

SFK

**MAJOR ACCIDENTS
COMMISSION**

**at the Federal Ministry for the Environment, Nature
Conservation and Nuclear Safety**

**Guidance on Application of the Major Accidents
Ordinance to Industrial Estates**

by the working party on "Industrial Estates"

SFK-GS-44

Translation

MAJOR ACCIDENTS COMMISSION (SFK)

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Accidents Ordinance to Industrial
Estates**

**drafted by the working party on
“Industrial Estates”**

adopted by the SFK on 24 June 2005

SFK-GS-44

The Major Accidents Commission (SFK) was set up by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety pursuant to Article 51 a of the Federal Immission Control Act (Bundes-Immissionsschutzgesetz). Its offices are located at GFI Umwelt - Gesellschaft für Infrastruktur und Umwelt mbH (GFI Umwelt) in Bonn.

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Annex/Appendices have not been translated

1 Introduction¹

1.1 The current situation

One of the intentions of the Seveso II Directive (1996), and hence of the German Major Accidents Ordinance (2000), was to identify the risk posed by sites with large quantities of hazardous substances. While undoubtedly expedient from a risk control viewpoint, this approach may conflict with recent trends in company policy over the past ten years which are becoming increasingly pronounced.

The trend to focus on core business, outsource unrelated activities, and create smaller, independent units has prompted many large chemicals corporations to split up into smaller companies. As a result of this trend, a number of large chemical sites previously under the responsibility of a single operator have been transformed into industrial estates².

In a conventional site (with a single operator), the provisions of the Major Accidents Ordinance make allowance for the risks associated with spatial proximity, material combinations ("Verbund") and infrastructure correlations between several hazardous installations. However, industrial estates are characterised by several different operators who are not necessarily all subject to the provisions of Major Accidents Ordinance, together with one (or more) infrastructure company(ies) with varying levels of responsibility.

In Germany, industrial estates are a comparatively new phenomenon that has only arisen in the past few years. The relevant legislation has always tended to focus on industrial sites with "closed" factory premises and a single operator. As a result, the existing provisions under environmental and major accident law are not tailored to the specific requirements of industrial estates.

Official and statutory requirements are generally aimed at operators; in the case of major accident legislation, the operators of establishments. Rather than one company being the operator responsible for the entire site, in an industrial estate there are several different companies, whereas the complex site interactions that

¹ Led by C. Jochum

² For simplification purposes, the term "industrial estates" is used representatively to cover a range of

have evolved over time have not changed significantly to reflect this. This poses the question of which regulations need to be adopted within an industrial estate in order to ensure compliance with prevailing major accident law. It should be noted that efforts to enforce desirable, technically expedient, cost-effective and appropriate provisions governing the conduct of the estate's various different users may fail, due to the fact that legal framework conditions do not support such provisions. Legally admissible or acceptable approaches previously applicable to single-user sites may need to be considered differently in industrial estates.

In particular, this poses the question of how to ensure high safety standards in industrial estates despite the associated problems (e.g. from operators not subject to the Hazardous Accidents Ordinance, splitting up of companies or operators etc.). A number of fundamental statements on this issue were made in the Federal Environmental Agency's R&D project "Industrieparks und Störfallrecht" ("Industrial Estates and Major-Accidents Law") (UBA-Texte 31/2002; grant number 299 48 325). Additionally, Guide SFK-GS-35 outlines the SKF's views on two issues with particular relevance for industrial estates:

- Who is the operator (particularly with regard for close legal or production-related ties between different companies)?
- What is the definition of the establishment (particularly in the case of several spatially separated installations belonging to one operator on the same or neighbouring plots)?

However, a technical discussion by the Federal Environmental Agency on 1 July 2003 (Texte 77/03 "Die Anwendung umweltrechtlicher Vorschriften in Industrie- und Chemieparks" (The application of environmental legislation to industrial estates and chemical parks) identified the following issues as requiring further action, and in particular, clarification:

- *Further monitoring of the development of industrial estates*
- *Drafting of specimen contracts with modules for compliance with all requirements under environmental law*
- *Drafting of interpretation guidance for the application of environmental legislation to industrial estates*
- *Guidelines (checklists) to help authorities to audit industrial estate constellations for compliance with prevailing environmental law*

common terms (chemical parks, technology parks etc., see chapter 1.2).

- *Tracking and active accompaniment of developments at European level*

This document contains interpretation guidance on the application of major accident regulations and recommendations for the official controls referred to in 3 and 4 above³.

It was drafted specifically for industrial estates. However, some comments (such as the reference to the term "neighbours" in chapter 2) may also be of interest to single-user sites.

1.2 Definition of terms

Industrial estates differ widely, as does the terminology used by and about them. In some cases, this is a reflection of business policy. Some estates want to appeal specifically to chemical firms by using the term "chemical park", while others prefer to emphasise their openness to other sectors by using the term "industrial estate".

Although the existence of an industrial estate is usually quite clear, it is nevertheless difficult to give an unambiguous legal definition of the term "industrial estate". Given the considerable differences between industrial estates, it is particularly difficult to find a definition which is legally unambiguous, without excluding or unfairly favouring a particular industrial estate model. This would also be counter-productive, given the ongoing differentiation between different industrial estate types necessitated by economic considerations.

In view of these restrictions, this document uses the following definitions:

- **(Conventional) site (single-user site):** Uniformly managed site, owned by a single company. All activities on the site either belong directly to the company or are provided solely for that company by third parties (**external companies**).
- **Industrial estate (industrial park, chemical park, technology park, multi-user site, ...)** Site with several legally independent companies. Note that the problems addressed in this document become relevant as soon as even one legally independent subsidiary (e.g. a company spin-off) becomes additionally active in the establishment! The infrastructure and a varied spectrum of services are provided by the largest company at the site (**major user**) or one (or in some cases several) independent **infrastructure company(ies)**.

