THE INTERNATIONAL COMMITTEE FOR INVESTIGATION OF TORTURE IN BELARUS

ENVIRONMENTAL CONDITIONS OF DETENTION OF POLITICAL PRISONERS IN BELARUS

Research report

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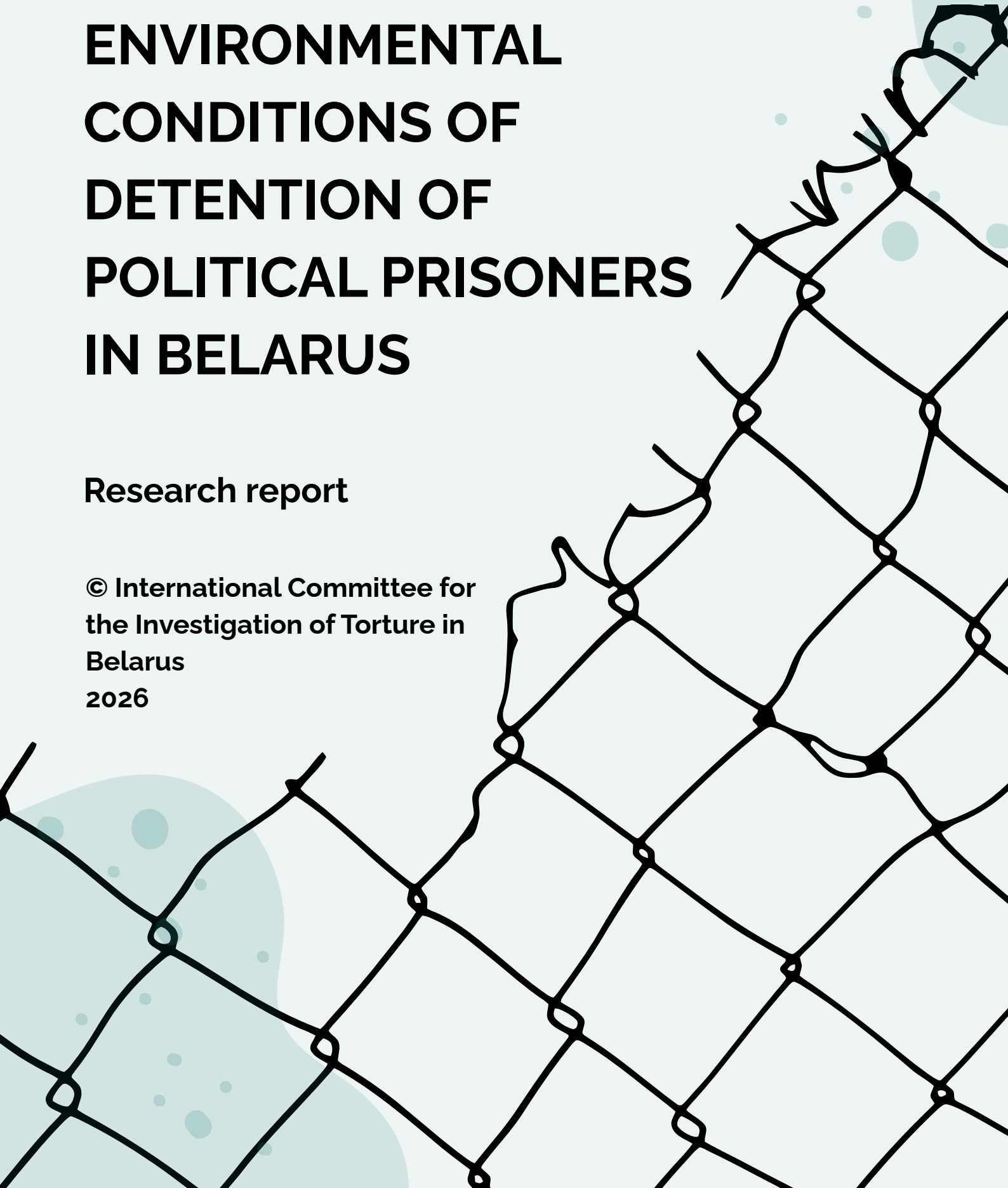


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List of abbreviations

IK	—	penal colony (ispravitelnaya koloniya)
SIZO	—	pre-trial detention centre (sledstvenny izolyator)
UIK	—	Penal Enforcement Code of the Republic of Belarus
PVR	—	Internal Regulations (of penal institutions)
ICRC	—	International Committee of the Red Cross
TKP	—	Technical Code of Common Practice (technical standard)
SanPiN	—	Sanitary Norms and Rules
NDC	—	Nationally Determined Contribution
UNICRI	—	United Nations Interregional Crime and Justice Research Institute
PRI	—	Penal Reform International
CO	—	carbon monoxide
SO_2	—	sulphur dioxide
NO_2	—	nitrogen dioxide
PM10	—	particulate matter with a diameter of up to 10 μm
MPC	—	maximum permissible concentration

Executive summary

This report documents the environmental conditions of detention in two penal colonies in Belarus – IK-4 in Homiel, a women's colony, and IK-1 in Navapolatsk, a men's colony – and compares them with national and international standards. The study is based on a body of interviews with former political prisoners, supplemented by independent reports of human rights organisations and official government data.

The problem

Penitentiary institutions have traditionally been analysed through the lens of security and punishment, while their environmental dimension – including air and water quality, sanitary conditions and temperature – has remained on the periphery of both human rights and academic research.

In the Belarusian context, this problem has an additional dimension. Documented testimonies indicate that poor conditions of detention may not only result from the general inefficiency of the penitentiary system, but may also be used selectively as an instrument of pressure on political prisoners.

Method

Each thematic area of the study – air, sanitation, water, health, infrastructure and disaster preparedness – is, where possible, assessed against two sets of standards: the national legislation of Belarus, where it sets a relevant standard, and international standards, above all the Nelson Mandela Rules and the recommendations of the International Committee of the Red Cross.

Official data from the administrations of the penal institutions are not available. The study is therefore based on a comparison of several types of sources: interviews with former prisoners, reports by human rights organisations, official government statistics from the Ministry of Natural Resources and Environmental Protection, Belstat and the sanitary services, and materials of the UN Special Procedures.

Comparing IK-4 and IK-1 makes it possible to test whether particular problems recur in two institutions that differ substantially in location and conditions of detention. The difference in gender composition is also taken into account when interpreting the findings: IK-4 is a women's colony and IK-1 a men's colony, so some of the differences between them may be related to factors other than territorial and infrastructural ones.

Key findings

In each of the areas analysed, there is a gap between international standards, national regulation and actual conditions of detention. In a number of cases, national legislation either contains no quantitative standards or sets thresholds at or below the international minimum. At the same time, the actual conditions described by former prisoners in a number of cases fail to meet even these requirements.

A further problem is the inaccessibility of certain regulations. In particular, the technical standard TKP 310-2011 "Buildings and facilities of pre-trial detention centres, arrest houses and prisons", which the administration cites as the basis for certain practices, is not publicly available and cannot be independently verified.

Air and the industrial environment

IK-1 directly adjoins the Naftan petrochemical complex. The report examines prisoners' testimonies about air quality together with official data from state ambient air monitoring.

Water supply

According to the Homiel City Centre for Hygiene and Epidemiology, exceedances of the standards for iron content and turbidity are regularly recorded in Homiel's water distribution network; the highest values for the period available were recorded in the first quarter of 2026. The sanitary service attributes these exceedances to the condition of the water mains[1].

1 https://www.gomelgcge.by/?page_id=12062

Temperature

Since May 2026, Belarus has had no quantitative temperature standard in force even for ordinary residential premises. No specific publicly available standard for places of detention has been found either.

Health

In detention, climate stress – including exposure to heat and cold – does not act in isolation but in combination with other factors: chronic illness, limited access to medical care, workloads and other adverse conditions of detention. According to the Viasna Human Rights Centre, as of August 2026 serious health problems had been documented in 266 of 863 political prisoners.

Recommendations

The recommendations are addressed to the state authorities of Belarus and to international mechanisms. They include ensuring public access to the technical standards governing conditions of detention, establishing quantitative standards in areas where none exist, and taking the environmental conditions of detention of political prisoners into account in the work of the relevant UN mechanisms.

The full list of recommendations is set out at the end of the report.

1 Introduction

Penitentiary institutions have traditionally been analysed through the lens of security, punishment and rehabilitation, while their environmental dimension – including air and water quality, sanitary conditions and resilience to climate extremes – long remained on the periphery of both human rights and academic research.

In recent years this has begun to change. In 2025, UNICRI and Penal Reform International published the report Green Prisons, which notes that prisons have a significant environmental footprint yet still remain outside many discussions on sustainable development. The authors also point out that climate change and environmental instability can exacerbate prisoners' existing vulnerabilities and create additional risks to their health and safety[2].

At the same time, a global review of the academic literature shows that the relationship between climate, human rights, environmental justice and conditions of detention remains one of the least studied areas, with substantial gaps in empirical data[3].

This study examines these issues in the case of Belarus, focusing on the environmental conditions of detention of political prisoners and their possible use as an instrument of selective pressure.

According to data gathered by the International Committee for the Investigation of Torture in Belarus from interviews with former political prisoners, differences are recorded in Belarusian places of detention between the conditions in which political and non-political prisoners are held. In particular, in certain documented cases political prisoners were deprived of mattresses, food parcels and access to drinking water, and their ventilation and ability to maintain hygiene were restricted.

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2 https://cdn.penalreform.org/wp-content/uploads/2025/03/Green-prisons_-PRI_UNICRI_2025.pdf

3 https://www.emerald.com/ijoph/article/doi/10.1108/IJOPH-11-2025-0090/1346778

Testimonies also point to the use of extreme temperatures as a form of pressure. In one documented case, a former prisoner described a cell in the KGB pre-trial detention centre designed for four people, in which seven were held at the same time, with the ventilation blocked and a temperature of around 40 °C.

The UN Group of Independent Experts on the Human Rights Situation in Belarus has specifically recorded the exposure of political prisoners to extreme temperatures, detention in unsanitary cells and deprivation of basic hygiene items as elements of systematic ill-treatment[4].

