

270 DEATHS FORETOLD

Report of the International Independent Commission of Inquiry on the Impact of the January 25, 2019 Brumadinho Dam Collapse



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Executive Summary

Aria's daughter, Priscila, was 29 years old, and her body was found 79 days later. Edi's husband was 58 years old, and his body was not found for four months. They were two of the 270 men and women who were killed by a wall of iron ore tailings that collapsed and liquefied at lunch time on January 25, 2019, pouring its toxic sludge over occupied buildings and townspeople in the southeastern Brazilian state of Minas Gerais.

"Priscila had said she never wanted to be buried when she died, but she died being buried alive," Maria told the six-member Independent International Commission of Inquiry on the Impact of the Brumadinho Dam Collapse in its urgent visit to Brazil in late July 2019. The Commission, a global group of human rights and health and safety experts, has found after four days of hearings that these individuals were subject to an environmental and human "atrocity." Community members and workers were not so much killed and/ or traumatized by a wall of iron ore tailings as by a culture of corporate non-compliance, cost-cutting and concealment.¹ The Commission has selected a title appropriate to the gravity of human failure in this catastrophe: "270 Deaths Foretold."

The Commission's report calls on state and federal governments and the judiciary in Brazil to apply human rights principles to help deliver desperately-needed justice to the Vale victims. The report includes original testimony from a broad cross-section of communities affected by the dam collapse, including the perspectives of a leading Catholic bishop, family members, social movement leaders, Pataxó-Hã-Hã- Hãe indigenous community representatives, and union representatives. In addition, the Commission reports on meetings "Priscila had said she never wanted to be buried when she died, but she died being buried alive."

with state legislative investigators, a labor prosecutor, and federal and state legislators. The Commission's "Findings and Recommendations" section² includes a succinct explanation of the application of international instruments agreed to by Brazil's legislature and judiciary. The Commission identifies four crucial areas for reform: "Justice, Independence, Transparency, and Deterrence."

In its "Justice" finding and recommendation, the Commission calls for full consideration of all prosecutorial options against what it calls the environmental and human "atrocity" of this dam collapse. Criminal prosecutions must be part of that consideration, as provided in other judicial systems, such as Australia. Moreover, the Commission calls for removal of any legal caps on moral damages. Finally, the Commission calls for speedy attention to the needs of all the aggrieved, with the dictum, "Justice delayed is justice denied."

In its "Independence" section, the Commission warns of the dangers of privatization in remediation of environmental and

1 Some background to the Commission: At the request of mining industry trade unions, ICLR recruited specialists in labour rights and health and safety from around the world. The Commission was on the ground from July 27, 2019 to August 1, 2019. Included in the Commission were: Oscar Alzaga, Mexican labour lawyer and former labour judge; Frank Luce, Canadian labour lawyer and former professor; David Michaels, professor at George Washington University and President Obama's Assistant Secretary of Labor for Occupational Safety and Health, 2009-2017; Attorney Jeanne Mirer, labour lawyer (New York, NY) and president of ICLR; Micòl Savia, Italian attorney and counsel to the International Association of Democratic Lawyers at the United Nations in Geneva; Richard Spoor, South African lawyer representing mine workers in occupational exposures in South African mines.

The Commission's work is supported by International Lawyers Assisting Workers (ILAW), the Association of Labour Lawyers of Latin America (ALAL), the Canadian Association of Labour Lawyers (CALL) and the International Association of Democratic Lawyers (IADL).

2 Prior to the completion of this full report, the Commission supplied a copy of just the "Findings and Recommendations" to the State and Federal Parliamentary Commission of Inquiry (CPIs) for them to consider before the release of their reports in mid-September 2019. Thus, these committees had the benefit of the full findings and recommendations by the Commission before they issued their reports. These findings may be an appendix to those reports.

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human disasters, and calls for an end to corporate control of funds for disaster settlements and remediation. With respect to "Transparency," the Commission calls for public airing of all information, hearings, and negotiations in order to avoid repeating a history of individualized bargaining by companies in disaster settlements, to the detriment of families and the wider community.

With regard to "Deterrence," the Commission underlines the perverse calculus of corporate risk-taking, which undervalues human life. "Prevention" of catastrophe has failed in the Brazil mining sector. A heightened system of penalties, with new emphasis on punitive damages, must be advanced in order to deter reckless behavior. With the Mariana dam disaster a mere three years earlier, company officials must be deterred from putting more human life at risk by stringent regulations and severe penalties. The Commission's witnesses note that dozens more risky dams loom over other communities.

In short, "270 Deaths Foretold" is a call for living justly by ensuring that the rule of law is applied forcefully against wrongdoers, and with effective remedies for all the injured. The Commission hopes that by pursuing its recommendations, Brazilian authorities can help to provide some solace and justice to survivors of the Brumadinho dam collapse and radically transform a corporate culture of noncompliance.

Executive Summary of the Commission Report

1. A sampling of family member victim statements

"Bruno was murdered by a pen stroke. Someone in Vale knew the dam was unstable and could collapse at any time and they did not say anything." (Andresa Aparacida Rocha Rodrigues)

"Because of Vale my happiness has been taken away." (Nayara Cristina Dias Porto)

"Vale owes us an apology. But no one from Vale has talked to us." (Jacinta Francisca Mateus Costa)

"It was criminal for Vale to place the canteen and the offices and hostel at the bottom of the dam. When the dam collapsed, it was like everyone went through a crusher." (Josiane Melo)

"Vale's crime was ... a calculus, it is cheaper to let this happen than to prevent it." (Kenya)

"We are in a hole, we are in a ditch." (Geraldo Resende)

"The six year old was not told for several months that her father was not coming home... People need to know what Vale is doing to stop other dam collapses." (Sergio Caldeira do Amaral)

2. Auxiliary Bishop Dom Vicente de Paula Ferreira

"The Collapse was predictable. It was not an act of God or Nature. That this was predictable heightens our pain. The event is not in the past, it is in the present, [while it also] lives in people's memories and in their pain. We live with that collapsed dam in people's hearts."

3. Catholic Social Coordinator for the Affected [Mine] Communities (Articuladora Social das Comunidades Atingidas) Marina Oliveira.

"Vale is using all strategies against us. We want these deaths to be exceptional in changing the life of the country. This would be some comfort. If mining does not change we die. The 270 voices silenced in the mud need to be heard."

4. Córrego do Feijão residents

"I have a store, but I lost my business. I was stuck for a month, no right to any reparation. My business sold stationery. Nobody can buy anything now. Other shop keepers and farmers have been ruined. Vale has not recognized our damage. I cannot work now due to feeling psychologically unstable. I do not have a life anymore." (Sara de Souza)

"The firefighters lowered the bodies into the field in front of the church. From there they went to the morgue but because the community was cut off, it did not happen right away. The bodies were not even covered or put in bags until days later... Everybody is in pain. My husband is in pain, and the community is in pain." (Juliana Cardoso)

5. Pataxó-Ha-Ha-Hae Cacique

Besides economic damage, the biggest impact of the collapse was "to take away our joy." (Tanara Santos)

6. Jocile Andrioli of Movement of those Affected by Dams (Movimento dos Atingidos por Barragens) (MAB)

"We are dealing with a crime that affects all of humanity. It is an environmental crime that is now more common in a system which favors profit over all."

"In contrast to Mariana, MAB decided from the beginning to fight Vale on various fronts, including territorial control, technical support and legislative consultation, with the convening of official investigations."

7. Legislative Staff of the Minas Gerais Legislature (Eduardo Martins de Lima)

The goals of the CPI are to find the people responsible, develop alternatives and guidelines for reparation, and create new laws. One law creating stricter standards for construction of dams is in the works.

The State of Minas Gerais filed in court to freeze 12 billion reals [of Vale funds] for the public expense of searching for bodies and repairing damage

8. Federal Deputy Rogerio Correia, Rapporteur, federal Chamber of Deputies CPI

Vale's claim was they had no problems with the dam, and no one knew why the dam ruptured. They blamed contracted auditors from the German firm TÜV SÜD for saying the dam was safe when TÜV SÜD was pressured to change its findings.

Testimony of the workers, on the other hand, who unlike Vale officials did not have lawyers monitoring what they said, contradicted this. The workers stated that Vale knew there were problems with the dam. The committee has emails which convict them.

9. State Deputy Beatriz Cerqueira

The safety problem arose in Minas Gerais because the mining industry has control of the state apparatus.

The Commission of Parliamentary Inquiry (CPI) has been delayed and hampered by the failure to testify by Vale and by German TÜV SÜD officials who are protected from detainment by a habeas corpus order.

The State is very permissive, it does not protect people, it does not inspect, and it is difficult to impose punishment. Vale does not feel pressure and the business community defends Vale and does propaganda on its behalf.

10. Sonia Toledo Goncalves

(Speaking as an individual while a prosecutor of Labor Prosecutor's office (Ministerio Publico do Trabalho (MPT)

It is clear there was pre-knowledge that a collapse would occur. This is based on evidence coming from the police, the CPIs, and the federal and state prosecutors. All evidence also points to it having been possible to prevent the accident.

After failed attempts at individual settlements, the company began to offer more money, for example, 200,000 reals per family, then 300,000 per family, and 75,000 for a brother or sister. These offers had the effect of dividing the families.

Eventually the families in Brumadinho voted in favor of a settlement at 700,000 reals per family. It was approved at a hearing, with 1 to 2 months for execution. This applies to all families, even those who accepted prior individual settlements. The families also got the right to immediately ask for deceased workers' pensions. Additional material damages may include the removal of a fixed 25 year limitation on workers' compensation payments in favor of life expectancy. Another aspect of the settlement is a three-3 year employment guarantee for surviving workers.

Although she does not praise the settlement—in her opinion, it is small in relation to the gravity of the case-- she believes it was the best they could do under the circumstances.

11. Public prosecutor of Minas Gerais (Ministerio Publico (MPMG) André Sperling

This dam collapse was a crime committed, not an accident. An accident cannot be predicted, but this was predictable. Vale knew the risk. They calculated the damage in advance, using 2,600,000 reals as the value of a human life.

Many people are fearful. There is a realistic worry that they will be killed at any moment. We have to recognize the rights of the people who are in these communities. The family members of the deceased and injured victims are the visible victims. But there are a large number of less visible or invisible victims, such as communities along the river that lost their livelihoods.

MPMG got technical advisors at Brumadinho—the judge made it clear that it would be ordered. Vale's tactic has been to try to individualize the problem. Instead, there is now an independent-minded approach with funding directed from the judge to the technical advisors. Vale is going to pay but through the court not a foundation it controls.



Surviving family of Brumadinho victims speak with the International Independent Commission.

COMMISSION FINDINGS AND RECOMMENDATIONS (please see full report)

(1). Justice

Vale bears full and ultimate responsibility for the acts of its managers and contractors at Córrego do Feijão and therefore for the consequences of this catastrophe. A regressive cap on moral damages has been challenged before the Supreme Court. Human rights principles applied to this case dictate that the cap itself is a menace to human dignity. Moreover, justice delayed is justice denied.

(2). Independence

All decisions on indemnification must be made with the input of the affected communities, and must be made independently of Vale (separate from Vale's Foundation which has been involved in other community settlements). Moreover, scientists independent of Vale should conduct studies to measure the extent and effect of the Brumadinho contamination on the environment.



"Missing" posters highlight the victims of the disaster.

(3). Transparency

The actions of corporations and the government must be open for all to see and evaluate. All financial and other offers, calculations, studies, settlements and other activities should be accomplished in a transparent process. Details of all secret or non-transparent agreements signed to date should be revealed and if parties want to renegotiate them, that should be allowed. It would be appropriate if monies from Vale can be held in an account outside of Vale control and for the benefit of civil society.

(4). Deterrence

Evidently the costs of a collapse were perceived in the executive offices and board room as being less than the cost of adequate investigation and prevention of a collapse. It is imperative that the ongoing response to the Brumadinho disaster deter further bad behavior by Vale and other mine owners—and protect workers and the community from their deadly decision-making. One way to change the behavior is to impose very large financial penalties on mine owners whose dams collapse. Moreover, to apply criminal penalties to boards, it should not be a requirement to show actual knowledge of the criminal behavior. Authorization of a mine should require a deposit into a state account of enough funds earmarked to rehabilitate the affected area, even if the company goes bankrupt, and this amount should be annually reviewed and increased if necessary.

I. Creation of the Commission of Inquiry

n January 25, 2019, in the State of Minas Gerais, Brazil, the Córrego do Feijão dam collapsed in a catastrophic and almost instantaneous breakdown known as "liquefaction." This dam is owned and operated by the multinational corporation Vale S.A. Vale is the largest iron ore producer in the world and had over \$6.8 billion dollars in profit in 2018. The dam held back millions of tons of mud and iron ore tailings³. When the dam collapsed, these tons of waste quickly descended on company buildings below the dam and in the town of Córrego do Feijão,

on to the town of Brumadinho, and beyond. The waste spread death and destruction for at least five miles and contaminated the downstream creeks and rivers. It was the worst industrial catastrophe in Brazilian history. More than 240 persons are known dead and more than 20 remain missing.

The dam collapse in Brumadinho was the second such Vale disaster in the recent past. A similar upstream dam in Mariana had collapsed on November 5, 2015, causing immense environmental destruction, 19 deaths and many lost livelihoods.