³ Specimen contracts as referred to in point 2 have not yet been drafted and were not discussed by this working party

- **Industrial estate operator:** Infrastructure company (or major user) that is usually responsible for operating the site's infrastructure facilities and also tends to act as landlord for the site, usually with overall control of/responsibility for the organisation of emergency management.
- **Industrial estate partners:** All companies based in an industrial estate (users/tenants) and infrastructure companies.
- **Plant operator:** Companies that operate production facilities in the sense of the Federal Immission Control Act (BImSchG) in the industrial estate and the related infrastructure equipment such as power plants, recooling plants etc. These may be industrial estate users, but may also include the infrastructure company.
- **Domino effect:** Reciprocal influences between establishments (or their installations) with major accident relevance as defined by Article 15 of the Major Accident Ordinance (StörfallIV) 2000. Installations/establishments where the hazard originates are defined as "**donors**", while the others are defined as "**acceptors**".
- **"Closed" industrial estate:** Industrial estate with "factory-like" structures, such as common fences, shared emergency management and a shared infrastructure.
- **Open industrial estate:** Industrial estate without the aforementioned features.

1.3 Task/approach

At its meeting on 30/31 January 2003, the SFK initially mandated an ad hoc group (**Appendix 1**) to define the issue. At the group's suggestion, it subsequently issued the following mandate at the meeting on 3 July 2003:

With due regard for more recent developments and based on other practical examples and findings, a guidance document for the users and operators of industrial estates and the authorities that monitor them is to be drafted.

This document should include "best practice" examples, as well as the legally enforceable minimum requirements. Where applicable, any regulatory deficits, and measures for the rectification thereof, should also be highlighted.

Attention should focus in particular on the following:

- Mitigating measures

- Cooperation and information obligations (such as emergency planning, access rights, emergency management, safety management)
- Measures for industrial estate users falling outside the scope of the Major Accidents Ordinance

The following existing SFK guidelines were to be consulted when drafting the Guide: SFK-GS-23, SFK-GS-24, SFK-GS-26, SFK-GS-31, SFK-GS 35, SFK-GS-38.

The AK-IP (for a list of members, see **Appendix 2**) was constituted on 8 September 2003 and convened seven times up until 12 May 2005. Each of the following priority topics was addressed under the leadership of 1-2 members, although the results are supported by the entire working party.

2 Legal appraisal of the term "neighbourhood"⁴

2.1 The problem

The relationship between a “closed” conventional site and its vicinity is characterised by the definition of the “neighbourhood”. Below, we consider whether the new “internal neighbourhood” existing within the estate itself requires a different legal assessment. First, we attempt to abstractly clarify the definition of “neighbourhood”, based on the principles developed for immission control law. Next, this definition is applied to the industrial estate, and we discuss the option of dispensing with “neighbourhood rights” within industrial estates. Finally, the findings are applied to major accident legislation and the situation in the industrial estate.

2.2 Clarification of the term "neighbourhood"

The UBA research report “Industrieparks und Störfallrecht” (“Industrial Estates and Major-Accidents Law”) (UBA-Texte 31/2002; grant no 299 48 325) has already established that as a general principle, every legally independent operator within an industrial estate is a “neighbour” in the legal sense of the word (cf. III.5). The next step is to investigate in greater detail the associated consequences for operators and authorities.

2.2.1 Third-party protection/the term "neighbour"

According to the prevailing theory, a legal provision is considered to have the effect of protecting third parties if it was adopted not only in the public interest, but was also designed to protect the interests of individual citizens (cf. here: Wahl in Schoch/Schmidt-Aßmann/Pietzer VwGO, preliminary statement on Article 42, para. 2, margin note 94 ff.). If a legal provision is designed to protect third-party interests in this sense, then any citizen falling within the protective scope of such a legal provision enjoys legal protection, i.e. he can obligate the obligated parties to uphold the standard by means of recourse to the law. Whether or not a legal provision is designed to protect third-party interests, and how far this third-party protection extends, is determined by an interpretation of the legal provision. The terms “neighbours” and “third-party protection” are often used synonymously; however, yet not every legal provision that uses the term “neighbourhood” serves to protect third parties (cf. Jarras, Federal Immission Control Act (BImSchG), Article 3, margin note 31).

⁴ Led by H. Becher

The term "neighbourhood" is found in Article 3, para. (1) and Article 5, para. (1), no. 1 of the Federal Immission Control Act (BImSchG). According to the prevailing view (cf. Jarras, Article 5 BImSchG, margin note 120), these regulations have third-party protective effects for the neighbours, because in formulating them as an obligation to defend certain rights, the legislators, by explicitly mentioning the neighbours, have granted them a special entitlement to protect and defend their rights. The references to the neighbourhood in Articles 3 and 5 of the BImSchG express the fact that harmful environmental influences are phenomena which are to be prevented in the interests of the neighbourhood. This says nothing about what is required, prohibited or permitted with regard to harmful environmental influences (Koch in GK-BImSchG, Article 3, margin note 78), nor does it define who "neighbours" are in the sense of these regulations, since the cited regulations do not contain a legal definition of the term "neighbourhood".

The Federal Administrative Court (BVerwG), and based on this, the prevailing view in literature, requires "the term 'neighbourhood' to exhibit a qualified affectedness which should be distinct from the effects that could affect the individual as part of the general public" (BVerwG NJW 1983, 1507). The Higher Administrative Court (OVG) of Lüneburg additionally requires a close spatial and temporal relationship with the installation being licensed. As such, it refers to a right that is linked to the specific situation and closely related to the installation's sphere of influence, which must be ascertained in each individual case. Against this background, for example, there is some debate as to whether employees of a neighbouring company in a "closed" industrial estate could be considered "neighbours" within the meaning of the aforementioned regulations.

Court rulings to date have failed to produce an explicit decision in this regard; for the most part, the literature assumes that an employee working in a neighbouring company within the same industrial estate could be considered a "neighbour" within the meaning of the aforementioned regulations.

