End of Mission Statement by the UN Special Rapporteur on Toxics and Human Rights, Marcos A. Orellana, on his visit to South Africa, 31 July to 11 August 2023

Pretoria, 11 August 2023

Today, I conclude my official country visit to South Africa. I would like to express my sincere appreciation to the Government for its invitation and excellent cooperation, prior and during this visit. I was heartened by the open and frank discussions with national and provincial authorities.

South Africa faces the crude legacy of pre-1994 environmental racism. This abhorrent practice entailed the intentional siting of landfills and polluting industries along racial lines and in low-income and migrant communities. The legacy of pervasive air and water pollution to this day is disproportionately impacting marginalized and poor communities. The challenges to overcoming the legacy of environmental racism are enormous, and they are compounded by structural inequality, widespread poverty, unemployment, corruption, a severe energy crisis and new environmental threats such as the climate emergency.

While the legacy and current pollution challenges are vast, South Africa has committed to the respect of fundamental rights in its constitution and international treaties. This is cause for hope and optimism.

I would like to congratulate South Africa for having ratified the key multilateral environmental agreements on chemicals and wastes (Basel, Rotterdam, Stockholm, and Minamata Conventions and the Montreal Protocol). I would also like to recognize South Africa’s leadership in the multilateral system and in capacity-building in the human rights and environmental areas. South Africa hosts the Regional Centre for English-speaking countries of the Basel and Stockholm Conventions. The country also supported a proposal to amend the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, to overcome the breakdown of the Convention's science-policy interface mechanism. While South Africa has yet to become party to the Bamako Convention, which aims to ban the import of all hazardous substances into Africa, it has ratified the Basel Ban Amendment that prohibits the import of hazardous wastes from OECD countries.

South Africa is also party to most of the international human rights instruments and to the African human rights ones. It is also a member of the UN Human Rights Council and has extended a standing invitation to the UN special procedures mechanisms since 2003.

Over the course of my visit, I had the privilege of engaging with Minister of Forestry, Fisheries, and Environmental Affairs, Ms. Barbara Creecy, Deputy Minister of International Relations and Cooperation, Mr. Alvin Botes, and technical experts from various governmental departments including: the Departments of International Relations and Cooperation; Justice and Correctional Services; Agriculture, Land Reform and Rural Development; Cooperative Governance and Traditional Affairs; Employment and Labour; Department of Forestry, Fisheries, and the Environment; Health; Home Affairs; Human Settlements; Mineral Resources and Energy; Science and Innovation; Water and Sanitation; and Women, Youth and Persons with Disabilities. I was also pleased to exchange with the South African Human Rights Commission and the Presidential Climate Commission. I am also thankful to the Premiers and Members of the Executives Councils as well as officials from the provincial governments in Gauteng, Mpumalanga, Kwa-Zulu Natal and Western Cape for hosting fruitful discussions with me.

During my visit, I also held several meetings with civil society organizations, members of academia, and local communities. Their contributions and insights have been invaluable, and their commitment and passion in defense of human rights and the environment, inspiring. I would also like to thank the United Nations in the country, including the Regional Office for Southern Africa of the Human Rights Office, for their support as well as those businesses I interacted with during this visit.
Today, as my visit concludes, I am pleased to share my preliminary observations. A full report on my official country visit to South Africa will be presented to the United Nations Human Rights Council in September 2024.

**Overcoming the legacy of environmental racism**

The term “environmental racism” describes institutionalized discrimination based on race or colour. In pre-1994 South Africa, the distribution of environmental risks and harms disproportionately and often deliberately targeted low-income groups and along racial lines. Today, despite the efforts by Government in setting up institutions and laws to address this legacy of environmental racism, pervasive air, water and chemical pollution still imposes a heavy toll, especially on disadvantaged communities. Overcoming it will require significant additional efforts, including structural, legislative, economic and environmental changes.

Since 1994, South Africa has built a strong legislative framework. The South African Constitution is renowned worldwide for its advanced stance on human rights. For example, the Constitution recognizes the justiciable right of everyone to an environment that is not harmful to their health or well-being. It took the UN General Assembly an additional 25 years before it recognized, for the first time at the global level in 2022, the critical importance of the right to a clean, healthy and sustainable environment.

Since 1994, South Africa has adopted numerous and important norms governing chemicals and wastes. I can refer to the National Environmental Management Act No. 107 of 1998, the Air Quality Act 39 of 2004 and the Waste Act No. 59 of 2008. Also, there are important measures in progress, such as the climate bill and the banning of certain hazardous pesticides, such as chlorpyrifos.