On June 17, 2019 the International Commission for Labor Rights (ICLR) received a written request from Eduardo Armond, representing the Sindicato dos Trabalhadores nas Indústrias da Construção Pesada de Minas Gerais (Minas Gerais Heavy Civil Construction Workers' Trade Union) (SITICOP-MG), and Maximiliano Nagl Garcez, lawyer for SITI-COP and 6 other unions currently litigating against Vale, of the dam collapse and to make findings and recommendations. More than 240 persons are known dead and more than 20 remain missing.

The ICLR recruited specialists in labour rights and health and safety from around the world and assembled an expert Commission of Inquiry. The Commission was on the ground in the cities of Brumadinho and Belo Horizonte from July 27, 2019, through to its press conference on August 1, 2019, when a preliminary statement was issued.⁴

The Commission is supported by International Lawyers Assisting Workers (ILAW), the Association of Labour Lawyers of Latin America (ALAL), the Canadian Association of Labour Lawyers (CALL) and the International Association of Democratic Lawyers (IADL).



International Independent Commission outside the Legislative Assembly of Minas Gerais state.

A. Composition of the Delegation⁵

Oscar Alzaga: Mexican labour lawyer and former labour judge who represents the Mineworkers Union.

Frank Luce: Canadian labour lawyer and former professor.

Professor David Michaels: Professor at George Washington University and President Obama's Assistant Secretary of Labor for Occupational Safety and Health, 2009-2017.

4 The Preliminary Report is attached to this report

5 The Curriculum Vitae of each member is attached at the end of the report.

³ According to Engineering.com, the tailing pond consisted of "finely ground rock waste, water and whatever chemicals were used to extract the metal... 11.7 million cubic meters of mud burst out of the dam, flowing downhill...and swept down toward the mine's administrative area and cafeteria." https://www.engineering.com/BIM/ArticleID/18557/Manufactured-Disaster-How-Brazils-Dam-Collapse-Should-Have-Been-Avoided.aspx_Geologists report that iron ore tailings often contain traces of nickel, cadmium, iron oxide, ammonia, silica, silt, clay, mercury and arsenic.

Attorney Jeanne Mirer: New York City labour lawyer and president of the board of International Commission for Labor Rights.

Attorney Micòl Savia: Italian lawyer who represents the International Association of Democratic Lawyers at the United Nations in Geneva.

Attorney Richard Spoor: South African lawyer representing mine workers in a class action regarding occupational exposures in South African mines.

B. Scope of the Investigation

The members of the Commission determined to meet a broad section of persons affected by the dam collapse as well as to meet those involved in investigating the events and developing remedies for the impact. The Commission was able in a short period of time to meet with affected family and community members, including members of a Pataxó-Hã-Hã-Hãe indigenous community, as well as union representatives, government officials, church officials, and social movement representatives.

The Commission emailed a letter to Mr. Marcelo Klein, Vale's director of emergency response, requesting a meeting but got no response. The Commission gave particular focus in its visits with dam collapse victims to the human rights framework set forth more fully in our conclusions and recommendations. The Commission wishes to emphasize that we have not had the opportunity to independently validate the testimony we received. The statements about Vale and this tragedy are not those of the Commission but of the witnesses to this disaster. Moreover, in some circumstances, if they did not fully identify themselves, witnesses are identified only by a first name or another designation.

II. Summaries of Testimony and Meetings

After an informal meeting of the Commission on the evening of July 27, 2019 the Commission began in the morning of July 28, 2019 in Belo Horizonte, the capital of the state of Minas Gerais, with an orientation from the leaders of the union which had requested the Commission. This orientation provided members with important background information on the min-

ing industry in Brazil, the Brumadinho disaster, as well as efforts of the authorities and the union to obtain compensation from Vale for some of the victims. The principal presenter was Eduardo Armond, a SITICOP-MG representative.

In the afternoon of Sunday, July 28, 2019 the Commission traveled to Brumadinho and met with families of victims in the Brumadinho municipal assembly chamber. The Commission was also able to see the area and some of the damage to the community and infrastructure.

On Monday, July 29 the Commission met at the Catholic Church episcopal offices in Brumadinho with Auxiliary Bishop Dom Vicente de Paula Ferreira and the church's community organizer Marina Oliveira. After this meeting the Commission



International Independent Commission members hear family testimonies.

met with members of the Community association in Córrego do Feijão. After that meeting we met with the Movimento dos Atingidos por Barragens (MAB) (Movement of those Affected by Dams), notably Joceli Andrioli, Tchenna Maso and others from MAB who had been involved in other dam collapses.

On Tuesday, July 30 the Commission viewed videos from surviving workers who were involved in the cleanup and search

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operations. We then met at the Minas Gerais legislature to hear about the state legislature's Parliamentary Commission of Inquiry (CPI). The Commission was joined by Osmar Gusmão, in-house lawyer for the SITICOP construction union. Eduardo Martins de Lima, advisor to the state CPI Rapporteur André Quintão, gave an opening statement. In the evening members of the Commission met with Rogério Correia, Rapporteur for the Federal Deputies' CPI.

On Wednesday, July 31 the Commission heard from State Deputy Beatriz Cerqueira. Thereafter the Commission had an unofficial briefing from Sônia Toledo Gonçalves prosecutor for the Public Prosecution Ministry for Labour Issues (MPT) in Minas Gerais. (Ministério Público do Trabalho). She is part of the MPT's task force for the Vale Brumadinho case. Also present was Andreia Cristina Custodio, another MPT official in Minas Gerais and advisor to the task force on Vale Brumadinho. Andreia lives in a municipality that borders on Brumadinho. After this meeting the Commission was briefed by André Sperling at the Minas Gerais public prosecutor's office (Ministério Público de Minas Gerais) (MPMG)]. The evening ended with a meeting with Pataxó-Hã-Hãe community representatives.

A. Orientation

Eduardo Armond, SITICOP-MG union representative

The catastrophe of Brumadinho occurred in the State of Minas Gerais. Mining is carried out under license and contributes substantially to state revenue. The history of the state owes much to mines and mining. (Indeed, in English, Minas Gerais means "General Mines.") There are 245 tailings dams. There have been six dam bursts in the past 10 years, causing deaths of workers and others.

Many tailings dams, including those in Brumadinho and Mariana, are built from the mines' own residue and mud. These are called "upstream dams," operating without other physical containment such as cement. These dams can be as high as 110 meters, holding back the sludge by-products of mining operations. The mines in Minas Gerais are mainly iron mines. Therefore the dams in Minas Gerais are mainly holding back iron ore tailings. As the export price for iron ore went up, so did the emphasis on production, and the need for the dams to store the tailings. Moreover, recent production included mines with lower concentration of iron ore, creating a higher ratio of tailings that needed to be stored. As production went up less attention was paid to safety of the dams. All of the dams are filled to the top. The tailings contain water which needs to be able to drain. SITICOP workers in

particular work on the drains. The belief is that such



Socio-environmental catastrophe caused by the dam breaking at Vale mining company in Brumadinho (MG) Photo: Vinícius Mendonça / Ibama

drains will keep the contents of the dam dry. However, there must be constant monitoring of the dam and drains in order to ensure proper drainage to avoid liquefaction, a condition in which solids essentially collapse and liquefy.

In November 2015 there was a liquefaction dam collapse at the Mariana mine. The Mariana dam contained 80 million square meters of tailings, and one square meter weighs 700 kilos. Brumadinho had 30 million square meters of sludge. The records seized from Vale's offices showed that in 2016 the dam in Brumadinho had drainage problems and a risk of rupture. The problem was not corrected. Surviving workers told investigators of the numerous cracks and leaks which Vale ignored. Rather it used an outside company TÜV SÜD to certify the dam as safe.⁶

⁶ According to a SITICOP lawsuit, safety tests of the site were defective, methods to drain the dam did not follow best or proper practices, and contractors in risk reduction made gross errors. The union points out that Vale and its contractors may argue with each other about responsibility but the ultimate responsibility belongs to Vale.

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The Brumadinho dam collapse killed more than 240 people, with some 23 who are missing and presumed dead: 20 from the local community (19 dead, 1 disappeared); 119 outsourced workers died (109 dead, 10 disappeared); 131 mineworkers died (120 confirmed dead). Of the administrative workers who worked in buildings below the dam, 30 were engineers and 40 were cooks, cleaners, and transport workers. In construction, 81 are dead.

Overall, 12 Vale dams are at their limit and unsafe.

Mr. Armond also provided a description of the cases filed by the unions and the labour prosecutor, as well as the settlements to date.

Settlements thus far have only addressed the emotional or "moral" damage claims of families of workers who lost their lives. The settlements do not address the death claims of workers, injuries of the workers who survived, or the claims of the community members who lost their livelihoods. The damages issues will be described in more detail in the section on the Commission's meeting with the labour prosecutor.

The unions and the social movement, especially MAB, are working together to press for prosecutions of the dam collapse as a criminal matter.

III. Meeting with Surviving Family Member Representatives in the Brumadinho Municipal Assembly Chamber ⁷

The Commission met with a group of affected family members at the Brumadinho municipal assembly chamber. Most wore white tee shirts with a picture of their lost loved ones imprinted on the shirts. The pictures showed happy faces and contrasted to the suffering that the loved ones expressed.

All the people who provided testimonies expressed perspectives about their faith, but said that their faith had been shaken by the events. Each had a different story but they all expressed that the pain of losing loved ones was compounded by Vale's failure to tell family members anything or to listen to them, not even to express condolences or an apology. They reported that it took embarrassing protests by the families for Vale to consider an apology but that was not until six months later.

Below are excerpts from the testimonies.

1. Andresa Aparacida Rocha Rodrigues, is the mother of Bruno who was only 26 years old when he was murdered, she told the commission.

"Bruno was murdered by a pen stroke." Someone in Vale knew the dam was unstable and could collapse at any time and they did not say anything. Today it is known that the dam was leaking at the bottom, and the company knew and said nothing.

The families are dying every day. They relive January 25. They are thinking who are the next victims? Andresa told the Commission that her son worked 105 days of overtime for the company in the months before the collapse. It is 185 days later, she said, and the company has never contacted her.

She still relives January 25th and the initial panic of not knowing if he had survived the waves of mud. Her husband went to the site and said there was zero chance he would be found alive. The whole office was built below the dam.

"Because of Vale, my happiness has been taken away."

⁷ The Commission brought four professional interpreters to each meeting who provided simultaneous interpretation. This report is compiled from notes taken primarily by English speakers from the interpreters. Direct quotes are noted in bold and with quotation marks. Those statements not in quotes represent the gist of what the witness stated, as reported by qualified interpreters.

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2. Nayara Cristina Dias Porto said that she can never forgive Vale for taking her husband. He was a forklift driver near the canteen which was below the dam along with the office. She was her husband's second wife. Even though Vale was provided information about their marriage, they still gave his indemnification payments to his ex-wife and daughter. Vale claimed to have no record of her. She also described reliving the horror of January 25 and her efforts to find him. She said: **"Because of Vale my happiness has been taken away."**

3. Jacinta Francisca Mateus Costa was the mother of Thiago, 32 years old and a mechanic. Thiago had sickle cell anemia. He was hired by Vale after six years of studies to be one of the 26 persons with workplace disabilities. He worked for them for 13 years and even though he had to have transfusions every three weeks, he never missed a day of work. She recounted how she found out about the collapse and her panicked efforts to find Thiago. She told the commission: **"Vale owes us an apology. But no one from Vale has talked to us."**

4. Josiane Melo survived only because she was on vacation on January 25th. She did lose her sister in law who was five months pregnant as well as 135 work colleagues. She was part of a protest group that was able to meet with a Vale representative. When they asked for an apology the representative asked what kind of apology they wanted. They should not have had to ask for an apology to begin with, she said. The Vale question showed that any apology would be insincere.

Because of the trauma she has to take medication to sleep. She is off work due to PTSD. She told the Commission she believed **"It was criminal for Vale to place the canteen and the offices and hostel at the bottom of the dam."** When the dam collapsed, **"it was like everyone went through a crusher."**

5. Natalia Oliveira's sister, Lecilda, has not been found. Vale calls this group the "disappeared" **"but they have not dis-appeared, they are buried and broken."** She told the commission that the suffering of the people whose family members have not been found is very grave. **"They cannot apply for any benefits as they do not have death certificates."**

6. Kenya, widow of Adriano Aguiar Lamounier, told the Commission that there is a need for Vale to recognize that what they did was to commit a crime. The community still believes in justice but it is hard to see it. Vale has not listened. They tried to shove a settlement down people's throats. They never met with survivors or families. "Vale's crime was without malice, it was a calculus, it is cheaper to let this happen than to prevent it." Vale is acting like they are giving a donation, not justice.



Surviving family of Brumadinho victims speak with the International Independent Commission.

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7. Geraldo Resende lost his daughter Juliana who worked for Vale for eleven years and has not been found. Juliana's husband Dennis who worked for Vale also died. She was finishing an engineering job. They have left two children who he is now caring for. He is trying to raise his grandchildren but without their parents working for Vale, they have no health care coverage. They have no money to pay for health care. The trauma is unending. They all need medication to sleep. "We are in a hole, we are in a ditch."

8. Anastacia do Carmo Silva's son Cleiton died at age 29. He was in school to be a mechanical technician. He was the support for the family. As a result of his loss the family lost health care and is suffering both the trauma and loss of resources.

9. Sergio Caldeira do Amaral lost his brother who worked for Vale for 12 years. He was found in his truck. His brother had a wife and 2 children, 6 and 9 years old. Although his brother's body was found whole, many bodies were not found intact. He told the Commission that the family has been totally devastated. **"The six year old was not told for several months that her father was not coming home."**

The people who worked at Vale and their families are humble people but Vale never gave them information when the dam collapsed, he said. Vale should have put together a special team to address the families but did not. It was not until the families organized and protested that Vale met with family members affected by the collapse. The people in charge must be arrested. People need to know what Vale is doing to stop other dam collapses, he said.