It is also argued, albeit without further justification, that employees of a plant could reasonably be exposed to a higher level of immissions, or that they are adequately protected by workplace exposure limits, and the provisions of immission control law would not apply, labour protection law being decisive as "lex specialis".

Based on the criteria developed by court rulings, we must assume that an employee of a neighbouring company is also a “neighbour” within the meaning of immission control law, but that this will always need to be investigated in relation to the facility and the specific legal provision utilised. We would reiterate that this does not automatically impose increased requirements on the plant’s facilities.

2.2.2 The term "neighbours" in the industrial estate

Applied to the situation in the industrial estate, the situation of qualified affectedness and temporal and spatial proximity between the individual plants, companies and their employees is generally valid, so we can therefore assume that they are “neighbours” within the meaning of the provisions of immission control law. Here too, all cases must be considered on their individual merits.

2.3 Dispensing with “neighbourhood rights”

In conjunction with industrial estates, there is much debate regarding the extent to which “neighbourhood rights” may be dispensed with in an industrial estate context, in order to create legal and planning certainty for the operators. It is generally asserted that such agreements are only possible within a narrow legal framework and are generally ineffective towards employees.

Nevertheless, the legal opportunities allowing site users to reciprocally dispense with neighbourhood rights should be utilised. This can also be achieved within the context of the site agreement, which may agree to dispense with such legal rights for both existing and future facilities. It is important that this agreement should also be submitted to the competent licensing or inspecting authority, otherwise the authority will not be bound by it. Public-law agreements with the authority are likewise conceivable, although the authority has an obligation to protect public interests. If all conceivable neighbour conflicts (i.e. including public interests) are conclusively and comprehensively regulated by agreements between the site users, the authority will likewise be bound by such agreements and will even be able to adopt them itself.

However, even under the current interpretation, operators of facilities in “closed” factory premises were not safe from claims by employees and would have needed to endeavour to obtain effective waiver statements in this regard. Employees of external companies employed on factory premises for longer periods, e.g. in the case of extensive construction work, would likewise have been considered neighbours with the right to defend their legal rights under the previous interpretation. However, this highly complex problem, which has been the subject of much non-specific debate,

appears to have little practical relevance. In practice, complaints by employees against their own company for compliance with immission limits are unheard-of, and there have also been no cases of legal action from one operator within an industrial estate against another operator, nor of claims by employees of different operators within an industrial estate to defend their legal rights.

As far as we can tell, the aforementioned dispute regarding the term "neighbours" has thus far been conducted solely on the basis of immission control law. Major accidents legislation has been disregarded. This in turn raises the question of whether major-accidents law should be interpreted as protecting third parties.

2.4 Third-party protection under major accidents legislation

The Twelfth Ordinance on the Implementation of the Federal Immission Control Act (BImSchV) makes no mention of the term "neighbourhood". As such, the Ordinance itself does not link it to the criteria of qualified affectedness developed by court rulings. However, Article 5, para. (1), no. 1 of the Federal Immission Control Act (BImSchG) also extends to preventing the hazards of major accidents in the neighbourhood. The legislators evidently assume that major accidents may have increased impacts on the neighbourhood. However, this does not mean that every provision in the Twelfth BImSchV should be interpreted as protecting third parties. In this regard, Article 5, para. (1), no. 1 of the BImSchG should be viewed merely as an aid to interpretation. The individual provisions of the Twelfth BImSchV must be considered from the viewpoint of the regulation's protection purpose. This entails questioning which hazards the Act is designed to protect which individuals from, and what is needed to achieve such protection. Unlike the harmfulness of immissions, which is determined by the duration of exposure as well as the exceeding of certain limits, this is not necessarily applicable to major accidents. Hence, it is not automatically the case that a "neighbour within an industrial estate" is more worthy of protection or able to place higher demands on plant safety than a neighbour outside of a former site fence. The material requirements should be established on the basis of the legal provision and the technical rules and standards.

2.4.1 Third party protection standards under the 12th Federal Immission Control Ordinance (StörfallIV)

The prevailing view is that the provisions of Article 3, paras. (1), (2) and (4); Articles 4, 5 and 6 of the 12th BImSchV serve to protect third party interests. Individuals

falling within the scope of protection must be ascertained on a case-by-case basis.

The classification of requirements in Article 3, para. (3) of the 12th Federal Immission Control Ordinance (BImSchV) is contentious.

One opinion in literature and court rulings makes a distinction between protective and precautionary principles in the 12th BImSchV as with the Federal Immission Control Act (BImSchG). Generally speaking, the prevailing view is that only the protective principle serves to protect third parties, and not the precautionary principle. For example, the obligations cited in Article 5, para. (1), no. 2 of the BImSchG can be classified as precautionary. Rather than preventing hazards, they conceptually precede such hazards.

According to this definition, Article 3, para. (3) of the 12th BImSchV (precautions to keep the effects of major accidents as small as possible) could be considered precautionary, as the wording of the provision itself indicates (cf. Rossnagel in GK-BImSchG Article 5, margin note 338 ff, OVG Münster NVwZ 1989, 174), and therefore would not have the effect of protecting third parties. As such, a neighbour in an industrial estate could not enforce any preventive measures to minimise the impacts of major accidents.

An alternative view (Spindler UPR 1997, 170 ff, VGH Kassel ruling of 23 January 2001 -2 UE 2899/96), which is echoed in the BMU's "Vollzugshilfe zur StörfallV" ("Enforcement Guide to the Major Accident Ordinance" by the Federal Ministry for the Environment, see "Umweltpolitik" series, Fachinformation 2309; March 2004), ascribes a third-party protective effect to Article 3 para. (3) of the 12th BImSchV, at least on the issue of adequate safety distances, with the consequence that neighbours could potentially enforce compliance with safety distances or other measures.

