

Mandates of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes and the Special Rapporteur on the human rights to safe drinking water and sanitation

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(Please use this reference in your reply)

25 February 2025

Excellency,

We have the honour to address you in our capacities as Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes and Special Rapporteur on the human rights to safe drinking water and sanitation, pursuant to Human Rights Council resolutions 54/10 and 51/19.

In this connection, we would like to bring to the attention of your Excellency's Government information we have received concerning **alleged human rights violations of the population of Okinawa stemming from contamination of per- and polyfluoroalkyl substances in the surrounding areas of military bases operated by the United States of America.**

According to the information received:

PFAS contamination around Futenma and Kadena Air Bases

Contamination of per- and polyfluoroalkyl substances (PFAS) has been detected by local authorities since 2016 in the surrounding areas of the Futenma and Kadena air bases, which are operated by the United States of America on the island of Okinawa, Japan.

In 2016, high concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), both of which are hazardous types of the class of PFAS chemicals, were detected by local authorities in rivers and other sources of water from the Chatan Purification Plant. According to information available, some 450,000 people in seven municipalities that were supplied with tap water from the Chatan Plant, were allegedly exposed to contaminated water without their knowing.

Reportedly, U.S. Marine Corps Environmental Division documents from 2018 show that levels as high 1,800 ng/L for PFOA and 27,000 ng/L for PFOS, totaling 28,800 ng/L of PFAS, were detected in sewage from the firefighting training facility on Futenma base, and that these substances were discharged from the base through its drainage system.

In 2020, following an incident involving a leak of fire-fighting foam at the Futenma base, sampling was carried out as part of consultations under the 2015 Japan-U.S. Supplementary Environmental Agreement. However, the details of the sampling discussed at the consultation between the United States and Japan were reportedly not disclosed to the local authorities, and the investigation was

reportedly conducted solely within the parameters and methodology set by the United States, using samples supplied by the United States.

Japan-U.S. agreements allow for on-site access for Japanese authorities in the case of “a contemporaneous environmental incident, i.e. a spill” (article 4(a) of the Supplemental Environmental Agreement), however, the investigation following the 2020 incident at the Futenma base was reportedly conducted exclusively by the United States.

A 2022 water quality survey conducted by the Okinawa Prefectural Department of Environmental Affairs on spring water around Futenma also found that the combined total of PFOS and PFOA exceeded Japan’s provisional target value of 50 ng/L at 11 sites, even reaching 1,400 ng/L.

These levels are 28 times Japan’s provisional guideline value for PFAS in water and 350 times the more stringent U.S. Environmental Protection Agency’s maximum contaminant level for PFOA and PFOS in drinking water, which is set at 4 ng/L.

The 2022 survey also showed that the combined levels of PFOS and PFOA exceeded the provisional target value at 12 sites near the Kadena air base. At these sites, a peak of 2,100 ng/L was reportedly detected, which is 42 times Japan’s current provisional guideline value and 525 times the Environmental Protection Agency’s maximum level.

A 2022 soil survey of a school in close proximity to the Futenma base reported 1,100 ng/kg levels of PFOS, and a subsequent survey conducted by Okinawa Prefecture reported levels as high as 6,600 ng/kg of PFOS in the schoolyard soil. This survey also reported that PFOS was detected at levels as high as 11,436 ng/kg in the soil of a taro field in the area. PFAS regulations for soil have not yet been established in Japan and a unified federal standard also does not exist in the United States.

As part of the ongoing monitoring of contamination, the Okinawa Prefecture Department of Environmental Conservation took underground water samples using boring tests from the surrounding areas of the Futenma air base in August 2023 and January 2024 and tested for certain PFAS. The results of the testing revealed concentrations of PFOS and PFOA at levels exceeding 50 ng/L in various points downstream of the base. The testing also revealed PFAS levels in the waters that do not exceed the 50 ng/L in points upstream of the base.

Water samples have also been taken from several rivers, including the Hija River, Nagata River and Tengan River, as well as the Kadena Wells, revealing high concentrations of PFOS, according to local authorities.