10. Edi Tavares told the Commission that her husband was 58 and had worked for Vale for 38 years. His body was not found for 122 days. **"He left home alive and returned in pieces. We die a little every day. He literally gave his life to Vale."** He had recently trained someone to take his place. He always worked Saturdays, Sundays and holidays if necessary. He leaves three children, ages 21, 25 and 28.

"There is no laughter at home."

"The sludge destroyed the lives of these families. Everything we had done for Vale is for nothing."

"All victims were murdered. It did not matter whether someone worked one year or 38 years, all of the victims paid with their lives. The suffering is slowly killing us. There have been suicide attempts."

"I do not know what to do. I live my life one day at a time. We want justice and the guilty punished."

11. Maria Regina da Silva lost her daughter Priscila who was only 29. "Priscila was happy and healthy on January 25 when she went to work. She was buried for 72 days." Maria lost not only her daughter but many more friends "Priscila had Vale in her heart but they have not shown the same heart. No one from Vale has apologized. Priscila went to work in one piece and came back in pieces."

Because Priscila was unearthed in pieces they could not let anyone see her in her coffin to say goodbye. They could not have a wake, or place a keepsake in her hand before her burial.

"Priscila had said she never wanted to be buried when she died, but she died being buried alive." Maria said that she has nightmares about what happened and dreams of mud coming out of her mouth. She wonders what the workers felt when they saw the mud coming at them. She wonders why Vale put the office and canteen at the bottom of the dam. The persons with special needs were also working at the bottom.

Vale must pay for what the community lost, she said. Maria has high blood pressure from the despair. The survivors are not entitled to health care based on the employee's healthcare. **"Our loved ones who worked there did not know the risks but the company did." "The surviving workers are in despair."** Maria said that there is a lack of respect for the workers who helped rescue people.

"He left home alive and returned in pieces...He literally gave his life to Vale."

IV. Meeting with Auxiliary Bishop Dom Vicente de Paula Ferreira and Church Community Liaison (Articuladora Social das Comunidades Atingidas) Marina Oliveira

1. Bishop Dom Vicente

The population feels abandoned by Vale and the state and federal authorities. He described all the work the church had done to help the community in the aftermath and the support they tried to give the community. He said that everyone is tired, but the tired need to go on. There has been no ability to fully measure the damage.

"The collapse was predictable. It was not an act of God or Nature. That this was predictable heightens our pain. The event is not in the past, it is in the present, [while it also] lives in people's memories and in their pain. We live with that collapsed dam in people's hearts."

The Catholic community of Brumadinho has been deeply affected but the church is working with everyone, from evangelicals to others. The church's relief work includes people in the city as well as groups living on the riverside and those who lost land



The International Independent Commission meets with Auxiliary Bishop Dom Vicente de Paula Ferreira.

and agriculture. Indigenous community members (Pataxós), quilombolas (Afro-Brazilian descendants of escaped slaves), and MST Patria Libre (a settlement of landless people) all are affected.

All leaders of the church have come together to support the victims, but there are hurtful moments. Vale wants to act as if everything is in the past, and people should move on, and forget what happened. The municipality is working with the company. There is desperation of the people who have not found their loved ones yet. People are suffering so much that they take medication to sleep.

Regardless of the failure to find people and the collapse, operations at the mine have not stopped, he said.

It is a delicate situation now. Just when workers are dying in the dam collapse, indigenous community members are being assassinated in the Amazon. A chief was killed to destroy the indigenous resistance to development.

Some people are saying mining should be stopped. Some say if mining goes people will lose a way of life. But, they [the mining companies] are ruining the water and agriculture, they are killing the river. And when the ore is gone they will just abandon the area. The Bishop has received no information from the company regarding what it is doing to inspect other dams.

It is like a war situation, he said. There is a lot of prejudice against the slave descendants' community and the indigenous

communities. People come to Brumadinho to invest without consulting the community.

On the spiritual side, since the 25th of January, the church went to all the burials. Most people are Catholic and the church

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provides burial services. The church has been visiting all families, including lay people, and receives donations of food, clothing and money to give to the people including the indigenous communities. The church has also worked with the public prosecutor's office to make sure funds from legal settlements go where there are supposed to go. Before the collapse the church was able to work on small projects to help the community but now they are only responding to crises, putting out fires.

There are five regions in this archdiocese, with the center of this region being Brumadinho.

The church has tried to stop the destruction from mining which is ruining the natural heritage of the country. It is part of a committee set up by Bishop Sebastian to address ecology and mining. There are many conflicts due to mining all over Brazil.

Pope Francis says that capitalism cannot continue like this. What are the alternatives? The Indigenous have been resisting for 500 years. Others need to learn how they have resisted. So has the quilombola community. The church is studying this.

Humans are in the process of decimating the species. Everything is being polluted. There are 500 million refugees of war. Now there are mining refugees.

The church has a role to play without specifically naming people. The church is doing silent work, for the community. The company is pushing money, but the spiritual side remains a concern.

People are in terrible psychological pain. An army of psychologists offering medication has come to the community. People are being doped up. Where is the support for the spiritual side? People in Brumadinho are very spiritual. A whole generation will live under this trauma. How does one calculate that cost?

"To conclude, if we continue like this, the planet will end. We have a responsibility to save it."

"There is dignity in life itself. How can you calculate spiritual damage to a life and a wound that will never heal?"

"To conclude, if we continue like this, the planet will end. We have a responsibility to save it."

The church has built a leadership group to have dialogue with the community and attends meetings of all types, he said. The health system appears to be in shambles, the roads are a problem, no one in the community is making money, only the company.

Dom Vicente introduced the Catholic social coordinator (Articuladora Social das Comunidades Atingidas) Marina Oliveira who has been carrying out community coordination and talking to the different factions

2. Social Coordinator for the Affected [Mine] Communities (Articuladora Social das Comunidades Atingidas) Marina Oliveira.

Marina grew up in a mining town. As a child she would draw pictures of trains arriving empty and going away full. At the time she did not think it was wrong that they did not bring anything into the community. But she now feels that the system of mining she witnessed has resulted in the land, water animals and people being destroyed.

She has now come to see what this crime meant. The dam ruptured with complex consequences. The Córrego do Feijão community was rich in flora and fauna. Everything in the path of the sludge was killed. People cannot drink milk from cows that are drinking polluted water. Children are traumatized, they cannot play football in streets. People lost their gardens, and their homes. Family heirlooms were lost along with family history.

The children can no longer swim in the river. People are so on edge about further collapses that an old man told her that he was traumatized by the noise of his refrigerator which he thought was a siren. **"People who have lost their livelihoods are ashamed to ask for help with basic needs. But it is their right to have a livelihood."** The quilombo community was

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Signage points to two heavily impacted communities: the Indigenous Pataxó community and MST Patria Libre, established by landless agricultural workers. isolated for two months until the road was blasted clear. In the Pataxó community all of the fish died. By tradition, they buried each fish separately. Children cannot swim in the river.

The river is a source of transport of crops and now the crops are lost. Children use the river to go to community school. Pataxó members lost access to ancestral lands and the ability to engage in their rituals. There are no hospitals or ambulances that can get through to these communities. Roads are blocked and water faucets run water brown as mud.

The loss of life has impacted everyone. She cannot go anywhere without finding people who lost loved ones. Their lives were torn from them. **"The impact will be here forever, people are suffering depression, and other damage to their health and the worry is what will happen to future generations."**

"Vale is using all strategies against us. We want these deaths to be exceptional in changing the life of the country. This would be some comfort. If mining does not change we die. The 270 voices silenced in the mud need to be heard."

She said that Vale managers and directors need to apologize, on TV, on the news, on WhatsApp.

"People were proud to wear the Vale Shirt, but the company did not have the respect to acknowledge the deaths or inform the families."

Money is all Vale has offered. She said that people do not want to reject the right to be paid, but those responsible should be punished. The process of compensation should not be hard but Vale has caused divisions. This is because some got payments and others did not. **"Vale hired people to tell the company who to pay and the information was not accurate and this caused much pain."** Vale must be held to account, she said.

State and Local governments are involved, public attorneys as well as mediators for the families. **"We do not know who to trust. Judges are not fair. They say if mining goes away Brumadinho will be over."**

"But complete solutions should come from the bottom up." Vale's business model is to have a legal process for dam collapses. There have been five dam collapses in this state. One characteristic of predatory mining is that the company only thinks about reparation not prevention. **Vale needs to stop dividing the community.**

V. Meeting with Community of Córrego do Feijão at the Córrego do Feijão Community Center

Present: Fabiano De Oliveira Sara de Souza Jefferson Vieira, President Juliana Cardoso, Vice president

Sara de Souza

Most of the people who live in this community were born here, Sara said. Thus, most of those [from Córrego do Feijão] who died in the disaster were born here. Community members were not prepared for this. The destruction is like what would occur in a war. Residents were cut off.

Córrego do Feijão lost 27 residents. Sara named a friend who worked for an outsourced company. The community is now made up of sick and fragile children and adults. Residents were traumatized by seeing the helicopters coming in and out. Bodies were hanging from the helicopters as they arrived to the church yard. Many people have suffered serious psychological injuries. **"Children are drawing pictures of corpses hanging from helicopters."**

Justice has been lacking. The Brazilian president said that Vale is a precious gem, but did not say anything about the people. The community needs justice. This has been horrible, very sad for the people, with a lack of humanity. Although she did not lose anyone in her family she feels that she lost her history, and her youth.

In 2018, Sara said that the community had received assurances that the dam was safe.

She called the dam collapse a crime and an assassination. Below the dam, in the hostel, 5 members of the community were found dead under a bridge. **"Vale did not respect us or allow us our dignity. It is sad for us to continue living."**

Since the collapse Vale built a road around the sludge trail **"We have to use it every day and as we do we remember the hostel where 5 of our residents died. Every time we pass on the road we know our friends are buried under the mud."**

"I have a store, but I lost my business. I was stuck for a month, no right to any reparation. My business sold stationery. Nobody can buy anything now. Other shop keepers and farmers have been ruined. Vale has not recognized our damage. I cannot work now due to feeling psychologically unstable. I do not have a life anymore."

"I want my life, my dignity. I see no future. We do not see any solution."

Jefferson Vieira

Jefferson's grandmother, who took care of him and his sibling, left for work as a cook at the hostel on January 25, 2019 and never came back. His pregnant 35 year old aunt never came back. His grandmother was 57. Her body came back mutilated. He will never forget it. His grandmother at 57 looked very young and was very particular about how she looked. Vale gave no news about our family members, he said. **"I learned of my grandmother after 14 days, and that she had gone directly to burial. My family was destroyed."**

The area, he said, is a rural community with mines all around it. Residents all know each other. No one is a stranger. **"The col**lapse was an apocalypse. We had no energy, no water, no news, no roads, all we could see was a sea of mud which engulfed houses and structures. We had no news of family members. No road access. Only sludge." After January the 25th the region was bombarded by press but only on the outside. People on the outside had more information.

Jefferson saw helicopters flying over with corpses. Heads, as well as mutilated arms and legs. The helicopters took them to the church yard to unload. Children saw all these bodies. Firefighters left the bodies in the church yard.

"People died very scared. These people were mutilated by greed. Dams are unsafe."

No alarms rang, he said. They all were off. No information came from those responsible.

Many people depend on the river. Vale said they would clean two kilometers but the contamination runs for many kilometers. The water is contaminated and going to Belo Horizonte.

"If Vale had been punished for Mariana, Brumadinho would never have happened."

Juliana Cardoso

Although she was born in Belo Horizonte, Juliana moved to Córrego do Feijão 8 years ago for the quality of life, which was good. She lost her father-in-law, Levi Gonçalves. Since the collapse she has suffered an ongoing assault on her emotions as searchers found some of his body parts in February and others in April.

The quality of life is now destroyed. "I used to eat the beans my father in law planted. My children would only eat the beans he planted. Now they cannot... Who will restore all that was lost? The struggle will never end. It is with me every day. The assassination was not just the 25th of January, after 6 months it continues."

The company is acting maliciously, she said. The children need psychological treatment. Children to do not want to go over the road.

"I get calls with people asking how to commit suicide. I never took medication be-

fore but now I cannot sleep."

One child said to her while looking up to a helicopter carrying a body part: "Is that a head or a baby?"

The community is crying, there are children living off the products of the forest. The new road is a point of reference, built on top of places where body parts were found. Her son does not want to use it.

"The firefighters lowered the bodies into the field in front of the church. From there they went to the morgue but because the community was cut off, it did not happen right away. The bodies were not even covered or put in bags until days later."

"Everybody is in pain. My husband is in pain, and the community is in pain."

She said that they could see the dam collapsing from their house. Residents ran to their cars, grabbing children to save them. She said that the scene left a deep imprint in her mind. **"I see these images and hear the screams of people in my mind** every day. No justice has been done".

"The President says things like 'go on as before' but we are in unending mourning. It consumes us."

"Six months later and they are still killing us. How long will it go on?"

A settlement was made by the labour ministry for the people working for Vale at that moment as direct or outsourced workers. She said that the collapse killed workers, but also families. Fathers, mothers, sisters, brothers. Business and private people.

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Broken railway bridge illustrates the damage caused by the dam's collapse.

They killed private people. Nobody has given the community any support.

She said that some people who worked for Vale came disguised as volunteers and controlled the donations. They wore shirts that said volunteer, but it was clear after meeting them that they were working for Vale. Residents know they were Vale employees.

