the prevention and treatment of health problems, and f. Satisfaction of the health needs of the highest risk groups and of those whose poverty makes them the most vulnerable.

Article 11- Right to a Healthy Environment

1. Everyone shall have the right to live in a healthy environment and to have access to basic public services.

2. The States Parties shall promote the protection, preservation, and improvement of the environment.

State actions and omissions around the issue of lead contamination in Abra Pampa additionally represent violations of standards for the prior consultation of indigenous peoples, children's rights, and requirements for community participation in environmental matters. The violations of the Right to Health and Healthy Environment have been exacerbated through the failure to adequately respect human rights standards such as these, which establish mechanisms that guarantee special protections for marginalized groups and communities.

Indigenous Rights of Participation and Prior Consultation

As a community that principally identifies as indigenous Kolla, human rights standards for the participation and protection of natural resources of indigenous peoples must also be taken into account. In Jujuy, indigenous communities such as Abra Pampa have clearly already been affected by mining activity, and there are dozens of communities whose land is currently being prospected for new mining projects. With respect to the guarantee of basic human rights such as the right to health and the right to a healthy environment, State agencies have an obligation to respect these standards through all processes of exploration, excavation, and processing. Up to the present, and in the case of Abra Pampa, however, it is clear that these standards have largely been ignored.

Under international law, indigenous peoples are guaranteed rights to prior consultation about projects and policies that impact their communities, land, or resources, and are additionally guaranteed positive, special protections from the State as a group that has historically been made vulnerable by its situation. Convention 169 of the International Labor Organization (ILO 169), for example, requires that indigenous peoples be consulted prior to all “legislative or administrative measures which may affect them directly,”²⁸ and that prior consultation must be done “in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures.”²⁹ Furthermore, ILO 169 establishes that “[s]pecial measures shall be adopted as appropriate for safeguarding the persons, institutions, property, labour, cultures and environment of the peoples concerned.”³⁰

For indigenous communities in Jujuy and throughout Argentina, the link between their economic and cultural livelihood and the use of their territory and natural resources is paramount, especially in considering the potential impact of mining project development on or near their traditional lands. ILO 169 clearly establishes that “the rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded, and that “these rights include the right of these peoples to participate in the use, management and conservation of these resources.”³¹ And with respect to mining and extractive industries in particular, the Convention states that:

In cases in which the State retains the ownership of mineral or sub-surface resources or rights to other resources pertaining to lands, governments shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands. The peoples concerned shall wherever possible participate in the benefits of such activities, and shall receive fair compensation for any damages which they may sustain as a result of such activities.³²

In addition, the Inter-American Court has clearly required that environmental and social impact assessments are conducted prior to any development or investment project within traditional territory, and that the State implement adequate safeguards and mechanisms in order to minimize the damaging effects that projects may have upon the social, economic, and cultural survival of indigenous or Afro-descendant people³³.

Community Participation

Through Argentina’s General Environmental Law, the State offers additional protections that apply not only to indigenous communities, but also to all communities potentially impacted by development plans or policies with environmental repercussions. Law 25.675, which outlines the organizing principles and framework of the State’s policy for environmental protection, places a particular emphasis on the principle of precautionary action and the establishment of

²⁸ International Labor Organization (ILO), Convention 169 (ILO 169), Ratified by Argentina on July 3, 2000, Article 6.1a.

²⁹ ILO 169, Article 6.2.

³⁰ ILO 169, Article 4.

³¹ ILO 169, Article 15.1.

³² ILO 169, Article 15.2.

³³ Inter-American Court of Human Rights, *Saramaka People v. Suriname*. Preliminary Objections, Merits, Reparations, and Costs. Judgment of November 28, 2007, Series C No. 172, para. 194.

constitutionally guaranteed minimal standards for the prevention of environmental and related health problems. Of greatest significance for the people of Abra Pampa are the principles outlined in Articles 2 and 11, which, respectively, require prior consultation about and participation in decision-making processes involving environmental matters, and the establishment of obligatory environmental impact assessments for all projects with potential environmental risks.

Children's Rights

Argentina has ratified the Convention on the Rights of the Child, which has particular relevance to the Abra Pampa situation given that lead poisoning produces more severe effects upon developing children. The fact that the situation of lead contamination affects so many children brings up the question not only of the right to health generally, but also those rights as specifically guaranteed to children. Article 24(1) of the CRC guarantees “the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health.” 24(2)(c) specifically mentions that States should “[take] into consideration the dangers and risks of environmental pollution,” such as the toxic waste causing the health problems in Abra Pampa. Because lead poisoning affects children disproportionately, these provisions of the CRC become particularly relevant to the situation. The State’s failure to adequately respond to the nature and scope of the environmental and health dangers allowed the dangerous waste to remain in the town as new generations of children were born into a situation in which they were all but guaranteed to suffer from lead contamination. The failure to remove the sources of contamination and the failure to provide adequate health treatment to the affected children represent serious human rights violations.

Shortcomings in the Protection of Human Rights

The fact that the residents of Abra Pampa continue to be exposed to dangerous environmental conditions on a daily basis represents clear violations of international standards for the rights to health and healthy environment, as well as additional protections for participation and special measures for vulnerable groups. Despite having knowledge of the extreme health problems caused by the lead waste left by the smelter, the State has failed to take effective steps to fully remediate the environmental and health crisis in the town, generally leaving residents of Abra Pampa in a position of ignorance about the most imminent health concerns of their community and the rights that they have as Argentinean citizens.

While different representatives of the government have identified the situation in Abra Pampa as a human rights problem, the State’s actions to-date have failed to respond to the urgency and scope of the environmental and health risks that threaten the community of Abra Pampa. Indeed, this lack of action was described by Jujuy’s Provincial Ombudsman in 2006 as a “flagrant violation of the human right to a healthy environment and, correspondingly, of the right to health.”³⁴

In a request for information (*pedido de informe*) to the executive, legislators described the situation in Abra Pampa as a “slow poisoning” (*un envenamiento lento*), and stated that all levels of government are responsible for this situation.³⁵ The National Ombudsman stated:

³⁴ Defensor del Pueblo de la Provincia de Jujuy, Resolución No. 0229, June 27, 2009. Original: “...flagrante violación al derecho humano a un ambiente sano y correlativamente al derecho a la salud.”

³⁵ *Pedido de Informes al Poder Ejecutivo Sobre la Contaminación Ambiental Producida por Minera en la Localidad de Abra Pampa*, signed by National Deputies Miguel Angel Guibergia and Alejandro Mario Nieva, File No. 3629-D-2007, July 20, 2007.

That it is clear from what has been told that the 7500 inhabitants of Abra Pampa have seen harmed their right to a healthy environment, which is not appropriate for human development given a public and private negligence from mining that, occurring during decades, has transformed an environment without relevant negative impacts into an environment that produces risks and harms to the ecosystem and human beings who without knowledge- lived, played, grew, and worked amid the waste piles of sickness.

That it is clear that the provincial or municipal authorities have not realized those actions that would have responsibly corresponded to guarantee the basic human rights to health and a healthy environment of the inhabitants of this place, considering that since 1986 there has been a long succession of unwise actions and incomprehensible omissions.³⁶

The Inter-American Court of Human Rights has held that “the fundamental right to life includes, not only the right of every human being not to be deprived of his life arbitrarily, but also the right that he will not be prevented from having access to the conditions that guarantee a dignified existence.”³⁷ Through its repeated failures to remedy the sources of contamination, the State has failed to guarantee and protect the rights of Abra Pampa residents to live a dignified existence.

The case of Abra Pampa clearly demonstrates that the recognition of the right to a healthy environment established by law has not been sufficiently translated into a social reality. International human rights law not only requires that a State recognize these fundamental human rights in its constitution, but also places an obligation on the State to guarantee, respect, and protect these rights.³⁸ Thus, to guarantee and protect the right to a healthy environment, the State is responsible not only for designing legislation that incorporates environmental protections, but also for actively ensuring that contaminated areas are remediated to guarantee that community members can live dignified lives. In this case, the government has guaranteed the right to a healthy environment and acknowledged that there are environmental dangers in Abra Pampa. However, almost nothing has been done to address the serious health problems facing the community, nor have responsible State institutions recognized their role in providing effective and preventative medical treatment. The State has failed to take the appropriate actions to fully guarantee, respect, and protect the rights of the residents of Abra Pampa and future generations that may be exposed to dangerously high levels of contamination.

³⁶ Defensor del Pueblo de la Nación, Recomendación al Gobierno de Jujuy y a la Secretaría de Ambiente de la Nación por la Contaminación en Abra Pampa, Actuación No. 1678/07, July 19, 2007. Original quote: “Que surge claro de lo aquí relatado que los 7500 habitantes de Abra Pampa ven lesionado su derecho al ambiente sano dado que el mismo no es apto para el desarrollo humano, en razón de que claramente la negligencia pública y privada vinculada a la minería, ocurrida durante décadas, ha transformado un ambiente sin impactos negativos relevantes en un ambiente productor de riesgos y daños al ecosistema natural y a los seres humanos que desinformadamente vivieron, jugaron, crecieron y trabajaron entre las escorias de la enfermedad. Que surge claro que las autoridades provinciales o municipales no han realizado las acciones que responsablemente correspondieran para garantizar los derechos humanos básicos a la salud y al ambiente sano de los habitantes de esta localidad, considerando que desde 1986 se sucedieron una gran cantidad de acciones desacertadas y omisiones incomprensibles.”

