

Appendix J: Relevant Legislation, Policies, Standards, etc.

1. INTRODUCTION

The Republic of Namibia has five tiers of law and a number of policies relevant to environmental assessment and protection, which includes:

- The Constitution
- Statutory law
- Common law
- Customary law
- International law

Relevant policies currently in force include:

- The EIA Policy (1995).
- Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation (1994).
- The National Climate Change Policy of Namibia (September 2010).
- Policy for the Conservation of Biotic Diversity and Habitat Protection (1994).

As the main source of legislation, the Constitution of the Republic of Namibia (1990) makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws intended to protect the natural environment and mitigate against adverse environmental impacts.

The environmental regulations are guided and implemented by the Department of Environmental Affairs (DEA) within the Ministry of Environment and Tourism (MET).

The section below summarises the various applicable laws and policies (refer to Table 3-1 in Section 3 of the EIA Report).

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Windhoek Office: Physical address: 8 General Murtala Muhammed Str, Eros, Windhoek / Postal address: P O Box 86386, Windhoek / T: +264 61 231 287 / F: +264 61 231 289 Swakopmund Office: Physical address: Schumacher House, 6 Tobias Hainyeko Str, Swakopmund / Postal address: P O Box 807, Swakopmund / T: +264 64 402 317 / F: +264 64 403 327 Please note that the order of discussing the Acts does not necessarily imply their significance.

2.1 The Constitution of the Republic of Namibia (1990)

Article 91 defines the function of the Ombudsman and 91 (c) describes the duty to investigate complaints concerning the over-utilisation of living natural resources, the irrational exploitation of non-renewable resources, the degradation and destruction of the ecosystem and failure to protect the beauty and character of Namibia.

Article 95 (I) states that 'the State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at ... maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of natural resources on a sustainable basis for the benefit of all Namibians both present and future; in particular the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian Territory.'

Article 100 states that 'the land, water and natural resources below and above the surface of the land ... shall belong to the State if they are not otherwise lawfully owned.'

Article 101 further states that the principles embodied within the Constitution 'shall not of and by themselves be legally enforceable by any court, but shall nevertheless guide the Government in making and applying laws. ... The courts are entitled to have regard to the said principles in interpreting any laws based on them.'

Article 144 states that the general rules of international law and international agreements are binding to Namibia under the Constitution and shall form part of the law of Namibia. A list of the ratified international treaties and protocols is given in Section 1.7.

2.2 Environmental Management Act, No. 7 of 2007

The Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and the Commencement of the Environmental Management Act, List of Activities that may not be undertaken without Environmental Clearance Certificate and Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) were promulgated on 6 February 2012.

Section 10 (1) (General Obligations) states that: '*An Environmental Assessment Report shall contain, as a minimum:*

(I) where appropriate, an outline for monitoring and management programmes and any plans for post-project analysis;

(j) a description of measures to be employed for decommissioning and restoration.'

Further, **Section 20** deals with the transitional provisions of existing environmental contracts granted under the current existing policy.

The Environmental Management Act furthermore promotes the sustainable management of the environment and use of natural resources. The principles of environmental management set out in the Act [Article 3(2)((i)] include that "the reduction, re-use and recycling of waste must be promoted". Article 5 of the Act provides for regulation on matters in respect of waste, including that a person may not discard or dispose of waste, except (a) at a disposal site declared or approved by the Minister or (b) in a manner or by means of a facility or method and subject to such conditions as the Minister may prescribe. A list of activities which may not be undertaken without an ECC has been published by the Ministry of Environment and Tourism (MET). With regard to waste management, treatment, handling and disposal, the activities requiring an ECC include:

- The construction of facilities for wastes sites, treatment of waste and disposal of waste;
- Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance of 1976; and
- The import, processing, use and recycling, temporary storage, transit or export of waste.

2.3 Pollution Control and Waste Management Bill, Third Draft September 2003

Namibia is in the process of developing further legislation to regulate waste management and public health as reflected in the Pollution Control and Waste Management Bill (circa 2003) and the Public and Environmental Health Bill (2014). The DPMT Waste Management Procedure should give consideration to the intentions of these Bills in as much as this is feasible.