Adverse environmental conditions of detention in the Belarusian penitentiary system may thus not only result from shortcomings in infrastructure and in the general functioning of institutions, but may also, in certain cases, be used deliberately and selectively.

The research question of this report is formulated as follows: what are the documented environmental conditions of detention of political prisoners in IK-4 and IK-1, including temperature, sanitation, water supply and air quality, and to what extent do they comply with the national standards of Belarus and with international standards of detention?

The work has been prepared as a research report addressed to UN mechanisms and is based on an analysis of interviews with released political prisoners, supplemented by triangulation with reports by human rights organisations in exile and international monitoring bodies.

4 https://digitallibrary.un.org/record/4077808?v=pdf

2 Methodology and limitations of the study

Methodology

The study is qualitative: its empirical basis is a body of semi-structured interviews with former prisoners of Belarusian penal colonies. The report draws on confidential material, including first-hand testimony, as well as on open sources. Prisoners' testimonies are treated as a primary source of knowledge about conditions of detention. This approach is dictated by a systemic gap in existing approaches as applied to closed authoritarian contexts.

In the Belarusian case, the documented body of independent testimony points to a selective worsening of conditions specifically for political prisoners. The institutional reports of the UN and international NGOs have mostly been developed with democratic states in mind, where the penitentiary system has a certain degree of transparency. Neither the UNICRI/PRI report nor the global scoping review singles out political prisoners as a distinct analytical category, and neither offers a methodology applicable to closed authoritarian contexts. The present study fills this methodological gap[5].

Interview excerpts were organised into nine thematic areas: heat; cold; rain and snow clearing; power and utility outages; requests and complaints; medical care; differential treatment of persons on preventive registration; sanitation; and water quality. The bulk of the analysis is built on excerpts relating to two institutions: IK-4 and IK-1.

Official data from the Belarusian prison administration are not available for independent research because of the closed nature of the penitentiary system. Rule 83(1)(a) of the Nelson Mandela Rules establishes regular institutional inspections as the norm. The Belarusian system's failure to meet this standard is

5 https://www.emerald.com/ijoph/article/doi/10.1108/IJOPH-11-2025-0090/1346778

in itself a finding to be recorded, not a technical obstacle to be quietly circumvented[6].

This is compensated for by a comparative normative analysis on two levels. Each thematic area is assessed against:

1. the national legislation of Belarus, where a relevant standard has been set at all;

2. international standards, above all the Nelson Mandela Rules and the guidance of the International Committee of the Red Cross.

Limitations of the study

Within the framework of this work it was not possible to submit an official request to the Department of Corrections or to obtain high-resolution satellite imagery of the IK-4 and IK-1 sites themselves. The available open geodata and public mapping services show the general layout of the facilities but do not provide sufficient resolution to assess the condition of specific buildings, roofs or local sources of pollution on the institutions' premises. This limits the scope for remote verification of testimonies about specific facilities, in particular the dilapidated quarantine building at IK-1 and the condition of certain blocks at IK-4.

A further limitation is the general quality and availability of Belarusian state statistics. For example, since 2023 Belstat has been legally entitled to restrict the dissemination of data on grounds of "national security". Official climate and environmental monitoring also has limited precision: a single weather station records data for an entire city and does not reflect conditions in specific districts. The same problem arises with the Ministry of Natural Resources and Environmental Protection data for Homiel and Navapolatsk. Experts also note that detailed geodata for the IK-4 and IK-1 sites cannot be obtained.

Where state statistics are insufficient, civic monitoring can partly make up for them, but here too the possibilities are limited. River basin councils, formally established to involve the public in the management of the country's water resources, in practice exclude environmental civic associations. Many such

6 https://www.unodc.org/documents/justice-and-prison-reform/Nelson_Mandela_Rules-E-ebook.pdf

associations have been liquidated, which reduces the level of independent expertise and undermines confidence in the results of assessments of the state of water bodies[7].

A similar picture emerges with regard to civic air quality monitoring. The existing civic initiatives of this kind, which use networks of low-cost sensors, have no measurement points directly near the institutions analysed in this work, IK-4 and IK-1. Their data therefore cannot be used to independently verify testimonies about air quality in these particular localities[8].

For reasons of safety, respondents' personal data are not disclosed in this report. Direct quotations from interviews are published only where and to the extent permitted by the consent obtained for the use of the testimony. Internal interview identifiers are not given in the published version of the report.



7 https://belarusgreen.vision/wp-content/uploads/2025/07/belarusian-cso-report-on-sdgs-implementation.pdf

8 https://map.airmq.by

3 The two sites studied

The study compares two institutions located in different natural and infrastructural settings. If the same feature is found in both institutions, the likelihood that it is explained solely by local circumstances is reduced.

The comparison between the two sites is, however, limited by another significant difference that must be taken into account when interpreting the findings: IK-4 is a women's penal colony and IK-1 a men's. This means that some of the possible differences between the sites, in particular as regards sanitary facilities, hygiene standards and water use, cannot be attributed unequivocally to natural or infrastructural differences between Homiel and Navapolatsk. They may be explained by the different gender composition of the prisoner population and, accordingly, by differences in official provision standards – for example, in the frequency of bathing for men and women, where such differentiation is established by law.

Where appropriate, the subsequent comparison seeks to distinguish between two types of explanation: territorial and gender-related. On the data available, however, it is not always possible to separate them fully.

The gender dimension is also confirmed at the institutional level. Nils Muižnieks, Special Rapporteur on the situation of human rights in Belarus, together with the Special Rapporteur on torture and the Working Group on discrimination against women and girls, has recorded overcrowding in places of detention, poor hygiene conditions, and the lack of clean clothing and privacy for women prisoners in Belarus[9].

9 https://www.ohchr.org/en/press-releases/2025/01/belarus-experts-deplore-blatant-lack-accountability-ill-treatment-women

3.1 IK-4, Homiel

IK-4 is a women's penal colony in Homiel. Homiel lies on the Sozh River, in the Dnieper basin.

Homiel's drinking and domestic water supply is based on groundwater. The municipal system comprises seven group water intakes equipped with iron removal stations. The need for iron removal at all intakes points to a naturally elevated iron content in the region's groundwater, which is a typical feature of this part of the Dnieper basin[10].

Significantly, according to the city's sanitary service, exceedances of hygiene standards are recorded in the distribution network: iron content reaches 1.7 mg/dm^3 against a standard of no more than 0.3 mg/dm^3, and turbidity 4.64 mg/dm^3 against a standard of no more than 1.5 mg/dm^3. The sanitary service attributes this to the condition of the water mains and names flushing them as one of the response measures[11].

This fact is doubly important. First, it has been established independently of former prisoners' testimony and relates to the municipal water supply system of which the institution is a consumer. Second, it locates the problem in the distribution network rather than in the water source. The colony also has its own internal networks and storage tanks, the condition of which is not described publicly anywhere.

A separate feature of the site is seasonal. Respondents describe an annual mass appearance of biting insects (gnus) at the end of May and in June. The floodplain landscapes of the Sozh and the Dnieper provide conditions for blood-sucking flies to breed, and the seasonality the respondents describe matches these conditions.

This information is also confirmed by the report of the International Committee for the Investigation of Torture in Belarus, "Torture and ill-treatment in Homiel

10 https://www.gomelgcge.by/?page_id=12062
11 https://www.gomelgcge.by/?page_id=12062

Women's Penal Colony No. 4", based on 20 interviews with former women political prisoners who served sentences in IK-4 between May 2021 and February 2024[12].

12 https://legin.info/documents/44

3.2 IK-1, Navapolatsk

IK-1 is located in Navapolatsk, Vitsebsk region. Navapolatsk lies on the Western Dvina, in the Baltic Sea basin, and is the country's largest petrochemical centre. The industrial character of the city means high volumes of industrial water consumption and wastewater discharge within a single municipal system.

The report of the International Committee for the Investigation of Torture in Belarus, "The Torture Conveyor", describes the colony as "the dirtiest from an environmental point of view". The report also notes that prisoners are assigned to the most hazardous production sites regardless of their qualifications and state of health. These include plastics processing, involving toxic fumes, and coal production, involving constant exposure to coal dust[13].

The differences between IK-4 and IK-1 are taken into account below in the analysis of each thematic area. Comparing two structurally different institutions makes it possible to consider separately the influence of the natural and industrial environment, the condition of infrastructure and the specific ways in which conditions of detention are organised, while bearing in mind the limitations of such a comparison noted above.

13 https://torturesbelarus2020.org/wp-content/uploads/2025/11/na-sajt-pytki.pdf

4 Normative framework: international and national instruments

International standards

The United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules) set out basic requirements for the thematic areas of this study. The Rules also apply to Belarus. The following provisions are particularly relevant for this document[14].

Material conditions and air

Rule 13 requires all accommodation provided for the use of prisoners to meet all requirements of health, due regard being paid to climatic conditions and particularly to cubic content of air, lighting, heating and ventilation. Rule 14 requires windows that allow natural light and the entrance of fresh air whether or not there is artificial ventilation. Rule 17 requires all parts of the prison regularly used by prisoners to be kept clean.

Sanitation and hygiene

Rule 15 requires sanitary installations adequate to enable every prisoner to comply with the needs of nature when necessary and in a clean and decent manner. Rule 16 requires bathing and shower installations at a suitable temperature and the opportunity to bathe or shower as frequently as necessary for general hygiene according to season and climate, but at least once a week in a temperate climate. Rule 18 requires the provision of water and such toilet

14 https://www.unodc.org/documents/justice-and-prison-reform/Nelson_Mandela_Rules-E-ebook.pdf

articles as are necessary for health and cleanliness. Rule 19 requires the provision of clothing suitable for the climate.

Discipline and solitary confinement

Rule 43 prohibits prolonged or indefinite solitary confinement, placement of a prisoner in a constantly lit cell, reduction of a prisoner's diet or drinking water, and collective punishment.

The International Committee of the Red Cross guidance Water, Sanitation, Hygiene and Habitat in Prisons[15] and its Supplementary Guidance[16] translate the general requirements into measurable technical values that are absent from the Nelson Mandela Rules themselves.

In particular, the guidance sets a benchmark of 100–150 g of soap per person per month; a minimum of 3–5 litres of water per day for survival and 10–15 litres per day to maintain health; and provides a separate checklist for the engineering assessment of ventilation, water supply, sewerage and waste disposal.