2.4.2 Observing the principle of proportionality

Even if we assume that "internal neighbours" have fundamental rights, the ordering of such measures is subject to the principle of proportionality. Within existing industrial estates, these measures would soon approach the limits of proportionality, because the benefits of extensive precautionary measures would be disproportionate to the effort involved, given the spatial density. One must also bear in mind that the legislators have ascribed hazardous activities to industrial and commercial areas, and hence also (indirectly) to industrial estates. From a proportionality viewpoint, therefore, an industrial estate cannot be subject to the same requirements as those applicable to neighbours outside of the estate. However, proportionality decisions restrict planning confidence for the operators of such estates. Clarification is needed from the legislators in this regard. One conceivable solution would be to adopt provisions whereby industrial estate partners who subscribe to a uniform concept (best practice), as proposed here, would receive the same legal treatment as a company under the supervision of a single operator. However, this would have to take a tenable format from the authorities' point of view, such as an agreement under public law which new users would be required to sign.

2.5 Intervention by the authorities

The authority is not obliged to enforce more stringent requirements inside the industrial estate merely by virtue of the fact that factory premises have been converted into an industrial estate or an industrial estate was planned from the outset. Instead, the authority must decide, within its discretionary scope, whether intervention is necessary. An enforceable claim by a neighbour for intervention by the authorities can only arise if a legal provision designed to protect third parties has been violated.

In the case of existing installations, the authority may issue retrospective administrative orders and is therefore subject to the principle of proportionality (cf. Article 17, para. (2) of the BImSchG). In many cases, spatial proximity to the establishment within the industrial estate can be compensated by means of organisational measures (protection areas, training, personal safety equipment, etc.) in a way which is not available outside of the estate. The authority must investigate these measures with a view to proportionality. Against this background, it is more

important than ever to ensure that adequate organisational measures (information etc.) are taken inside the industrial estate so that evidence can be submitted to the authorities that adequate precautions have been taken. A site agreement may offer an excellent tool for such purposes.

2.6 Position of the working party

Prevailing immission control legislation fails to fully address the particular legal situation of neighbours in an industrial estate.

Based on the aforementioned considerations, the working party proposes that the legislators should clarify the term "neighbour" in an immissions legislation context, with due regard for the situation in industrial estates. This should make it possible for the authority to interpret the term "neighbourhood" in a manner appropriate to the situation. The necessary conditions in this regard must have been verifiably met, e.g. by signing a public-law agreement.

3. Cooperation and information flow

3.1 The Problem

Within a **single-user site** as an establishment, it is necessary to ensure that the potential impacts of all major accidents that cannot reasonably be excluded do not have exacerbated consequences outside of safety-relevant parts of the establishment. Normally, such considerations are geared to the immediate vicinity of the facilities in question, since experience has shown that specific interactions between more distantly separated installations are highly unlikely to exacerbate the effects of an accident.

In consequence, when describing potential major accidents and specifying corresponding measures, consideration must also be given to the vicinity (e.g. likelihood of operating staff being in the vicinity, presence of hazardous substances during filling operations). These measures should be reviewed in case of major changes to the installations and during the construction of new installations.

Information to the public pursuant to Article 11 of the StörfallIV, must be available as well as an internal emergency plan, to serve as the basis for off-site emergency planning.

Within the framework of the operator's own responsibilities, a consistent organisation helps to ensure that all the necessary experts are consulted when preparing such information. Moreover, various committees are in place to ensure the requisite in-house information flow.

Within the framework of the safety management system, in-house guidelines exist for the operational and organisational structure. Compliance with these guidelines ensures preparation of the necessary documents. There is an authorised plant representative available to take care of essential coordination processes with the supervisory authorities.

Where there are several establishments belonging to independent companies within one site, i.e. in an **industrial estate**, the existence of such organisational requirements can no longer necessarily be assumed.

The Major Accidents Ordinance (StörfallIV) explicitly makes allowance for this with reference to so-called “domino establishments”, which are identified by the competent authority on the basis of Article 15:

Article 15 Domino effect

The competent authority shall identify and notify to the operators any establishments or groups of establishments where the likelihood or possibility or consequences of a major accident may be increased because of their location, their mutual proximity and their inventories of dangerous substances.

Such identification generally occurs on the basis of a “Status Report” by the LAI (*Working Group on Immission Control of the German Länder*) which defines the distances between establishments where an increased probability of major accidents with potentially serious implications may not be excluded. The authorities have generally notified the operators on the basis of this report.

In an industrial estate comprised of several establishments, it can be assumed that the criteria of Article 15 of the Major Accidents Ordinance are met by the majority.

Article 6 of the StörfallIV is dedicated to ensuring the flow of information between domino establishments:

Article 6 Additional requirements

(3) Operators of the establishments set out in Article 15 shall in consultation with the competent authorities

- 1. Exchange all information necessary to enable them to take account of the nature and extent of the overall hazard of a major accident in their major-accident prevention policies, safety management systems, safety reports and internal alarm and emergency plans, and*
- 2. Cooperate in informing the public and in supplying information to the authority responsible for the preparation of external alarm and emergency plans.*

The following table summarises the information which could be relevant for the flow of information within the meaning of Article 6:

Information about	Basis in StörfallIV
Construction of a new establishment	Article 7 Notification
Significant modifications to the establishment	Article 7 Notification
Installation-related parts of the safety report	Article 9 Safety report
Emergency plan – plant or site	Article 10 Emergency plans
Safety in the event of an accident (<i>Neighbourhood information</i>)	Article 11 Information on safety measures
Major accidents in the establishment and significant disturbances of normal operation (<i>near misses</i>)	Article 19 Reporting procedure

Even for establishments for which no domino effect has been ascertained, and for all other installations in an industrial estate, the operators must make allowance for neighbouring sources of hazard and the potential impacts of their own installations on the neighbourhood. Above and beyond the basic obligations of the StörfallIV and the BlmSchG, such requirements are also derived from the risk assessment obligations under labour protection law.

3.2 Protection target

By making information available about potential major accidents, all establishments should be in a position to effectively put in place all the necessary measures to reduce the probability of major accidents whose impacts may be exacerbated as a result of close proximity. Furthermore, this should also facilitate a coordinated approach when drafting information for the general public (Article 11) and the external emergency plans.

