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Mandates of the Working Group on the issue of human rights and transnational corporations and other business enterprises; the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment; the Special Rapporteur on the rights of indigenous peoples; 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; and the Special Rapporteur on the human right to safe drinking water and sanitation

REFERENCE: UA BRA 10/2015:

24 November 2015

Excellency,

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 issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment; 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, 19/10, 24/9, 27/23, 24/6, and 24/18.

In this connection, we would like to bring to the attention of your Excellency's Government 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.

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 itswalls and released 50 million cubic meters of iron ore waste. 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.

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. Thousands of lives have been radically affected – fishermen, ranchers, city-dwellers and the Krenak Indigenous peoples who immediately lost their livelihoods, have been unable to fish and who 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 river Doce, 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), Coronel Fabriciano (220,000 inhabitants), 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. All 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 and heavy metals. 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 an area covering over 500 kilometers. Eye witnesses report that huge quantities of fish have died wherever the waste mud has passed. In addition to the 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 already extended downstream from Bento Rodrigues, damaging protected forest and habitat throughout Minas Gerais and Espírito Santo. It has now reached the Atlantic Ocean, at Regencia beach, at Linhares city, 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. Reportedly the number of persons to be affected by the disaster is likely to rise from 3 to 6 million persons, given the proximity of the metropolitan region of Vitória, in which the Espírito Santo population is concentrated.

The results of various studies have shed light on the toxicity of the wastes. An indepth 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, these levels have increased considerably after the accident rendering the water hazardous for human consumption and causing grave and fatal harm to the environment and the rivers 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 mud but are still present in the water which can cause intoxication to humans, animals and plants. Arsenic 2,6394 mi/l (when the acceptable level is 0,01 ml/l) and manganese 61, 221 ml/l (when the acceptable level is 0,01 ml/) were found to be present. The Baixo Guandu city administration in Espírito Santo state, also commissioned a study which reveals high concentration of arsenic, 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

Another study confirms 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.

Samarco Mining S.A. is a joint venture of Vale S.A. (50%) and BHP Billiton Brazil Ltda (50%). 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 two dams, 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 tailings dams 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 Nº 257/2013). The Prístino Institute in its report recommended, as a condition for renewing Samarco's operating license for the dam, a contingency plan 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 in case of accidents.

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. For instance the Ibopeda waste dam is allegedly damaged by the collapse of the Fundão dam, as its ore belt has been compromised for at least 7 months awaiting repair. The biggest threat concerns Samarco's third and largest waste dam in the mining complex Germano-Alegria which is in a critical condition. If there is a new rupture, it is said that this 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 toxic mud and to the surrounding environment which has been irreparably damaged. Concern is also expressed as to the human and environmental impact of the continuous advance of the waste water. Grave concern is expressed about the lack of information given to the affected communities and the lack of organised support to help them evacuate. 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

third dam in Germano-Alegria. Further concern is expressed regarding the accountability of the liable companies and the access to remedy for the victims.

In connection with the above concerns regarding the detrimental impact of the collapse of the tailing dam in Bento Rodrigues on human health, we wish to draw the attention of your Excellency's Government to article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), ratified by your Excellency's Government on 24 January 1992, which 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).

We also wish to draw the attention of your Excellency's Government to the Guiding Principles on Business and Human Rights (contained in A/HRC/17/31) which the Human Rights Council unanimously adopted 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.

Moreover, we wish to also draw the attention of your Excellency's Government 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 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).

The full texts of the human rights instruments and standards recalled above are available on www.ohchr.org or can be provided upon request.

In view of the urgency of the matter, we would appreciate a response on the initial steps taken by your Excellency's Government to safeguard the rights of the abovementioned 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 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 the river Doce.
- 3. Please provide further information on the chemical in the tailings pond, including industrial chemicals and heavy-metals.
- 4. Please describe any government measures to protect human life and the environment from harm from the release of tailings waste from mining.
- 5. Please describe any government measures that have been taken to respond to the incident and in particular to protect against continued harm to human health, access to water and sanitation, property and the environment.
- 6. Please describe how the Government plans to ensure the victims and affected communities receive an effective remedy.
- 7. Please describe how the Government plans to respond to this incident to prevent recurrence of such disasters in the future.
- 8. Please describe how the Government is investigating this incident, with a view to holding accountable those responsible for this damage.

While awaiting a reply, we urge that all necessary interim measures be taken to halt the alleged violations and prevent their re-occurrence and in the event that the

investigations support or suggest the allegations to be correct, to ensure the accountability of any person responsible of the alleged violations.

John Knox, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment and Baskut Tuncak, the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes and Léo Heller, the Special Rapporteur on the human right to safe drinking water and sanitation; are intending to publicly express our concerns in the near future as we are of the view that the information upon which such press releases will be based is sufficiently reliable to indicate a matter warranting immediate attention.

Your Excellency's Government's response will be made available in a report to be presented to the Human Rights Council for its consideration.

Please accept, Excellency, the assurances of our highest consideration.

Margaret Jungk

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

John Knox

Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment

> Victoria Lucia Tauli-Corpuz Special Rapporteur on the rights of indigenous peoples

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