Fire-fighting drills at the Futenma air base have in the past used fire-fighting foam containing PFOS and PFOA. Upstream of the Futenma air base, there are no industrial facilities that produce or use PFAS. Similarly, upstream of the Futenma air base there are no waste management facilities that could release leachate contaminated by PFAS. Accordingly, the available scientific evidence

suggests that the Futenma air base, under the control of the United States of America, is the source of PFAS contamination of the environment surrounding the base. A similar situation and pattern of PFAS contamination of underground waters around the Kadena air base, also controlled by the United States of America, has also been documented by the Okinawa Prefecture Department of Environmental Conservation.

Local authorities have reportedly submitted four requests for on-site surveys to the U.S. Forces in order to identify the source of PFAS contamination around the bases operated by the United States of America. Of the four entry applications filed, reportedly no permission was granted. These applications were not linked to a specific “spill” or other “contemporaneous environmental incident”.

According to the information received, transparent and effective sampling for PFAS testing of the chronic contamination generated by routine operations has not taken place within the Futenma or the Kadena air bases, given lack of authorization by the U.S. Government to enter the bases for the purpose of testing.

Adverse impacts on surrounding populations

The presence of PFAS in underground waters and rivers around U.S.-controlled air bases in Okinawa has adverse impacts on the quality of waters available to the population of central Okinawa for drinking and other uses. Several intake points of the public drinking water utility system are found around these locations, including the Kadena Wells inside the Kadena air base. In order to clean these waters from PFAS, the Okinawa Prefecture has installed carbon filters, at a high cost, at the Chatan Water Purification Plant. These filters need to be changed circa every four years, also at a high cost.

Around the Futenma air base there are reportedly several springs, including Chun'nagar spring, which was used for ceremonial purposes before the 2022 water quality survey on spring water in the area discovered PFAS contamination. Communities around the Kadena air base also used the Yara Ubuga Spring for ceremonial purposes, including the bathing of newborns. This and other rituals are no longer practiced because of PFAS contamination of the spring.

The case demonstrating the contamination of a schoolyard also raises concerns for the rights and wellbeing of children in the vicinity of the U.S. bases.

In 2022, independent blood sampling was conducted on approximately 400 people in six municipalities in Okinawa, reportedly finding that blood levels of certain types of PFAS were 14 times higher than the national average.

Noise impacts

Around the air bases, residents report high levels of noise from aircraft, especially at take-off and landing. Around 16,000 take-off and landing

operations take place every year. The closest point from the runway to the residences is 350 meters. Noise levels often exceed 90-100 decibels. Also, aircraft cause noise during the nighttime hours of 10 p.m.-6 a.m.

According to information received, noise abatement countermeasures at Kadena air base have been proposed to the Joint Committee provided for in paragraph 1 of article XXV of the 1960 Agreement regarding the Status of United States Armed Forces in Japan. These measures include limitations on flight and ground operations between the hours of 10 p.m.-6 a.m. and on night training flights. However, these restrictions are reportedly routinely breached.

The 1960 Agreement regarding the Status of United States Armed Forces in Japan

This agreement, also referred to as the Status of Forces Agreement, provides in article 4(1) that: “The United States is not obliged, when it returns facilities and areas to Japan on the expiration of this Agreement or at an earlier date, to restore the facilities and areas to the condition in which they were at the time they became available to the United States armed forces, or to compensate Japan in lieu of such restoration.” According to information received, there is lack of clarity on whether this provision addresses environmental issues, including any obligations of the Parties regarding cleanup of environmental contamination in and/or around the facilities.

The 2015 Agreement Between the United States of America and Japan on Cooperation in the Field of Environmental Stewardship Relating to the United States Armed Forces in Japan, Supplementary to the Agreement under Article VI of the Treaty of Mutual Cooperation and Security Between the United States of America and Japan, Regarding Facilities and Areas and the Status of United States Armed Forces in Japan, is similarly silent on the question of cleanup of environmental contamination.

Without prejudging the accuracy of these allegations, we express our most serious concern regarding the human rights and environmental impacts of the water, soil and noise pollution apparently resulting from the operation of the Kadena and Futenma air bases in Okinawa. Environmental contamination and harm due to PFAS pollution threatens the right to life, health and a healthy environment of present and future generations in the surrounding areas of the air bases.