In this work, these values are used as a quantitative benchmark for comparison where the national legislation of Belarus itself sets numerical standards.

National legislation of Belarus

A number of regulations governing conditions of detention in Belarusian places of deprivation of liberty are not publicly available. The most telling case is the technical standard TKP 310-2011 "Buildings and facilities of pre-trial detention centres, arrest houses and prisons", which the administration explicitly cites as the basis for specific practices, in particular the installation of solid (blind) grilles on cell windows. Yet the text of the document is absent from electronic legal databases and from all the scientific and technical libraries checked, including the national library. This means that even where a standard formally exists, its content cannot be independently verified and its compliance with international standards cannot be assessed.

15 https://www.icrc.org/en/publication/0823-water-sanitation-hygiene-and-habitat-prisons
16 https://www.icrc.org/sites/default/files/external/doc/en/assets/files/publications/icrc-002-4083.pdf

Living space and material provision

Article 94 of the Penal Enforcement Code of the Republic of Belarus sets a living space standard of no less than 2 m^2 per convicted person in colonies and prisons, 3.5 m^2 in juvenile correctional colonies and 3 m^2 in medical correctional institutions. The Code also guarantees the right to an individual sleeping place, bedding, clothing and personal hygiene items, delegating the setting of specific food and hygiene standards to the Council of Ministers. The figure of 2 m^2 corresponds to the level that ICRC practice regards as an absolute crisis minimum rather than a working standard.

Sanitary infrastructure

The Internal Regulations of Correctional Institutions, approved by Resolution of the Ministry of Internal Affairs No. 174 of 20 October 2000, require a bathhouse with a laundry and a disinfection chamber in the residential zone (para. 14) and oblige convicted persons to observe the rules of personal hygiene and keep their premises clean (para. 57.6). A monthly inspection of convicted persons' appearance, including clothing and footwear, is also provided for, during which the sanitary condition of the living quarters is checked as well (para. 72). Neither the frequency of bathing nor the per capita water consumption standard is laid down in the text of the Regulations.

Quantitative benchmarks

Where Belarusian subordinate legislation does set specific values – for example, in the rules for administrative detention – they are comparable to the ICRC benchmarks or fall below them. The standard for toilet soap is 5 g per three days for men, i.e. about 50 g per month, and 10 g for women, i.e. about 100 g per month, against the ICRC benchmark of 100–150 g per month. The standard for men is thus set at roughly half the international minimum, while that for women coincides with its lower limit. No corresponding standards for penal colonies have been found in the public domain.

Microclimate

Resolution of the Ministry of Health No. 95 of 20 August 2015 set an air temperature of +18…+24 °C, humidity of no more than 60% and an air velocity of no more than 0.3 m/s for residential buildings. Its applicability to cells in penal colonies or pre-trial detention centres was, however, never established anywhere. The specialised standard – TKP 310-2011 "Buildings and facilities of pre-trial detention centres, arrest houses and prisons", which the administration cites as the basis for specific practices – is in practice inaccessible.

Working conditions

The microclimate of the production premises where convicted persons work is regulated by general occupational safety and health legislation. The available documents include the Sanitary Norms and Rules "Sanitary and epidemiological requirements for the working conditions of employees and the maintenance and operation of production facilities", approved by Resolution of the Ministry of Health of the Republic of Belarus No. 114 of 19 July 2023 (SanPiN No. 114), and the Sanitary Norms and Rules "Requirements for the microclimate of workplaces in production and office premises", approved by Resolution of the Ministry of Health of the Republic of Belarus No. 33 of 30 April 2013 (SanPiN No. 33).

A feature of climate policy

The Nationally Determined Contribution of the Republic of Belarus (NDC) for 2026–2035 contains a methodology for assessing the population's vulnerability to climate change, disaggregated by sex, age, income level and state of health, as well as a separate quantitative climate risk index for children.

However, neither the NDC, nor the national report of the Ministry of Natural Resources and Environmental Protection "Vulnerability and adaptation to climate change", nor any other available Belarusian climate policy document mentions persons deprived of liberty as a distinct vulnerability category. Yet according to the formal criteria used in these documents – including limited mobility, dependence on third parties for meeting basic needs and the heightened physiological vulnerability of part of the prison population to temperature extremes – prisoners fit the profile of a risk group.

This gap is not unique to Belarus. The UNICRI/PRI report Green Prisons notes that only a few countries have included penitentiary institutions in their national climate change adaptation plans or other climate strategies. Positive examples cited include Malawi's energy sector plan, which included prisons in measures to improve the energy efficiency of stoves; New Zealand's first national adaptation plan, which explicitly mentions prison infrastructure; and the UK Ministry of Justice's climate change adaptation strategy, which takes into account the climate resilience and energy consumption of prison buildings.

In this respect Belarus reflects a global gap. In the Belarusian case, however, the absence of the penitentiary system from climate policy is combined with the selective vulnerability of political prisoners within that system, already documented in this work. The state is developing a methodology for taking vulnerable groups into account, yet the category most dependent on institutional decisions when it comes to adapting to heat, cold and natural disasters falls entirely outside the scope of that methodology.

5 Findings: empirical analysis

This chapter presents an empirical analysis based on a body of interviews with former prisoners of IK-4 and IK-1, supplemented by independent reports and official government data. The material is organised by thematic area: air, sanitation, water quality, health vulnerability, infrastructure problems, disaster preparedness, and perceptions of the environmental agenda. Each area compares documented practice with the normative framework set out above.

This structure makes it possible to answer three questions in turn for each area: what actually happened, according to prisoners' testimonies and independent sources; whether this complied with the national standard, where one exists; and whether it complied with the international standard.

Where a match is found between two structurally different institutions – the women's colony in Homiel and the men's colony in Navapolatsk – this is treated as grounds for a firmer conclusion that the problem is systemic rather than local.

5.1 Air

According to official statistics of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, the most alarming indicator for Homiel is the concentration of carbon monoxide (CO): the average annual concentration exceeded the established standard of 500 μg/m^3 in each of five consecutive years – 639 μg/m^3 in 2021, 654 in 2022, 617 in 2023, 640 in 2024 and 577 μg/m^3 in 2025. Carbon monoxide pollution in Homiel was thus not an episodic phenomenon but a chronic background condition that persisted throughout the period covered by the testimonies from IK-4.

For particulate matter (PM10), the number of days on which the average daily maximum permissible concentration (MPC) was exceeded rose from 67 in 2021 to a peak of 103 in 2024, before falling to 30 in 2025. The average annual concentration was 37, 31, 44, 44 and 23 μg/m^3 respectively, meaning that 2023–2024 were markedly worse than 2021 and especially 2025.

In Navapolatsk, the trend in sulphur dioxide (SO_2), a direct marker of oil refining, is telling. In 2021–2022 the average annual concentration substantially exceeded the standard of 50 μg/m^3: 68 μg/m^3 in 2021 and 87 μg/m^3 in 2022, the latter almost double the standard. This was followed by a sharp decline: 50 μg/m^3 in 2023, 28 in 2024 and 19 in 2025.

The two worst years for SO_2 pollution in Navapolatsk fall precisely at the start of the period covered by the IK-1 interviews, while the improvement by 2024–2025 coincides with the end of that period. For nitrogen dioxide (NO_2), exceedances of the average annual standard of 40 μg/m^3 were also recorded: 41 μg/m^3 in 2022 and a peak of 59 μg/m^3 in 2023. For CO, the concentration rose from 327 μg/m^3 in 2021 to 485 μg/m^3 in 2025, coming very close to the standard of 500 μg/m^3 without formally exceeding it.

The chronic exceedance of the CO standard in Homiel provides confirmation, independent of prisoners' testimonies, that the city's air as such failed to meet the standard throughout the observation period. This is relevant when assessing complaints about stuffiness and air quality in IK-4.

An important limitation must, however, be borne in mind: the Ministry's data come from urban background stations rather than from the colonies' premises or perimeters. A discrepancy between city statistics and prisoners' concrete experience – especially with regard to IK-1, which directly adjoins Naftan – is methodologically to be expected; it does not refute the testimonies but shows the limits of the precision of official monitoring.

Rule 13 of the Nelson Mandela Rules requires prisoners' accommodation to meet the requirements of health, due regard being paid to climatic conditions and cubic content of air; Rule 14 requires windows that allow the entrance of fresh air whether or not there is artificial ventilation.

The only publicly available quantitative microclimate benchmark in Belarusian law – Resolution of the Ministry of Health No. 95 of 20 August 2015 – set an air temperature of +18…+24 °C, humidity of no more than 60% and an air velocity of no more than 0.3 m/s. It was formally developed for residential buildings rather than penal institutions, but in the absence of a specific accessible standard it is the only value against which the documented temperature of around 40 °C in a cell of the KGB pre-trial detention centre can be compared. The relevant standards may be contained in TKP 310-2011 "Buildings and facilities of pre-trial detention centres, arrest houses and prisons", but this document is in practice inaccessible.

Former prisoners' testimonies point directly to the use of temperature extremes and air quality as a form of pressure. Air quality in the colony's living quarters is determined not by the condition of the engineering systems but by policy within the colonies. There is no mechanical ventilation; natural ventilation exists but is often put out of action by the prisoners themselves. The only working mechanism is the window, and the decision to open it is taken by someone other than those who breathe the air.

Living quarters: layout and ventilation

Ventilation

> *There was no mechanical ventilation in the residential barracks. There was natural ventilation – a ventilation shaft. A strong draught came from it, so the shaft outlets in the living sections were taped over with paper to keep the heat in.*

The only existing ventilation system was put out of action, and not out of negligence. The prisoners had to choose between fresh air and keeping warm, and they chose warmth. The choice was forced: the temperature in the premises did not allow them to have both. The institution knew this, or could have established it at any inspection: a ventilation grille taped over with paper is visible to the naked eye.