The community was given a training for escape routes. They were told to put their documents in a plastic bag and go to designated safe place. However, one of the meeting places was below a bridge. Residents were not able to use the training because when the dam broke everyone had to go to the highest place which became the HQ for the firefighters. People from this neighborhood made the first rescues. People dove into the mud to save other people.

"The training was a joke. My father in law lived 50 meters from the dam. When the dam broke the sludge came out at 80 km per hour. It went 400 meters in seconds."

"The mud covered the road and the slope and another house near me. It came only meters from my house."

The community needs to know what contaminants are in the mud, she said. The fish died. There are no fish downstream. Vale says the mud is safe. A university should test it.

She said that there are questions of who did or did not work for Vale and that lawyers are trying to coerce people. Less educated people have conceded to Vale, such as by selling their farms.

The community wants to know if they can sue [the contracted dam collapse risk researchers] TÜV SÜD. Half of the community is afraid to live near the mine.

People have grave exposures to heavy metals and fear cancer or other diseases from the contamination.

She said that houses are now worthless. TÜV SÜD should have to help to buy the houses. Vale has to cover costs of medical tests for the residents and to help people with direct and indirect losses.

"Vale was not punished for [the dam collapse at] Mariana. If Vale had been punished for Mariana, Brumadinho would never have happened."

VI. Meeting with Movement of those Affected by Dams (Movimento dos Atingidos por Barragens) (MAB)

Joceli Andrioli

Joceli stated that the MAB Movement was started 40 years ago. MAB has been in this region since 1991. It has spread to 12 Latin American countries where it is called MAP (P for "Presas," which is "Dams" in Spanish).

MAB is dealing with a crime that affects all of humanity. It is an environmental crime that is now more common in a system which favors profit over all. And in Brazil everyoneis dealing with privatizations. Vale was a public company until 20 years ago when it privatized.

"People are afraid in Minas Gerais because so many people are in the pathways of dams."

Now residents fear other industrial accidents, especially in Minas Gerais, in the city of Congonhas, for example. There is also risk at Barão de Cocais and Nova Lima. In the north of Minas Gerais, there is a chemical issue at Paracatuthat puts the Rio Sãn Francisco at risk.

The Mariana dam collapse in 2015 taught the social movements a great deal. The Mariana collapse caused contamination on a large scale, not only along the Rio Doce but, after the sludge reached the ocean, 400 kilometers of the coastal area was contaminated.

Some 300 billion Brazilian reals are owed for the damage to the Rio Doce and the coastline. In contrast the cleanup of parts of the Rhine River after the 1986 chemical spill cost 100 billion Euros. Vale does not want to pay these billions and will try hard not to.

Vale has political clout. They have strong ties to the federal and state governments and support the campaigns of many politicians. Their political power inhibits activism. They try to criminalize social movements using various tactics. For example, Vale has tried to sue the leaders to prohibit MAB protests; they have used police "bought" by Vale to infiltrate their groups; even bus companies are asked who hired them to take people to protests as a way to intimidate them from not supporting the social movements.

They do not want Mariana and Brumadinho to serve as precedents for reparation for any future disasters.

The 4th anniversary of the Mariana dam collapse will be November 5, 2019. Although Mariana was a public embarrassment for Vale they have managed to subvert the process of reparation. In Mariana, the legal system failed the people. Many people are not being compensated. The government said Vale could decide who to compensate. Vale is also in conflict with the population along the Rio Doce. They are trying to control the territory. Vale made a secret deal with the state government to accelerate payments and obtained releases that required the transfer of land ownership to Vale. Thankfully, and as a result of pressure, the judge overruled these releases, so even in the Bento Rodrigues (Mariana) community the people still own the land.

The Brumadinho collapse was marked by the large number of deaths and destruction. The water system is contaminated. When the dam collapsed it was traumatic, and the first few days were decisive.

In contrast to Mariana, MAB decided from the beginning to fight Vale on various fronts, including territorial control, technical support and legislative consultation, with the convening of official investigations.

As to territorial control, MAB workers reached the trapped victims in Córrego do Feijão before Vale representatives did. MAB organized the feeding of families and helping children. MAB made the lists of those affected. They stopped Vale from making lists which have been used in the past against people. MAB convinced people not to sell their land to the company. In

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legal actions Vale's funds were blocked. They worked with the community in finding the bodies, 24 still not found, for 2 they have found only a leg. In Brumadinho, people depend on wells for water. Many families were using contaminated water. MAB was able to access the families and try to provide them water and emergency aid. Six thousand people were helped with this emergency aid. MAB demanded emergency payments for 100,000 people for a year including all of Brumadinho and people one kilometer on each side of Rio Paraopeba, as ordered by the Court.

As to technical support, MAB has argued that in order to be reliable, there need to be independent Commission members listen to MAB speak on the impact of dams on communities. technical advisory teams to evaluate psychological



damages, water and other environmental contamination and economic damages of those affected. Judges need their own independent technical assistance for doing these assessments to determine reparations.

The discourse of the government has shifted in favor of independent technical assistance. This is not like Mariana where the court allowed Vale to control all aspects of the study of the Rio Doce, allowing the voices of the victims to be lost.

For a socio-economic study the judge has assigned the Federal University of Minas Gerais (UFMG) to advise. The river contamination will be measured up to the Três Marias dam.

There is also a problem of heavy metals appearing in the blood of people living in the area. There are stomach and skin ailments connected to these exposures and there are fears of serious health consequences and that many will die as a result of the exposure to sludge heavily contaminated with iron ore.

There was a study done by Vale on this heavy metal exposure but it was not honest. Also, because the dam collapse happened at the end of the rainy season, there is a fear that its effects will appear during the next rainy season, with health problems. Vale has various labs looking at health effects, but it is a problem not to have reliable information.

As to investigations and other legislative initiatives MAB has succeeded in the introduction of a federal law for dam security. They are trying to get a law to set legal standards for safety of dams and licensing dams and how to safely decommission the dams. There needs to be a dam observation agency and a mechanism to develop guidelines for the legal system to implement. Another law has been approved by the federal deputies and is before the Senate, for the rights of the affected. Initiatives at the state level have been blocked.

The judiciary is not prepared to deal with this type of problem. But they are setting up observatories to study such situations. There are several parliamentary investigations (CPIs) ongoing. MAB is assisting these CPIs and monitoring their progress.

In Mariana MAB's actions were fragmented but MAB learned from that and is now more cohesive and fighting on many fronts. MAB sees its immediate task to get the other dams independently monitored so as to detect problems and fix them before another disaster strikes.

After the presentation by Joceli, several other MAB activists who were present made several other points. José Geraldo from Mariana emphasized that addressing the mental suffering of the victims is very important. People lived where they were because of the river. There has been a 60% increase in the use of anti-depressant drugs, lots of alcohol and drug abuse. There is no endpoint to the crime.

No matter how much they organize with the community Vale is busy disorganizing and dividing the community. In the aftermath of the collapse, the company only brought in outsourced workers to divide them from Vale employees. Vale also spreads misinformation. The further you go downriver, Vale hires people to say that the water is good when it is not.

VII. Video Testimonies

The Commission was provided by the union with a series of videos taken of surviving workers.

Carlos Diniz

"On January 25, 2019 my life ended. My wife died. We have two daughters, ages 4 and 15. They ask for their mother every day. I tell them their mother is in heaven. On Mother's Day one of my daughters "We have two asked me 'How do I go to heaven? I want to see my mother." daughters.. On the day of the collapse he was having lunch with his mother when he heard of the collapse. He ran to the site but there was nothing he could do. His daughter asked if her mother had died. They ask for He worked for Vale for 27 years. He said that as they continued working, they found pieces their mother of people. every day. I

They were told the dam was safe. He wondered what her last moments were like.

He used to be proud to work for Vale. Now, he said he goes there because he has to work. He appreciates the help from the fire fighters but feels that Vale is giving them barbeques but nothing for the workers.

Vale killed his children's mother, he said, but there has been no justice. "We really ask for justice."

Jardel Dutra

heaven."

tell them their

mother is in

Jardel said that he worked at Vale for 9 years. He worked there on the morning of the dam collapse but then was sent to another mine. All of his friends died. He is 35 years old and returned to work on February 19. But he lives with pain.

He said that he has seen body parts of victims on the job. He has been to a psychiatrist and has taken sleeping pills. Others have removed whole bodies or bodies split in half.

He said that Vale is the killer, yet it is Vale requesting employees to rescue bodies from the mud.

Neemias Martins

At the hour of the dam collapse, Neemias, an electrical mechanic, was having lunch away from the mine's canteen. The canteen was buried under millions of tons of sludge. He is thankful he was not there. When he first heard the dam collapsed he thought surely this was just another practice drill because they had all been told that the dam was safe. A fellow worker from the Jangada mine left and tried to help rescue people. "I did not feel I had the strength to go save people and now I feel guilty."

Shortly after the collapse, he asked his managers if he could help by returning to work. At this time, he said, Vale showed a lack of respect to day workers. Firefighters were given special treatment, such as paid lunches and rotating assignments, but everyday workers were not.

Neemias pointed out that machine operators found 11 bodies and other parts of bodies. There was a strong smell of dead bodies and insects were flying around them. There was a work pause only when the machines had to be fixed.

"I am so depressed but I have to work. I ask God to find everyone." But one of his closest friends has not been found.

VIII. Meeting with Legislative Staff and Federal and State Deputies Regarding Parliamentary Investigation Commissions (CPIs)

Eduardo Martins de Lima, advisor to the Minas Gerais CPI Rapporteur André Quintão

Eduardo Martins de Lima provided a summary of the CPI's work. There are two legislative houses in the Federal government: the Senate and the Chamber of Deputies. The Senate CPI has found that Vale is guilty because it assumed the risk. There is another CPI working in the Chamber of Deputies.

Minas Gerais has only one legislative chamber, the House. The legislature is running a legislative investigation and is able to use judicial power but cannot impose sentences. The CPI advises the executive but cannot enforce any laws.

On January 26, 2019 the State of Minas Gerais filed in court to freeze 12 billion reals for the public expense of searching for bodies and repairing damage. They have engaged firefighters and dogs and heavy equipment.

Vale had internal calculations of the losses in case of a dam collapse, as well as forecasts for the path of the mud and flooding. Alarms never came on, causing a loss of lives.

The CPI is looking at the causes of the dam collapse and the consequences. At least 270 are dead but not all have been found. Families had to wait a long time to hear that a family member had died. Bodies were found three meters down in the mud.

The goals of the CPI are to find the people responsible, develop alternatives and guidelines for reparation, and create new laws. One law creating stricter standards for construction of dams is in the works.

The state CPI is ongoing, with a reporting date of September 14. So far there has been testimony from the police, Vale officials, workers, the unions, and families. There is a consensus that there must be indemnification. There is also consensus that lessons were not learned from the Mariana mine collapse three years earlier. There is hope that each CPI will provide insight and lessons.

As for financial payments, Vale officials informed the CPI that there have been 23 individual settlements reached, with 170 in progress. The process lacked transparency and efforts to settle with individuals before the labour prosecutor's office involvement and the union lawsuits resulted in very low settlement amounts.

Testimony from Vale executives was limited as Vale hired individual lawyers for each official who testified. The lawyers were contracted by Vale, not by the individuals in question. There were no lawyers for the workers but the workers testified as to what they witnessed regarding the failure of the company to maintain the dam.

Federal Deputy Rogério Correia, Rapporteur, Federal Chamber of Deputies CPI.

Deputy Correia is the rapporteur for the CPI investigating the Vale disaster. He has met with the unions, families of the victims, affected communities, social movements and the Catholic Church. Before the federal investigation he was part of the special committee which monitored what he emphatically called "the crimes" from Mariana.

He stated that in Mariana the companies were aware of the risks. The price of iron increased which made them increase production for export without any care for the jobs of the workers. Three years later Brumadinho happened. Initially there were hopes that because Brumadinho involved a smaller dam than Mariana, the damage would be less, but of course that was not true. He saw the collapse on film.

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Vale has wanted to stop, but could not stop, the investigating commission. At the hearing Vale executives were represented by lawyers paid for by Vale. Their claim was they had no problems with the dam, and no one knew why the dam ruptured. They blamed contracted auditors from the German firm TÜV SÜD for saying the dam was safe when TÜV SÜD was pressured to change its findings.

Testimony of the workers, on the other hand, who unlike Vale officials did not have lawyers monitoring what they said, contradicted this. The workers stated that Vale knew there were problems with the dam. The commission has emails which convict them.⁸ All the documents are public. The commission has been able to break the seal of secrecy to have telephone messages from Vale executives produced.

Vale knew the dam was unstable. They saw the mud from the base. When they tried to insert drains it only made the situation worse.

With respect to TÜV SÜD they are trying to get the German Ambassador in Brazil to secure the testimony of relevant engineers. The Ambassador promised to have people from TÜV SÜD testify. But the relevant people went back to Germany and have disappeared. They have given written questions to them but have received no response.⁹

There is urgent need for new federal legislation in mine safety but the mines and industry lobby has prevented the passage of several bills which could prevent future collapses and provide adequate indemnification.

There are four bills which need to be passed. There is one bill they are working on with MAB which would be for all victims of dams. They need safety standards, strict licensing requirements and verified monitoring. All the dams were included in the laws they tried to pass.

People have the right to know the truth, he said, and there ultimately will be accountability.

Minas Gerais State Deputy Beatriz Cerqueira

State Deputy Cerqueira informed the Commission about her background and the work she has been doing to address violations of rights of the communities associated with the dam collapse.