3.3 Problem-solving approach

The transition from a single-user site to a multi-user site does not generally produce any changes regarding the evaluation of potential major accidents and their spheres of influence. The only difference is that the controlled flow of “in-site” information as an essential requirement for meeting the protection target may no longer be fully ensured.

In order to ensure the additional **flow of information inside the industrial estate**, therefore, the following organisational tools are recommended:

- **Site committee** as an inter-company management level which defines fundamental requirements, and in particular, communicates the significant changes and plans for new installations, and evaluates the potential effects on existing installations.
- **Committee of experts** as an inter-company technical level which exchanges major-accidents hazard-related information, evaluates potential mutual effects, and exchanges information regarding major accidents and significant disturbances of normal operation (“near misses”).
- Making the information cited in Article 6 (3) Nos. 1-2 of the StörfallV available on demand. The supply of the information required for emergency response should be coordinated between the operators and the competent emergency response authority, so that their measures can be initiated without delay in the event of an incident.

These committees should meet regularly or as and when necessary; the required actions should be documented.

The procedure for drafting information pursuant to Article 11 of the StörfallV and the provision of information for external emergency plans (in collaboration with the authority) would fall under the decision-making scope of the site committee.

Regarding the **external flow of information**, it is recommended that

- The general public is informed about the site with a joint company brochure
- Standardised information is made available for external emergency planning.

Other organisational solutions are also conceivable in principle, the effectiveness of which should be outlined where applicable.

3.4 Position of the working party

Numerous new internal and external interfaces arise during the transition from a single-user site to an industrial estate. In order to control the overall risk at the site, this necessitates in-depth cooperation with the industrial estate partners. The interfaces must be clearly defined and organisationally regulated. The corresponding mechanisms (e.g. committees) must be in place. Communication with the authorities and neighbours should also be coordinated. Previous experience has shown that it is feasible to achieve this within the framework of private law agreements with a reasonable amount of input; there is no need for additional regulation.

4 Coordination of management systems⁵

4.1 The problem

Compared with a conventional single-user site under the sole responsibility of one operator, given the spatial proximity between users of an industrial estate and possible infrastructure service-providers, clear agreements are essential to prevent adverse effects on the companies' own business processes and their ascribed legal responsibilities. The companies' own business processes should therefore be examined to determine whether and to what extent special requirements may arise in interaction with other (neighbouring) industrial estate partners. Similarly, where applicable (potential) changes in dealings with authorities and third parties should be modified in line with this. To this end, the participants' management systems must be coordinated with one another in order to avoid interface problems, both in terms of the internal relationships between participants, and in the external relationships between industrial estate partners and authorities / third parties.

4.2 Protection target

The management systems, particularly the safety management system, of the individual industrial estate partners should be coordinated in order to analyse/ascertain the overall hazard emanating from the industrial estate, based on the risk and hazard potentials of the participants' plants (due to their spatial proximity, whereby only substance-related synergy effects are relevant), and where necessary, coordinated technical and organisational protection measures should be defined and introduced to ensure that the requisite legal requirements are met by the industrial estate partners. Appropriate coordination of the management systems existing within the industrial estate is essential for avoiding accusations of negligence directed at individual operators.

⁵ Led by K.-D. Paul with the assistance of E.Moch

4.3 Problem-solving approach for coordinating the management systems

When formulating the company-specific business processes of the industrial estate users and operator, as well as the infrastructure services provider, coordination of the management systems should make allowance for the framework conditions of the industrial estate, with a particular emphasis on liability law aspects⁶.

The following aspects are relevant to the coordination of management systems:

- Assessment of the current company-specific operational procedures and requirements placed on the management systems or an integrated management system, with due regard for the framework conditions of the industrial estate.
- Analysis and specification of interfaces
- Mutual information and coordination between participants with regard to requirements and needs
- Specification of procedures and responsibilities for effective implementation

For safety management pursuant to Annex III of the Major Accidents Ordinance, it is first necessary to identify the processes of the safety management system to be agreed between participants. If a company in an industrial estate operates several establishments and/or establishments in several different industrial estates, in the interests of a uniform company safety policy, it is advisable to adopt a basic approach when coordinating management systems, which should be refined and adapted individually for the specific establishment in question, i.e. with the involvement of the other industrial estate partners.

The following points⁷ of the safety management system should be reviewed and modified based on the framework conditions of the industrial estate (interface assessment):

- Organisation and personnel
Specification of the in-company safety policy with due regard for the hazard potential and, where applicable, framework conditions of the other industrial

⁶ Cf. UBA-Forschungsbericht (Research Report of the Federal Environmental Agency) 299 48 325 (Texte 31/02) "Industriepark und Störfallrecht" (Industrial Estates and Major Accidents Law)

⁷ Cf. SFK guide SFK-GS-24 (Rev. 1)

estate users and operators, as well as infrastructure service-providers and potential interactions between them. The operational and organisational structure with the specific tasks, rights and obligations of management and employees must therefore be defined. The specification of task regulations to be transferred to the industrial estate operators and, where applicable, infrastructure service-providers.

Coordination of the organisations of plant environmental and safety officers with regard to the interfaces between industrial estate users as a whole, as well as industrial estate operator and infrastructure service-provider.

Coordination of the requirements applicable to (sub)contractors with regard to occupational safety and environmental protection, e.g. successful SCC audit.

➤ Identification and evaluation of major-accidents hazards

Exchange and evaluation of hazard analysis results between participants, identification of the overall hazard to the industrial estate, and where applicable, specification of other safety-based technical and/or organizational protective measures. Agreement on the site-specific and establishment-specific parts of participants' safety reports. Specification of inter-establishment regulations, where applicable.

➤ Operational control

Agreement on the procedures and instructions for operational control vis-à-vis interfaces to the infrastructure facilities used, the transfer of corresponding tasks to the industrial estate operators or infrastructure service-providers etc. Specification of responsibilities in the respective establishments. Agreement regarding the requirements for the use of personal protective equipment and the performance of dangerous work (e.g. permit certificates).

