

**Mandates of the Working Group on the issue of human rights and transnational corporations and other business enterprises; the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes; the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health; the Special Rapporteur on the rights of indigenous peoples; and the Special Rapporteur on the human right to safe drinking water and sanitation**

REFERENCE: OL  
OTH 12/2015:

7 December 2015

Dear Mr. Souto,

We have the honour to address you in our capacity as Chairperson of the Working Group on the issue of human rights and transnational corporations and other business enterprises; Special Rapporteur on the rights of indigenous peoples; Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes; Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health; and the Special Rapporteur on the human right to safe drinking water and sanitation pursuant to Human Rights Council resolutions 26/22, 24/9, 27/23, 24/6, and 24/18.

In this connection, we would like to bring to your attention information we have received concerning **the detrimental human rights impacts caused by the collapse of a tailing dam in Mariana in the state of Minas Gerais, which has destroyed an entire community and negatively impacted a large number of people. We would like to offer our sincere condolences to the families and friends of those who have lost their lives, sustained injuries and to those who are still missing.**

We are writing to the three companies involved - BHP Billiton, Vale and Samarco Mining - following an urgent appeal letter which we sent to the Government of Brazil about this case on 24 November 2015, as well as a press release issued by the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment and the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes on 25 November 2015. We are well aware that the situation is rapidly evolving and that new studies are being conducted. We will be examining these studies with attention and might raise new information that has come to our attention in the near future. At this point in time, we thought it necessary to inform you about our concerns arising from the information currently at our disposal. We are

sending you this information so that you can corroborate and clarify the facts and the actions your company took to prevent or remedy actual impacts on human rights.

According to the information received:

On 5 November 2015, an iron tailing dam named Fundão in the district of Bento Rodrigues in the state of Minas Gerais, belonging to Samarco Mining S.A., burst its walls and released 50 million cubic meters of iron ore waste, as informed by the company. The dam was filled with mud waste from iron ore production called tailings, a mining waste product of metal filings, water and occasionally chemicals, a mixture that can often be toxic. Samarco Mining S.A. is a joint venture of Vale S.A. (50%) and BHP Billiton Brazil Ltda (50%).

The breached volume of the waste water was the equivalent of 20,000 Olympic swimming pools which flooded and washed away an entire community of 600 inhabitants in the Bento Rodrigues district. Hundreds of thousands of lives have been radically affected – city-dwellers who had their water supply interrupted, fishermen, ranchers, and the Krenak Indigenous peoples who immediately lost their livelihoods, have been unable to fish and have been without water for drinking, bathing and cultivating products for over a week.

The disaster was described first as a flood then as a ‘mud wave’ or ‘sludge’ that penetrated the Doce river, one of Brazil’s largest rivers in the southeast region. The Krenak indigenous peoples have been severely impacted with the loss of their only source of water from the contaminated Doce river which is the main water source of an entire water basin. The Doce river flows downstream some 850 kms until Regencia, a district of Linhares city in Espírito Santo State, passing through regional municipalities in the state of Minas Gerais such as Governador Valadares (300,000 inhabitants), and Ipatinga (240,000 inhabitants); and in the state of Espírito Santo; Colatina (120,000 inhabitants) and Linhares (160,000) inhabitants. Overall, from the source of the contamination to the mouth of the sea, around 3 million people are affected by this disaster. Most of these cities have had water cuts, since their main source is the Doce River and the water is unable to be treated for human consumption due to the large presence of suspended solids. Alternative sources of water have been scarce and people are queuing long lines to obtain drinking water. Furthermore at time of writing the Fire Department of Minas Gerais reports that 11 people have died, and 12 people are still missing. No precise information has been released on the death toll.

The full scale of the environmental damage is estimated to extend for years as the inevitable path of the mud water captures the whole extension of the Doce river and the sea beyond the estuary. Eye witnesses report that huge quantities of fish have died wherever the waste mud has passed. In addition to the likely presence of heavy metals, the heightened turbidity of water seems to have blocked oxygen to fish and other fauna and flora in the affected area, causing deaths. The local fishery community relies upon this natural resource for its subsistence. The

Federal Court of the Espírito Santo state is reported to have issued an injunction demanding Samarco Mining S.A. rescue the maximum amount of fish stock possible in the parts of the river that the mud wave had not reached yet.