The loss of drinking water sources due to PFAS pollution from the air bases and the costs of installation of filters for water purification impose unwarranted burdens on the local population in their enjoyment of the right to water. The inability to conduct traditional rituals, including bathing newborns, in springs now contaminated by PFAS infringes on the effective enjoyment of cultural rights. The reported results of blood testing also heighten concerns around residents’ access to the right to health. Moreover, the contamination of soil with PFAS poses a threat to the right to food of the local population and beyond.

Insufficient information in the public domain concerning potential contamination of the environment interferes with residents’ right of access to

environmental information, which is a necessary condition for transparency and accountability in governance and international cooperation.

The incessant high levels of noise, including during the night hours, impose a heavy burden on the right to privacy and the right to a clean, healthy and sustainable environment, among others.

Moreover, the lack of clear and specific obligations in the relevant international agreements governing the status of American armed forces in Japan regarding the cleanup of environmental contamination resulting in and around air bases and other facilities, is deeply problematic for the effective enjoyment of several human rights that are compromised by the legacy of pollution. This is particularly troubling given the persistent characteristics of certain contaminants found in the surroundings of the air bases, such as PFAS.

In connection with the above alleged facts and concerns, please refer to the **Annex on Reference to international human rights law** attached to this letter which cites international human rights instruments and standards relevant to these allegations.

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/or comment(s) you may have on the above-mentioned allegations.
2. Please specify the measures taken by your Excellency's Government to mitigate adverse environmental, health, economic, social, or cultural impacts on communities affected by PFAS originating from the operation of U.S. military bases.
3. Particularly, please explain what measures Your Excellency's Government has undertaken to respect the right to an adequate standard of living, including safe drinking water and sanitation, food, and the right to the enjoyment of the highest attainable standard of physical and mental health.
4. Please provide information on any testing and monitoring of U.S.-operated bases and results concerning potential impact on human health and the environment.
5. Please highlight the steps that your Excellency's Government may have considered or taken to help cover the costs of installation and maintenance of carbon filters for PFAS water purification.
6. Please provide any information on the status of the noise abatement proposal and any monitoring of compliance concerning Kaden air base.
7. Please describe any steps taken to ensure that residents in the vicinity of U.S.-operated bases are informed of any contamination of their water

and/or soil.

8. Please define the threshold that distinguishes an “incident” allowing for testing on U.S.-operated bases from chronic, pervasive pollution arising from the presence and operation of the bases.
9. Please inform whether the US forces apply the standard of the US Environmental Protection Agency concerning a maximum contaminant level for PFOA and PFOS in drinking water (4 ng/L) vis-à-vis its operation of military bases and the population in Okinawa, Japan.
10. Please explain your Excellency’s Government’s interpretation of the 1960 Agreement regarding the Status of United States Armed Forces in Japan and its 2015 supplementary agreement on cooperation in the field of environmental stewardship, in respect of specific obligations for cleanup and restoration of environmental pollution in and around facilities.
11. To that end, please describe any steps taken or considered following testing showing levels of PFAS contamination that exceed U.S. and Japan’s standards and guidelines in the surroundings of U.S.-operated military bases.

This communication and any response received from your Excellency’s Government will be made public via the communications reporting [website](#) within 60 days. They will also subsequently be made available in the usual report to be presented to the Human Rights Council.

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(s) responsible for the alleged violations.

Please be informed that a letter on this subject matter has also been sent to the Government of Japan.

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

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Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes

Pedro Arrojo-Agudo

Special Rapporteur on the human rights 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 draw your attention to the applicable international human rights norms and standards, as well as authoritative guidance on their interpretation.

We wish to recall article 6(1) of the International Covenant on Civil and Political Rights (ICCPR), ratified by the United States on 8 June 1992, which guarantees the right to life. As highlighted by the Human Rights Committee in general comment No. 36, the duty to protect life also implies that States parties should take appropriate measures to address the general conditions in society that may give rise to direct threats to life or prevent individuals from enjoying their right to life with dignity, including degradation of the environment (para. 26). Environmental degradation constitutes one of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life. Implementation of the obligation to respect and ensure the right to life, and in particular life with dignity, depends, inter alia, on measures taken by States parties to preserve the environment and protect it against harm and pollution caused by public and private actors (para. 62).