She stated she was formerly a teacher and is now a member of the Minas Gerais CPI, which started in March and will go until September. She was also involved in Mariana from 2015 where there were many rights violations.

She said that the safety problem arose in Minas Gerais because the mining industry has control of the state apparatus. These dam collapses relate to how the mining companies operate in general in Brazil. It could have been any one of the dams that collapsed.

The CPI has been delayed and hampered by the failure to testify by Vale and by German TÜV SÜD officials who are protected by a habeas corpus order. Other Vale executives claim to have known nothing. It was only the workers who provided any information. The Vale system was that all executives hide information. The Civil Police, however, have information available.

There are no policies in place to protect the people afflicted by violation of mine safety. The state allows mining companies to be self-regulating. The state is very permissive, it does not protect people, it does not inspect, and it is difficult to impose punishment. Vale does not feel pressure and the business community defends Vale and does propaganda on its behalf. To date Vale's profits and image remain intact.

⁸ For example, according to the New York Times, "in emails included in the arrest warrant, one TÜV Süd engineer said that inspections indicated that the dam was at risk of liquefaction — when the solid tailings abruptly become a murky liquid. The engineer, Makoto Namba, wrote that the analysis wasn't complete, 'but, as always, Vale is going to push us to the wall.'" <u>https://www.nytimes.</u> com/2019/02/15/world/africa/brazil-dam-arrests.html

⁹ After the ICLR Commission visit, members learned that TÜV SÜD had pulled out of providing dam safety certifications. https://www.reuters.com/article/us-vale-sa-disaster-tuvsud/tv-sd-pulls-out-of-dam-safety-checks-after-brazil-disaster-idUSKCN-1V91AR



Members of the Commission meet with the federal CPI

Vale tells their executives that they cannot advance in their careers if they are found guilty. Vale has sent their workers to help find bodies and parts of bodies, so these are suffering psychological problems. The company seeks as well to criminalize the social movements.

Vale has taken on the role of the state, like in Brumadinho, where companies are replacing the state in matters of education and so on. The process has been very difficult, and after September it will be another challenge to keep international visibility on Vale. Vale bets on the exhaustion of the victims.

Last year Vale representatives went to the community, in December 2018, to train peo-

ple on what to do if there was a siren indicating a problem at the dam. They used the alarm bell from another location that could not be recognized. The practice alarms were not realistic, giving 7 or 8 minutes to get to the gathering point, but in fact there were only 35 seconds to escape from the Brumadinho canteen during the dam collapse. There was no siren, and the survivors were only those who did not follow the Vale's suggested escape routes. The siren did not sound because there was no one available to press the signal. They were monitoring from a distance and it was lunch time. Those who followed the route died. In the hostel there were 30 dead within 4 minutes.

In May, people from Córrego do Feijão staged a protest at the Vale office. A Vale employee came out and confronted a woman who had lost her husband. It is the women who suffer the most: they lose their income through the death of the husband and their own income loss is not recognized because they work in the informal sector. Vale has been buying up land around an affected community to put the sludge they have removed. The trucks go by, make noise, raise dust, but there is no dialogue with the community.

Vale will not share any information about the toxicity of the dam waste. As far as she is aware there has been no independent analysis of the toxicity of the sludge

In Brumadinho, anti-depression medication is used extensively in place of a medical system that does not work. People have suffered with dengue and skin problems. There have been 2 suicides in Brumadinho. Recently she had a request from a mother to pay for the health treatment of a child whose whole problem was caused by Vale.

Vale also uses panic and despair to have people leave the region so Vale can buy the land to expand, like they did in Barão de Cocais and Macacos.

IX. Meeting at the Labour Prosecutor's Office (Ministério Público do Trabalho) (MPT)

Sônia Toledo Gonçalves has been a prosecutor with the MPT since April of 2001. She underlined that she spoke as an individual, not for the MPT. She described the history and process that the MPT went through to achieve recent financial settlements, which will be described below.

She started working at the MPT in 2001. She is part of a continuing group within the MPT organized in March to handle the Vale-Brumadinho situation.



International Independent Commission members at the Ministerio Publico (public prosecution) of the state of Minas Gerais

The case has been very painful, emotional and stressful. It is clear there was pre-knowledge that a collapse would occur. This is based on evidence coming from the police, the CPIs, and the federal and state prosecutors. All evidence also points to it having been possible to prevent the accident. The lack of respect for human life is upsetting and scary. She said they she cannot believe Vale put a canteen and administrative offices in the path of any dam rupture. More importantly the accident was avoidable.

The MPT has had two people working on the file to secure payment for violations of people's rights. Labour prosecutors froze 800,000 reals to pay initial expenses, and this was doubled to 1,600,000 reals, the largest amount in history for the MPT in Minas Gerais.

The MPT engaged in a constant dialogue with the families, which was a breakthrough. It is the role of MPT members to act as mediators in conflicts, distinct from the advocacy of social movements. This allows the institution to maintain some neutrality.

In this situation the MPT decided to dialogue with the families and held assemblies in Brumadinho, including regular dialogue.

The MPT tried to explain the risks in a judicial process. This process was a learning experience. The families were not used to legalistic terms. The language used was difficult. MPT acted in partnership with the unions.

Initially the MPT was advised that Vale would pay 50 times the monthly salaries in moral damages, as provided in the 2017 labour law reform.

The families would not agree to this and refused even to discuss this offer more. The MPT then filed a constitutional challenge to the law.

Then the company began to offer more money for example, 200,000 reals per family, then 300,000 per family, and 75,000 for a brother or sister. These offers had the effect of dividing the families.

In light of this division, the MPT launched a class action. This helped the MPT maintain harmony among the families and to start a collective negotiation process with Court oversight.

Vale sought individual settlements with families and unions using lawyers who often received payments which almost equaled

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the amount to be paid to the family. Some of these attorney fees in the settlements have been nullified by the courts.

Families by and large resisted the effort at individual settlements as the families saw that with the MPT involvement Vale was increasing its offers.

Vale, she said, was counting on getting individual agreements. Vale does not want to deal with public institutions and always tries to isolate these institutions and the unions, as in the case of the Mariana dam collapse in 2015.

The settlement was approved at a hearing, with 1 to 2 months for execution. This applies to all families, even those who accepted prior individual settlements. The families also got the right to immediately ask for deceased workers' pensions. Additional material damages may include the removal of a fixed 25 year limitation on workers compensation payments in favor of life expectancy.¹⁰

Another aspect of the settlement is a three-year employment guarantee for surviving workers. Families have the option to accept or if not, hire a lawyer and proceed.

Although she does not praise the settlement—in her opinion, it is small in relation to the gravity of the case-- she believes it was the best they could do under the circumstances.

The administration of the settlement funds will be through the MPT and a commission established for this purpose which will include representatives of families and others.

There are other claims for damages which also can be made by surviving workers, such as for workers who are looking for bodies and are finding pieces of their colleagues' bodies. One worker said he found a torso which was of his workmate and he was traumatized and having to take medication for this. It is also unknown what effect the sludge will have on people's health. Investigators are trying to find out what is in the mud that may expose people to health risks.

In the end she believes there has to be an independent auditing of the safety of the mines and the tailings dams.

At the end of the meeting she introduced Andreia Cristina Custodio, a worker at the MPT who lives near Brumadinho. Her neighborhood is below a dam which has the same construction and material as the dam which collapsed. According to her testimony, prior to this incident, Vale had a positive reputation. People were proud to wear the Vale shirt. Now things are different. She said that there need to be safety standards and that there is no shine in the eyes of the Vale workers.

X. Meeting with the Public Prosecutor of Minas Gerais (Ministério Público) (MPMG)

MPMG Prosecutor André Sperling gave the Commission a presentation about its work on the investigation:

MPMG has been a participant in the investigations of both the Brumadinho and Mariana dam collapses and is still involved in Mariana.

Vale and all the mining companies engage in predatory mining practices: they get the most profit possible out of the workers and do not care about the impact on the environment. Other mining companies, such as Anglo American, have built ducts to direct water to the mine. Some use slave labour. They don't recognize the rights of workers or communities. This type of mining is for maximum profits and disrespects the environment and workers.

The MPMG has taken on this struggle at Brumadinho and beyond. Brumadinho is part of the system, which impacts humble people who depend on the river. This dam collapse was a crime, not an accident. An accident cannot be predicted, but this

¹⁰ https://www.theguardian.com/world/2019/jul/16/vale-brazil-mining-dam-collapse-brumadinho

was predictable. Vale knew the risk. They calculated the damage in advance, using 2,600,000 reals as the value of a human life.

His area of responsibility is for damages for all people damaged by the mining industry, not just for Brumadinho. The certification of dams has also become an issue. Companies who certified safety face criminal prosecution. The safety certification did not correspond to reality.

Other cities are in danger from the sludge of Brumadinho and Mariana. Vale and the mining industry in general insist that there is no injury if the dam does not break. But there may be injuries for those in the zones of risk around similarly con-

This dam collapse was a crime, not an accident. An accident cannot be predicted, but this was predictable. structed dams.

Many people are fearful. There is a realistic worry that they will be killed at any moment. We have to recognize the rights of the people who are in these communities. The family members of the deceased and injured victims are the visible victims. But there are a large number of less visible or invisible victims, such as communities along the river that lost their livelihoods.

Many live off fishing. The Afro-Brazilian quilombo communities, gather worms to sell as bait at the banks of the river. There are no more worms so these sales are lost. For them, the injury is also a question of territory. Monetary damages do not solve the problem.

For the Rio Doce and the Paraopeba communities, the MPMG needs technical advisors (Assessoria tecnica) to be chosen by the affected people, with engineers and others who live in the region. People understand the damage but they do not know their rights. These technical advisors help solve problems. In Mariana, the technicians spoke down to the people from above, but this advice should come from the base, not from above. The principal actor (protagonista principal) should be the person affected.

In Mariana, the federal prosecutor and others were involved in negotiating an agreement that resulted in the creation of the Renova Foundation, which is controlled by Vale and BHP. This foundation excluded affected people from its governance and put all decisions in the

hands of the two companies responsible for the crimes. This is not acceptable. The MPMG is currently working on a way to fix this.

The MPMG has three technical advisors active at Mariana and four have been chosen for Brumadinho. At Mariana, MAB and the social movements were absent, but at Brumadinho, the MAB, the social movement and the university have been brought to the table, which has made a big difference. Independent consultants can help collective struggles. These independent consultants have to be approved by the prosecutor and the court. They need to hear from victims and work with the victims.

Vale tried to avoid this but MPMG got technical advisors at Brumadinho—the judge made it clear that it would be ordered. Vale's tactic has been to try to individualize the problem. Instead, there is now an independent-minded approach with funding directed from the judge to the technical advisors. Vale is going to pay but through the court not a foundation it controls.

Vale has paid into an emergency fund to provide 100,000 reals per person. In Mariana it was 10,000 reals. The federal courts (Poder Judicial Federal) have done a lot more in Brumadinho than in Mariana. There have been more hearings, with the big issue being the recognition of people as victims.

The MPMG has three areas of work on damages in this case. Environmental, social, and criminal. The criminal investigation is ongoing. Vale works to avoid responsibility for its executives by insulating them through not keeping records which show they were informed of events. They use the same tactic that is used by organized crime. Above the level of general manager (gerente-geral) the documents and paper trail disappear. The MPMG noticed that lower level officials deliberately block the investigation claiming there are no records. But there are personal meetings. Information is passed along verbally. They know everything, they just work not to be caught.

He believes the deaths were homicides. Vale knew of risks but did not take action to prevent it.

XI. Meeting with Pataxó-Hã-Hã-Hãe Community¹¹



Members of the Pataxó-Hã-Hã-Hãe community meet with the International Independent Commission.

Tanara Santos, cacique

The community is prevented from going to the river. Twelve families in the community are not acknowledged as victims, she said. The community is denied the right to health and education. The mining companies are killing both rights and motherland. They think indigenous people have no problems but money is a problem.

There is no peace in the land, she said. Some unknown people almost burned the community's houses. Protecting the land is like being in prison. The mining company wants to restrict the community. The land is not demarcated and its loss means a loss of family livelihood.

The Pataxó community wants dignity. Even the municipality will not acknowledge this community. The biggest impact of the collapse, this leader said, was "to take away our joy."

Fishing, bathing and playing in the river have been lost. The joy of swimming is lost.

Residents cannot harvest their own food and must eat pesticide contaminated food. Prior to the collapse children had safety and health but do not have it today. Help is needed.

Arakuã Pataxó Hã Hã Hãe, cacique

Vale promised a lot of things but without follow through. He stated that there is a lack of education and a lack of transportation to the nearest health clinic. The community wants peace but is threatened by unknown people looking for the chief. Everyone is worried and sleeping with worried hearts.

¹¹ After the Commission's visit, the Pataxó community entered into a new negotiation with Vale in August 2019 that includes matters different from this report, such as possible relocation. Those matters may be reviewed at https://www.brasildefato.com. Those matters may be reviewed at https://www.brasildefato.com. br/2019/09/25/com-a-morte-do-rio-paraopeba-em-brumadinho-indigenas-pedem-realocacao-de-territorio/





Volunteer teacher

There is no support from the government in terms of school material. Even chairs and desks are not adequate. The river is dead. The company has been asked to revive it but it is not that easy. The authorities can be asked for health and education assistance but there is no ultimate result. Community members trust in the Pataxó nation. But the people from Vale do not acknowledge the Pataxó community as victims.

The community is under pressure, sleeping during the day and trying to stay awake at night to guard against attackers. There is no peace. Water is sent by the Bishop, not from Vale, and the community also sought relief from the UN.