Windows

> *In the building housing units 5, 7 and 13, the windows took up almost the entire wall on one side of the section; there were four or five of them. There were no bars on the windows in the colony – they were only in the quarantine unit. The casements could be opened; the small vent panes (fortochki) were not used, even where they existed. Many units had double-glazed windows without vent panes but with a tilt-to-ventilate setting. The ventilation setting was used, but rarely: it did not provide adequate ventilation, so people usually opened the casement. Decisions about airing were not taken by the administration – the matter was settled by the unit's inmate "activists" (aktiv).*

The absence of bars and the large area of glazing distinguish the unit-based system from cell-based detention. The micro-ventilation setting worked poorly, and the choice between it and a fully open casement was made by the prisoners

themselves. Controlled air exchange in the room did not exist at all: there was either full airing with loss of heat, or no fresh air supply.

Mould

> *There was no mould in the unit's living quarters. Living conditions vary considerably from unit to unit, so it is likely to have been present in other units. In the washrooms, bathhouse and showers there was mould, and it was removed regularly.*

The presence of mould in constantly humid premises without ventilation is to be expected. It was dealt with regularly, by the prisoners themselves: the problem was known and was addressed by cleaning rather than by removing its cause.

Air volume per person

> *Living section of unit 13: area of about 40 m^2 (estimate from memory), ceiling height 2.8 m, volume 112 m^3, 32–35 occupants. This gives 1.14–1.25 m^2 of floor space and 3.2–3.5 m^3 of air per person. The area given is the total area: part of it is taken up by bunk beds, bedside cabinets, stools and wardrobes, so the free space is considerably smaller. The area of the section is given from memory, with the qualification "approximately", and has not been confirmed by precise measurement.*

Paragraph 44 of the Internal Regulations sets a living space standard in penal colonies of no less than 2 m^2 per convicted person; Belarusian legislation contains no higher standard for women's colonies. Under this standard the section could accommodate twenty people, whereas in fact 32–35 were accommodated. To meet the standard, the room would have had to measure 64–70 m^2.

Measured against international benchmarks, the gap is greater. The Council of Europe's European Committee for the Prevention of Torture (CPT) regards 4 m^2 per person in multiple-occupancy cells, excluding the sanitary annex, as the minimum; the International Committee of the Red Cross recommends at least 3.4 m^2 in dormitories. The calculated figure for IK-4 is less than a third of the former.

Pollution brought in: clothing, bodies, smoking

Clothing and footwear

> *Padded jackets were washed once a year, the regulation footwear had a persistent pungent smell, and not every unit had a separate room for storing them. Where there was none, the jackets and shoes were kept in the wardrobes of the living sections, i.e. directly in the room where people sleep. The drying room was not equipped with ventilation, so clothes took a long time to dry and picked up a smell; some prisoners hung up unwashed clothes.*

Smells

> *A lack of pleasant smells is a typical feature of life in the colony. The canteen smelled unpleasant, especially when stewed cabbage was being cooked; there was a pungent smell in the outerwear storage room and in the drying room; the smell of unwashed bodies could be felt in the sections. Shampoos, soap and washing powder with a strong pleasant scent were highly valued among the prisoners – they were used not only for hygiene but also for cleaning, to freshen up the room.*

Smell served as a basis for how a person was treated within the group: in the same institution, bullying of those who smelled bad has been described. With a limited set of clothing, one bath day a week and no possibility of drying clothes, there is no way out of this situation by one's own efforts.

Smoking

> *Smoking was allowed only in the local enclosed area (lokalka), in specially designated smoking spots. Smoking outside them, even within the local area, was strictly prohibited and punished. People smoked cheap cigarettes; prisoners who received no help from outside smoked cigarette butts – they were easily identified by the pungent smell.*

Smoking takes place outside the living quarters, which is impossible in cell-based detention, where the smoke stays where people sleep. Comparison with men's institutions on this indicator shows the most noticeable difference.

Industrial zone

Ventilation

> *There was no forced ventilation at the factory either, although it should be provided – at least above the irons and in the workshops, above all in the cutting shop.*

The absence of local exhaust systems is at odds with four provisions of Chapter 12 of SanPiN No. 114 at once, each of which is addressed specifically to garment production: paragraphs 147, 149, 150 and 151.

Dust

> *Conditions of detention, work at the factory. It is hell... Again, faulty ventilation, black fine dust everywhere. Next to my workstation there were ten irons and presses. That is steam at a temperature of a hundred degrees... The required*

floor space per person under production standards was not observed, everything was crammed together. That is, it led to industrial injuries. We had people who cut off their own fingers there… All the passageways were blocked with synthetic padding and fabrics[17].

In Belarus, dust of plant and animal origin, including textile dust, is classified as a harmful occupational factor requiring mandatory periodic medical examinations for those who work with it. Occupational disease associated with such dust is well known and can be prevented through ventilation, protective equipment and medical examinations.

Fabric impregnation

Prisoners frequently and repeatedly complained in conversation about allergic reactions associated with the fabric impregnation: watering eyes, red and itchy hands. I experienced this to a lesser extent myself, since I mostly worked in the pattern section.

Chemical impregnation of fabrics is a known source of contact and respiratory reactions. The complaints were widespread, meaning that the problem was known; there is no information about protective equipment being issued, the technology being changed or medical monitoring.

Two requirements of SanPiN No. 114 are violated: paragraph 146 requires synthetic materials to be aired in storage premises before being delivered to the workshop, and paragraph 6 requires facilities for copious rinsing of the skin and mucous membranes with running water to be provided at the workplace.

17 https://news.zerkalo.io/life/128018.html

Painting of the workshop during working hours

> *Before inspections, the walls in the workshops were partially repainted for cosmetic purposes. Work did not stop while this was done. The smell did not have time to dissipate, because very cheap, pungent paint was used and touching-up was done bit by bit over several days. This happened several times.*

Painting the workshops violates paragraph 23 of SanPiN No. 114, which prohibits repairs to production premises and process equipment while they are in operation. The same SanPiN was used to punish prisoners for bringing a sweet to their workstation, as a breach of the ban on eating in production premises.

Testimonies about stuffiness and blocked ventilation are independently corroborated by official data from the Ministry of Natural Resources and Environmental Protection: the chronic exceedance of the CO standard in Homiel throughout the observation period and the peak SO_2 values in Navapolatsk, which coincide with the start of the period covered by the IK-1 interviews. Since May 2026, Belarusian law has had no public quantitative temperature benchmark at all.

5.2 Sanitation

Inadequate sanitary infrastructure directly affects human dignity and may have health consequences. Unlike many other adverse conditions of detention, physiological needs cannot be postponed.

> *It was practically impossible [to wash, to do laundry, to tidy oneself up, to carry out any hygiene procedures]; there was one shower for the whole unit.*

The documented practice – one shower for a unit of 97–100 people, accessible for 30 minutes a day, during which only 5–6 people physically have time to wash, i.e. less than 6% of the unit per day – complies with neither the internal nor the international standard.

The informant refers to an internal rule requiring washing at least once per shift: 30 minutes for 97 people makes the stated frequency physically impossible for the vast majority of the unit, whatever the wording of the regulation.

Rule 16 of the Nelson Mandela Rules, meanwhile, requires bathing at least once a week in a temperate climate. With the capacity described – 5–6 washes a day for the whole unit – the actual interval between washes for most prisoners is around two to three weeks, i.e. two to three times longer than the international minimum.

What deserves separate analysis is not the shortage of time as such but the allocation mechanism: the queue for the shower is controlled not directly by the administration but by the unit's aktiv and the unit housekeeper (zavkhoz), who cooperate with the operational department. A basic hygiene need thus becomes an instrument of an intra-unit hierarchy built with the participation of the administration. A formally neutral infrastructure shortage – one shower per unit – is implemented selectively: the loyal get access, while the rest are systematically squeezed out.

Types of toilet facilities

> *Very few units were equipped with proper toilets; in most cases squat toilets were installed. In the fifth unit, one toilet block had sit-down toilets and the other squat toilets. This apparently depended on the allocation of funds for replacing the equipment.*

Two types of toilet facilities of different standards in a single building mean that the equipment was replaced as funds came in and the process was never completed. Differences in conditions thus existed not only between buildings but also within a single unit, which means they could be allocated between individuals.

> *The premises of unit 13 had two toilet blocks. Each had four toilets and six washbasins – eight toilets and twelve washbasins per unit in total – as well as two curtained shower cubicles. The toilets were in cubicles with doors and were fitted with bidet sprays for feminine hygiene. The unit numbered between 91 and 97 people. This means 11–12 people per toilet, 8 per washbasin and 46–48 per shower cubicle.*

The applicable international benchmarks are the recommendations of the International Committee of the Red Cross: at least one toilet per 25 people and one handwashing point per 50 people. By these indicators, unit 13's provision under normal conditions exceeds the requirements.

This did not, however, eliminate queues. The facilities had to be used simultaneously: some seventy people returned from their shift at the same time, and twenty minutes were allotted for the whole sequence of hygiene procedures.

A provision ratio calculated on the assumption of even use throughout the day does not reflect such a load. When comparing institutions, the "persons per fixture" indicator should be given together with the time allotted under the daily schedule. The shower cubicles are the only indicator that is low even when

considered on its own: 46–48 people per cubicle, which makes daily washing impossible.

Privacy and its health consequences

> *Most often the toilets were not individual: there were partitions but no doors. Relieving oneself was as if one were doing it in a public square in front of everyone. Many could not even urinate; for most this manifested itself in an adaptation crisis – constipation, since under such conditions it really is impossible to defecate.*

Rule 15 of the Nelson Mandela Rules requires that prisoners be able to comply with the needs of nature in a clean and decent manner. Decency is not an aesthetic wish but a condition of normal physiological functioning, and the observation above demonstrates this literally.

In human rights practice such consequences are hardly ever documented: they are not always perceived as a separate violation, they are embarrassing to talk about, and interviewers do not always ask about them. Yet this is one of the few cases in which the impact of conditions on a person can be described through an objective physiological indicator.

Cleaning and maintaining cleanliness

> *So-called general cleanings were held regularly in the unit; in addition, the unit was thoroughly cleaned every day by the prisoners themselves. The living sections, the toilet blocks and the corridors were cleaned separately. On the whole, everyone had an interest in keeping things clean and cleaned conscientiously. Chlorine bleach was issued and not stinted; people added their own shampoo for a pleasant smell. On the whole it was clean.*
>
> *We had, say, general cleanings on Sundays… sometimes, as a punishment, we were given cleaning duty, and it was not that we cleaned up, finished and that*

was it, we were free to go, but that we cleaned until a certain time. That is, it did not matter that we had already cleaned up and finished; the time was not yet up, so we had to walk around and pretend to be doing something until the head of the unit said we could stop.

