

Underwriting Environmental Risks - The German Perspective

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■ The context

- Germany has numerous contaminated sites because of damages throughout early industrialisation
- In the former German democratic republic (GDR) antiquated production and disposal processes caused significant contamination
- The overall extend of the financial public and private clean-up liability risk is thought to be between €200bn and €500bn for an estimated number of 350,000 sites

■ Some facts

- Historically the subject was only addressed by the general conditions for liability insurance (AHB) inasmuch as the classic exclusions under art. 4 | 5 AHB do not cover for property damage resulting from the gradual impact of temperature, gases, smoke and fumes, moisture or settling particles (smoke, soot and dust etc.)
- Coverage according to the water resources act (Wasserhaushaltsgesetz - WHG from 1960) provided the first impetus for environmental liability

- **Liability insurance for water pollution**

- Facilities for the storage of potential water pollutants (facility risks)
- Coverage for bodily injury, property damage and financial loss to third parties as a **consequence of the contamination of water**
- **Did not cover the contamination of water or ground water**
- The initial contamination of the water or ground water is deemed to be the occurrence

- **Liability insurance for water pollution**
 - “**Loss minimisation costs**” became an important factor
 - German insurance contract law (VVG) stipulates coverage if such costs become necessary to avert or minimise damages (as insured under the policy) **after** the event

■ Liability insurance for water pollution

- The concept of “advanced loss minimisation costs”
 - “The expense of loss minimisation where it may be assumed that the occurrence will be unavoidable if no appropriate measures are taken”
- “Own damage” was included to restore the policyholder’s premises
- Total pay-out from the insurance industry estimated to range from “a couple of hundreds of millions” to “a couple of billions” (EUR)

From the Law to the Coverage

■ German environmental law

- Protecting the environment is one of the main objectives of German politics
- Protection of the environment was incorporated into the constitution (1994) as an objective of the federation and states (article 20a of the German constitution)
- Environmental policies and the implementation of environmental laws are based on three main principles:

From the Law to the Coverage

- **German environmental law**

- The principle of precaution (Vorsorgeprinzip)
- To avoid or minimise the possibility of pollution or thread to the environment even before it arises
- Authorities are entitled to regulate industrial installations even if they have not (yet) been proven harmful

From the Law to the Coverage

- **German environmental law**

- The “polluter pays” principle (Verursacherprinzip)
- Anyone responsible for endangering, polluting or causing damage to the environment will be liable for any costs related to avoidance or clean-up

From the Law to the Coverage

- **German environmental law**

- The co-operation principle (Kooperationsprinzip)
- Environmental policy shall be developed by close co-operation between all relevant public and private organisations
- Requires exchange of information and sharing environmental responsibility among the state, corporate organisations and individuals

From the Law to the Coverage

■ Public environmental law

- Consists a large number of statutes, ordinances and administrative regulations
- Have been enacted over the last three decades
- Regulates the operation of production plants and hazardous installations (“installation-related”)
- “Product-related” environmental laws concern hazardous products

From the Law to the Coverage

■ Private environmental law

- Authorises private parties to require others to refrain from activities damaging life, health and property
- Constitutes rights to compensation
- Private (tort) law
- The environmental liability act of 1990

From the Law to the Coverage

■ Criminal environmental law

- Imposes fines and sentences on anyone who pollutes the environment in breach of public environmental regulations or
- Unlawfully runs an installation that needs to be licensed
- Non-compliance is generally subject to latent criminal prosecution

From the Law to the Coverage

■ Regulatory instruments

- Federal acts supplemented by state acts
 - Laws on emission control, federal water act etc.
- Ordinances (Rechtsverordnungen)
 - For emission control 32 ordinances have been enacted to date (Bundesimmissionsschutzverordnungen)
- Administrative regulations (Verwaltungsvorschriften)
 - May define threshold values on air quality control (TA Luft) and on noise (TA Lärm)

From the Law to the Coverage

■ Environmental authorities

- The federal environmental agency (Umweltbundesamt)
 - Environmental research, planning and administrative tasks (given to it by the federal ministry)
- On state level there are ministries, districts and counties (or cities equal to counties)
 - Generally authorities are delegated to county authorities
 - Direct control of behaviour by statutory order, administrative order, licensing, reporting, and notification procedures
 - May issue orders to ensure compliance with environmental laws

From the Law to the Coverage

■ Licenses and permits

- The central instruments used to ensure compliance with environmental regulations
- Contained in several environmental statutes
 - Federal immission protection act
 - The substance cycle and waste management act
 - The federal water act
- Hazardous substances and products may require a licence before being imported from outside the EU or put on the market (chemicals, pesticides or cars !)