2.4 Soil Conservation Act, No. 76 of 1969

The Act prescribes that measures are to be implemented to prevent erosion, denudation and disturbance of land.

2.5 Water Resources Management Act (WRMA), No. 11 of 2013

The WRMA provides for the management, development, protection, conservation and use of water resources in a manner that is consistent with and conducive to the fundamental principles as contained in the Act. These water resources management principles may establish and enhance environmental protection as it provides for, amongst others, the harmonisation of human needs with environmental ecosystems and the species that depend upon it, while recognising that those ecosystems must be protected to the maximum extent; integrated planning and management of surface and underground water resources in ways which incorporate the planning process, as well as economic, environmental and social dimensions so as to promote sustainable development; the preventative and polluter pays principle; as well as environmental awareness and training, in order to establish openness and transparency by making water resources information available and accessible to the public. Furthermore, provision is made for regional diversity and decentralisation to the lowest possible level of government consistent with the available capacity at such levels.

The Act also prescribes that No person may drill or construct a borehole for industrial purposes without the authority's permission.

The entry into force of the WRMA brought about a significant change in water resources management and ownership. In terms of the WRMA, ownership of water resources below and above the surface of the land belongs to the state and, hence, the state must ensure that water resources are managed and used to the benefit of all people in furtherance of the objectives of the Act and the water resources management principles.

The Act also provides for the establishment of a Water Advisory Council, a Water Regulatory Board and a Water Tribunal, as well as incidental matters, all aimed at facilitating the management, development, protection, conservation and use of water resources.

2.6 Nature Conservation Ordinance, No. 4 of 1975

Nature Conservation Ordinance, 1975 (the Ordinance) establishes a guiding framework for habitat and species conservation, including wildlife management and utilisation.

The regulations published under GN 240 (GG 2256 of 125, August 1976) state that a permit is needed from MET should a nursery be operated to propagate indigenous plant species for rehabilitation purposes.

2.7 Namibian Water Corporation Act, No. 12 of 1997

The Namibia Water Corporation Act, 12 of 1997 regulates bulk water supply and the conservation of water resources.

2.8 Atmospheric Pollution Prevention Ordinance, No. 11 of 1976

Namibia has an Atmospheric Pollution Prevention Ordinance (NAPPO) (No. 11 of 1976) which addresses the following:

- Part II Control of noxious or offensive gasses
- Part III Atmospheric pollution by smoke
- Part IV Dust control
- Part V Air pollution by fumes emitted by vehicles

The Namibian Atmospheric Pollution Prevention Ordinance (No. 11 of 1976) does however not include any ambient air standards, and only prescribes opacity guidelines for smoke under Part I. It is implied that the

Director provides air quality guidelines for consideration during the issuing of Registration Certificates. Registration Certificates are only issued for so called "Scheduled Processes" which are processes resulting in noxious or offensive gasses and typically pertain to point source emissions. Scheduled Processes at the DPMT smelter include Sulphuric Acid Processes and Copper Processes. Up to the end of 2016, Arsenic Processes would also have needed to be considered. The Ordinance defines a range of pollutants as noxious and offensive gasses, but air pollution guidelines are usually primarily for criteria pollutants namely, Sulphur dioxide (SO₂), oxides of nitrogen (NOx), carbon monoxide (CO), ozone (O₃), lead (Pb) and particulate matter (PM).

A number of sections (5 (1), 7, 8 (1), 11 (1) (2) (3), 12 (1), 13 (1) (2) (4) (5) (6), 24 (1), 25 (1) (2) and 25 (1) (2)) relate to 'Air pollution control certification', dust control, closure certificate, etc. At present, the Ministry does not grant any certificates, as no procedures or guidelines exist. The best practice would be to notify the Ministry of the anticipated emissions.