Young man

Schools are needed, but medication is prescribed. He does not want to have to take medication.



Photos above: Members of the Pataxó-Hã-Hã-Hãe community meet with the International Independent Commission.

XII. Findings and Recommendations of the International Independent Commission of Inquiry on the Impact of the Brumadinho Dam Collapse

The Córrego do Feijão —or, "stream of beans"— Dam was aptly named for a gentle and sensitive riparian and human crossing point. During four days of hearings, we heard about errors, negligence and possible concealment by Vale Corporation and its contractors that yielded an environmental and human atrocity. We do not easily use this word. Those responsible had at least three years of notice, readily available technology, and ample funds to ensure that a predictable dam collapse at the very least avoided loss of life. Instead, a man made tidal wave of iron ore tailings on January 25, 2019 crushed, drowned and/or dismembered some 247 forensically identified individuals, with at least 23 more missing and considered dead. The surviving workers, family members, and community residents face a lifetime of grief and economic hardship. All of the affected individuals, as well as the environment of the area, are in need of healing, repair and remedy. We have concluded that the gravity of the disaster in Brumadinho combined with recent and urgent application of human rights law to environmental disaster call on Brazilian legal authorities to make human rights principles a primary filter to address the harms caused to individuals and communities by this dam collapse and to shape appropriate remedies.¹²

The very definition of a "right to life" in UN instruments speaks to the preventable disaster in Brumadinho. This fundamental right, as promulgated in the International Covenant on Civil and Political Rights (ICCPR), signed by Brazil in 1992, includes "the entitlement of individuals to be free from acts and omissions that are intended or may be expected to cause their unnatural or premature death, as well as to enjoy a life with dignity... Deprivation of life involves an intentional or otherwise foreseeable and preventable life-terminating harm or injury, caused by an act or omission."¹³

Respecting and promoting human dignity is the central principle of all international human rights law. The Preambles to the Universal Declaration of Human Rights (UDHR), the ICCPR, and the International Covenant on Economic, Social and Cultural Rights (ICESCR) establish "... the inherent dignity ... of all members of the human family [as] the foundation of freedom, justice and peace in the world..." The American Declaration on the Rights and Duties of Man adopted in Bogota in 1948 has similar language, but specifically recognizes and upholds that family is a central concept to human dignity and deserves protections.¹⁴

Human rights instruments notably define dignity in the context of the workplace, making such definitions especially relevant to the Brumadinho disaster. For example, Article 23 of the UDHR states: "Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity..." Under Article 7 of ICESCR, such an existence requires "safe and healthy working conditions." Where such safety fails, ICCPR Article 2(3) requires that states "ensure that any person whose rights or freedoms...are violated shall have an effective remedy..." and that the states "shall enforce such remedies..." The American Declaration on Rights and Duties of Man goes further to hold that while it is the duty of every person to work, it fundamentally recognizes that every human being has the right to security of his person – to be free from violence – and a duty rests upon every individual to safeguard society.¹⁵

Besides ratifying the human rights covenants that entail the overall right to life and right to a safe workplace (ICCPR and ICESCR), Brazil has ratified International Labour Organization conventions that deal with the prevention of major industrial accidents— in addition to general and specifically mining occupational health and safety conventions. ILO Convention No. 176, the Safety and Health in Mines Convention (ratified by Brazil in 2006), states that "employers shall take all necessary measures to eliminate or minimize the risks to safety and health in mines under their control" and, in particular, to "take steps

¹² Indeed, Brazil is party to all of the major human rights instruments known as the International Bill of Human Rights. These instruments have been incorporated into Brazilian law by the decision of the Federal Supreme Court which gives them supra legal status, enabling human rights treaties to be used to interpret not only legal provisions, but also the Constitution itself.

¹³ https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf

¹⁴ Articles V & VI

¹⁵ Articles XXXVII, I & XXIV.

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to maintain the stability of the ground in areas to which persons have access in the context of their work."¹⁶ An associated Recommendation of this convention, which offers a kind of Code of Practice for employers, states that employers must "Ensure that dams…tailings and other such impoundments are adequately designed, constructed and controlled to prevent dangers from sliding material or collapse." Moreover, ILO Convention No. 169, the Indigenous and Tribal Peoples Convention (ratified by Brazil in 2002), among other things, safeguards the property, institutions and environment of indigenous and tribal communities. Finally, Brazil has also ratified the Occupational Safety and Health Convention No. 155.¹⁷

Application of Covenants, Conventions and Recommendations in international deliberations and even tribunals¹⁸ have yielded a growing jurisprudence of human rights principles and remedies in environmental disasters that legislatures and judges should consider as authoritative for their own analysis and references. One key example of this jurisprudence in this drastic time of climate change, privatization, and industrial disaster is the compendium of human rights principles recently published by the UN Human Rights Council and its special rapporteur on the environment, Professor John Knox of Wake Forest University. Professor Knox provided this commission a copy of the "Framework Principles on Human Rights and the Environment," which could have been written for Brazil, in stating: "The interdependence of human rights and the environment is an idea whose time is here."¹⁹

The Framework Principles explain existing—not new—responsibilities ranging from providing vital information on environmental risks caused by industry to identifying and assessing "any actual or potential adverse human rights impacts with which [corporations] may be involved either through their own activities or as a result of their business relationships." Such language seems particularly suited to the circumstance here in which subcontractors may have consorted with Vale to certify a deadly dam as safe.

Beyond these legal international instruments there are also corporate international instruments that companies voluntarily bind themselves to under the guise of corporate social responsibility or to secure loans from the World Bank and its commercial lending subsidiary, the International Finance Corporation (IFC). Vale publishes that it subscribes to the IFC guidelines and standards, which includes health and safety, environment, risk assessment and in severe cases involuntary resettlements. Subscription to these Corporate Social Responsibility standards represents a public contract that the company has entered into with society, a vow made to abide by best international human rights practices even beyond those contained in formal legal instruments.

The Commission has taken these international instruments into account while reviewing the hours upon hours of testimony of stakeholders. We have focused our recommendations on four categories that seem most appropriate for the circumstances of Brumadinho to facilitate a "make whole" remedy for these survivors and other affected individuals. What the reader will not find here is the word "accident" or the remedial category "prevention." While we of course believe that accidents need to be prevented, in this case, it is more apparent that industrial atrocities need to be deterred. Accident "prevention" has failed—as already demonstrated by the Mariana disaster three years ago with the same company and same type of upstream dam. When corporate actors fail to carry out practices that protect lives, the remedy must include penalties that deter bad behavior and the purely pecuniary assessments that often accompany corporate decisions to risk the disaster and litigation consequences.

¹⁶ Article 6 specifically includes the duty to take all reasonably practicable measures to ensure the health and safety of workers. The concept of "reasonably practicable measures" holds special legal meaning that creates an onus of fault upon the employer, rising to strict liability in many instances.

¹⁷ This convention further enforces the concept of reasonably practicable measures.

¹⁸ See Öneryildiz v Turkey No 48939/99 (2004) (improper maintenance of municipal rubbish tip); Kolyadenko v Russia No 17423/05 (2012) (flash flood); Budayeva v Russia No 15339/02 (2008) (mudslide).

¹⁹ A safe, clean, healthy and sustainable environment is necessary for the full enjoyment of human rights, including the rights to life, to the highest attainable standard of physical and mental health, to an adequate standard of living, to adequate food, to safe drinking water and sanitation, to housing, to participation in cultural life and to development, as well as the right to a healthy environment itself, which is recognized in regional agreements and most national constitutions. At the same time, the exercise of human rights, including rights to freedom of expression and association, to education and information, and to participation and effective remedies, is vital to the protection of the environment. https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/FrameworkPrinciplesUser-FriendlyVersion.pdf

Thus, we have organized our recommendations by the four headings of "Justice," "Independence," "Transparency," and "Deterrence." The following are the principal findings and recommendations of the Commission:

1. Justice

Finding

Vale owns the mine, maintained the dam, and hired the auditors. Like most corporate processes, there were divisions of responsibility and attempts at contracting out safety. Our visit was not aimed at assessing causation of the collapse.²⁰ But it is sufficient to say that unlike its joint ownership at Mariana, Vale bears full and ultimate responsibility for the acts of its managers and contractors at Córrego do Feijão and therefore for the consequences of this catastrophe.

The collapse of the dam caused major violations of human rights. Not only were people killed arbitrarily, and their livelihoods, property and traditions destroyed, but the environment has been so contaminated that their right to health is impaired and the effect of this tragedy will be felt for many years . Those who died suffered the horrendous death of being buried alive, many torn to pieces, and those who witnessed the collapse and its aftermath have been traumatized. The tragedy has further caused injury to the surviving family members, through their undeniable grief, emotional shock and infringement of their own personal dignity.²¹ In these conditions it was incumbent on Vale to treat the people of Brumadinho with dignity and respect and to work to implement effective remedies. It was not only the humane thing for Vale to have done, it was also their duty to have done so. Conduct of perpetrators after the fact is a relevant and admissible consideration in matters considering potential punitive damages; egregious conduct to avoid responsibility can and does aggravate the harm suffered.

Unfortunately, from the testimonies we heard, it is apparent that Vale has failed in this regard. A common refrain from the impacted people and communities was that Vale provided little if any information about the loss of their loved ones and failed to make contacts or express condolences to the families for their loss. We heard from families who are visibly depressed and remain isolated in their pain. We heard from workers who had devoted their lives to Vale and were once proud to wear the Vale shirt. They reported that they were disrespected, and only after protests from families of survivors did Vale agree to provide some form of apology.

Recommendation

Vale bears full and ultimate responsibility for the acts of its managers and contractors...and therefore for the consequences of this catastrophe.

Pursuant to the human rights instruments that Brazil has ratified, it is imperative that Vale, and any others complicit, completely indemnify all victims of this disaster. The recipients of these payments include:

21 North American jurisdictions speak of the loss of companionship, while the United Kingdom speaks of the loss of society. South Africa recognises an indigenous legal concept called Ubuntu, that essentially recognises that a person is a person through others and because of them – i.e. a person's identity as the wife or son of someone is an aspect of that person's dignity worthy of legal protection.

²⁰ The Commission does wish to underline the recent Conclusions and Recommendations of the Federal Senate Parliamentary Commission of Inquiry (Commission translation): "With respect to the issue of criminal responsibility... the deactivation of [the Córrego do Feijão dam] since 2016 (the immediate effect of which would have been to raise the level of complacency over time) increased the risk tolerance of Vale employees, which brought with it a lack of operational attention, and restraint with respect to the cost of measures required to avoid liquification. In addition, Vale did not have an adequate system of governance and compliance to coordinate the incentive of directors, managers and employees to control risk and comply with the law, which proved to be relevant to causative developments that led to the bursting of the dam. The probative elements gathered by the CPI point to the crime of felonious negligence... that was reflected in the creation of a quantifiable risk, leading to a duty to act –which was ignored – to prevent the damage which resulted... Federal Senate Parliamentary Commission of Inquiry CPI of Brumadinho and other dams Report of July 2019, Section 7: Conclusions and Recommendations at 339.

• Families of people killed or who have disappeared

• Survivors of the event, including direct and outsourced workers who survived and have been traumatized and mistreated by Vale

- People whose ways of life were disrupted or damaged by the event, including indigenous people.
- People whose economic well-being was disrupted or damaged by the event
- People whose health is imperiled by environmental contamination of land and water.

The payments to individuals and payments for environmental remediation must all be made promptly. It is a global maxim: Justice delayed is justice denied.

We believe, as well, that it is essential to address several particulars in the remedy framework, as described by union and government officials. In the Mariana dam collapse of 2015, individual settlements were negotiated by the company that diminished the ability of affected individuals and the community to obtain justice. Moreover, survivors had little access to the expertise necessary to hold the companies to moral damages which encompass punitive or exemplary damages—in other words, to a cost commensurate with the resources of the company.

At the present time, although some settlements which have been achieved have been outside the statutory moral damages cap, that regressive cap on moral damages is subject to constitutional challenge before the Supreme Court. We believe that human rights principles applied to this and other cases dictate that the cap itself is a menace to human dignity by undermining an adequate remedial framework with an artificial limit on damages. It also encourages the type of bad behavior which Vale showed in this case. Vale has demonstrated by the Brumadinho example that when faced with an apparent choice between the long-term protection of human lives and the short-term requirement to certify safety, it will take the economic short cut. Rather, as enunciated by the Human Rights Council Framework, states must ensure "…Reparation, as necessary to provide effective remedies for violations. The procedures should be available for claims of imminent and foreseeable as well as past and current violations. States should ensure that decisions are made public and that they are promptly and effectively enforced."²²

It is further a widely understood phenomena that corporations adopt strictly profit-making decision processes when deciding on a course of action in identified risks, usually comparing the balance sheet effect on a risk rectification, or recall, against the possible litigation damages and administration fines. Where the cost of rectifying a health and safety risk is perceived as greater than the expected costs of the risk materializing, i.e. fines and litigation, then corporations rationalize not removing the dangers irrespective of the law because it is more profitable to breach the law. It is naïve to pretend that corporations are not driven by profit, and therefore it is necessary to ensure these corporate calculations do not place workers at further risk. This can only be done through punitive awards that go beyond the ordinary compensation concept.

2. Independence

Finding

The Commission finds from testimony that we believe is credible that before the unions and community organizations became involved in negotiations to compensate individuals and families, Vale sought to reach early and atomized legal settlements. This behavior, the witnesses stated, grew from a conflict of interest that occurred in the previous dam collapse in Mariana in 2015 in which Vale and BHP in the end make the decisions as to who to compensate and how much without input from the victims.