Scheduled cleaning in the unit was oriented towards completing a specific task and was adequately supplied with materials. Alongside this, however, a practice was recorded of assigning cleaning as a punishment, in which the amount of work done was irrelevant: once the task was completed, prisoners were obliged to simulate activity until the end of a period arbitrarily set by the head of the unit.

Rule 97(1) of the Nelson Mandela Rules expressly prohibits the use of labour as a disciplinary sanction. Turning cleaning from a housekeeping task into a means of keeping prisoners in place after the result has been achieved points precisely to the punitive rather than the housekeeping function of the measure, which is applied outside the formal disciplinary procedure and therefore without any procedural safeguards for the prisoner.

Parasites

There were no cockroaches or bedbugs. What did happen was lice. Lice were brought in from outside; sometimes they were missed at the quarantine examination because of the incubation period. Only a single medical examination was carried out in quarantine; there was no second one before allocation to units. Everyone who lived in the relevant group of beds was sent to have their bedding heat-disinfected, and in the medical unit their hair was examined and treated; it did not have to be cut. Other prisoners reacted to such situations very nervously.

No systematic parasite infestation was observed in IK-4; the response was rapid, treatment was carried out and no forced haircutting was resorted to. Compared with colonies where such cases are widespread or chronic, this shows that disinsection and sanitary treatment are technically feasible within the system and

that their absence in other institutions is explained not by impossibility but by other reasons.

> *It is hard to say how often such episodes occurred. Sometimes it happens once a year. However, judging by the actions of the administration and the aktiv and by the way it was discussed, such cases are nothing exceptional – everyone knows what to do. Unpleasant, but not frightening compared with tuberculosis.*

How well-rehearsed the response is serves as an indirect indicator of frequency: everyone knows the procedure without explanation, and the situation causes no confusion. The exact number of cases is known only to the medical unit and should be requested; extrapolating one case per unit per year to twenty units would be inadmissible.

The scale of risk perception – head lice as a nuisance, tuberculosis as a threat – appears justified. Compared with men's institutions, where parasites are named among the main hardships, the difference concerns the prevalence of the phenomenon rather than how it is perceived.

Provision of hygiene items

> *Prisoners who did not receive money transfers from home could submit a written request to the colony administration for hygiene items funded by the Red Cross. Everyone who was entitled to do so submitted such a request.*
>
> *Some political prisoners – those included in the list of persons involved in terrorist activity, as well as certain individuals under special supervision by the administration – were prohibited from receiving money transfers, including from close relatives. When a transfer was attempted through the electronic payment system, the accounts department checked the lists manually, and where a ban applied, the transfer was returned to the sender.*

The institution is obliged to provide prisoners with hygiene items under Rule 18 of the Nelson Mandela Rules and Rule 5 of the Bangkok Rules. In practice, the matter was handled through a humanitarian organisation on the prisoner's own application.

At the same time, passing items between prisoners is prohibited on pain of disciplinary sanction. As a result, a person left without means faces a choice between giving up hygiene and petty theft, and the informal redistribution that has developed through the unit fund and the aktiv exists precisely because the legal mechanism does not work. Distribution was handled by the aktiv, i.e. prisoners vested with powers by the administration. Access to basic hygiene items was thus mediated by the internal hierarchy.

Breakdowns, blockages and dealing with their consequences

> *The toilets broke down, especially the feminine hygiene bidet sprays – not everyone knew how to use them. Repairs were paid for by the prisoners, and the unit housekeeper had them done promptly. Washbasins became clogged with food and hair; the prisoners cleared them themselves, since it took a long time for a plumber to come. If they could not manage, the washbasin was taken out of use for several days.*

Repairs to sanitary equipment at the prisoners' expense are another instance of shifting costs. Taking a washbasin out of use for several days, with an initial load of about eight people per fixture, worsens provision accordingly.

The capacity of the sanitary infrastructure systematically fails to meet either the internal standard or the ICRC international minimum; the shortage is allocated not directly by the administration but through the unit's aktiv, turning a basic hygiene need into an instrument of the intra-unit hierarchy.

5.3 Water quality

Water was available in the residential zone. In the industrial zone the situation differed between institutions. The quality of the drinking and domestic water supplied to the institution may deviate from hygiene standards on the same parameters as in the municipal network, and the institution's internal networks and storage tanks may aggravate this deviation.

Asked directly about access to drinking water at the factory, an IK-4 respondent describes a drinking fountain located not far from the toilet, and the water in the toilet itself. Formally, this constitutes provision: a drinking water point exists at the production site. However, the location of the only point mentioned in the immediate vicinity of the toilet block is a sanitary issue in its own right rather than a detail of the description.

In IK-1 the situation is described differently:

> *So you come back to the unit and you want to drink tea at least once a day, because in the industrial zone you don't drink tea or anything. The only water there is from the washbasin. There is no drinking water there either. You can drink from the washbasins if you want, or not drink at all.*

Here there is not only no dedicated drinking water point but also no distinction between water for domestic use and water for drinking. Provision of drinking water in the industrial zone thus depends on time controlled by the administration: the water is there, but there may be no break in which to drink it.

> *In the unit it was possible to get a drink practically at any time. Even during a compulsory educational event, one could, if necessary, go out to the toilet and drink water from the washbasin. At night one was allowed to get up to go*

to the toilet.

This is a positive finding and corresponds directly to Rule 22 of the Nelson Mandela Rules, which requires drinking water to be available to every prisoner whenever he or she needs it. In the residential zone of IK-4 this requirement was in practice complied with.

Where prisoners work a full shift, drinking water in one of the two institutions is not provided as a separate category and is replaced by water from the washbasin. In the other institution it is provided, but the only point mentioned is located next to the toilet block. In both cases, the actual possibility of getting a drink in the industrial zone depends on the daily schedule, not only on whether water is available.

For IK-17, pronounced skin reactions are described, which the respondent links to the quality of the water:

When I arrived at the colony, after that shower you just scratch yourself like a dog. It is as if, say, a person hasn't washed their hair and dandruff falls off them – with you, all your skin falls off, it just flakes off like dandruff. Because the water is very hard. And, say, on bath day, I don't know, I choose, well, not exactly choose, but I prepare myself mentally to wash, because I know that I will dry off and I will itch like a dog. There are very big problems with the water there, very big problems.

A respondent from IK-3 describes a situation at the opposite end in terms of provision: showers in the workshop, available daily, with hot water – and yet the same category of complaint: after contact with the water, blisters periodically appeared on the body, along with itching and unexplained skin symptoms.

In the residential buildings the water was generally fine. Many disliked its iron taste, but the quality was not bad. Sometimes, when there was no time to wait

in the queue for the socket, instant coffee was made with warm tap water.

Water quality in IK-4 was not among the acute problems. For other institutions, in particular IK-1 in Navapolatsk, there are testimonies to the contrary. The difference between institutions is in itself a finding here: it shows that acceptable water quality is achievable within the system.

The iron taste points to an elevated iron content, typical of groundwater sources in the region, and this is not an assumption but a documented fact for both cities.

According to official data of the Homiel City Centre for Hygiene and Epidemiology, the city's drinking water is supplied through seven group water intakes equipped with iron removal stations precisely for this reason. Nevertheless, exceedances of the standards for iron and turbidity are regularly recorded in the distribution network, which the agency explicitly links to the condition of the water mains rather than the source: from 0.42–0.95 mg/dm^3 of iron in 2024 to a maximum of 1.7 mg/dm^3 against a standard of no more than 0.3 mg/dm^3, and turbidity of 4.64 mg/dm^3 against a standard of no more than 1.5 mg/dm^3, in the first quarter of 2026. This is the historical maximum for the entire period for which observations are available, meaning that the situation is getting worse rather than better[18].

For Navapolatsk, official water utility data for November 2025 show a different picture: raw water at the Okunevo intake also contains naturally elevated iron, on average 3.9 mg/dm^3 against a standard for untreated water of 10.0 mg/dm^3. After the iron removal station, however, full compliance with the standard was recorded both before supply to the distribution network and within the network itself: 0 non-compliant samples out of 120 and 100 respectively, with an average concentration of 0.12–0.14 mg/dm^3 [19].

The indicator is thus by its nature the same – geological iron in the region's groundwater, which does not affect health when the standard is moderately exceeded – but it is at the distribution network stage that the two cities show different results. In Homiel the network systematically returns iron and turbidity above the standard; in Navapolatsk, according to the November 2025 snapshot, it does not.

18 https://www.gomelgcge.by/?page_id=12062

19 https://npvkh.by/wp-content/uploads/2025/12/kachestvo-vody-noyabr-2025-novopoloczk.pdf

This does not refute the hypothesis concerning IK-1's own internal networks and storage tanks, since the city data cover the system as a whole rather than the institution's premises specifically. For Navapolatsk, however, there is no municipal background confirmation of the problem comparable to that available for Homiel.

> *When a water cut-off was announced, water was collected in every available bucket; a bucket of water was placed in the toilet cubicle and toilets were flushed using containers. If they were told that the water would be off for three or four hours, the aktiv might say that people should defecate only in an emergency – but this was more of a joke than a requirement: everyone understood that it was impossible to comply with.*

A separate episode concerns the flooding of a basement after heavy rain:

> *After downpours the sewage mixed with the stormwater and flooded the basement of one of the residential buildings – apparently because of design flaws. The water mixed with faeces had to be bailed out. The bailing was done by whichever unit was on duty for maintenance work that day. In summer 2024 this fell to the author's unit as well. In the half-light of the basement, which housed the library and the gym, prisoners stood almost knee-deep in water containing faeces, wearing rubber slippers, and shovelled the water into buckets, carrying them out and pouring them onto the asphalt at the basement entrance. There were no respirators. The drying faeces remained on the asphalt for several more days until they were finally cleaned away. About twenty people took part in the work, which lasted about two hours. Afterwards they were given the opportunity to shower outside the schedule. Nobody went to the medical unit, but the participants reported feeling unwell – headaches, fatigue, bouts of nausea.*

The symptoms reported by the participants are typical of exposure to gases produced by the decomposition of sewage, above all hydrogen sulphide and ammonia, which accumulate in enclosed, unventilated spaces. The fact that different participants had the same symptoms makes them a sign of environmental exposure rather than an individual reaction.