States have a duty to prevent exposure to hazardous substances and wastes, as detailed in the 2019 report of the Special Rapporteur on the human rights implications of the environmentally sound management and disposal of hazardous substances and wastes to the United Nations General Assembly (A/74/480). This obligation derives implicitly, but clearly, from a range of rights and duties enshrined in the global human rights framework, under which States are obliged to respect and fulfill recognized human rights, and to protect those rights, including from the consequences of exposure to toxic substances. These rights include the human rights to life, health, food and drinking water, a healthy environment, adequate housing and safe and healthy working conditions.

We would further like to bring to the attention of your Excellency's Government the information that adverse impacts on human rights of the release of hazardous substances into the environment disproportionately affect children and women, as reported by the Special Rapporteur on toxics and human rights in his report, "Gender and hazardous substances" (16 July 2024, A/79/163).

We wish to refer to Human Rights Council resolution 48/13 of 8 October 2021 and General Assembly resolution 76/300 of 29 July 2022, which recognize the right to a clean, healthy and sustainable environment as a human right. We also wish to refer to general comment No. 26 (CRC/C/GC/26) by the Committee on the Rights of the Child, which states that children's right to a clean, healthy and sustainable environment is implicit in the Convention on the Rights of the Child and directly linked to, in particular, the rights to life, survival and development (article 6), to the highest attainable standard of health, including taking into consideration the dangers and risks of environmental pollution (article 24), to an adequate standard of living (article 27), and to education (article 28), including the development of respect for the natural environment (article 29, para. 63).

We also wish to bring to the attention of your Excellency's Government the Framework Principles on Human Rights and the Environment as detailed in the 2018 report of the Special Rapporteur on human rights and the environment (A/HRC/37/59). The principles state that States should ensure a safe, clean, healthy and sustainable environment in order to respect, protect and fulfil human rights (principle 1); States should provide for education and public awareness on environmental matters (principle 6); States should provide public access to environmental information by collecting and disseminating information and by providing affordable, effective and timely access to information to any person upon request (principle 7); States should take additional measures to protect the rights of those who are most vulnerable to, or at particular risk from, environmental harm, taking into account their needs, risks and capacities (principle 14), and States should ensure that they comply with their obligations to indigenous peoples and members of traditional communities, including by: (a) Recognizing and protecting their rights to the lands, territories and resources that they have traditionally owned, occupied or used (principle 15).

In addition, we would like to stress that the former Special Rapporteur on human rights and the environment identified non-toxic environments in which people can live, work study and play as one of the six substantial elements of the right to a clean, healthy and sustainable environment as recognized by the Human Rights Council and General Assembly. In his report on the topic, he concluded that “[t]he substantive obligations stemming from the right to a non-toxic environment require immediate and ambitious action to detoxify people’s bodies and the planet. States must prevent toxic exposure by eliminating pollution, terminating the use or release of hazardous substances, and rehabilitating contaminated communities” (para. 86). The Special Rapporteur has also recommended to “prohibit the production and use of substances that are highly toxic, bioaccumulative and persistent (including carcinogens, mutagens, endocrine disruptors, reproductive toxins, immune system toxins and neurotoxins) with limited exemptions where uses are essential for society” (para. 89(b)(4)) (A/HRC/49/53).

We also recall to your Excellency the explicit recognition of the human rights to safe drinking water and sanitation by the UN General Assembly (resolution 64/292) and the Human Rights Council (resolution 15/9), which derives from the right to an adequate standard of living, protected under, inter alia, article 25 of the Universal Declaration of Human Rights, and article 11 of International Covenant on Economic, Social and Cultural Rights (CESCR), which was signed by the United States of America on 5 October 1977. Article 24(2)(c) of the UN Convention on the Rights of the Child requires States to take appropriate measures to combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the provision of clean drinking water, taking into consideration the dangers and risks of environmental pollution.

General comment No. 15 on the right to water stresses that the right to water “clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival” (para. 3), with the right to an adequate standard of living enshrined in article 11 of the CESCR, and that the right to water is also “inextricably related to the right to the highest attainable standard of health” (para. 3) guaranteed under article 12(1). A sufficient and continuous water supply must be available for personal and domestic use, and “water is necessary to produce food (right to adequate food) and

ensure environmental hygiene (right to health)” (para. 6).