If it is not already clear from the cost-cutting decisions that led to dangerous upstream dams in the first place, it is in the financial interest of the shareholders or owners of all corporations to limit the payments made to individuals affected by the company's harms, whether the deaths and injuries of the dam collapse or to remediate the damaged environment.

²² https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/FrameworkPrinciplesUserFriendlyVersion.pdf.

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On the other hand, we learned that the Movimento dos Atingidos por Barragens (Movement of those Affected by Dams, MAB) and unions counteracted some of the corporate influence by organizing early support after the Brumadinho disaster, offering services and contacts to individuals and families suffering harm. MAB has advocated for independent technical advisory teams to evaluate psychological damages, water and other environmental contamination and economic damages of those affected, as well as independent experts for judges to help compute damages.

The Commission further notes as applicable to Brazil the analysis of the UN Human Rights Council Special Rapporteur on obtaining independent and accessible expert information for all populations.²³ Moreover, the Commission commends the effective work of MAB and the unions in demanding that independent, not corporate-sponsored sources of expertise inform the public.

Recommendation

All decisions on indemnification must be made with the input of the affected communities, and must be made independently of Vale and other corporations who may share responsibility for the dam collapse. However, it important that Vale and these other corporations fully cooperate in terms of providing access to sites and information. These decisions include:

- Who is to be indemnified because of the damage suffered
- What is to be indemnified, i.e. loss of earnings, grief, loss of companionship, loss of amenities, loss of farm land, economic hardships, medical expenses, funeral expenses, lessor inconveniences suffered, etc..
- The amount of indemnification provided to these individuals
- How to ensure the identified eligible victims receive their indemnification, with special regard to vulnerable persons such as women, children, elderly and/or the disabled.
- The necessity, type and extent of environmental clean-up, including veterinary and other ecological rehabilitation services.
- The necessity, type and extent of long-term medical assessments on community members endangered by the disaster and its ecological long-term impact on pathogens, including consideration of animal welfare.
- The total amount of money the responsible corporations are required to provide, and/or the secured and bank guaranteed undertaking required for long-term issues.
- All dams in Minas Gerais must be enrolled in an ongoing independent auditing program to monitor their structural integrity and make any repairs necessary. Vale and other responsible parties must bear all of these costs of this work; but the responsible parties must not insist upon a governance role or influence.
- Studies must be conducted to measure the extent and effect of the Brumadinho contamination on the environment.

These studies must be conducted by scientists independent of Vale, with no conflicts of interest.

44. States should develop environmental education, awareness and information programmes to overcome obstacles such as illiteracy, minority languages, distance from government agencies and limited access to information technology, in order to ensure that everyone has effective access to such programmes and to environmental information in forms that are understandable to them. States should also take steps to ensure the equitable and effective participation of all affected segments of the population in relevant decision-making, taking into account the characteristics of the vulnerable or marginalized populations concerned.

²³ https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/FrameworkPrinciplesUserFriendlyVersion.pdf "[Par. 43]... States should develop disaggregated data on the specific effects of environmental harm on different segments of the population, conducting additional research as necessary, to provide a basis for ensuring that their laws and policies adequately protect against such harm. States should take effective measures to raise the awareness of environmental threats among those persons who are most at risk. In monitoring and reporting on environmental issues, States should provide detailed information on the threats to, and status of, the most vulnerable. Assessments of the environmental and human rights impacts of proposed projects and policies must include a careful examination of the impacts on the most vulnerable, in particular. In the case of indigenous peoples and local communities, assessments should be in accord with the guidelines adopted by the Conference of Parties to the Convention on Biological Diversity.

3. Transparency

Finding

The Brumadinho dam collapse may have received world-wide attention, but crucial information leading up to the collapse and in its aftermath has been withheld. Decisions made in the aftermath of the disaster affect tens of thousands of people or more from all parts of civil society. Many thousands of Brazilians live in the shadow of other tailings dams and decisions made in Brumadinho will potentially impact their health and safety, as well as their income if they are involved with another dam collapse.

It is of great importance that all the consequences of the dam collapse, including decisions around indemnification and environmental remediation, be done in ways that are fair to all involved. The best way to ensure that is to pry open to the public all private avenues of response and communication. The actions of corporations and the government must be open for all to see and evaluate. If an agreement is made in secret, with parties sworn to not reveal its content, it is not possible to know if it has been made fairly.²⁴

Recommendation

All financial and other offers, calculations, studies, settlements and other activities should be accomplished in a transparent process, with the details made public in a way that is accessible to all members of civil society impacted by the dam collapse. Details of all secret or non-transparent agreements signed to date should be revealed and if parties want to renegotiate them, that should be allowed.



Truck carrying mud away from the site leaves the area

24 The Human Rights Council Framework document dedicates Framework Principles 6 and 7 to transparency and education: "... States should make the public aware of the specific environmental risks that affect them and how they may protect themselves from those risks. As part of increasing public awareness, States should build the capacity of the public to understand environmental challenges and policies, so that they may fully exercise their rights to express their views on environmental issues (framework principle 5), understand environmental information, including assessments of environmental impacts (framework principles 7 and 8), participate in decision-making (framework principle 9) and, where appropriate, seek remedies for violations of their rights (framework principle 10). States should tailor environmental education and public awareness programmes to the culture, language and environmental situation of particular populations. https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/FrameworkPrinciplesUserFriendly-Version.pdf

In addition, it would be appropriate to ensure that civil society is provided with an equality of resources in regard to legal representation against Vale while these processes unfold. It would be appropriate if monies from Vale can be held in an appropriate account, outside of Vale control and for the benefit of civil society that seeks adequate legal representation, including appropriate legal disbursements.

4. Deterrence

Finding

The earlier collapse of the Vale/BHP-owned dam in Mariana, killing 19 people in 2015, was not enough to change Vale's behavior around preventing future dam collapses. Evidently the costs of a collapse were perceived in the executive offices and board room as being less than the cost of adequate investigation and prevention of a collapse.

We heard testimony that literally dozens of similar dams in Minas Gerais could suffer a similar fate. It is imperative that the ongoing response to the Brumadinho disaster deter further bad behavior by Vale and other mine owners—and protect workers and the community from their deadly decision-making.

One way to change the behavior is to impose very large financial penalties on mine owners whose dams collapse. These penalties must be above and beyond all costs of indemnification and environmental remediation, which of course also must be paid in full by the responsible party or parties. To have the desired effect, this additional financial penalty should be proportional to the size of the corporation, not the costs of the dam collapse. It is also important to appreciate that in considering punitive damages, a perpetrator that frustrates the justice system and attempts to delay relief should receive a greater punitive damages penalty than one that openly and honestly offers to repair its wrong before a judicial decision is made.

A second effective approach to preventing dam collapses is to allow criminal penalties for members of corporate Boards of Directors whose firms' activities kill or damage humans or the environment. It is the responsibility of directors to know what their firms are doing and to ensure that their firms' behavior is ethical. To apply criminal penalties to boards, it should not be a requirement to show actual knowledge of the criminal behavior.

A stringent approach to corporate malfeasance is now being taken in Australia, New Zealand and other countries. In Australia, for example, federal authorities have taken the view that "criminal responsibility should attach to bodies corporate where the corporate culture encourages situations which lead to the commission of offenses. The provisions make companies accountable for their general managerial responsibilities and policy."²⁵

The difficulty with these types of criminal prosecutions is that they are frequently overlooked by government prosecutors for a variety of reasons, including their massive cost. Private prosecutions are sometimes the only prosecution mechanism to hold perpetrators It is imperative that the ongoing response to the **Brumadinho** disaster deter further bad behavior by Vale and other mine owners and protect workers and the community from their deadly decision-making.

accountable. For example, in South Africa, no mine owner has ever been successfully criminally prosecuted for negligently causing the death, serious injury or serious illness of an employee.

²⁵ The State of Victoria, for its part, has allowed criminal indictment for causing "a serious threat to the environment; a serious threat to public health; a substantial risk of serious damage to the environment; a substantial risk of a serious threat to public health." https://aic.gov.au/sites/default/files/publications/proceedings/downloads/26-norberry.pdf at 3. https://www.business-humanrights.org/sites/default/files/reports-and-materials/Allens-Arthur-Robinson-Corporate-Culture-paper-for-Ruggie-Feb-2008.pdf at 14

Recommendation

To deter corporate negligence of the sort that has been reported at the Brumadinho dam the Commission recommends that:

All laws that require monitoring of other dams, especially upstream dams, must be strengthened and strictly enforced. Although there is no way to make some 50 upstream dams in Minas Gervais alone disappear, this method of operating upstream dams should be immediately prohibited.

Laws which allow safety issues to be self-regulated must be amended to provide for a system of independent and transparent monitoring, paid for by the mining companies.

Funding for private prosecutions of criminal offenses in safety, health and environmental domains should be implemented, in order to ensure that prosecutions are carried out.

Authorization of a mine should require a deposit into a state account of enough funds earmarked to rehabilitate the affected area, even if the company goes bankrupt, and this amount should be annually reviewed and increased if necessary.

Laws should be passed that discourage owners of mines and dams from ignoring the risks those structures pose. In the event of a dam collapse, the corporations responsible for the collapse should be subject to a large financial penalty, proportional to the value of the corporation, to be paid in addition to the costs of reparations and environmental remediation. Further, high level executives of the corporations, including Directors of those corporations, should face criminal penalties in the event of a preventable dam collapse that results in significant damage to people or the environment.²⁶

Conclusion

In conclusion, the Commission expresses its deep appreciation for the hospitality and constructive communications that took place during its visit. The Commission expresses its deep condolences to the individuals and families who lost loved ones, livelihoods, and sacred grounds as a result of this catastrophe.

- (a) a person's death; or
- (b) serious injury or illness to a person.

86A(2)If a chief executive officer, manager, agent or employee of the employer commits an offence by performing or omitting to perform an act and such performance or omission would have constituted an offence had it been done by the employer, that employer is equally committing an offence if the act or omission fell within the scope of the authority or employment of the chief executive officer, manager, agent or employee concerned and the employer-

(a) connived at or permitted the performance or an omission by the chief executive officer, manager, agent, or employee concerned; or

(b) did not take all reasonable steps to prevent the performance or an omission.

86A(3)For the purposes of subsection (1) the-

(a) fact that the person issued instructions prohibiting the performance or an omission is not in itself sufficient proof that all reasonable steps were taken to prevent the performance or an omission;

(b) defence of ignorance or mistake by any person accused cannot be admitted; or

(c) defence that the death of a person, injury, illness or endangerment was caused by the performance or an omission of an act falling within the scope of the authority or employment of any individual within the employ of the employer may not be admitted.

²⁶ South Africa's Mine Health and Safety Amendment Act included the following addition to its criminal provisions in 2008:

⁸⁶A(1)An employer, chief executive officer, manager, agent or employee commits an offence if he or she contravenes or fails to comply with the provisions of this Act thereby causing-

Acknowledgements

This Commission was brought together with the cooperation of many people who spent much time and effort to seek persons with the proper expertise and to raise the funds to support the Commission. We want to acknowledge the support of the ICLR Board members, including Ashwini Sukthankar, Ben Davis, Angela Cornell, Jeff Vogt, Frances Schreiberg, and Jeanne Mirer. We would like to acknowledge the support of the Canadian Assocation of Labour Lawyers and specifically Lori Harreman and Claude Melancon. Jeff Vogt was instrumental in bringing ILAW resources to bear. We want to thank him for his efforts, not only in supporting the Commission, but for his work organizing ILAW. We thank the IADL for securing the participation of their representative to the Human Rights Council in the Commission. We want to thank Merle Ratner, ICLR's program director who assisted with all the logistics and coordinated the program with the Commission members.

We want to acknowledge all of the Commission members who participated in this mission. Each member played an important role bringing their individual expertise to the process of writing this report.

We want to thank Eduardo Armond of the the Sindicato dos Trabalhadores nas Industrías da Construção Pesada de Minas Gerais (Minas Gerais Heavy Civil Construction Workers' Trade Union) (SITICOP-MG), who invited the Commission and Maximiliano Nagl Garcez, lawyer for SITICOP and 6 other unions for ensuring the Commission members met with a broad spectrum of the affected communities and public officials. We also want to thank Los Mineros of Mexico for supporting the participation of Commission member Oscar Alzaga.

We want to specifically thank Jonathan Rosenblum who provided his keen editing skills to this report to ensure that it is both impactful and readable. We acknowledge Charlotte Kates for her skill in professionally designing the report and making the report come alive.

Mostly we want to thank all of the people who met with us to provide their testimonies and information. They shared their pain with the Commission and the Commission heard them. This report documents what they said. The Commission hopes that this report with its findings and recommendations will be of use.

Appendix: Preliminary Statement of the International Independent Commission of Inquiry into the Impact of the Brumadinho Dam Collapse

Earlier this year, unions representing workers at the Vale Córrego do Feijão iron mine (SITICOP MG, Sindicato Metabase Brumadinho and Rede Nacional de Barragens from ICM) reached out to the International Commission for Labor Rights (ICLR) for assistance in addressing the impact of the dam collapse in Brumadinho, Minas Gerais. The ICLR contacted several organizations of human rights attorneys and with their support and assistance, created the International Independent Commission of Inquiry into the Impact of the Brumadinho Dam Collapse.

The focus of the inquiry is on the consequences of the dam collapse and ways to prevent future dam collapses.