2.9 National Heritage Act, 27 of 2004

The Act provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. It also makes provision for archaeological impact assessments.

2.10 Public Health Act 1919 (Act No. 36 of 1919)

No person may allow the existence of a nuisance or other condition liable to be injurious or dangerous to health, on any land owned or occupied by them.

2.11 Hazardous Substance Ordinance, No. 14 of 1974

The Act regulates the validity of licences or registration referred to in **Section 5**. It deals with hazardous substances of Groups I to IV. However, while environmental aspects are not really explicitly stated, guidelines for the importing, storage, handling, etc. of hazardous substances are set out.

3. NAMIBIAN POLICIES

3.1 Environmental Assessment Policy for Sustainable Development and Environmental Conservation (1994)

Namibia's Environmental Assessment Policy is legislated through the Environmental Management Act. The regulations have been promulgated on 6 February 2012 and have been implemented.

4. LOCAL BYLAWS

The Council of the Municipality of Tsumeb has made regulations relating to refuse removal, littering and dumping (N 33 of February 2005). These regulate the management of domestic refuse in the municipal area and the council's provision of services in this regard.

5. NAMIBIA'S DEVELOPMENT CONTEXT

The following section describes Namibia's long-term strategic framework for developing the country as well as the development strategies and plans of the Region.

5.1 Vision 2030

Namibia's Vision 2030¹ was developed as a long-term planning framework for the country. It is built on a set of development objectives, which integrate economic, social and environmental dimensions underpinned by key concerns identified amongst the Namibian people. Its Vision statement is *"a prosperous and industrialised Namibia, developed by her human resources, enjoying peace, harmony and political stability"*. It provides the long-term policy framework for the Third National Development Plan (NDP3) 2007/08 - 2011/12, the up-coming NDP4 and all other local and regional development plans. The eight major objectives of Vision are to:

- Ensure that Namibia is a fair, gender responsive, caring and committed nation, in which all citizens are able to realise their full potential, in a safe and decent living environment.
- Create and consolidate a legitimate, effective and democratic political system (under the Constitution), and an equitable, tolerant and free society, that is characterised by sustainable and equitable development and effective institutions, which guarantee peace and political stability.
- Develop a diversified, competent and highly productive human resources and institutions, fully utilising human potential, and achieving efficient and effective delivery of customer-focused services which are competitive not only nationally, but also regionally and internationally.
- Transform Namibia into an industrialised country of equal opportunities, which is globally competitive, realising its maximum growth potential on a sustainable basis, with improved quality of life for all Namibians.
- Ensure a healthy, food-secured and breastfeeding nation, in which all preventable, infectious and parasitic diseases are under secure control, and in which people enjoy a high standard of living, with access to quality education, health and other vital services, in an atmosphere of sustainable population growth and development.
- Ensure the development of Namibia's 'natural capital' and its sustainable utilization, for the benefit of the country's social, economic and ecological well-being.
- Accomplish the transformation of Namibia into a knowledge-based, highly competitive, industrialised and eco-friendly nation, with sustainable economic growth and a high quality of life.

¹ www.npc.gov.na/vision/vision_2030bgd.htm

• Achieve stability, full regional integration and democratised international relations; the transformation from an aid-recipient country to that of a provider of development assistance.

5.2 Namibia's Millennium Development Goals (MDGs)

Namibia has been making variable progress towards the eight MDGs it set itself in 2004:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and tuberculosis (TB)
- Ensure environmental sustainability
- Develop a global partnership for development

5.3 The Fourth National Development Plan 2012- 2017

The Fourth National Development Plan 2012- 2017 became effective in 2012. The overarching goals of NDP4, directly adopted from Vision 2030 are:

- High and sustainable growth
- Employment creation and
- Increase in income equality.

NDP4 intends to put in place a funding mechanism, including a Public-Private-Partnership framework and guidelines for concessions, including partial and full privatisation, to ensure delivery of infrastructure, while at the same time maintaining macroeconomic stability.