³⁷ Inter-American Court of Human Rights, Case of the “Street Children” (Villagrán-Morales et al.) Vs. Guatemala. Merits. Judgment of November 19, 1999. Series C No. 63, para 144.

³⁸ Inter-American Court of Human Rights, Case of Velásquez-Rodríguez v. Honduras. Merits. Judgment of July 29, 1988. Series C No. 4, para. 166.

Remediation in Abra Pampa and the Loan Agreement with the IDB

The Argentinean Government, aware of the situation in Abra Pampa for at least 20 years, has only recently begun to respond to the community's demands to live and raise their families in a healthy environment. The State has entered into a loan agreement with the IDB in which the State will perform a remediation project in Abra Pampa. Additionally, the Province of Jujuy has initiated the remediation process with external funding, outside of the IDB loan agreement, and has already removed over 10,000 tons of waste from the town of Abra Pampa. The IDB loan represents an important opportunity for the State to implement a remediation plan that incorporates international human rights standards to ensure that the community members of Abra Pampa have the ability to fully enjoy their rights to live in a healthy environment. Unfortunately, the initial stage of the remediation project, which is outside of the scope of the IDB loan, has raised several concerns among community members which the State must address in order to carry out an effective and total remediation that complies with international human rights standards.

The Remediation Process Today

In November 2007, Argentina signed a loan contract with the IDB with the objective of “help[ing] [to] make production-related activities environmentally sustainable.”³⁹ The loan contains specific provisions identifying Abra Pampa as a site where the State will carry out a comprehensive remediation of environmental liabilities. The IDB loan is divided into two subprograms and designates different governmental agencies as the executing agency in charge of the project. Subprogram I is aimed at developing clean production and is led by the Secretary of the Environment and Sustainable Development (*Secretaría de Ambiente y Desarrollo Sustentable*), while Subprogram II is led by the Secretary of Mining and is focused on environmental management. The provisions identifying Abra Pampa are within component 3 of Subprogram II, which calls for “supporting environmental management in degrading mining areas.” The loan contracts states that the degraded mining areas had been “prioritized due to their impact on the environment and health of affected communities.”⁴⁰ The total cost of the program is listed at US\$50 million, with the IDB providing US\$40 million. The portion of the IDB loan aimed at supporting environmental management in degraded mining areas is placed at US\$13.7 million, or 27.4% of the entire project. However, to date, and despite the urgency of the situation, no funds with respect to this part of the program have been released.

Although no IDB funding has yet been released to the State to remediate Abra Pampa, the initial steps of the remediation process have already taken place. For this initial stage of the remediation, the provincial government of Jujuy received financing from the Chamber of Mining of Jujuy for the removal of the waste located in the town center to a different site. The Chamber of Mining of Jujuy is a private organization comprised of member companies from the mining industry that operate in the province, and the Chamber works to promote the economic interests of its members. As such, there is an apparent conflict of interest.

The first stage of this part of the remediation process was aimed at limiting the community's exposure to the dangerous materials located throughout the town. This was effected by placing chain-link fences around the site where the smelter had operated in the center of town and around the sites where the other concentrations of waste were located, in Barrio 12 de Octubre and Arroyo Tabladitas. The province entered into an agreement with the mining company Minera Aguilar to

³⁹ IDB, Loan Contract, para. 2.11.

⁴⁰ IDB, Loan Contract, para. 2.11.

have the waste removed to a location on the property of Minera Aguilar. This part of the remediation was to remove the large waste pile at the center of the town, which contained an estimated 15,000 tons of waste, and to remove additional piles of waste from Arroyo Tabladitas, located on the edge of the town. The initial stage of the remediation was led by the provincial government of Jujuy, with participation from the national Secretary of Mining and Secretary of the Environment and Sustainable Production during the process of planning the remediation procedure. The plan called for steps to be taken to secure the area surrounding the waste piles to minimize exposure. The waste was to be removed to first be smelted and deposited in a new construction on the Minera Aguila property constructed for the specific purpose of holding the type of dangerous materials that had been sitting in the town for over 20 years.

The waste pit at the Mina Aguilar site was constructed for the specific purpose of holding the dangerous waste that would be transported from Abra Pampa. Taking into consideration the threat posed by the waste, it was built to hold at least 10,000 tons of the toxic material from Abra Pampa. The hole uses an impermeable synthetic membrane to isolate the waste and is covered by a series of high density polyethylene layers to prevent filtration and distribution of the toxic materials. Additionally, the Ministry of Production placed a monitoring system to detect any type of leakage into the ground or to areas around the site.⁴¹

The mere fact that the specially-constructed dike on the property of the mining company incorporated so many precautions in its design is further evidence of the potential health and environmental dangers posed by the smelter waste to which generations of Abra Pampa residents have been exposed. That same waste that now sits in the specially-constructed dike sat uncovered in the center of town for at least two decades with no State apparent interest or concern. Currently, there are tens of thousands of additional tons of smelter waste that remain in the town and continue to sit in piles exposed to high winds that distribute residue from the waste throughout the town.

Between November 2008 and January 2009, after more than two decades of the State's awareness of the problem, the first stage of the remediation process had been completed. The province, with the funding from the Chamber of Mining de Jujuy, had removed the large waste pile at the center of town and the smaller sets of piles located at Arroyo Tabladitas on the edge of the town to the specially-constructed dike.

The provincial authorities stated that they were: "satisfied for having completed that which was expected by the province, national government, and the judiciary, following current norms for environmental protection, with attention to an emblematic situation that affected the population of the Puna's capital for years."⁴²

Yet after meeting with government representatives and residents of the town, the Clinic Delegation found that while the first steps of the remediation were an important initial gesture in the long-term process of effectively guaranteeing the rights of the community to a healthy environment, these first steps of the process of remediation had already raised several concerns among the residents. The State has not taken adequate measures to fully guarantee the rights of all of the community members in carrying out the remediation process. The response of the State was too slow, the

⁴¹ See Ministerio de Producción and Medio Ambiente de Jujuy, "Última Inspección del Depósito para Residuos de Metal Huasi," Press release, January 15, 2008.

⁴² "Finalizó el traslado de residuos a Abra Pampa," *El Libertario*, January 31, 2009. Original quote: "satisfechos por cumplir lo previsto por el Estado Provincial, la Nación y la justicia, siguiendo las normas vigentes de protección ambiental, en atención a un hecho emblemático que afectó durante años a la población de la capital puneña."

remediation had offered too little, and the manner in which the first stage of the remediation was carried out raises concerns as to how the State will manage future steps of the remediation process.

Inadequate Precautions and Monitoring during Initial Stages of the Remediation

The initial stages of the remediation demonstrate inadequate precautions taken to protect the residents of Abra Pampa from further exposure and raise several concerns as to how the remediation process will eventually be carried out.

For instance, the State identified securing the zones where waste was concentrated as a necessary first step in the remediation process to prevent the residents from experiencing even further exposure to the dangerous materials. The government constructed fences around three main sites where the piles of waste had been dumped by Metal Huasi to prevent residents from passing through this zone and placed signs to notify the residents to not enter those protected areas. The fences were constructed, but they have failed to secure the zone in two primary ways: first, residents continue to pass through the fenced-off areas, and second, the fences do not prevent particles of dust off the piles of waste from blowing past the fenced-off areas and into residential areas. Nor do they stop runoff from carrying these toxic particles throughout the town when it rains.

The fence constructed in Barrio 12 de Octubre does not prevent residents from entering the area. Several residents continue to pass through the area as it is a direct path to the town, and children and families continue to use land within the fenced-off area because there is a soccer field located within it. When the delegation traveled to Abra Pampa, it witnessed residents from the town playing a game of soccer within the fenced-off area and families walking from their houses to other parts of town using a path that runs through the same area. The government authorities readily acknowledge that the fence has been ineffective.⁴³ In keeping with the common practice of placing the blame and responsibility for their suffering onto the citizens of Abra Pampa, the Director of Environmental Policy (*Director de Políticas Ambientales*), Miguel Thomann, observed the broken fence and children playing on the soccer field alongside and atop of the waste and simply concluded that “a lot depends upon whether the population becomes conscientious of and pays attention to that which protects them.”⁴⁴ The government has taken no further actions to secure the area or to keep the residents away from the waste, failing to take adequate preventative measures in response to the urgency of the situation.

Additionally, Abra Pampa is located in the heart of the Puna region of Northern Argentina and is characterized by strong winds that pass through the town daily. The residents of Abra Pampa attested to the fact that the winds blow particles of dust from the waste piles, including the lead dust clouds, or *humos blancos* – the most dangerous and toxic part of the waste – to areas beyond the fenced-off area. Similarly, run-off from rain carries the *humos blancos* from the fenced-off area and runs along the side of residential houses. The delegation observed waste that had been distributed by wind and water beyond the fenced-off area. In fact, *humos blancos* were visible well past the fenced-off area and could be seen in concentrated levels directly in front of several houses in Barrio 12 de Octubre, areas that are commonly used by the children to play. The plan to secure the area has been both ineffective and inadequate as residents continue to be exposed to the lead

⁴³ During personal interviews, governmental authorities told the delegation that they had constructed fences hoping to prevent residents from accessing the area, but acknowledged that the fences had not worked.

⁴⁴ “Ahora resulta que Abra Pampa es casi un edén ambiental,” *El Libertario*, June 22, 2008. Original quote: “mucho depende de que la población se concientice y cuide lo que a ellos protege.”

pollution.