At the same time, there are laws dating from pre-1994 that are resulting in harms and human rights infringements. One example is the Hazardous Substance Act, No.15 of 1973. Similarly, the Fertilizers, Farm Seeds, Seeds and Remedies Act 36 of 1947 is outdated, fragmented and allows the import of hazardous pesticides that are banned in their country of origin. This results in the legalized poisoning of agricultural workers in the fields and neighboring communities.

Implementation and enforcement of legislation concerning chemicals and wastes falls under many Departments, making coordination and coherence challenging. I was therefore pleased to hear about the Multi-stakeholder Committee on Chemicals Management aimed at coordinating efforts among different stakeholders, including civil society and industry.

**Governance and Accountability**

South Africa’s strong legislative framework should serve as the backbone for accountability and access to effective remedies. Yet enforcement and implementation of the law is often nonexistent or insufficient. Where powerful actors are allowed to act with impunity and disregard environmental protections, the confidence in democracy and the environmental rule of law begins to erode.

South Africa has valuable tools for enforcement. For example, the Environmental Management Inspectors, so-called Green Scorpions, who monitor and enforce compliance with the Waste Act No. 59 can conduct inspections at sites, detect non-compliance, mete out administrative sanctions or refer to criminal prosecution. At the same time, postponement or exemption of compliance, for example with regard to hazardous air emissions, weakens enforcement and exposes the population to harms and risks to their lives and health.

The right to participate in public affairs is another strong pillar of the South African legislative framework. The South African State must be commended for this. Section 32 of the Constitution recognizes the right to access information. The Promotion of Access to information Act of 2000 gives effect to this right. As per section 195, public administration must be
governed by a number of principles including transparency and accountability. Yet I learnt that certain areas are covered in secrecy. For example, it is not possible for the public to access free of charge the list of pesticides registered for use in the country.

I also heard numerous testimonies that public participation has become a mechanical “box-ticking” exercise and perceived to be devoid of a genuine interest to find common grounds. I met a number of community members who unequivocally stated that they wished to “be involved and not workshopsed”.

The fact that communities can only resort to litigation in order to be heard, as in the so-called “Deadly Air case”, reveals that public participation processes are not delivering fully. Yet access to courts and effective remedies are often unavailable or unaffordable to marginalized communities and individuals.

A number of civil society organisations work with communities affected by mining, in the pursuit of environmental and social justice. Some provide legal assistance, while others support environmental defenders. I commend their relentless work, courage and resiliance. I heard that the work of many of these community activists and human rights defenders can be extremely dangerous, as they face powerful interests in defence of the right to a healthy environment.

Accountability for the harm suffered by individuals and communities as a result of hazardous substances and waste is an area where I believe more action is required. I received information on numerous cases where hazardous chemicals have impacted people’s human rights. The affected groups have yet to receive compensation; and industry and Government are yet to be held accountable.

One case in point is the United Phosphorous Limited (UPL) incident. During violence that erupted in KwaZulu-Natal in July 2021, the UPL warehouse in Cornubia, Durban, which stored thousands of tons of pesticides, was set on fire. The fire smouldered for several days. A toxic mix of chemicals flowed into the Ohlanga River and Umhlanga Lagoon killing thousands of fish and depriving thousands of fisherfolk of their subsistence.

The Blackburn informal settlement was particularly hit by the toxic pollution of the air and the waters. When talking to affected community representatives there, it was clear to me that both industry and Government left them on their own to bear the short - and longer- term consequences on their health and livelihoods. The community’s demands for sanitation, support for livelihoods, a library for the students, and an apology, remain till today unheeded. I understand a criminal case brought by the Provincial Government is ongoing, and I hope it will lead to effective redress for the affected communities.

**Confronting toxic challenges**

The post-1994 Government inherited an economic model that created a suite of toxic challenges. The toxic pollution undermined the realization of the right to a healthy environment. While there are no easy solutions to the current toxic challenges facing the country, the human rights to life, health and a healthy environment provide a moral compass for the design of effective and legitimate measures.