6. INTERNATIONAL GUIDELINES AND STANDARDS

6.1 International Guidelines and Regulations for Criteria Pollutants

Typically, when no local ambient air quality criteria exist, or are in the process of being developed, reference is made to international criteria. This serves to provide an indication of the severity of the potential impacts from proposed activities. The most widely referenced international air quality criteria are those published by the World Health Organisation (WHO). South African (SA) National Ambient Air Quality Standards (NAAQS) are also referenced in this EIA, since it is regarded as representative indicators for Namibia due to the similar environmental, social and economic characteristics between the two countries.

Air quality guidelines (AQGs) have been published by the WHO in 1987 and were revised in 1997. Since the completion of the second edition of the AQGs for Europe which included new research from low-and middle-income countries where air pollution levels are at their highest, the WHO has undertaken to review the accumulated scientific evidence and to consider its implications for its AQGs. The result of this work is documented in 'Air Quality Guidelines, Global Update 2005' in the form of revised guideline values for selected criteria air pollutants, which are applicable across all WHO regions.

Given that air pollution levels in developing countries frequently far exceed the recommended WHO AQGs, interim target (IT) levels were included in the update. These are more than the WHO AQGs themselves, to promote steady progress towards meeting the WHO AQGs. There are between two and three interim targets starting at WHO interim target-1 (IT-1) as the most lenient and IT-2 or IT-3 as more stringent targets before reaching the AQGs. The WHO permits a 1% frequency of exceedance per calendar year.

The South African Bureau of Standards (SABS) was engaged to assist the Department of Environmental Affairs (DEA, then known as the Department of Environmental Affairs and Tourism or DEAT) in the facilitation of the development of ambient air quality standards. This included the establishment of a technical committee to oversee the development of standards. Standards were determined based on international best practice for PM₁₀, PM_{2.5}, dustfall, SO₂, NO₂, O₃, CO, Pb and benzene.

The final revised SA NAAQS were published in the Government Gazette on 24 of December 2009 and included a margin of tolerance (i.e. frequency of exceedance) and implementation timelines linked to it. SA NAAQS for PM_{2.5} were published on 29 July 2012. As mentioned previously, SA NAAQS closely follow WHO interim targets, which are targets for developing countries (see Table 1).

Pollutant	Averaging (exposure period)	Limit value (µg/m³)	Limit value (ppb)	Limit value reference	Permitted frequency of exceedance	Reference
PM ₁₀	24-hour	75	Not applicable	WHO IT-3 and SA NAAQS	4	WHO and SA NAAQS
	1-year	40	Not applicable	SA NAAQS	-	-
SO ₂	10-minute	500	191	SA NAAQS	526	SA NAAQS
	1-hour	350	134	SA NAAQS	88	SA NAAQS
	24-hour	125	48	WHO IT-1 and SA NAAQS	4	SA NAAQS
	1-year	50	19	SA NAAQS	-	-

Table 1: Assessment guidelines and standards for criteria pollutants considered in the air quality impact assessment

6.2 Inhalation Health Criteria and Risk Factors for Non-criteria Pollutants

The potential for health impacts associated with non-criteria pollutants considered in this study are assessed per guidelines published by the following institutions:

- California Environmental Protection Agency (CALEPA); and
- World Health Organisation (WHO)

Chronic and acute inhalation criteria and unit risk factor (URFs) (the latter applicable to pollutants with a carcinogenic impact) for arsenic and H_2SO_4 are summarised in Table 2. Increased lifetime cancer risk is calculated by applying the unit risk factors to predicted long term (annual average) pollutant concentrations.