Work in such spaces is classified as high-risk work and requires monitoring of air composition, forced ventilation, respiratory, eye and skin protection, special footwear, supervision of the workers and subsequent sanitary treatment. None of this was done; classifying the work as self-service under Article 101 of the Penal Enforcement Code does not exempt it from occupational safety requirements.

The absence of visits to the medical unit does not mean an absence of harm: not seeking medical help was normal behaviour. There will be no documentary record of the episode, and its absence cannot serve as an argument against what has been described. The opportunity to wash outside the schedule shows that the administration was aware of the nature of the situation.

Both cities have a geologically determined elevated iron content in their groundwater. In Homiel this regularly shows up as an exceedance of the standard already in the distribution network, with a historical maximum in the first quarter of 2026; for Navapolatsk, the November 2025 snapshot shows full compliance of the network with the standard, which does not rule out problems at the level of the institution's own internal networks.

5.4 Health vulnerability

Belhydromet explicitly acknowledges that "high air temperatures have an extremely negative impact on public health" and describes heatwaves as "one of the causes of high mortality among the population in the summer period"[20].

For Belarusian penitentiary institutions, however, the problem of access to medical care remains unresolved in principle, not only in cases where health deteriorates as a result of heat, cold or other hazardous weather events.

> *It was easier for ordinary prisoners to get sick leave; some of them would even just say, I'm tired, I'll go on sick leave. In my case, no. As I understood it, there was some kind of instruction; people in our category were given sick leave very reluctantly.*

The testimonies relating to IK-1 and IK-4 independently describe the same pattern of interaction between prisoners and medical care. For political prisoners, outright refusal is not used as a formal decision; instead, a system of procedural filters operates that reduces the likelihood of any help being provided at all.

The UN Group of Independent Experts on Belarus has also found[21] that extremely low temperatures are maintained in cells, affecting the realisation of the right to health. The gender aspect deserves particular attention: the Group recorded that "women deprived of their liberty are denied gender-sensitive health care and subjected to adverse conditions of detention, including exposure to severe cold, with negative consequences for their health".

It is also important to note that people with chronic illnesses make up a significant proportion of Belarus's political prisoners. According to the Viasna

20 https://www.minpriroda.gov.by/ru/news-ru/view/vlijanie-klimaticheskix-izmenenij-na-pogodozavisimye-otrasli-ekonomiki-obsudili-na-kruglom-stole-v-belta-5045/

21 https://www.ohchr.org/ru/press-releases/2026/09/belarus-criminal-justice-system-weaponized-crush-dissent-un-experts-say

Human Rights Centre, as of August 2026 serious health problems had been documented in 266 of 863 political prisoners. This group is the most physiologically vulnerable to climatic factors.

Every year in Belarus, diseases of the circulatory system account for about 53% of all deaths – that is, this is not a theoretical factor but the statistically dominant cause of mortality in the country as a whole. In places of detention, this means that the documented temperature pressure – heat of up to 40 °C in cells, lack of ventilation – acts on a body whose compensatory reserves have already been reduced by chronic illness. Delays in medical care that a healthy person might survive without consequences therefore create a risk of irreversible harm for this group[22].

A weakened body as a susceptibility factor

In IK-1, exposure to cold is described as follows:

> *The cold means you wake up often; because of the cold you often go to the toilet to urinate… And losing weight in the punishment isolation cell (SHIZO) is, first of all, a loss of fluid… during the night you have to wake up 3–4 times and turn over, because you wake up and can't feel your legs, or it simply hurts by then.*
>
> *People sleep on the radiator… more than once I saw burns on people's backs because they fell asleep leaning against the radiator like that and simply burned their skin… something like angel's wings… blisters, well, I saw that on more than one person too.*

A separate episode concerns heat in the workplace:

22 https://belarusgreen.vision/wp-content/uploads/2025/09/izmenenie_klimata_v_belarusi_kak_eto_vliyaet_na_zdorove_cheloveka.pdf

> *Once in the industrial zone… there was a heatwave, it was in summer, it was very hot for a long period… I just took off my cap to let my head breathe… an officer… said: "I have recorded the fact of your violation", and wrote a report on me for breaching the dress code.*

The report specifically points out that heat stress increases the overall stress load on the body and reduces resistance to infections in general, which may also affect human health.

In the case of IK-1, this is confirmed by the simultaneous action of several factors of chronic stress. The report of the International Committee for the Investigation of Torture in Belarus, "The Torture Conveyor", records constant physical and psychological violence by staff; work at the most hazardous and arduous production sites – plastics processing with toxic fumes and coal production with constant exposure to coal dust – regardless of qualifications and state of health; and systematic denial of qualified medical care [23].

Taken together, these factors cause severe stress. A body whose resistance has already been reduced by this institutional burden is less able to compensate for additional heat or cold stress. This makes the climate factor in IK-1 not an independent variable but one that amplifies the violence already documented.

Denial of medical care is implemented not as a direct decision but as a system of procedural filters; climate stress acts as an aggravating factor against the background of the body's resistance already lowered by institutional pressure.

23 https://torturesbelarus2020.org/wp-content/uploads/2025/11/na-sajt-pytki.pdf

5.5 Infrastructure problems

Rule 13 of the Nelson Mandela Rules requires prisoners' accommodation to meet the requirements of health, due regard being paid to climatic conditions, including heating; Rule 14 requires natural light sufficient to enable prisoners to read or work without injury to eyesight.

Previously, Ministry of Health Resolution No. 95 contained a general housing standard in Belarus: a temperature of +18…+24 °C and humidity of no more than 60%. The resolution has lapsed, and since May 2026 Belarus has had no quantitative temperature standard in force even for ordinary residential buildings.

For production premises, the microclimate is regulated by SN 4.02.03-2019 "Heating, ventilation and air conditioning", while specific requirements for the quality of artificial lighting at workplaces are set by occupational health and safety sanitary standards.

Paragraph 45 of the Internal Regulations of Correctional Institutions, approved by Ministry of Internal Affairs Resolution No. 174, sets a requirement for the design of window grilles: they must let in natural light while maintaining isolation. The Regulations, however, contain no quantitative standards either for the temperature inside living quarters or for the level of artificial lighting.

This means that the absence of a national quantitative standard in itself makes internal compliance checks impossible: however cold or dark a particular room may be, there is formally nothing to compare it with other than the general housing standard or an international benchmark.

Heating and temperature

The subject of heating in the residential blocks breaks down into several consistently recurring themes, which together form a picture of a temperature deficit that is distributed unevenly rather than uniformly.

Prisoners describe particular units as systematically colder than others. The unevenness of heating is perceived not as an accident but as a known characteristic of particular rooms, discussed within the group.

An uninsulated roof is named as a separate source of the problem: in winter it makes the rooms colder, and in summer, conversely, hotter than the rest of the building. The same design defect thus works both ways depending on the season.

The radiators are described as “barely warm”: heating is formally present but does not provide an adequate temperature. Structurally, this matches the situation already described in the section on ventilation, where infrastructure nominally exists but does not function to the extent required for its stated purpose.

A draught at the junction between the door and the window is also recorded – a localised design defect that general heating measures do not remedy.

Against this background, prisoners describe leaving windows open at night as a paradoxical but understandable practice. It indicates that stuffiness and lack of ventilation are at times felt more acutely than the cold. Heat distribution in the building is so uneven that in the same room one problem or the other predominates depending on the time of day or year.

Finally, saving on heating is named directly by informants as the explanation for what is happening – not a technical fault but a deliberate decision to limit consumption.

One informant describes a sharp contrast in temperature conditions between different production sites within the same institution: in the soap-making and bread-baking shops it is very hot, to the point that workers have to go outside to get some air; in workshops whose gates are kept permanently open for moving materials, such as where wood is processed, it is cold.

The off-season is named as a particularly difficult period, since warm clothing is no longer issued at that time but outdoor work still has to be done. This description shows that temperature discomfort at work is not confined to one extreme – only heat or only cold – but depends on the particular site and time of year. A single assessment of working conditions for the enterprise as a whole is therefore inappropriate: specific workshops and seasons must be considered separately.

Lighting

A separate theme in its own right is the quality of lighting and its effect on eyesight. One informant links a deterioration in the vision of one eye – a decline in visual acuity from 1.0 to about 0.9 – to a long period in detention of more than seven months. He attributes it to poor lighting, constantly being indoors with limited access to outdoor exercise, and the forced adaptation of his eyesight to close-up work.

The informant stresses that, in his observation, this problem is widespread among prisoners and is unrelated to political status. It is thus described as a consequence of the conditions of detention as such rather than as a form of selective pressure.

IK-4: condition of the buildings by unit

A detailed description of living conditions in individual units is contained in the report of the International Committee for the Investigation of Torture in Belarus, "Torture and ill-treatment in Homiel Women's Penal Colony No. 4"[24].

Unit No. 15 is housed in a dilapidated building and has no shower room at all. For a unit of 80 people there are four sinks, one foot-washing basin, five toilets on the ground floor – one of which is reserved for the head of the unit, which in effect means four toilets for 80 women – and one bidet.

Unit No. 16, despite being the showcase unit and regularly visited by inspectors, is marked by damp and mould; the old wooden window frames do not retain heat, and there is no room for drying clothes.

Unit No. 14 has not been renovated for a long time: the walls and floor are damaged and the plumbing is corroded.

Unit No. 13, housed in a relatively new and renovated block, suffers from incorrectly installed window units that create a constant draught. According to prisoners' testimonies, it is this unit that people are sent to as a punishment, and in winter the women sleep with their outerwear on top of their bedding.

Former prisoners describe units Nos. 7, 9 and 17 as having satisfactory temperatures.

Insects – body lice, cockroaches, spiders – are recorded in most units regardless of their individual condition, and inadequate lighting is specifically named as a factor that hampers basic hygiene.