The mud water has extended downstream from Bento Rodrigues, damaging protected forest and habitat throughout Minas Gerais and Espírito Santo. It has reached the Atlantic Ocean, at Regencia beach, at Linhares municipality, and is advancing towards the Abrolhos National Marine Park, located in the Abrolhos Archipelago, where the sludge threatens to damage a vital ecosystem that is home to the largest marine biodiversity in the entire southern Atlantic Ocean.

The results of various studies have shed light on the toxicity of the wastes. An in-depth study taken at the disaster's site collected evidence of high concentrations of heavy metals and other chemicals in the water. Whereas mineral levels are present during normal times, their concentration has increased considerably after the accident possibly rendering the water hazardous for human consumption and causing grave and fatal harm to the environment and the aquatic ecosystem. The Baixo Guandu city department of water (SAAE), also provided a recent analysis of water collected at three different points along the river Doce by Tommasi lab which shows that the residual metals are concentrated in the water, in levels that can cause intoxication to humans, animals and plants. Concentrations of arsenic of 2.6394 mg/L (when the acceptable level is 0.01 mg/L) and manganese of 61.221 mg/L (when the acceptable level is 0.1 mg/L) were found. The same study also reveals high concentration of barium, lead, copper, iron, nickel, zinc, antimony, chrome, cobalt, vanadium, phosphor and aluminum; in quantities up to 1,000 times the acceptable limits for water consumption.

A report by the Minas Gerais State Institute of Water Management (IGAM) also indicated high levels of toxic chemicals. Arsenic, which can cause liver disease and cancer, was detected at as much as 108 times the legal maximum. Lead, which can cause brain damage, was measured at as much as 165 times the legal maximum. Copper, linked to gastrointestinal problems, was at as much as 75 times the limit. Chromium, which can cause gastrointestinal disorders and hemorrhaging, was at as much as 57 times the limit. Among the other metals detected were nickel, cadmium, manganese and iron, all found at elevated levels. The IGAM report is dated Nov. 17, but not publicly available until the following week, when reports began to surface of concerns.

According to a study conducted by a professor in a Brazilian state university, the hazardous polymer MAFLOC/acrylic acid (CAS# 25.085-02-3) to be present in the waste mud at Fundão dam which may account for why affected communities have reported respiratory irritation complaints from their exposure to the mud. According to the information received, hospitals in Mariana and Belo Horizonte, the capital city of Minas Gerais State have received many patients displaying symptoms of intoxication by heavy metals and medical officers have received emergency instructions to deal with these patients.

Although other studies either endorse or contradict these findings, on high toxicity of both the mud and the water, it would be expected that precautionary measures were applied. There is, however, no information on the adoption of such measures.

It is reported that the companies Samarco, Vale S.A. and BHP Billiton Brazil Ltda, have blamed ‘external forces’ such as an earthquake as being the cause of the burst of the dam, a position that is reported to have been publicly supported by the state government of Minas Gerais. However, it is also reported that earthquake shocks have not passed level 3 on the Richter scale and being commonplace in the region, would not cause disruption of a dam.

Furthermore it is alleged that the risk of rupture of the tailing dam has been of concern since 2013. The Public Prosecution Office of the State of Minas Gerais requested the Prístino Institute to provide a technical report before reissuing an operational license to the Fundão dam in response to the Single Opinion No. 257/2013 (Laudo Técnico em resposta ao Parecer Único N° 257/2013). The Prístino Institute in its report recommended, as a condition for renewing Samarco’s operating license for the dam, a contingency plan to be implemented in case of accidents, ‘given the presence of the population in the community of Bento Rodrigues.’ The report also highlighted several points of contact between piles of mining waste and the dam, noting that this carried ‘the possibility of destabilization.’ The report warned that ‘(d)epending on the radius of the rupture in this process, several collapses at various levels of the slope can occur, causing a great mass of waste to flow downstream in the direction of the Fundão dam.’ The report was published on the website of the State of Minas Gerais’ environmental regulator, Supram, dated 21 October 2013, eight days before Supram renewed Samarco’s license. It has also been alleged that the Santarém dam’s license expired in 2013 yet it is not clear whether Samarco had fulfilled the technical requirements contained in the license such as providing a contingency plan.

It is further alleged that there was no emergency plan and that Samarco did not provide any sirens or organized support forcing the residents to organize and evacuate themselves.