***Humos blancos* residue outside homes in Barrio 12 de Octubre deposited by rain runoff (May 2009)**

The remediation process itself required special protections to prevent further exposure to the dangerous materials. For example, the plan called for the most dangerous materials, the *humos blancos* (a fine white powder form of lead oxide), to be placed into special bags so that when the waste was removed from town, the *humos blancos* would not be blown from the trucks and out of the town. The other remaining waste would be placed directly into work trucks and covered by plastic during the removal. The waste removal was to take place at certain hours, when there were

no high winds, and was not to take place during times in which children would pass by the site on their way to school. The province also planned to temporarily relocate families that lived close to the waste pile in the center of town and would set up barriers further limiting any access near to the waste removal activities.

During the Clinic's visit to Abra Pampa, residents raised several concerns as to how the waste removal was carried out. The residents claim that the promised precautions did not take place. For instance, residents stated that the bagging of waste did not stop during periods of high winds. Additionally, community members noted that some residents walked right up to the smelter site out of curiosity while waste was bagged up, without any protest from anyone conducting the cleanup. After being loaded onto trucks, the big plastic bags of *humos blancos* were transported from the Metal Huasi site, the oxidized lead dust, the most dangerous materials in the waste, blew out of the trucks and left a trail from the site out of town. In the course of its visit, the Clinic observed the white dust outside of the Metal Huasi site. At Arroyo Tabladitas, the residents explained that some of the bags tore and spilled the contents of toxic dust onto the ground and into the air. The remnants of these bags – as well as the *humos blancos* they contained – are still half-buried in the dirt near the Arroyo, despite the fact that the intact bags have since been removed, suggesting that they may have torn during the waste removal process.



***Humos blancos* residue and remnants of storage bags in dirt at the Arroyo Tabladitas site (May 2009)**

A central concern surrounding this initial stage of the remediation is the fact that the financing from the project came from the Chamber of Mining of Jujuy. As a private organization that works to promote the interests of mining companies, this organization plays a specific role in the province: defending and promoting the interests of these companies. Given that the money did not come from the IDB loan, the remediation did not have to comply with IDB standards, nor did the process have to follow the additional terms of the loan agreement.

For instance, the IDB has created a system of independent investigation to respond to complaints related to the environmental impact from the design, analysis, execution or operations of the Bank's projects.⁴⁵ The loan agreement between the IDB and the State contains specific monitoring

⁴⁵ Inter-American Association for Environmental Defense (AIDA), *Guia de Defensa Ambiental: Construyendo la Estrategia para el Litigio de Casos ante el Sistema Interamericano*, pp. 118-119. It should be noted that the IDB system of independent investigation has been criticized for several reasons, from the fact that it does not have a permanent group of investigators, to the fact that the Executive Director, and not

and evaluation provisions that obligate the executing agency, the Secretary of Mining, to submit semi-annual reports on the status of activities, and those reports would be made available to the public on a webpage dedicated to the project on the Secretary of Mining's website.⁴⁶ As the first step of the remediation plan was carried out using non-IDB funds, all of these monitoring and transparency requirements do not apply to those portions of the cleanup effort.

The concerns related to the lack of transparency and independence are particularly worrisome after reviewing the history of the State's involvement, and more particularly the role of the provincial and national mining agencies, in assessing the environmental dangers in Abra Pampa. For instance, in 2005 and 2006, a soil study led by Dr. Fernando Diaz Barriga of the Universidad Autónoma de San Luis Potosí, Mexico with the National Ministry of Health of Argentina and INQA found alarming results. Standards for lead levels in soil are set at 400 mg/kg in the United States and Mexico. The study led by independent investigators took samples from various sites in Abra Pampa and found the following levels of lead: 422 mg/kg, 595 mg/kg, 11 mg/kg, 1133 mg/kg, 5,540 mg/kg, 6930 mg/kg, and up to 20,750 mg/kg from a sample taken at the site of Metal Huasi.⁴⁷ Dr. Diaz Barriga concluded from the results that "the risk is evident and urgently requires a public health program that immediately initiates biomonitoring for lead in the blood in the infant population."⁴⁸

Additionally, SEGEMAR, part of the Secretary of Mining, set up a problematic program of monitoring the dust in Abra Pampa to test for contamination.⁴⁹ With the standard for concentration levels of inhalable particles listed at 50 µg/m³, the preliminary results from the study showed that samples taken in the town had average levels ranging from 21.1 µg/m³ to 65.34 µg/m³, with maximum daily levels as high as 83.8 µg/m³. SEGEMAR described these results as producing a moderate alert, but that no sample showed a level above 150 µg/m³ that would be considered intolerable.⁵⁰ While SEGEMAR states that it realized an assembly with residents in Abra Pampa, the delegation visited with community members that claim that they protested the set-up of the studies because the machines that tested the air quality were positioned in areas far from where residents live and placed in the opposite direction from where the high winds blew particles from the piles of waste in Barrio 12 de Octubre. Furthermore, despite describing the levels of air pollution as producing a moderate alert in its preliminary analysis, newspaper articles reported that SEGEMAR informed the residents of Abra Pampa and the provincial Secretary of Environment that the quality of air was safe: "which is to say that, in Abra Pampa, there is no air-based lead contamination."⁵¹

The repeated failures of the State on both the provincial and federal levels to actively engage the

the independent investigators, makes the final decision as to whether to adopt special protective measures in those cases.

⁴⁶ IDB, Loan Contract-Annex, 4.18 to 4.21, and Loan Proposal, 3.26 to 3.29.

⁴⁷ Dr. Fernando Díaz-Barriga, Letter to the Mayor of Abra Pampa, Herman Zerpa, July 2006.

⁴⁸ "Preocupación por pasivo ambiental en Abra Pampa," *El Independiente*, October 18, 2006. Original quote: "el riesgo es evidente y urge un programa de salud pública que inicie de inmediato con el biomonitoreo de plomo en sangre en población infantil."

⁴⁹ Servicio Geológico Minero Argentino (SEGEMAR), "Programa de Monitoreo de polvo atmosférico del área de influencia de la ex Planta de Fundición de Plomo Metal Huasi en la localidad de Abra Pampa, Provincia de Jujuy: Informes de Avance y Técnico preliminar, incluyendo acciones de divulgación a la comunidad," November 23, 2007.

⁵⁰ SEGEMAR.

⁵¹ "Ahora resulta que Abra Pampa es casi un edén ambiental," *El Libertario*, June 22, 2008. Original quote: "es decir no hay en Abra Pampa contaminación por plomo en el aire."

residents and produce transparent and independent studies that fully describe the situation in Abra Pampa has exacerbated the environmental and health crisis in Abra Pampa and impeded the opportunity for new generations of residents to realize their human right to live a dignified existence. The implementation of the conditions established in the IDB loan creates an important opportunity to achieve this goal. The State must take a more active role in overseeing a prompt, effective and transparent remediation process that would remove the dangerous materials from the town of Abra Pampa and provide much needed health treatments to the affected citizens. To be successful, the State will have to assume its obligations to guarantee and protect the rights of the residents of Abra Pampa and take special measures to effectively guarantee the community's rights to life, physical integrity, health, and a healthy environment.

To adequately address the human rights situation in Abra Pampa, the State will have to adopt special measures that acknowledge and respond to the fact that solutions currently being offered are too little and too late to provide a total remediation.

Too Little: The Ongoing Environmental and Health Dangers in Abra Pampa

To date, the scope of the remediation-both in how it has been implemented and how it is imagined-has been too little. While the initial stage of the remediation removed the large pile of waste from the site of Metal Huasi, the waste located in Barrio 12 de Octubre that sits adjacent to a residential area has not been removed. Additionally, the State has not offered adequate health treatment to the individuals affected by the lead contamination.

The first steps of the remediation that was financed by the Chamber of Mining was not intended to clean up all of the waste from Abra Pampa related to Metal Huasi's operations, but it is important to recognize the scope of the problem that remains even after the large waste pile from the center of town was removed. On one level, it is not even clear that the most contaminating parts of the toxic waste have been removed. Children that live near the waste that still sits in Barrio 12 de Octubre have registered levels of lead contamination up to 46 µg/dL.⁵²

Moreover, the mere removal of the waste from the sites of Metal Huasi and Arroyo Tabladitas does not signify a total remediation. The fact that one can still observe *humos blancos* at those sites has caused concern among community members and should provide caution to the State that those areas could potentially still be a source of contamination. The Clinic does not know of any State plan to carry out independent studies of the soil conditions in the areas where waste was removed.

To provide an effective and full remediation, the State cannot limit its project to the simple removal of waste piles from the three fenced-off areas. It will have to address the concerns of the residents as it aims to respond to the nature and scope of the ongoing environmental and health dangers. This means that the State must aggressively analyze the manner in which the toxic materials have been distributed throughout the town, where that waste may continue to operate as a source of contamination for the residents, and whether the waste contaminated deeper soil levels or groundwater.

A major concern for the IDB loan remediation project is the absence of express terms that require a comprehensive health treatment to the residents affected by the contamination targeted in the

⁵² Institute of Applied Chemistry Research (INQA), "Evaluación del riesgo químico por metales tóxicos en Abra Pampa, asignando magnitudes y probabilidades de efectos adversos de la contaminación en el ambiente y la población infantil expuesta," 2006.

remediation project, as well as the limited time period for which funds will remain available. The terms of the IDB loan are targeted at a comprehensive remediation of the toxic waste in Abra Pampa. The Ministry of Health of Jujuy communicated to the delegation that it believes that a total remediation of Abra Pampa will require at least ten years. Currently, the general remediation plan designed to follow the IDB loan does not extend beyond 2011. The Clinic was not informed of any State plan to continue with the remediation program after that date.