Pollutant	Chronic Screening Criteria (μg/m₃)	Acute Screening Criteria (μg/m³)	Inhalation URF (µg/m³) ⁻¹
Arsenic	0.015 (CALEPA)	0.2 (CALEPA)	1.5E-03 (WHO)
H ₂ SO ₄	1 (CALEPA)	120 (CALEPA)	Not applicable

Table 2: Chronic and acute inhalation screening criteria and cancer unit risk factors

The identification of an acceptable cancer risk level has been debated for many years and it possibly will continue as societal norms and values change. Some people would easily accept higher risks than others, even if it were not within their own control; others prefer to take very low risks. An acceptable risk is a question of societal acceptance and will therefore vary from society to society. Despite the difficulty to provide a definitive "acceptable risk level", the estimation of a risk associated with an activity provides the means for a comparison of the activity to other everyday hazards, and therefore allowing risk-management policy decisions. Technical risk assessments seldom set the regulatory agenda because of the different ways in which the non-technical public perceives risks. Consequently, science does not directly provide an answer to the question.

Whilst it is perhaps inappropriate to make a judgment about how much risk should be acceptable, through reviewing acceptable risk levels selected by other well-known organizations, the United States Environmental Protection Agency (US EPA) application is the most suitable, i.e. "If the risk to the maximally exposed individual (MEI) is no more than 1×10^{-6} , then no further action is required. If not, the MEI risk must be reduced to no more than 1×10^{-4} , regardless of feasibility and cost, while protecting as many individuals as possible in the general population against risks exceeding 1×10^{-6} ". Some authorities tend to avoid the specification of a single acceptable risk level. Instead a "risk-ranking system" is preferred.

For example, the New York State Department of Health (NYSDOH) produced a qualitative ranking of cancer risk estimates, from very low to very high (see Table 3). Therefore, if the qualitative descriptor was "low", then the excess lifetime cancer risk from that exposure is in the range of greater than one per million to less than one per ten thousand.

Table 3: Excess Lifetime Cancer Risk (as applied by NYSDOH)

Risk Ratio	Qualitative Descriptor
Equal to or less than one in a million	Very low
Greater than one in a million to less than one in ten thousand	Low
One in ten thousand to less than one in a thousand	Moderate
One in a thousand to less than one in ten	High
Equal to or greater than one in ten	Very high

6.3 Legal Requirements and Noise Level Guidelines

IFC Guidelines on Environmental Noise

The International Finance Corporation (IFC) General Environmental Health and Safety Guidelines on noise address impacts of noise beyond the property boundary of the facility under consideration and provides noise level guidelines.

The IFC states that noise impacts should not exceed the levels presented in Table 4, or result in a maximum increase above background levels of 3 dBA at the nearest receptor location off-site (IFC, 2007). For a person with average hearing acuity an increase of less than 3 dBA in the general ambient noise level is not detectable. $\Delta = 3$ dBA is, therefore, a useful significance indicator for a noise impact.

It is further important to note that the IFC noise level guidelines for residential, institutional, and educational receptors correspond with the SANS 10103 guidelines for urban districts (see Table 5).

Table 4: IFC noise level guidelines

Area	One Hour L _{Aeq} (dBA) 07:00 to 22:00	One Hour L _{Aeq} (dBA) 22:00 to 07:00
Industrial receptors	70	70
Residential, institutional, and educational receptors	55	45

SANS 10103 (2008)

SANS 10103 (2008) successfully addresses the way environmental noise measurements are to be taken and assessed in South Africa, and is fully aligned with the WHO guidelines for Community Noise (WHO, 1999). The values given in Table 5 are typical rating levels that should not be exceeded outdoors in the different districts specified. Outdoor ambient noise exceeding these levels will be annoying to the community.

Type of district	Equivalent Continuous Rating Level ($L_{Req,T}$) for Outdoor Noise		
	Day/night	Day-time	Night-time
	L _{R,dn} ^(c) (dBA)	L _{Req,d} ^(a) (dBA)	L _{Req,n} ^(b) (dBA)
Rural districts	45	45	35
Suburban districts with little road traffic	50	50	40
Urban districts	55	55	45
Urban districts with one or more of the	60	60	50
following; business premises; and main roads			
Central business districts	65	65	55
Industrial districts	70	70	60

Table 5: Typical rating levels for outdoor noise, SANS 10103 (2008)

Notes

(a) L_{Req,d} =The L_{Aeq} rated for impulsive sound and tonality in accordance with SANS 10103 for the day-time period, i.e. from 06:00 to 22:00.