Moreover, water required for each personal or domestic use must be safe, i.e., free from chemical substances that constitute a threat to a person’s health. Water facilities and services must be accessible to everyone, both physically and economically, and must be free from discrimination. Further, water accessibility includes the right to seek, receive, and impart information on water issues. Lastly, “access to traditional water sources in rural areas should be protected from unlawful encroachment and pollution” (para. 16(c)). The right to health is protected under the Universal Declaration of Human Rights (UDHR) (article 25(1)) and the CESCR (article 12) and it includes the enjoyment of the highest attainable standard of both physical and mental health. Article 24 of the UN Convention on the Rights of the Child ensures the right of the child to the enjoyment of the highest attainable standard of health.

General comment No. 14 on the right to health interprets the right “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 and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions (...)” (para. 11). “A further important aspect is the participation of the population in all health-related decision-making (...)” (para. 11). The right to health also comprises the prevention and reduction of the population’s exposure to harmful substances, such as harmful chemicals or other detrimental environmental conditions that directly or indirectly affect human health.

Article 17 of the ICCPR guarantees the right to privacy, which stipulates that “no one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence” and that “everyone has the right to the protection of the law against such interference or attacks”.

Article 27 of the UDHR guarantees everyone the right to freely participate in the cultural life of the community. Article 15(1)(a) of the CESCR recognizes the right of everyone to take part in cultural life and requires States Parties to the Covenant to take steps to inter alia conserve culture (article 15(2)). General comment No. 21 (2009) by the Committee on Economic, Social and Cultural Rights clarifies that the right is interdependent on other rights enshrined in the Covenant, including the right of all people to an adequate standard of living.

The right to an adequate standard of living guaranteed under the UDHR (article 25) and the CESCR (article 11) encompasses among others, the right to adequate food. General comment No. 12 on the right to adequate food states that food must be free from adverse substances and requires means to prevent contamination of foodstuffs, for instance, through bad environmental hygiene. Article 27 of the UN Convention on the Rights of the Child guarantees the right of every child to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development.

Land plays an essential role in the realization of a range of human rights, such as the right to adequate food, the right to water, the right to the highest attainable standard of physical and mental health and the right to take part in cultural life.

Article 17 of the UN Declaration on the Rights of Peasants protects the right to land, both individually and collectively. General comment No. 26 on land and economic, social, and cultural rights stresses that “the sustainable use of land is essential to ensure the right to a clean, healthy, and sustainable environment and to promote the right to development, among other rights” (para. 1). Communities must be “properly informed about and allowed to meaningfully participate in decision-making processes that may affect their enjoyment of rights under the Covenant in land-related contexts” (para. 20).

International normative principles acknowledge that information and participation rights are a key point of intersection between environmental and human rights law. Principle 10 of the Rio Declaration, for example, states that “environmental issues are best handled with the participation of all concerned citizens”.

The rights of access to information and public participation are guaranteed under the UDHR (articles 19 and 20) and the ICCPR (articles 19, 21, and 25). The Human Rights Committee in its general comment No. 34 affirmed that freedom of expression, including therefore the right to access information, “is a necessary condition for the realization of the principles of transparency and accountability that are, in turn, essential for the promotion and protection of human right” (CCPR/C/GC/34, para. 3). According to the Committee, in order to give effect to the right of access to information, “States Parties should proactively put in the public domain Government information of public interest” (para. 19). States Parties should also “make every effort to ensure easy, prompt, effective and practical access to such information” (para. 19). General comment No. 25 on the right to take part in the conduct of public affairs clarifies that “citizens also take part in the conduct of public affairs by exerting influence through public debate and dialogue with their representatives or through their capacity to organize themselves” (para. 8).

The Special Rapporteur on toxics and human rights has stressed the importance of access to information and transparency around the disposal of hazardous substances and waste. What is disposed of, where, in what quantities and with what consequences, are among the key questions that communities and regulators must have answers to in order to take measures to prevent, control and reduce their exposure to toxic substances (A/HRC/57/52).

The Maastricht Principles clarify the content of States' extraterritorial obligations to realize economic, social and cultural rights in order to promote and give full effect to the purposes of the Charter of the United Nations and international human rights. [...] All States have obligations to respect, protect and fulfill human rights, including civil, cultural, economic, political and social rights, both within their territories and extraterritorially.

Accordingly, the aforementioned treaty obligations apply wherever a State exercises its jurisdiction.