Too Late: The Slow State Response to the Environmental and Health Crisis

The slow response of the State to the environmental dangers and related health crisis demonstrates a serious disregard for the human rights of Abra Pampa residents. For 20 years, the State made no attempt to remove the large waste pile that sat in the center of the town of Abra Pampa on the former lot of Metal Huasi. In 1999, the National Ombudsman published a resolution calling for the provincial authorities to intervene in order to understand the scope of the contamination produced by the mineral waste and the resulting health problems, specifically stating that the provincial authorities must adopt the necessary measures to guarantee the health of the residents of Abra Pampa and the removal of all the contamination that could affect them.⁵³ In 2000, the Committee on Natural Resources and Conservation of the Environment, Social Action, and Public Health of the National Legislature issued a resolution expressing the failure of the State to manage environmental liabilities.⁵⁴

Meanwhile, the State has argued that it had intended to take action but it was prevented from doing so by the fact that the waste left on the site of Metal Huasi was private property and the owner of the property had died. The Ministry of Environment and Natural Resources of the Province of Jujuy had attempted to notify Elias Amado, the last known owner of Metal Huasi, on various occasions in 2004 and 2005. In 2005, the Ministry issued resolution 115/2005, a warning to Amado for not complying with obligations to clean up waste at the site, allowing a period of 10 days in which to respond.⁵⁵ The Province did not receive a response, and it eventually learned that the owner had died. As true ownership of the property could not be determined, the State did not take any action.

Despite the debate over whether the State had the ability to enter the private property to remove the waste, the State duly failed to oversee the private company Metal Huasi during its years of functioning and has remained inactive for 20 years since its closure, failing to guarantee and protect the community's right to life, right to physical integrity, right to health, and right to healthy environment, failures which constitute grave human rights violations. Understanding Abra Pampa within the framework of human rights is important for the State as it moves forward in its remediation process, enacts new laws, and attempts to effectively implement existing laws.

In 1995, Argentina promulgated Law 24.585, a law on environmental protection for mining activity, which created a preventive environmental system for mining activity. However, these preventive environmental systems for mining activity do not offer any solutions to mining-related environmental liabilities that occurred prior to the enactment of the law.⁵⁶ The major legal environmental protection for mining-related activity does not apply to situations such as Abra

⁵³ Defensor del Pueblo de la Nación, Resolución No. 13.316/99.

⁵⁴ Cámara de Diputados de la Nación, Orden del Día No. 724, August 29, 2000.

⁵⁵ Gobierno de Jujuy, Ministerio de Producción, Infraestructura y Medio Ambiente. Resolución No. 115/2005, San Salvador de Jujuy, May 23, 2005.

⁵⁶ IDB, Loan Proposal, Section 1, May 16, 2007.

Pampa, and when Metal Huasi closed there did not exist any laws regulating mine closures. At the same time, there are no laws in existence that regulate environmental liabilities. The Secretary of Mining stated that the remediation project in Abra Pampa would contribute to a discussion on the creation of new laws to regulate mine closures and environmental liabilities. While it is perhaps understandable that no law on mine closures existed when Metal Huasi stopped operating, to this day Argentina still does not have an adequate mine closure law in an age in which there are over 400 mining projects either in operation or in planning stages throughout the country.⁵⁷ The fact that adequate legal protections did not exist at the time of the smelter closure does not excuse the State from taking responsibility in guaranteeing and protecting the basic human rights of residents affected by mining-related activities today.

⁵⁷ Secretaría de Minería de la Nación, “Minería: Una Oportunidad para Todos.” www.mineria.gov.ar.

A Community Ignored: Struggles for Community Rights & Accountability



Removal of Metal Huasi waste in open air (November 2008)

The most strikingly visual reminder of the Metal Huasi contamination – the mountain of heavy metal waste left in the center of Abra Pampa – has mostly been removed, but in the process, an underlying legacy of social exclusion and governmental negligence in Abra Pampa has been laid bare. As outlined in the previous section, government response to the human rights crisis in Abra Pampa can be characterized as too little action, delivered too late. The fact that the remediation plan was initiated after some delay and under circumstances that have exacerbated health and environmental problems discounts the immediacy of the problems at hand. Abra Pampa residents have had very little recourse to justice or point of entry on public discussion of the grave human rights violations facing the town. This blatant lack of concern for the urgency of risks facing Abra Pampa residents demonstrates social exclusion that precludes accountability for the environmental and health issues in the town. This has been evident through government bodies' failure to inform or provide access to information on environmental contamination in the area, as well as through a chronic negligence to fully deliver on remediation promises and to respond to demands for accountability for human rights violations in the community.

Remaining Health and Environmental Concerns

The problems that have arisen in the execution of remediation in Abra Pampa thus far underlie a deeply problematic governmental failure to inform and engage with community members on matters that affect their livelihood. There is a lack of governmental accountability for any actions that have been carried out in Abra Pampa, and often actions promised in the press or to community members regarding remediation are carried out incompletely if they are realized at all. Despite governmental rhetoric on plans to treat affected residents, officials have failed to provide medical treatment and advise most community members of the environmental and health risks to which they are continually exposed. This lack of thorough communication and provision of information to the community has been the source of much confusion, as community members are unaware or unsure of what has been promised regarding the health and environmental crises, by whom it has been promised, and how different steps of the remediation plan were to have been carried out. In conversations with Abra Pampa community members, the Human Rights Clinic often heard the same phrase: “*Todo sigue igual*” -- “Everything remains the same.”

The consequences of this lack of engagement with the community are particularly urgent when it comes to the health crisis in the community. The widespread lead contamination in the community, particularly among its children, merits an immediate treatment and prevention campaign. In lieu of this campaign, however, officials in the Ministry of Health of Jujuy Province and at the federal level demonstrate neither the urgency nor the commitment to inform community members of the health risks they face, particularly the consequences of the levels of lead in their blood.

Conversations with Abra Pampa community members have revealed a strong lack of confidence in provincial health officials to deal with the health crisis at hand, due largely to a lack of consistent communication with them to gauge how and where to provide treatment. One particularly problematic manifestation of this lack of engagement can be seen in the Ministry of Health of the Province of Jujuy's "georeference" study, which has been initiated to determine major sources of contamination in the town. Results of the study had not yet been published when Clinic members met with the Ministry of Health in April of 2009, but Dr. Daniel Bellone, Secretary of Policy and Health Regulation at the provincial Ministry of Health, told the Clinic delegation that preliminary results suggest there is no strong correlation between lead contamination levels and proximity to piles of heavy metal waste in the town, due to isolated cases of severe lead contamination spread throughout the town with no apparent pattern.⁵⁸ However, this conclusion does not take into account what community members informed the Clinic – that they have moved around the town, and thus the actual distance from current piles of waste should not be used to discredit a causal link between the waste and current health problems.

The Clinic met with a couple whose eldest son, now in his mid-twenties, has blood lead levels that exceed 40 µg/dL. While the family now lives several blocks away in Barrio 12 de Octubre, it lived just across from the Metal Huasi smelter while it was in operation throughout the 1980s when the couple's son was a child. This family said it did not know of plans for the Ministry of Health's current "georeference" study.

Due to the State's silence, secrecy, omissions, and misleading explanations, the Clinic cannot present hard scientific evidence to prove a causal link between this man's lead contamination and years of living in close proximity to the Metal Huasi smelter. Nevertheless and despite this lack of scientific data, all the available evidence indicates that the toxic waste produced by Metal Huasi is the main source of lead pollution in Abra Pampa. In addition, the Clinic finds this lack of thoroughness in the georeference study's methodology as in many other State actions to be problematic, as it may shift attention away from the toxic waste piles as the most likely factor in community members' high blood lead levels and does not necessarily identify some of the worst cases in the town. What is also problematic is the State's failure for twenty years to provide credible and scientific sounded evidence to explain the high lead levels present in the bodies of the residents if the State does not consider that the waste produced by Metal Huasi is the cause of high levels of lead in the blood of residents of Abra Pampa. It is also hard to understand why the State decided to move tons of waste produced by Metal Huasi if the waste is not the source of the high levels of lead in Abra Pampa.

In addition to problematic studies that may misrepresent some of the worst cases of lead poisoning in the town, the dissemination of and follow-up with other past health studies has also contributed to confusion and a general lack of knowledge regarding test results that determine blood lead levels. Community members who spoke with the Human Rights Clinic delegation in Abra Pampa

⁵⁸ Dr. Bellone, interview, April 29, 2009.

reported that study participants are often not given results, and if they are given, it is with little or no explanation of their significance. Additionally, Dr. Luis Márquez, director of the Hospital Nuestra Señora del Rosario in Abra Pampa, cited a lack of clinical records for many of the town's patients as a problem in determining the gravity of health problems in general, let alone those of lead contamination and their potential sources.⁵⁹

Problems with dissemination of blood test results to determine potential cases of lead poisoning may also be exacerbated by a pervasive practice of prior restraint from the provincial government in Jujuy. In his interview with the Human Rights Clinic delegation, Dr. Bellone from the provincial Health Ministry expressed frustration with dissemination of the results of blood tests completed in 2006, which, in his view, "alarmed" the community when many of its members learned of high levels of lead in their blood "before the government could construct a plan." Bellone did not clarify to which study he was referring, but he expressed his dissatisfaction with the fact that the study's results were not released through the Ministry.⁶⁰ In the Clinic's view, this attitude is problematic because the results of health studies should, presumably, be used to inform Abra Pampa residents of their health situations, with the aim of helping them seek treatment and learn prevention techniques. When this information must first be filtered through a government agency that has not responded adequately to the health crisis at hand, community members are further misinformed and without any say about matters that critically affect their well-being.