**Air Pollution**

Almost 90% of the electricity in the country is generated from coal. The mining and burning of coal are chief contributors to South Africa’s air pollution and emissions of greenhouse gases. The air is polluted with PM2.5, which are tiny airborne particles small enough to penetrate deep in the lungs and pass to the blood stream. A study estimated that 2,239 human deaths and more than 9,500 cases of bronchitis per year could be attributed to air pollution in South Africa.
Dust and ashes also negatively affect air quality in areas around coal mines. However, real time data on air pollution is lacking, and monitoring equipment is frequently non-functional. Also, South Africa’s National Air Quality Standards are far less protective than the air quality standards of the World Health Organization.

In the Highveld of Mpumalanga province, which already in 2007 the then Minister of Environmental Affairs had declared as priority area under the Air Quality Act because of its poor air quality, communities related how they were left with no other choice but taking up jobs in an area of coal mines and coal powered stations that imposed tremendous adverse health impacts on them. Communities reported that children get sick with asthma and eyes itching, and adults suffer from shortness of breath while clinics lack medication or ways to store it.

Some areas in Mpumalanga resemble a “sacrifice” zone as low-income, Black communities live in the vicinity of heavily polluting industries which have disproportionately impacted their human rights.

I spoke to community representatives who bravely brought a case to the High Court of South Africa on the poor ambient air quality in the Highveld Priority Area. In its March 2022 judgement, the Court declared that the poor air quality in the area “is in breach of residents’ section 24(a) constitutional right to an environment that is not harmful to their health and well-being.” It further directed the Minister of Forestry, Fisheries, and Environment to promulgate regulations to implement and enforce the Highveld Priority Area Quality Management Plan. I sincerely hope that the regulations that the Government started preparing will be finalized promptly and implemented effectively.

**Just Energy Transition**

In Mpumalanga, I also visited the Komati coal-fired power station which operated from the 1960s until 2022 when it was decommissioned. The World Bank’s supported plan is to repurpose Komati into a renewable energy generator and a renewable technology training facility. I saw, for example, a containerized micro grid that was assembled at Komati to be installed in rural communities that are not connected to the national grid. The Komati repurposing plan is aligned with South Africa’s just transition framework, which is supported by the 8.5 billion USD promised by four developed countries and the European Union via the Just Transition Partnership.

Despite the damage coal production and coal burning has on the health of local populations and on the climate system, many workers and others depended on the coal industry for their livelihood. Therefore, a just plan of action must consider the economic security of former employees and community members.

According to the Presidential Climate Commission, the net value added and employment in the mining industry is going to grow and not decrease in the transition to renewable energy sources. South Africa has several mineral resources that are useful for renewable energy technologies, including copper, cobalt, and vanadium, among others. Therefore, the country has a clear opportunity to integrate decarbonization and detoxification strategies, and to learn lessons from the past to prevent toxic pollution in the mining of transition minerals.

Lastly, considering the government’s commitments on climate action, I was perplexed to hear about its licensing of new coal and greenhouse gas-intensive projects. A couple of examples are the Musina-Makhado Special Economic Zone, another coal mine in Lephalale, and numerous offshore oil and gas projects.

**Mining**

The mining industry, particularly gold mining, has for many decades contributed to South Africa’s economic development. Its legacy also includes more than 6,152 ownerless or derelict mines and mine
dumps in the country. These abandoned mines and tailings pose a significant threat to human health and the environment.

In the pre-1994 era, the mining industry’s discriminatory practices subjected black South Africans to unsafe working conditions and hunger wages. Today, poor Black communities in South Africa continue to bear the brunt of the negative health and environmental impacts of mining.

In Gauteng, I visited the Witwatersrand mining basin. I saw mountains of mining waste dumps known as “tailings dams or dumps” that contain heavy metals. In Witwatersrand, the ore contains uranium. Nearby communities inhale the radioactive dust particles as they are blown by the wind. Due to contaminated soils, crops are unable to grow.

In addition to toxic dust and tailings dumps, mining operations create acid mine drainage. The mixture of fluids that make up acid mine drainage is highly toxic. It seeps and contaminates waters that communities use for irrigation, watering livestock, spiritual rituals, and other domestic and recreational purposes. In Witwatersrand, I visited an acid mine drainage treatment facility designed to reinject cleaner water to the Limpopo River. This facility embodies collaboration between the government and a mining corporation. I also visited the facilities of a company that reused polluted water from its tailings in its operations, in a closed loop system. This is an example of a good practice where rehabilitation is undertaken as mining operations are ongoing and not postponed until mining operations conclude.