It is also reported that the National Department of Mineral Production (DNPM) indicates the risk of more than 20 dams disrupting nationwide. However this risk analysis has been criticized as being much more complex because the Fundão dam that burst was ranked as a low risk. On 19 November 2015, it is reported that the DNPM admitted in a public hearing that the other dams in the Mariana region are at risk of collapsing. The biggest threat concerns Samarco’s third and largest waste dam, the Germano dam which is in a critical condition. If there is a new rupture, it would cause far more devastating impacts in the region.

Grave concern is expressed about the health, safety and livelihoods of all those affected who have been severely impacted by the sheer volume of flood water and mud, and exposure to residue mud and to the surrounding environment which has been irreparably damaged. Grave concern is expressed about the lack of information given to the affected communities and the lack of organised support to help them. Grave concern is also expressed regarding the reports of the critical condition of many other waste dams in the region and in particular, Samarco's Germano and Santarém dams. Further concern is expressed regarding the accountability of the liable companies and the access to remedy for the victims.

In view of the urgency of the matter, we would appreciate a response on the initial steps taken by your company to respect the rights of the above-mentioned person(s) in compliance with international instruments.

As it is our responsibility, under the mandates provided to us by the Human Rights Council, to seek to clarify all cases brought to our attention, we would be grateful for your observations on the following matters:

1. Please provide any additional information and any comment that you may have on the above-mentioned allegations.
2. Please provide further information on the environmental contamination types and levels in the wake of the tailings pond breach in the flood path and in the Doce river. Please indicate if specific tests and risk assessments have been carried out by your company after the 5 November incident and explain methodologies used and results obtained.
3. Please provide further information on the chemicals in the tailings pond, including industrial chemicals and heavy-metals.
4. Please describe what steps your company took to protect and cause no harm to human life and the environment from the damage following the release of tailings waste from mining.
5. Please describe any company measures that have been taken to respond to the incident and, in particular, to identify, prevent and mitigate against continued harm to human health, access to water and sanitation, property and the environment.
6. Please describe how and when your company plans to ensure that the victims and affected communities receive an effective remedy.
7. Please describe how your company plans to respond to this incident to prevent recurrence of such disasters in the future. Please elaborate upon the human rights due diligence mechanisms your company has in place to prevent, identify and remedy the adverse human rights impacts of such disasters in general.

8. Please describe how your company is working with the Government and all affected stakeholders in any investigations concerning this incident.

We would appreciate receiving a response as soon as possible. Your response will be made available in a report to be presented to the Human Rights Council for its consideration, and publicly available at the following website in due course: <http://www.ohchr.org/EN/HRBodies/SP/Pages/CommunicationsreportsSP.aspx>

Please accept the assurances of our highest consideration.

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Chairperson of the Working Group on the issue of human rights and transnational corporations and other business enterprises

Victoria Lucia Tauli-Corpuz  
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Baskut Tuncak  
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Léo Heller  
Special Rapporteur on the human right to safe drinking water and sanitation



## **Annex**

### **Reference to international human rights law**

In connection with above alleged facts and concerns, we would like to take this opportunity to draw your attention to applicable international human rights norms and standards, as well as authoritative guidance on their interpretation. These include:

- The Universal Declaration of Human Rights (UDHR);
- The UN Guiding Principles on Business and Human Rights;
- The UN Global Compact principles;
- The International Covenant on Economic, Social and Cultural Rights.

We wish to draw your attention to the UN Guiding Principles on Business and Human Rights (contained in A/HRC/17/31), which the Human Rights Council unanimously endorsed in June 2011 following years of consultations that involved Governments, civil society and the business community. The Guiding Principles have been established as the authoritative global standard for all States and business enterprises with regard to preventing and addressing adverse business-related human rights impacts. These Guiding Principles are grounded in recognition of:

- (a) “States’ existing obligations to respect, protect and fulfil human rights and fundamental freedoms;
- (b) “The role of business enterprises as specialized organs of society performing specialized functions, required to comply with all applicable laws and to respect human rights;
- (c) “The need for rights and obligations to be matched to appropriate and effective remedies when breached.”

The Guiding Principles apply to all States and to all business enterprises, both transnational and others, regardless of their size, sector, location, ownership and structure.

We would like to remind you that business enterprises have certain responsibilities as outlined in the Guiding Principles on Business and Human Rights. The responsibility to respect human rights is a global minimum standard of expected conduct for all business enterprises wherever they operate. It exists independently of States’ abilities and/or willingness to fulfil their own human rights obligations, and does not diminish those obligations. Furthermore, it exists over and above compliance with national laws and regulations protecting human rights.