In addition to the failure to adequately gauge and inform citizens of the health risks present in Abra Pampa, governmental attempts at "treatment and vigilance" have also fallen short in community members' eyes. Some community members told the Clinic delegation that they view the oft-praised plan to send a team of doctors to Abra Pampa every fifteen days as a publicity move that does not actually help those affected by lead contamination. According to these community members, some residents are not even aware of the doctors' presence when they do visit the town, which suggests that many who are in dire need of medical treatment are not even provided the information or means to receive it. Additionally, some feel that the doctors who do visit Abra Pampa are ill-equipped to deal with the health problems facing the community, calling them "fourth-rate doctors".⁶¹ This suggests an insufficient effort on the part of the provincial government to inform community members of treatment options available to them, and also to deliver on promises made, at least rhetorically, to investigate and provide treatment for residents who have been affected by lead contamination.

As is outlined in the previous section on problems with the IDB loan and remediation plans to date, prior consultation and positive measures to engage with Abra Pampa community members on environmental matters have also not been carried out. There is a major gap between what has been promised and what has actually been delivered to the people of Abra Pampa, with an almost total lack of engagement with the community to both minimize exposure to environmental hazards created during the remediation process and to resolve many ongoing health problems that have been present for years.

One of the measures outlined in the original plans of the IDB-funded remediation plan was to hold a series of "workshops" with community members in Abra Pampa. The purpose of these

⁵⁹ Dr. Luis Márquez, interview with the Human Rights Clinic delegation, April 30, 2009, Abra Pampa, Argentina.

⁶⁰ Dr. Bellone, interview, April 29, 2009.

⁶¹ Residents of Barrio 12 de Octubre, interview with the Human Rights Clinic delegation, May 1, 2009, Abra Pampa, Argentina.

workshops was to inform community members of plans for remediation, as well as actions to be taken to prevent further health complications related to exposure to heavy metal waste. While some Jujuy province press coverage from 2008 shows pictures of a “technical team of environmental experts” meeting with Abra Pampa residents as part of this campaign,⁶² it is clear that these information sessions did not reach many community members. Barrio 12 de Octubre residents who met with the Human Rights Clinic delegation reported that they had not been informed of the technical team’s visit, and knew of others in the town that were similarly unaware. The lack of a thorough, systematic attempt to inform community members of the remediation process and of necessary precautions to take to minimize risks associated with the process made it next to impossible for Abra Pampa residents to know how or when to take extra precautions, exacerbating the problem through no fault of their own.

The stark gap between provincial government promises and community members’ observations on the delivery of these promises seems especially wide in Barrio 12 de Octubre, which has been largely ignored in the execution of remediation plans so far, despite the expansive pile of smelter waste that borders the neighborhood. University of San Andrés student Patricio Peñalba, who has been working with community members in Abra Pampa to document on-the-ground implementation of remediation plans, has found that the provincial government has not delivered on many promises made to clean up the neighborhood and proactively protect residents from existing contamination.⁶³ This includes plans to wash the roofs and walls of houses in the neighborhood, which are coated in *humos blancos* residue due to the neighborhood’s proximity to large piles of waste. Barrio 12 de Octubre residents have reported that this was never completed in full. Additionally, plans to relocate some families living in Barrio 12 de Octubre to newer homes outside of Barrio 12 de Octubre by late 2007 became muddled due to poor communication with Barrio 12 de Octubre residents. According to Barrio 12 de Octubre residents who have spoken with both the Clinic delegation and with Peñalba, it remained unclear for some time for whom the houses were intended, as many residents were told they were unavailable even before any families had moved in.⁶⁴ Signs that were originally placed in the area containing the waste near Barrio 12 de Octubre warning of the dangers of contamination there have been removed and never replaced, and the chain-link fence surrounding it has been cut in several places and does very little to contain toxic waste to prevent it from blowing or leaching over to surrounding homes. Aside from these measures, the most obvious sign that Barrio 12 de Octubre has been largely forgotten thus far in remediation is the fact that the large waste pile still exists there, and no actions have been taken to remove it.

Community Rights Claims and Social Mobilization

With the removal of the waste in the town center came the idea that, today, the “most dangerous” and tallest pile of waste is gone, as is the need for a sense of urgency to proceed with remediation plans. Over the years the pile of waste had become, for community members and outsiders alike, a sort of rallying point for protest and a chilling reminder of 20 years of government inaction regarding the constant exposure to toxic waste experienced by the community of Abra Pampa. Perhaps the most blatant example of this fact is that, in April of 2007, Spanish activist priest Padre Jesús Olmedo “crucified” himself on the mountain of lead by tying himself to it in protest during a

⁶² “Informan a vecinos del barrio 12 de octubre,” *El Tribuno*, February 14, 2008.

⁶³ Peñalba has compiled this information in a table and submitted it to the Office of the National Ombudsman as documentation. This table was provided to the Human Rights Clinic delegation during a visit to the Ombudsman office in Buenos Aires on April 27, 2009.

⁶⁴ Residents of Barrio 12 de Octubre, interview, May 1, 2009.

demonstration in the town.⁶⁵ Now that the mountain is gone, some fear that a recent period of mobilization around the issue of lead poisoning in Abra Pampa will fade, despite the fact that *humos blancos* residue is still very present throughout the town and a large spread of toxic waste still borders the Barrio 12 de Octubre.

Since the release of the 2006 INQA study, which helped generate perhaps the most sustained public discussion on Abra Pampa in recent years, there has been some mobilization on the issue from within the community. Unfortunately, the government has actively tried to keep this mobilization at bay rather than identify public policies needed to solve the health and environmental crises.

The town *multisectorial*, a group of residents who have convened to discuss action on the issue of lead poisoning, has been active in making demands and attempting to mobilize Abra Pampa residents around the issue of mining in the area. However, governmental responses to *multisectorial* claims have been either nonexistent or inadequate, usually characterized by a failure to publicly offer any specific terms or steps toward action during “negotiations” with the *multisectorial*. Within the past year, for example, the provincial government put a stop to a march in which members of the *multisectorial* were to participate. The “March of the Forgotten Kollas,” which was slated to take place in July of 2008, was to cover a distance of more than 200 kilometers from Abra Pampa to provincial capital San Salvador de Jujuy, and was intended to call attention to environmental contamination and other mining-related problems in the area. The march was suspended after provincial authorities promised to meet with the *multisectorial* in Abra Pampa to address their environmental and health concerns.⁶⁶ While this meeting concluded with a resolution to reactivate remediation within a period of 45 days, ultimately nothing more was accomplished.⁶⁷ Since that time, members of the *multisectorial* have participated in other demonstrations to continue to call attention to the environmental and health crises in Abra Pampa, though activists still face challenges in a forgotten and impoverished region in which mobilization is stifled by an opaque political climate.

The case of Raúl García, whose voice has consistently been among the strongest in Abra Pampa on the issue of lead contamination, exemplifies some of the risks and obstacles that activists on the issue face. In addition to working with lawyers in the area to bring claims against the provincial and municipal governments, he has been active in both the *multisectorial* and in organizing fellow Barrio 12 de Octubre neighbors around the issue of lead contamination in their neighborhood and throughout the town. Because of his high profile as an activist in the area, García was singled out by Intendente Hernán Zerpa as a “political agitator” in the town in 2004. García reported to the Clinic delegation that after six months of persistently requesting the results from his own blood tests, which were processed in Buenos Aires, municipal authorities from the Ministry of Health (*Ministerio de Salud*) arranged for an ambulance from San Salvador de Jujuy to take him to a psychiatric hospital to cure him of his alleged ‘locura’ – insanity. He has also been offered a house in the city of Córdoba, Argentina -- a bribe to draw attention away from the issue of contamination, and most likely to remove one of the strongest voices on the issue from the town.

⁶⁵ “El cura Jesús Olmedo se crucificó en un cerro de residuos tóxicos de plomo en Jujuy,” *COPENOA: Agencias de Noticias del Norte Argentino*, April 8, 2007.

⁶⁶ “La multisectorial de Abra Pampa suspendió marcha,” *El Libertario*, July 20, 2008.

⁶⁷ “La gente del gobierno nos está tomando el pelo,” *El Libertario*, October 21, 2008.

Access to Information

Part of the reason why mobilization is so often stifled in Abra Pampa, in addition to overt attempts to block mobilization and empty political rhetoric, has much to do with the ways in which public information and access to the media is denied to many of Jujuy residents. Journalists and civil rights practitioners who have worked in the province note that the province is known for its lack of political transparency, consistent denial of public information requests, and for practices of “self-censorship” within the local media, due to a high proportion of government spokespeople who also work in major local media outlets. In Abra Pampa, these practices preclude knowledge and public criticism of governmental shortcomings that have further contributed to the environmental and health crises in the community. This denial of information is significantly linked to overall failures to provide positive measures to protect the health and well being of Abra Pampa residents.