The Independent Commission began its work on July 27, 2019. In the days since we arrived, we have taken the testimony of many people impacted by the dam collapse. This includes family members of workers killed; family members of community residents killed; workers and community members who survived the event; indigenous people; leaders and members of unions and religious organizations and social movements; and public officials. We visited the community of Córrego do Feijão, the community most directly impacted by the dam collapse. We testified for the Committee of Parliamentary Inquiry (CPI) of the Minas Gerais legislature and spoke with the rapporteur of the CPI for the federal Chamber of Deputies.

We heard from many stakeholders that the dam collapse was predictable and preventable. We were told that there were many signs that pointed toward the collapse but were not acted upon adequately to prevent the tragedy from occurring. A predictable and preventable dam collapse cannot be called an "accident".

On January 25th, the dam collapse killed 247 people, and 23 more are considered missing, for 270 people in total. We heard testimony that January 25th was only the beginning of what will be a very long period of damage to families, to communities, and to the ecology and economy of the region.

And we heard that fear that other dams will collapse grips tens of thousands of residents of Minas Gerais, and it is vitally

important to take steps promptly to eliminate this threat.

We make the following preliminary findings and recommendations, implementation of which must be centered on the needs of the affected communities.

Our findings and recommendations are guided by four principles: Justice, Independence, Transparency, and Prevention and Deterrence.

1. Justice

The workers and community residents killed by this event did not cause it. Nor did the workers and community residents who survived.

There is no question that Vale, the owner of the mine, has responsibility for the consequences of this event. There are investigations underway that may determine that other corporations share responsibility. The causes of the dam collapse and the apportionment of responsibility are not the focus of this inquiry.

In order to obtain justice, Vale and other responsible parties must completely indemnify all victims of this event. This includes:

- families of people killed
- survivors of the event, including direct and outsourced workers that survived and have been mistreated by Vale
- people whose ways of life were disrupted or damaged by the event
- people whose economic well-being was disrupted or damaged by the event

The survivors and the communities must be treated with dignity and respect. Unfortunately, from the testimonies we heard, Vale has failed in this regard. A common refrain from the impacted people and communities was that Vale never provided information about the loss of their loved ones, or even contacted them, that no one from Vale management expressed any form of condolence to the families' for their loss, that the families were never allowed to express their pain to anyone from Vale, that workers who had devoted their lives to Vale and were proud to wear the Vale shirt were disrespected by Vale, that they only met with families after six months, and only after protests from families of survivors did Vale agree to provide some form of apology.

In addition, Vale and other responsible parties must pay for all necessary environmental remediation and other costs of the event.

Finally, these payments must be made promptly. Justice delayed is justice denied.

2. Independence

By definition, Vale and other responsible parties have a conflict of interest. It is in the interest of their shareholders to limit their costs. Decisions that must be made independently of Vale include:

- Who is indemnified because they suffered damage
- The amount of indemnification
- The necessity, type and extent of environmental clean-up

In addition, studies done to measure the extent and effect of contamination on the environment must be made by scientists independent of Vale, although Vale and other responsible parties must bear all of these costs.

3. Transparency

The dam collapse is a public event potentially affecting more than 100,000 people from all parts of civil society. For its consequences to be addressed fairly, it is important that the response be open for all to see and evaluate. This means that all offers, calculations, studies, settlements and other activities be done transparently, with the details made public.

4. Prevention and Deterrence

This is the second dam collapse in Minas involving a Vale dam in 3 years. There are many more similar dams in Minas, and it is imperative that steps are taken immediately to prevent future collapses.

First, a thorough independent investigation into the Brumadinho dam collapse must be completed, so that the lessons can be

applied to prevent the same tragedy from re-occurring.

Second, all dams in Minas must be enrolled in an ongoing independent auditing program to monitor their structural integrity and make any repairs necessary.

All laws that require monitoring of other dams, especially upstream dams, must be strictly enforced. Any gaps in Brazilian Law which allow any safety issues to be self-regulated must be filled by appropriate legislation.

In addition, however, a program of enhanced deterrence is required to ensure that mine owners take their responsibility for protecting their workers and residents of communities near their dams. Simply paying the total costs necessary to achieve justice is not sufficient. In the event of a dam collapse, these costs are their responsibility, and there is no debate on this subject. But too many corporations build those into their operating costs. In this deadly calculus, they estimate that paying the costs of a dam collapse are less than the costs of keeping all their dams safe. This is not acceptable. The best way to prevent this is to impose a very large financial penalty on a mine owner whose dam collapses, to be paid in addition to bearing the costs of achieving justice. To have the desired effect, this penalty should be proportional to the size of the corporation, not the costs of the dam collapse.

A second effective approach to preventing dam collapses is to allow criminal penalties for members of corporate Boards of Directors whose firms' activities kill or damage humans or the environment. It is the responsibility of directors to know what their firms are doing and to ensure that their firms' behavior is ethical. To apply criminal penalties to boards, it should not be a requirement to show actual knowledge of the criminal behavior. This approach is now being taken in Australia, New Zealand and other countries.

This is our preliminary statement. We will prepare a full report in Portuguese and English and submit it to all relevant governmental bodies and make it available to stakeholders.

This Commission is supported by International Lawyers Assisting Workers (ILAW), the Association of Labour Lawyers of Latin America (ALAL), the Canadian Association of Labour Lawyers (CALL) and the International Association of Democratic Lawyers (IADL).

Appendix: Short Biographies of ICLR Commission of Inquiry to Brazil 2019

Jeanne Mirer, Esq. is a founding partner in the Law Firm of Mirer, Mazzocchi & Julien PLLC, in New York City. She specializes in labor and employment law. She has handled numerous class actions and multi-party actions for victims of discrimination and wage theft. Among her clients are various worker centers, the New York Taxi Workers Alliance, Worker's United and other labor organizations. Prior to this firm she worked in the firm of Eisner & Mirer P.C. from 2007 until the founding of her firm, where she worked for other union clients, as well as handled many arbitrations. Prior to this she was a partner in the firm of Pitt, McGehee, Mirer, Palmer & Rivers in Detroit Michigan. This firm specialized in all aspects of employment law, especially complex class actions. The firm handled hundreds of cases each year in both the public and private sectors and is considered the premier boutique employment firm in the State of Michigan.

The firm's clients included Utility Workers Union of America, Local 223 and Communication Workers of America, Local 4100. Jeanne is the President of the International Association of Democratic Lawyers, the President of the International Commission for Labor Rights and a member of the Executive Committee of the National Lawyers Guild where she represents the International Committee of the National Lawyers Guild.

Oscar Alzaga, Esq. has been a labor lawyer from 1975 through 2018. He has worked for the Trade Union of Telephone Operators of the Mexican Republic, the National DM Union, the Conasupo Unions, the Independent National Union of the Automotive Industry, the Mexican Electrician Union, the Union of the Legislative Assembly of the DF and the National Mining Union, among others throughout his lengthy career. He studied at the Faculty of Law at UNAM from 1970 and 1975. He has been a member of the National Association of Democratic Lawyers (ANAD) from 1991 to 2018 and served as President from 1997 to 1999. Between 1994 and 1996, he was the lawyer of the EZLN in the dialogues of San Andres and COSEVER. He was a member of the Latin American Association of Labor Lawyers (ALAL) from 2001 to 2018 and served as a board member between 2005 and 2013. He was a Magistrate of the international Court of Freedom of Association in Mexico in 2009, 2010, 2011 and 2012, and a Judge of the International Court of Freedom of Association in 2012 and 2014. He is the author of articles, essays, 17 collective books and three personal books on labor law and workers' struggles.

Frank Luce, LLB, PhD is an expert on labor and international law who has taught at university and worked as legal counsel and staff at several major labor unions. He directed programs in Work and Labour Studies Placement Course, Work and Labour Studies Programme, Social Sciences Department, York University from 2012-2014 and Labour Relations in Canada: an Introduction, Work and Labour Studies Programme, Social Sciences Department, York University from 2011-2012. He was an Adjunct Professor at Osgoode Hall Law School. He was a Coordinator of the Harriet Tubman Institute for Research on the Global Migrations of African Peoples, York University from August 2010-September 2011. Dr. Luce is a member of the Law Society of Upper Canada and was the union nominee for labour arbitrations from 2010 to 2015.

Dr. Luce was Associate Counsel for the Canadian Auto Workers (CAW-Canada) as well as working for the CAW International Department, worked for International Brotherhood of Teamsters, Joint Council 52 and Caley and Wray, Barristers and Solicitors. He was a Co-operant with Ministry of Internal Administration, Public Service and Labour of Guinea-Bissau and worked at the Canadian International Development Agency as Executive Assistant to the Director-General of Finance and Administration.

David Michaels, PhD, MPH is Professor of Environmental and Occupational Health at the Milken Institute School of Public Health of George Washington University. From 2009 until January 2017, he was Assistant Secretary of Labor for Occupational Safety and Health, the longest serving Assistant Secretary in OSHA's history. As Assistant Secretary, Dr. Michaels worked to strengthen OSHA's enforcement in high risk industries. Under his leadership, OSHA issued standards on silica and beryllium, and new safety regulations on fall protection, confined spaces, cranes and derricks, shipyards, and electricity generation and distribution.

From 1998 to 2001, Dr. Michaels served as Assistant Secretary of Energy for Environment, Safety and Health, charged with protecting workers, community residents and the environment in and around the nation's nuclear weapons facilities. He was the chief architect of the historic initiative to compensate nuclear weapons workers who were sickened by exposure to radiation, beryllium and other hazards. Dr. Michaels has conducted epidemiologic studies on workers in several industries,

Dr. Michaels received the American Association for the Advancement of Science's Scientific Freedom and Responsibility Award and is the recipient of the American Public Health Association's David P. Rall Award for Advocacy in Public Health, and the John P. McGovern Science and Society Award given by Sigma Xi, the Scientific Research Society.

Micol Savia, Esq. is the permanent representative of the International Association of Democratic Lawyers to the United Nations Human Rights Council in Geneva, where she has delivered reports and statements on human rights conditions and workers' rights around the world and participated in a number of legal delegations and fact-finding missions. She is a law graduate of the University of Turin, Italy and has worked as a civil lawyer in Italy, working mainly in the areas of international law and human rights. She is an active member of the Italian Association of Democratic Jurists and is also a member of the European Association of Lawyers for Human Rights. In 2008, she was appointed as the general vice-secretary of the IADL.

Richard Spoor, LLB was admitted as an Attorney of the High Court in 1986. He is a director of the Oxpeckers Investigative Environmental Journalism. He was an Associate Partner at Cheadle Thompson and Haysom Attorneys, a Director at Ntuli Noble and Spoor Attorneys, and has been the Director at Richard Spoor Incorporated Attorneys from 2005 to date. During the 1980's and early 1990's, Richard represented those engaged in the struggle against apartheid, in particular trade unions and their members.

Over the last decade RSI firm has represented numerous communities negatively impacted by mining and has secured a number of ground breaking settlements with some of South Africa's largest mining corporations. He has represented trade unions in investigations into some of the biggest mining and industrial disasters in recent South African history including: the Middelbult Coal Mine Dust Explosion in 1993; the Tshikondeni Coal Mine Explosion in 1996; the Sasol Synthol Fire in 2004; the AECI Moddei-fontein Explosion in 1994; the Paarl Print Fire in 2009; and the Injaka Bridge Collapse in 1998.

Richard represents mine and industrial workers suffering from occupational diseases including South African asbestos mine workers and communities exposed to asbestos, resulting in a \$40 million settlement. From 2005 to 2018 his law firm led in a class action, representing former gold mine workers suffering from silicosis and silico-tuberculosis resulting \$400 million settlement. His law firm is now litigating against coal mining companies on behalf of coal mine workers with lung disease.

Richard's firm is responsible for important precedent setting judgments in the field of communal land rights and a recent Constitutional Court decision on communities' right to have compensation determined before mining commences.



International Commission for Labor Rights

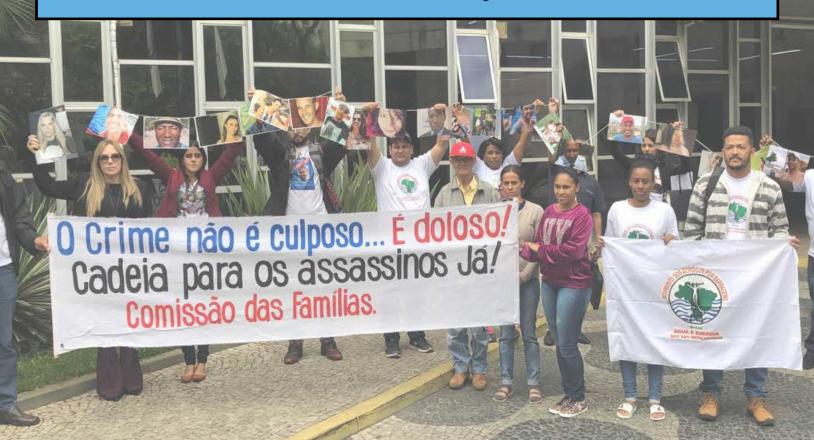
The International Commission for Labor Rights, ICLR, is a 501(c)(3) non-profit that is based in New York, and coordinates the pro bono work of a global network of lawyers committed to advancing workers' rights through legal research, advocacy, cross-border collaboration, and the cutting-edge use of international and domestic legal mechanisms.

Our Principles

We believe that all working people have certain core rights, which we are committed to defending:

- to form and join unions, and to bargain collectively for better conditions at work
- to earn enough to support themselves and their families, so that children do not have to work
- to work freely, without force or coercion
- to be free from discrimination in the workplace

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