In South Africa, mining operations are highly regulated with a set of mandatory processes and authorizations. However, informational deficits, meaningful public participation, and enforcement remain major challenges. Often, remediation upon mine closures is lost in the poor enforcement of legislation. The result is a landscape scarred by abandoned mines and tailing dumps and acid mine drainage. The result is the widespread infringement of the basic rights of neighbouring communities.

Hazardous Chemicals

Mercury

In Kwa-Zulu Natal, I visited the Thor Chemicals facility, currently owned by Guernica Chemicals SA Pty Ltd, in Cato Ridge. In the 1970s and 1980s, Thor Chemicals imported mercury-containing catalyst waste from other countries, with a view to recovering the spent catalyst. But the recovery facility was inadequate and operations did not take place. Nevertheless, Thor Chemicals continued to import mercury laden hazardous waste, and approximately 4300 metric tons mercury waste accumulated on site. By the 1990s, reports emerged on mercury contamination of water sources, poisoning of workers, and the death of 3 workers. This transfer of hazardous waste from the Global North to the Global South, where developing countries are used as the dumping ground of toxic wastes from industrialized countries, is a denial of the fundamental right of peoples to a healthy environment.

For almost 30 years, the hazardous waste remained on the site. In 2018, the Government mobilized for the cleanup, and Thor Chemicals agreed to pay for it. In 2021 the cleanup operation began. I applaud this effort.

However, while the company has invested significant resources in the clean-up of the site, most of the workers exposed to the mercury waste, or the families of those workers who have died, are still awaiting compensation. Reports indicate that only 41 of the 111 impacted former employees received compensation. I strongly urge the South African Government to take the necessary steps to ensure the right to an effective remedy is secured.
In South Africa, mercury is illegal in mining activities. However, it is still used by illegal small-scale miners commonly known in South Africa as Zama Zamas. Interlocutors explained that some Zama Zamas can be characterized as criminal syndicates, while some others are often pushed to such mining due to lack of alternative employment.

Efforts at formalizing artisanal practice could render important benefits for the workers and their communities. But these efforts should not be confused with legalization of mercury. In that regard, South Africa should consider tabling proposals to strengthen the Minamata Convention on Mercury, so that its efforts at phasing out mercury use in the country are further supported by the international community.

**Asbestos**

It is estimated that about 24.2% (273,627) of all houses built under governmental low-cost housing programme, from its inception in 1994 to December 2000, used roofing containing asbestos. It is well known that inhalation of asbestos fibers can be extremely hazardous and even cause fatal illnesses.

I was pleased to learn that the Government has set up an asbestos removal programme in homes. And that the program contemplates disposal of asbestos in accordance with relevant regulations. At the same time, I understand that cost implications of the program are a significant challenge to its timely execution.

**Polychlorinated biphenyls (PCBs)**

The group of persistent chemicals known as PCBs can cause serious health effects in humans and wildlife. The Stockholm Convention on persistent organic pollutants bans the production and new uses of PCBs and requires the elimination of the use of PCBs in equipment by 2025.

South Africa has installed capacity for the destruction of PCBs and other hazardous chemicals. Operating since 2004, the state-of-the-art facility run by a private company has eliminated 10,000 tons of PCBs and PCB contaminated waste in the period 2012-2023. This is an example of a good practice where government and industry align their efforts, with the support of the Global Environmental Facility. However, the delays in completing the inventories and collection of PCB contaminated equipment, and the burden placed on municipalities lacking capacity, speaks to the formidable hurdles still to be overcome.

**Pesticides**

Pesticide use has exponentially grown in South Africa. This is largely the result of an outdated regulation, namely the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947. This Act prioritizes the promotion of chemically-intensive agriculture, and it largely neglects the protection of human health and the environment. There is a growing call for a complete overhaul of this regulatory framework.

During my visit to the Western Cape province, I heard from women farm workers who were routinely exposed to hazardous pesticides and who denounced serious adverse health impacts in their communities. I also learned that pesticides meant for agricultural use are illegally sold and used to combat rampant rat and cockroach pest infestations that spread in the absence of sanitation services in informal settlements. I was appalled to learn of the many children who were poisoned or died from eating, drinking or handling hazardous pesticides.
Despite the scientific evidence on their harms and the fact that they cannot be safely used, many highly hazardous pesticides are still legal and in use in South Africa. In 2022, there were 34 reported cases of poisoning and 5 deaths in Gauteng caused by an organophosphate, likely Terbufos. Paraquat is another example of a pesticide that is widely available and responsible for serious health impacts and deaths. These two pesticides, amongst many others, are banned in the European Union; yet they are still produced in European countries for export, particularly to developing countries. This practice reproduces long-standing racist and colonial patterns of exploitation.