The corporate responsibility to respect human rights covers the full range of rights listed in the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights and the eight International Labour Organization core conventions. In addition, the UN Global Compact, a United Nations policy initiative for responsible business, has stated that the Guiding Principles provide the content of the first two principles of the Global Compact, informing the commitment undertaken by its participants.



The Guiding Principles 11 to 24 and 29 to 31 provide guidance to business enterprises on how to meet their responsibility to respect human rights and to provide for remedies when they have caused or contributed to adverse impacts.

The Guiding Principles require that “business enterprises: (a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; [and] (b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts” (Guiding Principle 13). This dual-requirement is further elaborated by the requirement that the business enterprise put in place:

- (a) A policy commitment to meet their responsibility to respect human rights;
- (b) A human rights due-diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights. The business enterprise should communicate how impacts are addressed; and
- (c) Processes to enable the remediation of any adverse human rights impacts they cause or to which they contribute (Guiding Principle 15).

Each of these is elaborated below, with regard to the context of this case.

#### **Policy Commitment:**

The first of these requirements, a policy commitment, must be approved by the company’s senior management, be informed by human rights expertise (internal or external) and stipulate the human rights expectations of personnel, business partners and other parties directly linked to its operations, products or services. The statement of policy must be publicly available and communicated internally and externally and reflected in operational policies and procedures necessary to embed it throughout the business enterprise (Guiding Principle 16).

#### **Human Rights Due Diligence:**

The second major feature of the responsibility to respect is human rights due-diligence, the procedures for which have been deemed necessary to ‘identify and assess any actual or potential adverse human rights impacts with which they may be involved either through their own activities or as a result of their business relationships’ (Guiding Principle 18). Adequate human rights due diligence procedures must include ‘meaningful consultation with potentially affected groups and other relevant stakeholders, as appropriate to the size of the business enterprise and the nature and context of the operation’ (Guiding Principle 18).

To prevent and mitigate against adverse human rights impacts, the findings of the human rights impact assessment should be effectively integrated across the relevant internal functions and processes of the company. (Guiding Principle 19). Responsibility for addressing such impacts should be assigned to the appropriate level and function within the business enterprise, and internal decision-making, budget allocations and oversight processes should enable effective responses to such impacts.

Any response by the company to address its adverse human rights impacts should be tracked to ensure that it is effective. Tracking should be based on appropriate qualitative and quantitative indicators, and drawing on feedback from internal and external sources including affected stakeholders (Guiding Principle 20). In addition, information about activities taken to address any adverse human rights impacts, and how effective those actions have been, should be communicated externally (Guiding Principle 21).

**Remediation:**

The Guiding Principles acknowledge that “even with the best policies and practices, a business enterprise may cause or contribute to an adverse human rights impact that it has not foreseen or been able to prevent”. Where the company identifies that it has “caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes” (Guiding Principle 22).

Business enterprises should establish or participate in operational-level grievance mechanisms “to make it possible for grievances to be addressed early and remediated directly” (Guiding Principle 29). Operational-level grievance mechanisms should reflect eight criteria to ensure their effectiveness in practice. Guiding Principle 31 outlines that all non-judicial grievance mechanisms should be: (a) Legitimate, (b) Accessible, (c) Predictable, (d) Equitable, (e) Transparent, (f) Rights-compatible, (g) A source of continuous learning, and (h) Based on engagement and dialogue.

In connection with the above concerns regarding the detrimental impact of the collapse of the tailing dam in Bento Rodrigues on human health, companies need to respect the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, and the right to water and sanitation. Article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) enshrines the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. General Comment No. 14 (2000) of the Committee on Economic, Social and Cultural Rights describes the normative content of article 12 of ICESCR and the legal obligations undertaken by the States parties to the Covenant to respect, protect and fulfill the right to health. In General Comment No. 14, the Committee interprets the right to health as an inclusive right extending not only to timely and appropriate health care but also to the underlying determinants of health, such as access to safe drinking water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions, and access to health-related education and information (para. 11, GC 14 CESC).

Moreover, we wish to also draw your attention to the General Comment No. 15 of the Committee on Economic, Social and Cultural Rights on the right to water. In that General Comment, the Committee interpreted that the obligations contained in Article 1 (2) of the Covenant include the obligation of State Parties, including the Brazilian Government, to "ensure that there is adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples "(E / C.12 / 2002/11 , paragraph 7).