- (b) L_{Req,n} =The L_{Aeq} rated for impulsive sound and tonality in accordance with SANS 10103 for the night-time period, i.e. from 22:00 to 06:00.
- (c) $L_{R,dn}$ =The L_{Aeq} rated for impulsive sound and tonality in accordance with SANS 10103 for the period of a day and night, i.e. 24 hours, and wherein the $L_{Req,n}$ has been weighted with 10dB in order to account for the additional disturbance caused by noise during the night.

SANS 10103 also provides a useful guideline for estimating community response to an increase in the general ambient noise level caused by intruding noise. If Δ is the increase in noise level, the following criteria are of relevance:

- " $\Delta \leq 0$ dB: There will be no community reaction;
- 0 dB < $\Delta \le$ 10 dB: There will be 'little' reaction with 'sporadic complaints';
- 5 dB < $\Delta \le$ 15 dB: There will be a 'medium' reaction with 'widespread complaints'. $\Delta =$ 10 dB is subjectively perceived as a doubling in the loudness of the noise;
- 10 dB < $\Delta \le$ 20 dB: There will be a 'strong' reaction with 'threats of community action'; and
- 15 dB < Δ : There will be a 'very strong' reaction with 'vigorous community action'.

The categories of community response overlap because the response of a community does not occur as a stepwise function, but rather as a gradual change.

6.4 Legal Requirements and Level Guidelines of Waste Management

In the absence of active and detailed waste management legislation and references from Namibia it is suggested that the DPMT Waste Management Procedure should give consideration to South African

legislation, regulation and norms and standards and/or international standards. The following South African legislation would be likely to have applicability to the scope of activities at the Tsumeb Smelter:

- The National Environmental Management: Waste Act, 59 of 2008, as amended.
- Waste Classification and Management Regulations (GN R634 of August 2013, (WCMR)).
 - The purpose of the WCMR is to ensure adequate and safe storage and handling of hazardous waste, and to inform the consideration of suitable waste management options. These regulate the classification of waste in terms of SANS 10234; prescribe requirements for the assessment of waste destined for disposal (GN R 635); require that disposal of waste to landfill take place in terms of GN R 636; prescribe requirements and timeframes for the management of certain wastes and prescribe the general duties of waste generators, transporters and managers. They also include communication elements for labelling and information required for Safety Data Sheets.
- National Norms and Standards for the Assessment of Waste for Landfill Disposal (GN R 635 of August 2013).

These prescribe the requirements for the assessment of waste prior to disposal to landfill. Waste generators must ensure their waste is assessed in terms of the standard prior to disposal. The assessment is based on the total concentration (TC) and leachable concentration (LC) of certain elements and chemical substances in the waste compared against concentrations specified in the standard. Following laboratory analysis, the TC and LC are compared with specific TC and LC threshold values in the standard, which then determines the particular type of waste (Type 0, 1, 2, 3 and 4) for disposal.

- National Norms and Standards for Disposal of Waste to Landfill (GN R 636 of August 2013). These determine the requirements for the disposal of waste to landfill, define landfill classification and containment barrier designs, waste acceptance criteria for landfills and certain restrictions on waste disposal. Four new classes of landfill (Class A, B, C or D) are prescribed in the standard, each with a particular barrier (liner) design. The new landfill classes do not make a distinction between sites for the disposal of general or hazardous waste. The standard stipulates which types of waste are allowed to be disposed at a particular class of landfill. Waste disposal prohibitions, aimed at eliminating the disposal of certain wastes within set periods of time include certain hazardous wastes, recoverable materials such as used oils and solvents, liquid wastes and brines, as well as high calorific value wastes.
- National Norms and Standards for the Remediation of Contaminated Land & Soil Quality (GN R 331 of May 2014).

These provide a uniform approach to determine the contamination status of an investigation area; limit uncertainties regarding the criteria and methods to apply in assessment of contaminated land and provide minimum standards for assessing environmental protection measures for remediation activities.