Equally, the South African Government has a duty to protect its people and not contribute to reinforcing these double standards. Accordingly, South Africa should ban the import of all highly hazardous pesticides, including those that have been banned for use in their country of origin, without delay. In this regard, I wish to applaud South Africa’s decision to ban chlorpyrifos, a hazardous organophosphate pesticide. However, the Government should require immediate safe destruction of existing stockpiles and not allow for the further harm and risks of chlorpyrifos exposures that result from a lengthy, years-long phase-out period.

I have also examined reports that reflect the extent of the agrochemical industry’s influence on information and standard setting. For example, while the government does not have a publicly available list of registered pesticides, Croplife, an industry association, has an online database for purchase. Not even other Government departments, such as the Department of Forestry, Fisheries and Environment, has free access to the list of registered pesticides. Similarly, I have received information that consultants not registered with the South African Council for Natural Scientific Professions have been involved in the preparation of applications for the registration of agricultural pesticides, in open breach of the Natural Scientific Professions Act, 2003.

**Waste management**

Pre-1994, Black and marginalized communities were moved in the hinterland and housed around landfills and petrochemicals hubs. The South Durban Basin is a clear example of this, where poor and marginalized communities' townships became a buffer around the polluting refineries and petrochemical industries. In recent years, a few landfills were closed down due to activists’ and residents’ pressure and mobilization. However, the legacy of contaminated sites persists.

The challenge of overcoming the legacy of environmental racism has been aggravated by the informal settlements which have sprung up around the same areas. While the national and provincial authorities have programmes for relocating informal settlements, the communities residing in these settlements suffer severely from poor or non-existent access to essential services such as water and sanitation, waste management, and electricity. Lack to such services has a profound impact on the human rights of those living in these settlements.

I also heard that landfills are the predominant model for waste management, with most landfills meant for solid waste and some meant to dispose of hazardous waste. I was also informed of efforts to move to a circular economy and zero waste. These efforts are very welcome and should be strengthened to offer relief to people exposed to the pollution stemming from poor waste management practices.

**Conclusion**

Overcoming the legacy of environmental racism has been an enormous undertaking for South Africa. I welcome all efforts in that direction.
The Constitution and ensuing legislative framework have been a powerful tool for transformative change in the country since 1996. Yet, the strong, multi-dimensional legal and institutional framework that the country has built, alone, has not proven effective to remedy the harm and human rights abuses that marginalized communities have suffered from decades-long exposure to hazardous substances and toxic pollution.

The legacy of environmental racism has meant the externalization of costs of environmental degradation to the marginalized and poor communities. The polluter pays principle is enshrined in legislation, but so often polluters act with impunity in South Africa.

The progress made since 1994 has not only been eroded by corporate capture and corruption, but also by lack of accountability. Overcoming the legacy of environmental racism requires the State to rethink a development model that is often focused on the short-term objective of increasing jobs and economic growth at any cost.

There are no easy solutions and the challenges are very real. For countless individuals and communities across the country, exposure to hazardous substances means loss of health and premature death. For many people living without essential services, lack of clean water and sanitation means living surrounded by wastes. And many others feel their only way to procure food, for them and their families, is to work in polluting activities.

Aggravating the challenge of overcoming the legacy of environmental racism are new toxics threats to a life of dignity. Climate change and the just transition away from fossil fuels are an existential matter for humanity. The phase out of highly hazardous pesticides marks the difference between health and illness. The economic and health costs of pervasive air, water and chemical pollution aggravate extreme poverty and the environmental injustices of inequality.

In the face of such challenges concerning toxics and human rights, the State cannot abdicate its responsibility to enforce environmental laws and ensure that environmental quality standards are a reality, and not a legal fiction or simply another aspiration. The right to a healthy environment enshrined in South Africa’s constitution offers a moral compass to guide the continuous efforts to overcome the toxic tide of pollution. The right to a healthy environment must be upheld for the benefit of all.

In concluding my visit, I want to thank the South African people for their warm hospitality. It has been an honour and a privilege for me to conduct an official visit to South Africa. The mandate that has been conferred to me by the UN Human Rights Council will continue to be available to offer its technical expertise in defence of human rights threatened by toxic chemicals and wastes.

Thank you very much.