➤ Management of change

Modifications to existing installations and the construction of new installations in an establishment should be evaluated and coordinated with neighbouring users, with due regard for interactions. Where applicable, additional protective measures should be specified.

➤ Planning for emergencies

Agreement on the peripheral conditions (particularly calculation of the overall risk) for emergency plans between industrial estate partners. Development of a joint emergency management system (cf. chapter 5).

➤ Monitoring Performance (of the safety management system)

Evaluation and implementation of the information exchanged between participants in the company-specific safety management system and in the inter-establishment regulations adopted. Ensuring the performance of on-going reviews and any modifications that may be required. Specification of organisational measures for the regular exchange of information and to determine current coordination requirements. Agreement regarding the investigation and evaluation of accidents and other incidents.

➤ (Systematic) audit and review

Ensuring a regular exchange of information for modifying the company-specific safety management system and inter-establishment regulations.

Annex 1 "Adapting the safety management of establishments pursuant to the Major Accidents Ordinance in line with the peripheral conditions in an industrial estate" (*not translated*) lists the individual processes of a safety management system under the Major Accidents Ordinance, as well as the adjustments (clearly company specific / clearly site-specific) required on the basis of the peripheral conditions for industrial estates, and the relevant coordination requirements in summarised form. Annex 1 has the same basic layout as the tables in guide SFK-GS 31⁸, thereby facilitating allocation to management processes where an integrated management system exists.

The following chapters 5 to 7 of this document address in more detail some processes of the safety management system with due regard for the framework conditions in industrial estates.

⁸ SFK guide SFK-GS 31 "Arbeitshilfe zur Integration eines Sicherheitsmanagementsystems nach Anhang III der Störfall-Verordnung 2000 in bestehende Managementsysteme" (Aid for the integration of a safety management system pursuant to Annex III of the Major Accident Ordinance 2000 within existing management systems)

4.4 Position of the working party

The implementation of company-specific safety concepts in the industrial estate should be agreed in such a way that the required uniform minimum standards are guaranteed, and the typical interfaces existing in industrial estates are regulated.

The committees proposed in chapter 3 (site committee, expert committee) may be used for the necessary information and coordination processes.

The agreements / regulations adopted between participants should be recorded in contracts under private law.

5 Coordinated emergency response and integrated emergency management⁹

Emergency response and emergency management are primarily based on the Major Accidents Ordinance and the fire protection legislation of the individual Federal States (Länder). Both types of statutory requirements are aimed at the operator and do not generally contain specific instructions or requirements on the establishment of a uniform, integrated management system for achieving an improved level of protection.

Consequently, at the present time, preparation for coordinated emergency response and establishment of an integrated emergency management plan in the entire industrial estate is only a legal requirement in limited cases.

The following comments therefore focus primarily on best practice. However, they do highlight key aspects which must be taken into account in order to ensure efficient emergency response, even if a differentiated approach is adopted in the industrial estate.

5.1 Emergency response planning

5.1.1 The problem

The differentiated hazard potential associated with an industrial estate places high demands on public and site fire brigades in the event of an accident. The different safety structures and organisations existing in individual companies may make it more difficult for the relevant safety organisations to undertake the necessary emergency response planning and to handle individual cases.

5.1.2 Problem-solving approach

In order to facilitate optimum handling of possible deployment scenarios, therefore, a uniform, coordinated emergency response planning encompassing the entire site is indispensable. Coordination should either be provided by the public emergency response organisation or by the industrial estate's emergency response organisation.

The core elements of such an emergency plan are:

- Uniformly designed and structured emergency plans for all establishments which have been coordinated with the competent fire brigades and safety authorities. Particularly for large sites, we recommend splitting emergency plans into a

⁹ Led by H. Hagen

“site plan” containing general provisions for all operators at the site, and individual “installation plans” containing the necessary detailed information on all individual installations / operating units or buildings.

- The “site plan” should include binding details of the command structures in the event of deployment, with corresponding allocation of duties and competencies. In particular, this should include specification of the competent on-site commander-in-chief (technical task force leaders, TEL), organisation of the necessary “background support” (site emergency director, WEL) as per the companies' consultation obligations pursuant to the StörfallIV, details of the structured, uniform approach to notification of the authorities, and the implementation of notification obligations (immediate notifications), and the structured external representation of companies.
- Another aspect of the definition of leadership structures is allocation of the necessary decision-making competencies, e.g. via assignment and naming pursuant to Article 12 of the StörfallIV. It may also be expedient to allocate decision-making competency for operational measures to an existing site fire brigade, since it covers largely the same decision-making as those assigned to it under the fire protection legislation of the Länder, and in this way, competency overlaps can be avoided. The operator's consultation obligations shall remain unaffected by this.
- The implementation of measures to avoid the domino effect must be regulated (cf. chapter 3), bearing in mind that the reciprocal information obligations refer to establishments as defined in the StörfallIV. This does not mean that all installations in large industrial estates need necessarily be affected by reciprocal influences.

In this context, it is useful to set out the basic reciprocal information obligations between the domino establishments as specified in the official notifications pursuant to Article 15 of the StörfallIV in the “site emergency plan”. By contrast, specific information on potential effects and any measures taken or to be taken in the event of an incident should be recorded in the emergency plans of the individual installations.

Scenarios may be used as an aid to evaluating and specifying such measures, where applicable. However, these should not be included in the emergency plans, to avoid incorrect analogies being drawn in a specific case.

Taken in its entirety, an integrated hazard and emergency management system with centralised storage of safety data and the evaluation thereof, e.g. by a site fire brigade, is a key contributor towards achieving the protection targets associated with the domino effect. Key elements in this regard are: Information obligations pursuant to Article 11 of the StörfallV / assured exchange of information in case of changes in the establishments / the forwarding of all emergency calls to a central control centre / centralised storage of all emergency plans / planned evaluation of disturbances of normal operation (*including near misses*) by safety staff, operators and (where applicable) specialist departments / initiation of warning measures in the event of an incident.