24 https://legin.info/documents/44

IK-1, Navapolatsk: the quarantine building and an environmental penalty

The IK-1 site directly adjoins the production facilities of the petrochemical complex; the distillation column of the Naftan refinery is about one kilometre from the residential zone.

An investigation by the Viasna Human Rights Centre of February 2024, based on the testimony of a former prisoner, established that the building used to house new arrivals in quarantine is in a dilapidated, unsafe condition. Construction waste from renovation work on the institution's premises is stored on the first floor of the same building.

The same investigation records that the institution was subjected to an administrative penalty by the environmental protection authorities for burning waste. The state has thus officially acknowledged an environmental violation at a facility where political prisoners are serving their sentences, but recorded it as an environmental protection offence rather than as a condition in which people are held.

Age of buildings and energy efficiency: the national context

According to public statements by the Department for Energy Efficiency of the State Committee for Standardisation of the Republic of Belarus, modern energy-efficient apartment buildings constructed in recent years have specific heat consumption for heating 2–4 times lower than buildings constructed in earlier decades. Improving the energy efficiency of the housing stock is one of the country's key energy-saving priorities[25].

Since 2012, the United Nations Development Programme and the Global Environment Facility have been implementing the project "Improving the energy efficiency of residential buildings in the Republic of Belarus". The project aims to reduce heat consumption for heating and hot water supply to 60 kWh/m^2, which is more stringent than the thermal standards and building codes in force at the time the project was developed[26,27].

25 https://energoeffect.gov.by/news/news_2022/20220614_news1
26 https://energoeffect.gov.by/effbuild/download/130.pdf
27 https://rep.bntu.by/items/337f72a5-8fb0-49a7-b8fc-93919efc878a

Under the project, pilot energy-efficient buildings were constructed in Minsk, Hrodna and Mahiliou, followed by monitoring of their actual energy consumption[28].

There is no information on the implementation of comparable modernisation programmes for buildings of the Department of Corrections. While the state invests purposefully in reducing heat losses and improving the energy efficiency of the housing stock, penitentiary infrastructure remains outside this policy, and no open data have been found on whether similar measures extend to it.

The absence of such programmes in the Belarusian penitentiary system contrasts with growing international practice. In Ireland, the government's public sector climate action mandate applies directly to the prison service: the Irish Prison Service's first roadmap sets targets for reducing energy consumption and fossil fuel emissions. The service itself publicly acknowledges how difficult these targets are to achieve precisely because of its old building stock, originally designed without regard to environmental requirements. Structurally, this situation is analogous to the one described in this work for IK-4 and IK-1.

In 2024, the Northern Ireland Prison Service opened a solar power plant on the grounds of Hydebank Wood prison. The Correctional Service of Canada has published its own sustainable development strategy since 1997 and has achieved a 31.9% reduction in greenhouse gas emissions since 2005.

The California Department of Corrections and Rehabilitation is implementing its own sustainability roadmap, including a transition to a zero-emission vehicle fleet and energy efficiency programmes.

In the United Kingdom, four new net-zero, all-electric prisons are planned; Scotland has announced the construction of its first prison powered by renewable energy using geothermal heat pumps. India's Tihar prison in New Delhi has operated a biogas plant and solar power plants since 2010.

Tellingly, none of these examples comes from a country with a closed political system comparable to that of Belarus. This makes the gap between Belarus's officially declared climate policy and its non-application to the penitentiary system all the more striking, given that even in democratic states it is often prison services that become pioneers of energy efficiency among public institutions.

28 http://mas.gov.by/special/ru/news_ru/energoeffektivnost-o-chem-govorjat-pervye-dannye-monitoringa-trex-pilotnyx-domov-993/

The temperature deficit is unevenly distributed between units and production sites, and this is documented as a known characteristic of particular rooms within the prisoner community. The quarantine building at IK-1 is documented as dilapidated and unsafe; the institution has been subjected to an administrative penalty for burning waste. National energy efficiency programmes for the housing stock do not extend to penitentiary institutions.

5.6 Disaster preparedness and response

Paragraph 81 of the Internal Regulations of Correctional Institutions provides that in bad weather and at low temperatures, roll calls of convicted persons are held indoors rather than outdoors.

This is the only provision found in Belarusian legislation that directly regulates the protection of prisoners from adverse weather conditions during mandatory regime procedures.

No specific standard or protocol governing the actions of the administration of correctional institutions in the event of natural disasters – floods, fires, extreme heat – with regard to the safety of prisoners has been found in open sources. Resolution of the Ministry of Emergency Situations of the Republic of Belarus No. 82 of 21 December 2021 sets general fire safety requirements and the procedure for drawing up evacuation plans, but contains no specific provisions for closed institutions.

Non-application of the rule

The cases documented in the interviews concern not the absence of a rule but its systematic non-application, even though the rule itself is well known to the informants, who quote it verbatim.

> *The internal regulations state that in bad weather, at sub-zero temperatures, at very low temperatures, roll calls are held inside the building. This rule did not apply at all. Whether it was a downpour, a blizzard, hail, snow, heat or very low temperatures – we all stood outside for 30 minutes. So, well, that is torture too; I mean, the internal regulation that roll calls should be held indoors in bad weather did not apply. And for us, being on preventive registration, there were four roll calls a day.*

So, rain – that is another one, a horrible, horrible thing. You are in a dress, you don't have, well, there are girls who either get no help from outside or something else, they have no raincoat. And streams of water are simply pouring from the sky. You get soaked, well, to the skin, to the skin. And this summer, well, it was cool. And there are people standing there, without warm clothes, in that terrible rain.

The informant explicitly characterises what was happening as a violation of a specific provision of the Internal Regulations rather than as a general complaint about the weather.

The reference to frequency is also significant: as a person on preventive registration, the informant underwent four roll calls a day, meaning that she was exposed to adverse weather four times as often as provided for under the general schedule for other prisoners.

The excerpts analysed for IK-4 and IK-1 contain no information on protocols for responding to floods, fires or other natural disasters beyond the daily routine – that is, on measures for events requiring evacuation or emergency action, as opposed to routine roll calls in bad weather.

The only provision found in Belarusian legislation that protects prisoners from adverse weather by requiring roll calls to be held indoors was, as documented, not applied in practice, even though the informants knew the rule verbatim. No specific protocol for responding to natural disasters in places of detention has been found.

5.7 Perceptions of the environmental agenda and "environmental citizenship"

Political prisoner Nasta Loika describes the structure of places of detention as objectively low-carbon: prisoners do not use phones, do not fly, do not consume significant amounts of electricity and have to use a limited set of belongings for a long time.

The limits in force in the colony – a strict list of permitted clothing by number of items, limited frequency of parcels, a cap on purchases in the institution's shop – objectively reduce consumption regardless of the prisoner's intentions. This may be described as a paradox: institutional restrictions introduced not as environmental policy but as part of the regime produce an environmental effect comparable to a voluntary low-carbon lifestyle[29].

The informant describes her attempt to maintain a number of environmentally conscious habits she had before imprisonment, and how those she could not maintain were transformed. Her reusable panty liners were twice confiscated by the administration and placed in the storage room. During menstruation, the use of disposable hygiene products was objectively unavoidable because there was no constant access to a sink at the workplace in the garment factory.

She managed to keep and use smaller reusable panty liners thanks to specially equipped drying rooms in the units. She deliberately ordered wooden toothbrushes, which last about six months compared with three months for plastic ones, noting that this practice did not catch on among other prisoners.

The informant describes two attempts to initiate a change in institutional practice through official channels.

The first concerned the organisation of separate waste collection. There was partial sorting in the canteen – cardboard and large plastic containers – but all other waste was removed unsorted, including a considerable volume of plastic bags after visits to the institution's shop.

29 https://news.zerkalo.io/life/128018.html

The informant considered submitting a formal proposal to the Department of Corrections with a step-by-step description of how to organise separate collection, but did not follow through, noting that there was no real space for submitting such initiatives.

The second attempt concerned saving water: the informant tried to persuade other prisoners to turn off the tap while brushing their teeth.

The UNICRI/PRI report Green Prisons directly confirms the soundness of the practices described above. Environmental sustainability in prisons can be achieved precisely through simple, low-cost measures at the level of the individual and the institution. The report specifically states that "greening prisons does not have to be costly or resource-intensive", and describes the engagement of prisoners themselves as an essential resource for the successful implementation of such initiatives.

Separate waste collection, water saving and reusable hygiene products are classified in the report as working practices of the circular economy and sustainable water use.

At the same time, the same report expressly warns of the risk of "greenwashing" – a practice in which environmental rhetoric and certification are used to mask human rights violations, including forced labour, unfair pay and ill-treatment.

The report also explicitly cites Belarus as an example: for years, the international forest certification body FSC issued sustainability certificates for timber products from Belarusian penal colonies made with the labour of political prisoners, including Penal Colony No. 2 in Babruisk, where political prisoners documented in open sources were serving their sentences. Some of the certificates were issued after the torture of detainees had already received international publicity [30].

30 https://unicri.org/sites/default/files/2025-03/Guide-Green-Prisons-Mar-2025.pdf

6 Conclusions and legal characterisation

Conclusions

This report has documented the conditions of detention in two penal colonies in Belarus – IK-4 in Homiel and IK-1 in Navapolatsk – and compared them with national and international standards.

In each of the areas analysed – air, sanitation, water, health, infrastructure and disaster preparedness – a gap has been found at three levels simultaneously: the international standard sets a quantitative minimum; national legislation either sets no quantitative standard at all or sets it at or below the international minimum; and actual practice systematically falls short of both levels.

The sanitary infrastructure of both institutions does not make it physically possible to maintain hygiene to the extent required by the Nelson Mandela Rules. In IK-4, a unit of 97–100 people has one shower cubicle, accessible for 30 minutes a day. With such capacity, the actual interval between washes for most prisoners is two to three weeks – two to three times longer than the international minimum of one wash a week.

The order of access to sanitary facilities is controlled not directly by the administration but by the unit's aktiv, which turns a basic physiological need into an instrument of the intra-unit hierarchy.

Air quality in the living quarters is determined not by the condition of the engineering systems but by the prisoners' forced choice between fresh air and keeping warm: there is no mechanical ventilation, and the natural ventilation is put out of action by the prisoners themselves to protect themselves from the cold. The institution knew this or could have established it at any inspection.