The closed character of media and public information on the situation in Abra Pampa reflects a relatively opaque, inaccessible information sphere in the province of Jujuy in general. A study released in October 2008 by the ADC found that the majority of media outlets in Jujuy province rely on State funding to operate, which has a chilling effect on the types of stories published and on the ways in which they are discussed.⁶⁸ Additionally, according to a Jujuy journalist who met with the Clinic delegation during its visit to provincial capital San Salvador de Jujuy in April 2009 and asked not to be identified, a majority of journalists working in Jujuy hold two jobs – the other being in the press office of government agencies or officials. In practice, this has led to the reproduction of governmental public relations publications as “news” in the local press, which is evident in the repetition of quotations and recycling of stories across various publications throughout the province.

In an attempt to test the system of access to public information, the Human Rights Clinic made a number of public information requests to various government officials in collaboration with ADC. Predictably, some of these requests were met with resistance from government officials. Citing provincial law 4.444, which guarantees the right of access to public information, as well as referencing national and international instruments designed to do the same for any member of the general public, the Clinic requested documents from the provincial Ministry of Health and Ministry of Production and Natural Resources. The documents that were requested included inter-ministerial agreements on plans for remediation, as well as various studies mentioned in press clippings but not readily available or, apparently, made public through the governmental agencies. Although members of the Human Rights Clinic were incidentally given many of the requested documents during meetings with various government officials while in Argentina, none of the information requests were granted an “official” response. In meetings with officials at the Secretary of Health and of the Environment in the Province of Jujuy, members of the delegation were denied requested information, even after officials acknowledged receipt of information requests sent several days in advance. Journalists who met with the Clinic delegation said this came as no surprise, and one of them noted that only one out of forty public information requests that she had recently made to the provincial government had actually been fulfilled.

This same situation occurred at the federal level. The Clinic filed several access to information requests to federal authorities. During meetings with federal officials, the Clinic received a few documents but no official responses explaining why the majority of the other documents requested were not being disclosed.

⁶⁸ Asociación por Derechos Civiles, *Publicidad Oficial en Jujuy: Un Proyecto del Programa de Libertad de Expresión de la ADC*, October 2008, p. 9.

Withholding public information becomes particularly problematic in cases like Abra Pampa in which lack of institutional transparency is an integral part of the human rights violations themselves. In addition to the stipulation of the General Environmental Law 25.675 that citizens be consulted and involved with decision-making processes on environmental matters and impact assessments (Arts. 2 & 11), several specific laws on access to information would be of utmost importance to guaranteeing that citizens are fully informed and aware of governmental actions that had been promised, at least rhetorically, in the Abra Pampa matter. In all of its requests for public information on Abra Pampa, the Clinic cited domestic and international laws, which guarantee citizens access to public documents including the Argentinean Constitution; Article 13 of the American Convention of Human Rights; Article 19 of the International Covenant on Civil and Political Rights: The Rules of Free Access to Public Information on the Environment (*Régimen de Libre Acceso a la Información Pública Ambiental*) of Law 25831 and Article 6 of Annex VII of Decree 1172/03.

In the context of Abra Pampa, denial of information about the harmful effects of Metal Huasi contamination constitutes basic rights held by all citizens, particularly in the public health realm. The annex at the end of this report provides a list of information requests the Human Rights Clinic has made, none of which received a formal response, although some documents were obtained during visits to the different governmental agencies.

Ineffective Legal Remedies

Abra Pampa residents have also faced significant legal obstacles to the protection of their rights on the issue of contamination. Various lawsuits and other complaints have been filed and resolutions handed down with no response from the government.

In 2005, a complaint was filed with the Ombudsman of the Province of Jujuy denouncing the Hospital Nuestra Señora del Rosario, the Municipality of Abra Pampa, and the Secretary of the Environment of Jujuy Province for the environmental and health crises in the town. The basis of the complaint was the health of Raúl García's children, whose blood was effectively poisoned with lead due to contamination from waste left by Metal Huasi, and of the failure to clean Barrio 12 de Octubre where he lives with his family.

In Resolution No. 0229-DP JUJ-06 in June of 2006, the office of the Ombudsman of Jujuy province outlined the severity of the lead poisoning in Raúl's sons' blood, which in one case was shown to be twice as high as levels present in healthy individuals not exposed to lead.⁶⁹ The Resolution also decried the environmental mess left by Metal Huasi operations in Abra Pampa, saying that the situation faced in Abra Pampa "cannot be considered to pose an eventual risk, but a present risk and one that will continue to pose problems in the future,"⁷⁰ a clear violation of environmental laws intended to curb hazards before they pose a problem. Resolution No. 0229-DP JUJ-06 outlines the following recommendations:

- That the Secretariat of the Ministry of Health of Jujuy province take the necessary measures to treat García's two sons.

⁶⁹ Levels of blood in healthy males with no exposure to lead: 3.1 to 17.7 mg/dl. Tests of García's sons revealed levels of 41.3 mg/dl and 23.3 mg/dl.

⁷⁰ "Lamentablemente no se puede considerar la presencia de un daño eventual, sino de un daño actual y de efecto futuro continuado."

- That the Secretary of Environment and Natural Resources of Jujuy Province demand responsible administrators in charge of Metal Huasi remove all waste and contaminated materials from the area, in compliance with resolutions of 2004 and 2005 as well as provincial environmental law.
- That the Secretary of Environment and Natural Resources of Jujuy Province take necessary measures toward “environmental recovery, and that the Executive branch of the province declare Abra Pampa an “area of environment at risk.”⁷¹

To date, this resolution has only partially been implemented by the provincial government. Similar to most families affected by lead poisoning in Abra Pampa, García’s children have yet to receive comprehensive treatment. As discussed above, while some of the waste has been removed, the removal process up to this point has been done in a haphazard manner and without the participation of the community. In Barrio 12 de Octubre, no comprehensive remediation plan has been developed so far.

In addition to attempts to seek remedies through the Ombudsman’s office of Jujuy, Abra Pampa residents have been involved with civil legal claims carried forth by the private law office of Riad Quintar, a provincial-level representative in Jujuy. In 2006, Ezequiel Aldao Fascio initially filed three separate claims against the municipal government in Abra Pampa for civil damages from the health costs faced by Abra Pampa residents. Municipal lawyers from Abra Pampa have argued that responsibility for health problems belonged to provincial government authorities, but in 2008 a provincial judge ruled that provincial laws establish municipalities’ responsibility for environmental issues, and that the claims could proceed against the municipality of Abra Pampa given the environmental hazards at the core of local health problems. These civil suits have since been merged into a single claim, currently pending a decision from provincial level courts in Jujuy. Although the civil claims represent potentially important means for reparations for those residents involved in the cases, members of the *multisectorial* from Abra Pampa also expressed to Clinic representatives that a favorable decision for community members included in the claims might also deflect attention away from residents who are not included in the cases. Furthermore, it is not clear that a decision against the municipality nor monetary damages would fully address the problems of lack of adequate State response with respect to the full range of environmental and health problems Abra Pampa residents continue to face, many of them beyond the scope of authority of the municipality.

Two other significant actions – through the federal prosecutor’s office in Tucumán, and the Federal Ombudsman’s office – represent major attempts to break through a relatively closed judicial environment in Jujuy to provide citizens of Abra Pampa with a modicum of justice, though unfortunately these resolutions and precautionary measures have not yet made a significant impact upon the people of Abra Pampa.

First, through its Preliminary Action No. 118/07: Pollution in Abra Pampa by toxic metals (*Actuación Preliminar No. 118/07: Contaminación en Abra Pampa por metales tóxicos*), a regional Federal Prosecutor (*Fiscal Federal*) from the Province of Tucumán filed a criminal action against the owner of the Metal Huasi site, citing as evidence of environmental crimes the soil study conducted by the Universidad San Luis Potosí in Mexico and the 2006 INQA study to discredit governmental rhetoric that air and soil qualities were not adversely affecting the health of Abra Pampa residents. The action names Elcoriam SA (firm that owned Metal Huasi) responsible for environmental degradation and its subsequent health effects in Metal Huasi. It names Ricardo Ariel

⁷¹ Resolución No. 0229-DP JUJ-06, the Office of the Ombudsman of Jujuy.

Elías Chenú, Héctor Luis Garibaldi, and José Raúl Ferraro, heads of the company, as directly responsible for “crimes of contamination that are presumably being committed in the city of Abra Pampa.” As far as the Clinic knows those criminal actions are not being actively pursued by the federal prosecutors with jurisdiction in the Province of Jujuy.

Second, through its resolution 0087/07, the Federal Ombudsman’s office issued a recommendation to the government of Jujuy, resolving immediate implementation of a program of Sanitary Assistance for the population of Abra Pampa to adequately treat the entire population, especially children, who are particularly susceptible to the harmful effects of lead exposure. Furthermore, it recommended that the Federal Secretary of Environment and Sustainable Development guarantee that waste removed from the Metal Huasi site be properly isolated and treated to ensure minimal damage to the environment and to Abra Pampa residents. While the Federal Ombudsman office has been active in collecting documentation from and maintaining contact with activists working on the Abra Pampa case for several years now, it has faced monetary and staff limitations that have prevented it from pursuing the case to the desired extent. The Ombudsman’s office has received several responses containing studies and initial plans for remediation from State and provincial authorities. However, staff members there have stated that much of the documentation that they receive is incomplete and does not reflect plans for health remediation in Abra Pampa, which the office believes should be of utmost priority.⁷²

⁷² Office of the National Ombudsman, interview with the Human Rights Clinic delegation, April 27, 2009.