- The emergency plans should include details of the support provided to the emergency responders by the operator, including the requisite obligation to provide advice pursuant to Article 5, para. (2) of the StörfallV.

The duties of company support staff should be detailed in the emergency plans. These may include both superordinate support measures (site plan) as well as measures directly applicable to an individual installation (installation plan).

The entire emergency response planning should be coordinated with the competent local authorities, particularly the responsible fire brigades, and the competent supervisory authority notified. Emergency plans must be practised repeatedly in drills. We recommend the systematic preparation of staff work in the management teams (TEL/WEL) and the performance of drills at regular intervals. As well as the on-site safety staff, these drills should also involve representatives of the individual operators. The duties and competencies of all participants must be clearly regulated and known, so as to avoid competency overlaps and the inadequate allocation of tasks in the event of an incident.

As this applies to all safety organisations, the local authority safety staff should also be involved in these drills.

5.2 Guaranteeing a uniform safety philosophy¹⁰ as the basis for integrated emergency management

5.2.1 The problem

In the event of an incident, problems for safety staff can also arise due to different safety philosophies between individual companies. Large companies, in particular, place high importance on a uniform global safety philosophy. It is often forgotten that this can cause considerable problems when different operators are required to collaborate at a “heterogeneous” site.

This concerns both the general safety management system addressed in chapter 4, and, more specifically, the emergency management system.

The specific technical requirements are defined either by the German regulations or by the company. Generally speaking, these stipulate minimum requirements which must **both** be implemented, whereby in the unlikely event of a contradiction between the two, priority should be given to the legal requirements. From the viewpoint of a uniform, functioning emergency planning, however, differing safety philosophies within an industrial estate should be harmonized to the extent necessary in order to achieve clear decision-making structures in the event of an incident.

5.2.2 Problem-solving approach

Establishment of a safety philosophy which has been well-coordinated between all operators on site, with due regard for existing interfaces. The core elements in this regard are:

- Agreement on predominantly uniform fire protection or safety concepts with relevance for the assignment of personnel and operational concepts of the competent fire brigade. Examples include:
 - Uniform concepts for the supply and retention of fire fighting water
 - Comparable fire protection equipment, tailored to the deployment capabilities of the competent fire brigade.
- Performance of fire inspections by the site fire brigade or involvement of the site fire brigade in the local authority fire inspection and in fire protection reviews by the insurers.
- Right to intervention / right of recitation by the site fire brigade if deficiencies

¹⁰ In this section, we interpret safety philosophy as the “philosophy” of emergency management

are ascertained. This also includes the authority to initiate the internal handling of minor incidents in the sense of preventative investigations, where applicable in conjunction with the major-accidents officer.

- It may be worth establishing an in-site exchange of experience on relevant safety issues (site or expert committee, cf. chapter 3.3). The safety departments of the operators, including the site fire brigade (if applicable), should be included in such exchanges.
- Joint control centre for all hazard notifications.
- Implementation of a uniform warning concept, both inside the site and for warnings in the vicinity. When planning such a concept, particular attention should be devoted to the involvement of the local authorities. The agreement of advance notifications and the specification of coordinated support measures are essential pre-requisites for the implementation of efficient warnings in the vicinity of the sites.

5.3 Core elements of an effective emergency response organisation

5.3.1 The problem

Ensuring effective emergency response at a site with multiple operators places increased requirements on an existing site fire brigade, and allowance must be made for this. In particular, certain basic requirements which may seem self-evident at a site with only one operator have significantly greater weighting in such cases, which must be taken into account.

5.3.2 Problem-solving approach

Particular consideration should be given to the following points to ensure that tasks are completed uniformly and in high quality:

- Clear, uniform, advance allocation of duties and competencies in the event of an incident, particularly for internal management staff, such as site emergency director (WEL) and/or fire commander in chief (TEL).

This includes coordination with the competent public fire brigades regarding leadership in the event of an incident. Where a site fire brigade already exists, the leadership for direct emergency response measures on site should remain with the site fire brigade chief (TEL “site”) because it is more familiar with the location and the plant, with advice and support being provided by public emergency services where necessary. Legal responsibility for measures in the vicinity of a chemical park, such as neighbourhood warnings, rests with the public fire chief (TEL “community”). By arrangement with all parties involved, however, individual tasks, such as limited warnings in the immediate vicinity or the activation of sirens to warn the neighbourhood, may be transferred to the emergency organisation of the industrial estate. For major incidents whose impacts extend well beyond the site itself, the site fire chief (TEL “site”) should be linked to the overall task force led by the public fire brigade, where necessary as a sub-unit, in order to ensure optimum coordination of the overall measures (supplies, catering etc.).

The site emergency director is primarily responsible for controlling the in-company measures and duties, including advising the emergency response forces, informing the authorities, media work, notifying the neighbourhood, making company support staff and materials available, taking measures to control traffic on site, and essential decisions regarding production.

- Regulating access rights to all installations and buildings of the individual operators, both in the event of a hazard and in order to ensure the necessary training in local and operational knowledge.
- Anchoring the right of the site emergency director to issue instructions to all employees, whether the operators are directly or indirectly affected, in the event of an incident.
- Providing the necessary information about installations, particularly with regard to
 - Employee numbers / working hours
 - Competent individuals at the installations (unit managers, unit engineers, unit foremen, process control engineers etc.)
 - Adequate knowledge of production techniques, materials, risk priorities, structural facilities and operational safety equipment.
- Regular drills by the site fire brigade with the operating units of all operators
- Deployment planning and preparation of the emergency response organisation by arrangement with and with the support of the individual operating units
- Clear regulation and coordination of the interfaces and cooperation with the relevant departments of the industrial estate partners in the event of a hazard, e.g. central environmental protection or central medical centre, as well as with the decentralised departments and responsible individuals at individual operators, e.g. major-accidents or immission control officers, occupational safety departments, radiation protection representatives etc.