In production, sanitary requirements for local exhaust ventilation are systematically violated, as independently confirmed in several work teams.

In one of the two institutions, drinking water at the workplace is not provided as a separate category and is replaced by water from the washbasin; in the other, the only water point is located right next to the toilet block. In both cases, the actual ability to quench one's thirst is determined by the schedule set by the administration rather than by the availability of water as such.

The quality of drinking water in Homiel's centralised network has been documented as failing to meet hygiene standards for iron and turbidity for at least two years, with a historical maximum exceedance in the first quarter of 2026; the city's sanitary service explicitly links this to the condition of the water mains.

The building used to house new arrivals in quarantine at IK-1 has been documented as dilapidated and unsafe. The institution has been subjected to an administrative penalty for burning waste. The IK-1 site directly adjoins the Naftan petrochemical complex.

The rule requiring roll calls of convicted persons to be held indoors in bad weather and at low temperatures, laid down in paragraph 81 of the Internal Regulations of Correctional Institutions, was systematically not applied in practice, even though the informants knew its content directly.

No specific protocol for responding to natural disasters with regard to the safety of prisoners has been found in Belarusian legislation.

Access to medical care is not blocked by outright refusal but restricted by a system of procedural filters: the dismissal of complaints, the doctor's decision being tied to the reaction of the administration officer present, and delays in responding until a critical condition sets in.

According to the Viasna Human Rights Centre, as of August 2026 serious health problems had been documented in 266 of 863 political prisoners.

The technical standard TKP 310-2011, which governs the design parameters of buildings of pre-trial detention centres and prisons and which the administration explicitly cites as the basis for specific practices, is physically unavailable in electronic legal databases and in all the scientific and technical libraries in the country that were checked, including the national library.

Ministry of Health Resolution No. 95, which previously set the only quantitative air temperature standard for residential premises (+18…+24 °C), lapsed in May 2026 without being replaced. Since then, not a single quantitative temperature standard has been in force in Belarus that applies even to ordinary residential buildings, let alone places of detention.

Legal characterisation

The facts established constitute a violation of the rights guaranteed by Article 10 of the International Covenant on Civil and Political Rights – the right to humane treatment – and by Articles 11–12 of the International Covenant on Economic, Social and Cultural Rights – the right to an adequate standard of living and to the highest attainable standard of health.

The conditions established also fail to comply with Rules 13–19 of the Nelson Mandela Rules, which govern material conditions of detention and sanitation, with Rules 15–16 as regards hygiene and with Rule 22 as regards access to drinking water.

The fact that the patterns identified coincide in two structurally different institutions – a women's colony in Homiel and a men's colony in Navapolatsk, differing in geography, climate and industrial surroundings – rules out explaining the established facts by chance local circumstances.

The inaccessibility of the technical standard that the administration cites as the legal basis for specific restrictive practices, and the repeal of the temperature standard previously in force without replacement, constitute a separate violation of the principle of legal certainty, irrespective of the actual conditions of detention.

Relevance for international mechanisms

The circumstances documented fall within the mandates of the Special Rapporteur on the situation of human rights in Belarus, the Committee against Torture and the UN Group of Independent Experts on Belarus.

The established involvement of international business in supply chains linked to

prison labour in Belarusian penal colonies, including cases in which such products were certified as environmentally sustainable, provides grounds for applying the UN Guiding Principles on Business and Human Rights to the corporate actors concerned.

Limitations of this document

This work cannot establish the exact origin of the recorded water quality exceedances on the colonies' premises themselves, as distinct from the municipal network as a whole, nor can it independently verify the content of the inaccessible technical standards.

This limitation is a direct consequence of the institutional opacity of Belarus's penitentiary system rather than a methodological shortcoming of this study.

7 Recommendations

To the authorities of the Republic of Belarus

- ensure public access to the technical standards governing the design parameters of places of detention;

- establish quantitative standards for water consumption, bathing frequency and the area of sanitary facilities per person in institutions of the penal enforcement system, and bring them into line with international standards.

To UN mechanisms

- take into account the data documented in this work when preparing the reports of the Special Rapporteur on the situation of human rights in Belarus and of the Committee against Torture;

- consider including the environmental conditions of detention of political prisoners among the topics of forthcoming calls for input;

- facilitate an independent assessment of the compliance of Belarusian penitentiary institutions with the Nelson Mandela Rules, including ensuring access to the technical standards governing the relevant facilities.

8 Directions for further research

Further work could include independent geospatial mapping of Belarusian penitentiary institutions in relation to zones of industrial and radioactive contamination; systematic coding of the interview corpus on the subject of food supply and its dependence on climatic factors; broadening the comparative material to include additional institutions in order to test the robustness of the identified patterns of differentiation by political status; and follow-up monitoring of the documented practices after any changes in legislation or law enforcement.

Annex
Literature review and international context

The environmental dimension of places of detention has become the subject of systematic academic and human rights attention relatively recently. The very emergence of a dedicated term – prison ecology, a field that documents the links between prisons, detention centres and environmental conditions – is telling. Academic reflection on the subject has caught up with activist practice only in the last decade[31,32].

The most developed and methodologically sophisticated body of research concerns the United States. This is not because the country is representative of the global situation, but because the availability of court records and an active network of human rights organisations have made detailed documentation of the problem possible.

Institutional recognition of the problem is also taking place outside the United States. In the United Kingdom, a coalition of more than 80 social and environmental charities, as part of the Everyone's Environment programme, found that prisoners face an increased risk of mortality, mental disorders, violence and changing patterns of disease as a result of heatwaves and floods. Because of where some institutions are located, prisoners are also exposed to heightened health risks associated with air pollution, and access to green and blue spaces within British prisons is generally absent[33].

Tellingly, even in this context – in a country with an incomparably higher level of institutional transparency than Belarus – the authors of the report note the absence of a national strategy linking prisoners with access to "green" jobs and

31 https://onlinelibrary.wiley.com/doi/abs/10.1111/anti.12569
32 https://escholarship.org/content/qt5848d17m/qt5848d17m.pdf
33 https://npproduction.wpenginepowered.com/wp-content/uploads/2024/12/NPC-Everyones-Environment-People-in-Prisons.pdf

point to the need for agreed minimum standards for heating and cooling precisely in order to avoid the risk of "greenwashing": superficial environmental changes without any real improvement in conditions.

This confirms the general argument of this work using the example of a country whose political regime is the opposite of that of Belarus: even where the state officially recognises the problem, an institutional response commensurate with its scale does not emerge automatically.

Infrastructural vulnerability and temperature extremes

Research in the United States notes that temperatures in prisons without air conditioning regularly reach levels capable of causing heat exhaustion and heat stroke. Researchers draw attention to a structural feature: climate hazards – extreme heat, floods, hurricanes and wildfires – are particularly dangerous for prisoners precisely because they have virtually no control over their own environment[34,35].

According to the state hydrometeorological service of the Republic of Belarus, for example, the period from 2020 to 2026 was a succession of climate records in the country, and 2024 was the warmest year in the history of meteorological observations, with an average annual temperature of +9.5 °C[36].

While for an ordinary resident of Belarus such heat was an inconvenience that could be dealt with – by opening a window, moving into the shade, buying water, spending less time outdoors – a detainee in a pre-trial detention centre might have no such option at all: the window is physically blocked by a solid grille, and access to water is restricted by the administration.

In other words, the same climate stressor that was a nuisance for the civilian population became a form of torture for a prisoner held in the conditions described.

34 https://www.vera.org/news/prison-is-already-hell-and-climate-change-is-making-it-worse
35 https://www.colorado.edu/asmagazine/2026/09/01/climate-crisis-behind-bars-heating
36 https://belgidromet.by/ru/climatolog-ru/view/klimaticheskaja-xarakteristika-2025-goda-11591-2026/

Pollution, siting of facilities, and water and air quality

Water quality problems have been systematically documented in research on US penitentiary institutions. In one Massachusetts prison, the water was dark in colour and had an elevated manganese content for many years; a prison in Texas was supplied for a decade with water containing elevated levels of arsenic; outbreaks of Legionnaires' disease have been recorded in prisons in California, Illinois and New York. In Connecticut, a court in 2018 found prisoners' long-term exposure to radon to be "knowing and reckless"[37].

For Belarus, the geography of the colonies in which political prisoners are held is also important. In particular, Homiel was previously officially classified as a radioactive contamination zone and was removed from the list of such zones by a Resolution of the Council of Ministers of the Republic of Belarus of 3 August 2026.

Official data from the state ambient air monitoring of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus for 2005–2025 confirm the status of Navapolatsk, where IK-1 is located, as one of the most polluted cities in the country.

Disaster preparedness and response

Hurricanes Harvey, Katrina and Ida exposed systemic gaps in evacuation plans for places of detention. According to human rights organisations, prisoners in Louisiana remained in flooding buildings without contact with their families even when an evacuation of the civilian population had been announced[38].

This international experience is also relevant to the Belarusian context, where no regulation containing specific provisions on disaster response for closed institutions has been found in open sources.

37 https://www.prisonpolicy.org/blog/2022/04/20/environmental_injustice/
38 https://www.vera.org/news/prison-is-already-hell-and-climate-change-is-making-it-worse

Theoretical integration: environmental justice and carceral studies

Prisons can be seen as spaces of environmental injustice: sites that generate hazardous waste, sewage discharges and air pollution.

One of the most systematic theoretical integrations of this argument was proposed by David Pellow. His concept of critical environmental justice explicitly includes the penitentiary system as an object of analysis[39].

This line of inquiry has been developed in subsequent work that treats prisoners' health, environmental justice and the design of penitentiary institutions as interconnected issues [40,41].

A global scoping review of research on the impact of climate change on the health of people in places of detention also shows that this field remains underdeveloped and is characterised by substantial gaps in empirical data [42].

39 https://onlinelibrary.wiley.com/doi/abs/10.1111/anti.12569
40 https://www.tandfonline.com/doi/full/10.1080/10455752.2022.2141430
41 https://escholarship.org/content/qt5848d17m/qt5848d17m.pdf
42 https://www.emerald.com/ijoph/article/doi/10.1108/IJOPH-11-2025-0090/1346778

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