From the Law to the Coverage

■ Environmental compliance officer

- A number of laws provide for company officers (Umweltschutzbeauftragter) to be appointed by the operator of a plant
- Monitors the company's compliance with specific environmental obligations
- Officers must be informed of all events of environmental importance concerning the installation

From the Law to the Coverage

■ Private liability for environmental damage

- General rules of private law as set out in the civil code (Bürgerliches Gesetzbuch - BGB)
- Section 906 of the civil code and section 14 of the federal immission protection act
 - Governs the relationship between neighbours with respect to emissions from one property to another
 - If the emission cannot be prevented with commercially viable means, the injured party will not be able to seek an injunction but may demand monetary compensation for the damage to its real property, with liability being independent of negligence

From the Law to the Coverage

■ Private liability for environmental damage

- Health and personal property are protected by tort law (section 823 of the civil code)
- Compensation may be sought if the damage was caused wilful or negligent conduct
- The burden of proof reversed by The federal supreme court (Bundesgerichtshof)
 - Injured party only needs to establish a causal link between the emission and the damage or injury

From the Law to the Coverage

■ Private liability for environmental damage

- Courts have also applied the concept of a “duty to protect the public” (Verkehrssicherungspflicht)
- Anybody creating environmental hazards has the duty to take all reasonable precautions to prevent damage to third parties
- Must prove compliance with the environmental standards imposed by statutory provisions or administrative orders
- Show all reasonable measures have been taken to avoid environmental damage

From the Law to the Coverage

■ Private liability for environmental damage

- Section 1 of the environmental liability act (Umwelthaftungsgesetz) provides for strict liability with respect to harmful effects to the environment
- If bodily injury or property damage occurs as a result of a hazardous installation as listed in the appendix of the act, the operator of the installation is under an obligation to compensate the aggrieved party for the resulting damage
- According to section 6 of the environmental liability act the burden of proof is reversed
 - If the installation looks likely to have caused the damage, it will be presumed it is responsible for that damage

From the Law to the Coverage

- **Private liability for environmental damage**
 - Section 22 of the federal water act provides strict liability
 - Any person who introduces or discharges any substance into water or takes any action which results in a change in its physical, chemical or biological composition, shall be liable to pay compensation for damage caused to any other person as a result of this action

From the Law to the Coverage

■ Public liability for environmental damage

- Laid down in various statutes, ordinances and administrative regulations at federal and state level
- Authorities may issue the appropriate orders on the basis of the state's general police laws (Polizei- und Ordnungsrecht)
 - Against the person/entity who directly caused the situation, i.E. The polluter (Handlungsstörer), or
 - The person/entity who owns the facilities or the site or is in actual possession of them (Zustandsstörer)
- Liability is irrespective of negligence and includes a responsibility for both investigation and remediation measures

- **Public liability for environmental damage**
 - The authority may recover the costs of the measures taken by itself in order to avert the danger of environmental damage
 - When recovering the costs the authorities can choose the party in the strongest financial position as the liable party

From the Law to the Coverage

■ Responsibility under criminal law

- Sections 324-330d of the German criminal code (Strafgesetzbuch - StGB) contain several provisions

- Prosecuted as criminal acts are
 - Pollution of natural waters
 - Air pollution which is damaging to health
 - The creation of serious dangers to health by the release of noxious substances
 - Waste disposal which endangers the environment
 - Unauthorised operation of installations which are potentially damaging the the environment

From the Law to the Coverage

■ Responsibility under criminal law

- German criminal law only applies to individuals but not companies
- Prosecuting authorities must allocate environmental duties and non-compliance to individuals within a company
- All members of the management can be held liable for any failure to comply with environmental laws

From the Law to the Coverage

- **Main features of the environmental liability act**
 - Came into force on January 1, 1991

- **Provides for**
 - Liability irrespective of fault or negligence (strict liability)
 - For bodily injury and property damage due to
 - Contamination or other impacts on soil, air and water (including bodies of water)
 - Applicable to owners of certain facilities enumerated in the comprehensive appendix

From the Law to the Coverage

■ Main features of the environmental liability act

- Liability is also for loss or damage which occurs even though a plant operates without disturbances and in compliance with all applicable provisions and licenses/permits (normal operations)
- Mandatory insurance is planned for particularly hazardous installations
- Maximum limits of liability are euro 85 million for bodily injury and euro 85 million for property

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Legal liability under civil law (not criminal law) for bodily injury and property damage due to environmental impacts on soil, air or water (including bodies of water)
 - Does not cover damage to water, to the soil or to the air but the bodily injury and property damage caused by the contamination of these media
 - Financial loss coverage is included if it results from the violation of rights of appropriation, such as hunting rights or the right to carry on an established business or water rights

- **Main features of the environmental liability insurance policy**
 - “Manifestation” being introduced as coverage trigger
 - First verifiable discovery of bodily injury or property damage by the insured party, the policyholder or a third party

- **Main features of the environmental liability insurance policy**

- Compensation of expenses incurred prior to the insured event

- After the disruption of operations or in compliance with administrative orders
- Provided they need to be incurred to avert or minimise otherwise unavoidable bodily injury or property damage

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Loss or damage resulting from normal operations (sublimited coverage only)
 - Full limits available for loss or damage resulting from a **“disruption of normal operations”**
 - Includes loss or damage to third parties resulting from fire or explosion
 - **No congruity between liability and coverage**