Implications of Abra Pampa: Struggles for Accountability in the Context of Mining Activity

Despite legal demands, community protest, media coverage, and promises of an effective remediation plan, the people of Abra Pampa continue to face serious health and environmental problems associated with local lead contamination. For decades, they have lived beside - and literally on top of - toxic smelting waste that continues to impose severe harms to the development of each new generation of children. The situation in Abra Pampa represents the clear and continued violation of the community's right to health, right to a healthy environment, the rights of children, judicial protection and standards for indigenous rights under international law.

For over twenty years, studies carried out by both public and private institutions have shown that the residents of Abra Pampa suffer from dangerously high levels of lead poisoning. Throughout most of this period, however, state institutions responsible for monitoring industry and responding to the health needs of the community responded with silence and indifference. Only after national media attention, the publication of independent studies, and massive community protest did public institutions offer a partial acknowledgement of the problems facing Abra Pampa. Unfortunately, in the few efforts made to provide environmental remediation, State institutions have shied away from international standards for environmental remediation, the right to health, and community participation - choosing instead courses of action which have only aggravated the environmental and health situation in Abra Pampa.

Marginalized Communities and the Search for Accountability

Environmental justice usually refers to discussions about the ways in which marginalized communities are disparately impacted by contaminating industrial practices and development projects. Projects with high environmental and health risks are often placed in communities that do not have the political leverage, legal tools, or knowledge needed to effectively hold powerful State and private actors to account. As stated by scholars Rohit Lekhi and Peter Newell, a common theme in issues of environmental injustice is the placement of "hazardous production activities in areas populated by groups from whom low levels of political resistance are expected," and that "impoverished communities generally lack the financial and technical resources necessary to resist environmentally hazardous facilities, as well as having less access to traditional remedies to ameliorate those burdens under environmental and civil rights law."⁷³ Indeed, as noted by Newell and Wheeler, the practices surrounding natural resource exploitation provides so many examples of tension because it "affect[s] the interests of the powerful and the poor simultaneously, often bringing them into conflict with one another."⁷⁴

The problem facing Abra Pampa, then, is more deeply rooted than a simple issue of environmental contamination. Not only have State actors at the provincial and national level neglected to give appropriate attention to the serious environmental and health problems at hand, they have also behaved in ways that have actively contributed to the exacerbation and perpetuation of existing problems. With each turn, government agencies and private actors have attempted to shed all

⁷³ Lekhi, Rohit and Peter Newell. 2006. "Environmental injustice, law and accountability," in Peter Newell and Joanna Wheeler (eds.), *Rights, resources and the politics of accountability*. New York: Zed Books, p. 201.

⁷⁴ Newell, Peter and Joanna Wheeler. 2006. *Rights, resources and the politics of accountability: an introduction*, Peter Newell and Joanna Wheeler (eds.). New York: Zed Books, 9.

responsibility and willingness to be held accountable for their actions. As discussed above, even within attempts to provide a response through a plan of environmental remediation, State actions have been marred by a lack of coordination between State agencies, a lack of independence of State agencies responsible for providing oversight of environmental, health, and human rights standards, and a general inadequacy and deficient quality of actions taken in the name of environmental and health protection. In all stages of the remediation process thus far, State authorities have failed to inform community residents of the nature of the situation they face, involve residents in discussions about health problems and the remediation process, or provide them with healthcare needed to combat the effects of lead poisoning

Many of these issues of accountability are rooted in the structure and conflicting roles of government institutions. Under the Secretary of Mining, for example, are the State organs responsible for the growth and development of the mining sector *and* the environmental monitoring of mining operations. Between institutions, there is also an issue of shedding responsibility for implementing standards. During multiple meetings, for example, when the Clinic delegation inquired about the agency in charge of implementing health and human rights standards, agency representatives quickly passed responsibility to other agencies. The Secretary of Health at the provincial level in Jujuy stated that the agency had no role in the remediation process in Abra Pampa unless there were negative health problems stemming from problems with the remediation plan. At the Secretary of Mining and Production in Jujuy, the Clinic delegation was told that it was up to the Secretary of Human Rights to ensure that human rights standards were applied during the remediation plan, and that the Secretary of Mining and Production was only concerned with the technical aspects of the remediation plan.

Extractive Industries and Human Rights

Problematic relationships between extractive industries and poor communities have long been documented and discussed, telling countless tales of social exclusion, violence, and environmental harms.⁷⁵ ⁷⁶ Human rights, environmental, and community groups have denounced the effects of open-pit mining. Each year, the Blacksmith Institute and Green Cross Switzerland include industrial mining activities, smelting and metals processing, and even artisanal mining among their list of the world's top ten pollution problems, pointing to the dangerous ties between their wastes and human health.⁷⁷ Indeed, regarding smelting alone, Abra Pampa is one of only many examples at the international level exposing the problematic ties between metals contamination and high costs to human health.⁷⁸ ⁷⁹ ⁸⁰

⁷⁵ Clark, Timothy David, Liisa North, and Viviana Patroni. 2006. "Mining and Oil in Latin America: Lessons from the Past, Issues for the Future," Liisa North, Timothy David Clark, and Viviana Patroni (eds.), *Community Rights and Corporate Responsibility: Canadian Mining and Oil Companies in Latin America*. Toronto: Between the Lines Press.

⁷⁶ David V. Carruthers (ed.). 2008. *Environmental Justice in Latin America: Problems, Promise, and Practice*. Cambridge: MIT Press.

⁷⁷ Blacksmith Institute, *The World's Worst Pollution Problems: The Top Ten of the Toxic Twenty – Metals Smelting and Processing*.

⁷⁸ The town of La Oroya in Peru was declared at one point to be one of the ten "most polluted places on earth." A lead smelter established in 1922 and currently operated by the United States-based company Doe Run has left almost identical results for local residents as for the people of Abra Pampa. Nearly all children in the town suffer from dangerous levels of lead poisoning, requiring immediate medical attention and urgent action for environmental remediation. The Peruvian government and Doe Run, however, had taken little substantive action to address the problem, prompting the 2005 filing of a case before the Inter-American Commission for Human Rights, which issued precautionary measures on behalf of La Oroya in 2007.

In the Province of Jujuy alone, there are parallel cases of health problems arising from lead contamination. For example, the town of Palpalá, just outside San Salvador de Jujuy, is reported to be “the most contaminated city in the country,” due to a range of industrial activity carried out in the town, although local lead poisoning is principally attributed to a local lead smelter belonging to Mina Aguilar and a steel foundry. Interestingly, Mina Aguilar was also the company that was contracted to remove and dispose of the Metal Huasi smelting waste, which was first re-smelted at their facility in Palpalá before disposal.

The environmental and health costs of these types of activities are often clear. Yet, as important as they are, the Human Rights Clinic is also concerned about the ways in which patterns of inadequate accountability and oversight- and the failure to respect standards for community participation and indigenous rights- reflect the type of relationship that continues to exist between State institutions, the mining industry, and marginalized communities. Scholars have long documented how, in considering the placement of new mining projects, “social considerations are subordinated almost entirely to company needs as dictated by the technical-productive requirements of the project. As a result, the genuine conditions for positive social outcomes –such as the development of trust and confidence, identification of effective intermediaries between community members and companies, and understanding of community realities and aspirations – are rarely taken into account.”⁸¹

Indeed, up to this point, State and industry proponents of mining in Jujuy have almost uniformly failed to respect indigenous communities’ rights to participation by ignoring standards of prior consultation (*consulta previa*) established under international human rights law. Today, the cultural and territorial integrity of indigenous communities in Jujuy remain threatened by a renewed interest in mining exploration and exploitation throughout the province over the past 10 years. Numerous concessions for new open-pit mining projects have been granted on top of lands recognized as the ancestral territory of indigenous communities- a fresh source of conflict for communities throughout Jujuy- prompting new protests about mining over the past few years.

These issues have particular resonance with respect to expansion of mining projects, whose operation has often been criticized as preying on areas “inhabited by indigenous people or people who were poor, socially and economically marginalized, and dependent on land and traditional ways of life,” and that “... the State’s selective absence from such regions often meant that it played a limited role in corporate and community issues.”⁸² Historically, community members have

For the original study, see Fernando Serrano, “Environmental Contamination in the Homes of La Oroya and Concepción and its Effects in the Health of Community Residents.” Division of Environmental and Occupational Health and School of Public Health, Saint Louis University. February 2008.

⁷⁹ See also AIDA, Human Rights and the Environment, “Current Projects-La Oroya Smelting.”

⁸⁰ Human rights issues stemming from metal processing and smelting have also affected communities within the United States. Over the past five years, community struggles to address the contamination from the Asarco lead smelter in El Paso, Texas, have revealed the challenges involved in addressing environmental and health rights issues in countries with strict standards. See Michael E. Ketterer, “The ASARCO El Paso Smelter: A Source of Local Contamination of Soils in El Paso (Texas), Ciudad Juarez (Chihuahua, Mexico), and Anapra (New Mexico),” Summary Report for the Sierra Club, January 27, 2006; see also Fernando Díaz-Barriga, et al. “The El Paso Smelter 20 Years Later: Residual Impact on Mexican Children,” *Environmental Research* 74, pp. 11-16, 1997.

⁸¹ De Echave. 2006. “Mining and Communities in Peru: Constructing a Framework for Decision Making,” in Liisa North, Timothy David Clark, and Viviana Patroni (eds.), *Community Rights and Corporate Responsibility: Canadian Mining and Oil Companies in Latin America*. Toronto: Between the Lines Press.