• List of Waste Management Activities (GN R 921 of November 2013), as amended.

These set out, in three categories, the waste management activities that no person may commence, conduct or undertake unless a waste management licence has been issued in respect of such activities.

• National Norms and Standards for the Storage of Waste (GN R 926 of November 2013).

These provide a uniform approach to the management of waste storage facilities, aim to ensure best practice in the management of waste storage facilities and provide minimum standards for the design and operation of facilities.

- Waste Tyre Regulations, (GN R 149 of 2009) provide regulatory mechanisms for the management of waste tyres.
- Regulations Regarding the Planning and Management of Residue Stockpiles and Residue Deposits from a Prospecting, Mining, Exploration or Production Operation (GN R 632 of 2015). The purpose of these Regulations is to regulate the planning and management of residue stockpiles and residue deposits from a prospecting, mining, exploration or production operation. The Regulations are not directly applicable to waste disposal operations at a smelter (as it is not a mine), but certain of the principles may be applicable to facilities managing mineralised wastes.
- Regulations to Phase-Out the use of PCB Materials and PCB Contaminated Materials, 2014 (GNR 549 of 10 July 2014).

The purpose of these Regulations is to prescribe requirements for the phase-out of the use of PCB materials and PCB contaminated materials to ensure that impacts or potential impacts on health, well-being, safety and the environment are prevented or minimised.

As a company with international reach, it is advocated that DPMT should also give consideration to the European Bank for Reconstruction and Development's performance requirements with relevance to waste management. **Performance Requirement (PR) 3: Resource Efficiency and Pollution Prevention and Control** includes the following:

- The PR recognises that increased economic activity and urbanisation can generate increased levels of pollution to air, water, and land, and consume finite resources in a manner that may threaten people and the environment at the local, regional, and global levels. Therefore, resource efficiency and pollution prevention and control are essential elements of environmental and social sustainability and projects must meet good international practice in this regard. This PR outlines a project-level approach to resource management and pollution prevention and control, building on the mitigation hierarchy, the principle that environmental damage should as a priority be rectified at its source, and the "polluter pays" principle. The project-related impacts and issues associated with resource use, and the generation of waste and emissions need to be assessed in the context of project location and local environmental conditions.
- Avoid or minimise the generation of hazardous and non-hazardous waste materials and reduce their harmfulness as far as practicable. Where waste generation cannot be avoided but has been minimised, reuse, recycle or recover waste, or use it as a source of energy; where waste cannot be recovered or reused, treat and dispose of it in an environmentally sound manner.
- If the generated waste is considered hazardous, assess technically and financially feasible and costeffective alternatives for its environmentally sound disposal considering the limitations applicable to transboundary movement and other legal requirements.

 When waste disposal is transferred offsite and/or conducted by third parties, obtain chain of custody documentation to the final destination and use contractors that are reputable and legitimate enterprises licensed by the relevant regulatory agencies. Also ascertain whether licensed disposal sites are being operated to acceptable standards. Where this is not the case, consider alternative disposal options, including the possibility of developing own recovery and disposal facilities at the project site.

7. INTERNATIONAL TREATIES AND PROTOCOLS

Namibia is a signatory to a number of multilateral environmental agreements, which when considered in conjunction with Article 144 of the Constitution mean that such conventions form part of the law of Namibia.

The following International treaties and protocols have been ratified by the Namibian Government:

- Convention on International Trade and Endangered Species of Wild Fauna and Flora (CITES) (1973)
- Vienna Convention for the Protection of the Ozone Layer (1985)
- Montreal Protocol on Substances that Deplete the Ozone Layer (1987)
- Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (1989)
- Convention on Biological Diversity (1992)
- United Nations Framework Convention on Climate Change (1992)
- Kyoto Protocol on the Framework Convention on Climate Change (1998)
- World Heritage Convention (1972)
- Convention to Combat Desertification (1994)
- Stockholm Convention on Persistent Organic Pollutants (2001)