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Cover excludes damage
 - Due to environmental impacts that are made necessary or unavoidable by business operations, or
 - Are taken into account as a possible consequence of business operations

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Damage is covered if the policyholder can prove that he could not have been expected to recognise the possibility of such damage
 - On the basis of the state of technical knowledge at the time of the impact and
 - In view of the circumstances of the case concerned
 - The insurer takes on the “development risk”

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Loss series clause addresses that a great number of insured events can arise
 - From a single environmental impact or
 - From a number of environmental impacts with the same or similar cause
 - Deems such situations to be a **single event**

- **Main features of the environmental liability insurance policy**
 - The retroactive date is the date when the policyholder purchased this type of policy for the first time
 - An automatic extended “discovery period” of three years after the end of the policy period subject to the aggregate limit of the last policy period
 - Accumulation provision across different policies issued to the same policyholder (public & products, environmental)

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - “UmweltHG” facilities (module 1)
 - Production, processing and storage facilities/installations as listed in appendix 1 of the UmweltHG (96 “named installations”)
 - Considered to be dangerous and being subject to strict liability

- **Main features of the environmental liability insurance policy**
 - “UmweltHG” facilities (module 2)
 - Production, processing and storage facilities/installations as listed in appendix 2 of the UmweltHG
 - Considered to be “particularly” dangerous and being subject to strict liability
 - Require provision of cover (not yet implemented)

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Other facilities/installations subject to obligatory declaration (module 3)
 - Which are subject neither to the water resource act (WHG) or the environmental liability act (UmweltHG)
 - But for which reporting or permit is obligatory under other laws or ordinances relating to the environment
 - Liability is governed by the principle of negligence

- **Main features of the environmental liability insurance policy**
 - Effluent or impact risks (module 4)
 - Effluent disposal installations
 - The (deliberate) discharge or disposal of substances into a body of water in such a way as to alter the physical, biological or chemical condition of the water

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Recourse cover (module 5)
 - Given to insureds which design, produce, supply, erect, dismantle, maintain or service installations of the described nature
 - Covers the right of recourse of the owner of an installation who is liable for environmental damage
 - **Note:** environmental damage resulting from the manufacture and supply of products remains covered by the products liability insurance

From the Law to the Coverage

- **Main features of the environmental liability insurance policy**
 - Basic environmental insurance (module 7)
 - Relates to “other environmental risks”
 - Covers damage due to environmental impacts connected with the risk as described in the policy
 - Provided these environmental impacts do not originate from facilities or activities for which cover according to modules 1 to 6 has to be obtained

- **Identify the key drivers of the exposure and collect data**
 - Summary of installations and their capacity
 - Classification of the installations
 - Analysis of the structure surrounding each location
 - Analysis of the environmental management (from the desk or by interviews)

- **Risk grading classes A - D**

**Environmental Impact Liability
Summary of Installations (Quertabelle)**



Policy No.:

Corporate Client:

Business Division:

Location, Zip code, City:

Street:

Allianz Versicherungs AG, K ARS
Harald Wüsteney, Tel: 089 9900 3467
Person responsible on location:
Mrs./Mr.:

Tel/Fac:

Date:

Technical notes on location:

1. Further information: The below listed NACE code equals the german WB Code **7395**
2.

Rating System	NACE	category	technology	surroundings	T/S	Management	Rating:
determined datas	93051	A	o.B.	o.B.	o.B.	o.B.	o.B.
NACE Code	Ehevermittlungsinstitute						

No.	installation	ident Plan No.:	commercial installation	96 named installation	Seveso II installations	amount & capacity of tanks	cumulated capacity of storage in t/gl	throughput in kwh or t/h	filled in by ARS			
									DB	RK	RI	nagnitude
1												
7												
21												

Overview of installations and capacity

2.1	Amount of water hazardous installations	0	plants
	Capacity of water hazardous storages	0	to
2.2	Amount namend installation	0	plants
2.3	Amount commercial installations	0	plants
2.4	Amount of seperators	0	plants
2.4	Amount of seperating plants	0	plants
	production water discharging	0	m ³ /a
	cooling/ground water discharging	0	m ³ /a
2.5	Seveso II installations	0	plants
2.7	Amount of basic installations	0	plants

- **Make use of established environmental management systems**
 - **EMAS** (environmental management and audit scheme)
 - Revised in 2001 - EMAS II
 - **ISO 14001**
 - Addresses mainly organisational issues

- **Invest in environmental engineers to support the underwriters**

- **There is extensive documentation on various levels**
 - Policies contain declarations with “named installations”
 - Insurer to build up database which allows for tracking of the different categories of installations
 - Tracking of claims per category
 - Records are kept at the insured and the insurer
 - EMAS requires extensive record keeping at each plant

Where Do We Stand Today?

- **Taking the European perspective**

- What has been the experience so far?
- What are our expectations for the future?
- How can our underwriters cope with the developments?
- Are the differences between various concepts properly addressed (writing cross-border or global programmes)?