⁸² Szablowski, “Regulating Corporate and Community Engagement in a Large Mining Project,” in Liisa North, Timothy David Clark, and Viviana Patroni (eds.), *Community Rights and Corporate Responsibility: Canadian Mining and Oil Companies in Latin America*. Toronto: Between the Lines Press.

rarely been consulted, and are generally left in the dark about the potential ways in which projects may impact their lives, reflecting patterns of industrial development and community relations seen in regions throughout the world.⁸³

Moving forward, State institutions involved in the remediation process in Abra Pampa have the ability to better their practices with communities like Abra Pampa, as well as communities in which companies are interested in new mining development- but only if the State begins to prioritize basic human rights over rapid project development, implements policies that reflect true “best practices” and meaningful forms of prior consultation, and avoids projects that pose devastating and irreversible environmental tolls. The State has an obligation to not only fully address the disastrous health and environmental problems faced by the people of Abra Pampa for decades, but also to carry forth policies and programs that actively work to avoid contamination and respect communities’ right to make decisions about their own health, economies, and livelihoods.

⁸³ Cole, Luke and Sheila Foster. 2001. *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. New York: NYU Press, 104.

Annex: Public Information Requests

Public information requests made by Human Rights Clinic, in collaboration with the Asociación por los Derechos Civiles (all document requests sent April 7, 2009)

Sent to:	Document requested:	Response received:
Dr. Eduardo Mondino, National Ombudsman	Copy of file 13.316/99, on contamination in Abra Pampa	Received copy during meeting with Ombudsman office on April 27, 2009. File incomplete due to floods in Ombudsman office.
Dr. Eduardo Mondino, National Ombudsman	Copy of case file 9692/00, on presumed deficiencies in hospital services in Jujuy province	Not received; file missing, presumably from flood in Ombudsman office.
Dr. Eduardo Mondino, National Ombudsman	Copy of denouncements related to case file initiated in 2007	Received all actions and related documents in meeting with Ombudsman office on April 27, 2009.
Dr. Homero Biblioni, Federal Secretary of Environment and Sustainable Development	Copy of “Memorandum of Agreement for Technical and Financial Assistance Applicable to the Execution of the Plan in the Province of Jujuy, for the Remediation of the Site of the Ex-Smelter Metal Huasi” (2007)	Received in ADC office in July 2009, three months after document request sent.
Dr. Jorge Mayoral, Federal Secretary of Mining	Copy of “Memorandum of Agreement for Technical and Financial Assistance Applicable to the Execution of the Plan in the Province of Jujuy, for the Remediation of the Site of the Ex-Smelter Metal Huasi” (2007)	None received
Dr. Jorge Mayoral, Federal Secretary of Mining	Copy of “Interministerial Agreement” of May 22, 2007, between the Secretary of Mining and Coordination of Attention to Health, Education and Social Action of the Province, on remediation in Abra Pampa	None received
Dr. Jorge Mayoral, Federal Secretary of Mining	Copy of agreement between the Secretary of Mining of the Nation and the School of Engineering of the National University of Jujuy, on the realization of a study of decontamination in Abra Pampa (2007)	None received
Dr. Jorge Mayoral, Federal Secretary of Mining	Copy of agreement between the Federal Secretary of Mining with the National University of Jujuy for on the “Preliminary Technical Evaluation on Remediation of the	None received

	Site of Metal Huasi”	
Dr. Jorge Mayoral, Federal Secretary of Mining	Copy of report on “Preliminary Technical Evaluation on Remediation of the Site of Metal Huasi”	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of “Memorandum of Agreement for Technical and Financial Assistance Applicable to the Execution of the Plan in the Province of Jujuy, for the Remediation of the Site of the Ex- Smelter Metal Huasi” (2007)	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of Resolutions 5-2007 and 6- 2007 from the Provincial Cabinet of Mining and Energy Resources, on regulation of reports on environmental impact and obligations to businesses to send copies of the reports to affected communities.	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of Resolution No. 135/2004 from the Provincial Cabinet of Environment and Natural Resources, on environmental remediation of the site of the smelter of Metal Huasi.	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of Resolution No. 115/2005 from the Provincial Cabinet of Environment and Natural Resources, on Metal Huasi’s failure to clean the site of the smelter’s operation.	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of Resolution No. 075/2006 from the Provincial Cabinet of Environment and Natural Resources	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of Resolution No. 151/2005 of the Provincial Cabinet of the Environment, on the closing of Metal Huasi	None received
Dr. Hugo Tobchi, Minister of Production and the Environment, Province of Jujuy	Copy of Judicial Action B- 162740/06, notification to the Secretary of Environment and Natural Resources of the Province	None received

	of Jujuy on the removal of waste from mining activity of Metal Huasi	
Dr. Guillermo López Salgado, Secretary of Environment, Province of Jujuy	Copy of “Memorandum of Agreement for Technical and Financial Assistance Applicable to the Execution of the Plan in the Province of Jujuy, for the Remediation of the Site of the Ex-Smelter Metal Huasi” (2007)	None received
Dr. Guillermo López Salgado, Secretary of Environment, Province of Jujuy	Copy of Resolutions 5-2007 and 6-2007 from the Provincial Cabinet of Mining and Energy Resources, on regulation of reports on environmental impact and obligations to businesses to send copies of the reports to affected communities.	None received
Dr. Guillermo López Salgado, Secretary of Environment, Province of Jujuy	Copy of Resolution No. 135/2004 from the Provincial Cabinet of Environment and Natural Resources, on environmental remediation of the site of the smelter of Metal Huasi.	None received
Dr. Guillermo López Salgado, Secretary of Environment, Province of Jujuy	Copy of Resolution No. 115/2005 from the Provincial Cabinet of Environment and Natural Resources,, on Metal Huasi’s failure to clean the site of the smelter’s operation.	None received
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Dr. Martín Sánchez Iturbe, Secretary of Production and Environment, Province of Jujuy	Copy of “Memorandum of Agreement for Technical and Financial Assistance Applicable to the Execution of the Plan in the Province of Jujuy, for the Remediation of the Site of the Ex-Smelter Metal Huasi” (2007)	None received

Dr. Martín Sánchez Iturbe, Secretary of Production and Environment, Province of Jujuy	Copy of Resolutions 5-2007 and 6-2007 from the Provincial Cabinet of Mining and Energy Resources, on regulation of reports on environmental impact and obligations to businesses to send copies of the reports to affected communities.	None received
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Dr. Martín Sánchez Iturbe, Secretary of Production and Environment, Province of Jujuy	Copy of Judicial Action B-162740/06, notification to the Secretary of Environment and Natural Resources of the Province of Jujuy on the removal of waste from mining activity of Metal Huasi	None received
Dr. María Tanúz, Secretary of Coordination of Attention to Health	Copy of "Interministerial Agreement" of May 22, 2007, between the Secretary of Mining and Coordination of Attention to Health, Education and Social Action of the Province, on remediation in Abra Pampa	None received
Dr. María Tanúz, Secretary of Coordination of Attention to Health	Copy of report of the Toxicology Service of the Central Laboratory of Public Health from the year 1986. "Epidemiological study on environmental contamination provoked by lead in the school-age population of Abra Pampa, in	Report received, but through contacts with Riad Quintar.

	relation to a lead smelter located in the town.”	
Dr. María Tanúz, Secretary of Coordination of Attention to Health	2006 INQA study, “Evaluation of Chemical Risk Provoked by Toxic Metals in Abra Pampa, Assigning Magnitudes and Probabilities of Adverse Effects of the Contamination in the Environment and the Exposed Childhood Population.”	Report received, but through contacts with the National Ombudsman office.
Dr. María Tanúz, Secretary of Coordination of Attention to Health	Information on the “Study for the Identification and Treatment of Abra Pampa residents Contaminated by Lead in the Town of Abra Pampa,” which began in 2008	None received
Dr. María Tanúz, Secretary of Coordination of Attention to Health	Information on studies realized in 1974, 1980, and 1984 that indicated lead contamination in Abra Pampa residents	None received
Dr. Nora Bellman, Ministry of Health, SUNIBROM	Information on the “Study for the Identification and Treatment of Abra Pampa residents Contaminated by Lead in the Town of Abra Pampa,” which began in 2008	None received
Dr. Victor Urbani, Minister of Health, Province of Jujuy	Copy of “Interministerial Agreement” of May 22, 2007, between the Secretary of Mining and Coordination of Attention to Health, Education and Social Action of the Province, on remediation in Abra Pampa	None received
Dr. Victor Urbani, Minister of Health, Province of Jujuy	Copy of report of the Toxicology Service of the Central Laboratory of Public Health from the year 1986. “Epidemiological study on environmental contamination provoked by lead in the school-age population of Abra Pampa, in relation to a lead smelter located in the town.”	None received
Dr. Victor Urbani, Minister of Health, Province of Jujuy	2006 INQA study, “Evaluation of Chemical Risk Provoked by Toxic Metals in Abra Pampa, Assigning Magnitudes and Probabilities of Adverse Effects of the Contamination in the Environment and the Exposed Childhood Population.”	None received
Dr. Victor Urbani, Minister of Health,	Information on the “Study for the Identification and Treatment of	None received

Province of Jujuy	Abra Pampa residents Contaminated by Lead in the Town of Abra Pampa,” which began in 2008	
Dr. Victor Urbani, Minister of Health, Province of Jujuy	Information on studies realized in 1974, 1980, and 1984 that indicated lead contamination in Abra Pampa residents	None received