5.4 Importance of private site regulations (under private law)

5.4.1 The problem

Particularly given that certain aspects of the fire protection and assistance legislation of the Federal States (Länder) are inadequately regulated, cooperation between different operators, as well as between industrial estate operators and industrial estate users, must additionally be regulated by means of private agreements, particularly with regard to cooperation in the field of emergency management pursuant to sections 5.1 to 5.3.

5.4.2 Problem-solving approach

- Obligation of individual operators to participate and be involved in a uniform safety structure, with due regard for mutual information obligations. This may expediently be agreed within the framework of a site contract.
- The right of the safety teams to issue instructions in the event of an incident, the obligation of employees to observe uniform safety regulations, and the agreement of joint and uniform penalties for misconduct, should be contractually protected, and should ideally be recorded in joint rules and regulations for the industrial estate.
- The performance of a fire inspection by a site fire brigade – having been appointed / mandated by the supervisory authorities – likewise requires clear contractual regulation, particularly vis-à-vis the clear delimitation of responsibilities during the identification and subsequent rectification of deficiencies. From a liability viewpoint, in particular, the period between ascertaining a deficiency and its rectification should be clearly regulated, particularly if the site fire brigade, as per its mandate, is entitled to grant the operator a period of grace in which to rectify the deficiency before forwarding the report to the regulatory authorities.

When specifying suitable framework conditions, the competent supervisory authorities, e.g. regional government, competent public fire brigade and local regulatory authorities, building authorities etc., should be involved.

5.5 Position of the working party

The working party feels that the absence of an agreed emergency response system and integrated emergency management system covering the entire industrial estate will significantly restrict the efficiency of emergency response, particularly in large industrial estates. For this reason, the industrial estate partners are explicitly advised to agree on an emergency response and emergency management system, and to ensure that this is firmly established.

Public fire brigades are required to ensure the most uniform possible standards by imposing uniform, structured requirements on the individual operators. Generally speaking, the fire protection legislation of the Federal States (Länder) provides a suitable basis for this purpose. It is also worth stressing that public fire brigades should be prepared to offer dedicated support for industrial estates with establishments pursuant to the StörfallV (e.g. preparation of an emergency response, knowledge of the establishment, continuous drills with the establishments, support to operators when training employees of the establishment in the requisite behaviour in the event of an accident, more extensive involvement in fire prevention). If they have the support of a site fire brigade that is responsible for the entire industrial estate, or if a site fire brigade assumes emergency response duties in the industrial estate at its own responsibility, the aforementioned duties should be adequately distributed. The working party feels that the best practice in such cases is to transfer emergency response and emergency management responsibility to the industrial estate operator or infrastructure company. A site fire brigade with responsibility for the entire industrial estate is an ideal solution, not only for operational emergency response, but also with regard to the establishment and maintenance of an emergency management system that has been agreed with all operators. The fire protection legislation of all Federal States (Länder) should facilitate this type of competency regulation, which as a minimum requirement should be implemented in all large industrial estates with establishments required to maintain an own fire brigade.

6 Access regulations for protection from unauthorised intervention (*Security measures*)¹¹

6.1 The problem

Article 4, point 4 of the StörfallIV regulates the general obligation of operators to “protect the safety relevant parts of the establishment from interference by unauthorised persons”. Guide SFK-GS-38 provides more specific recommendations in this regard. Industrial estates are subject to particular protection requirements due to the large number of legally independent operators. This obligation pursuant to Article 4, no. 4 applies to all industrial estate partners who operate establishments falling within the scope of the Major Accidents Ordinance (StörfallIV). The partners may either meet this obligation independently of one another, or cooperate, particularly with regard to joint exterior security.

6.2 Problem-solving approach

Guide SFK-GS 38 states that industrial estates with security-relevant facilities in establishments pursuant to Article 3, para. 5a of the Federal Immission Control Act (BImSchG) in conjunction with Article 1 para. 1 and 2 of the Major Accidents Ordinance (StörfallIV) should be “uniformly monitored” (“closed industrial estate” with a shared site fence and protection). Experience in larger sites has shown that this helps to minimise the risk of unauthorised persons gaining access unnoticed. Where applicable, sensitive areas and corresponding protection targets should be identified during the course of a threat analysis.

The protection targets in relation to unauthorised access and unauthorised presence may be achieved in particular by means of the following:

- Enclosed site fence with adequate anti-intruder measures
- Protected site access points (by qualified security staff or automatic access control devices), reliable identification of individuals with access authorisation, presence logging
- Clear access regime for authorised individuals and access management for visitors/non-company members

¹¹ Led by J. Frank

- Identification, logging and documentation of visitors/non-company members and evidence of their whereabouts
- Documented instruction in the safety provisions or industrial estate regulations for visitors and non-company members.

The use of additional electronic protection components (video systems, detection etc.) should be investigated.

The security activities should be designed to allow security staff to respond to forced entry within an appropriate period of time.

The mechanical and/or electronic security elements should expediently be coordinated with the deployment of staff (e.g. site security) so as to ensure an appropriate level of presence and be able to respond promptly and effectively to anything out of the ordinary (e.g. penetration by unauthorised individuals).

All industrial estate partners – i.e. including operators falling outside the scope of the Major Accidents Ordinance – must be incorporated into the security regime of "closed" industrial estates, and the measures must be widely accepted. Any independent protection measures by individual operators should be coordinated with and complement the exterior security of the site as a whole.

As it is impossible for industrial estate (as in most sites, at least large ones), to comprehensively monitor the whereabouts of all visitors / non-company members, the option of additional protection from intervention by unauthorised persons, where necessary, should be investigated for security-relevant establishments. This is particularly true of "security-sensitive points" as defined by the Security Screening Act (Sicherheitsüberprüfungsgesetz, SÜG) and the Security Screening Ordinance (Sicherheitsüberprüfungsfeststellungsverordnung, SÜFV).

In industrial estates without a closed perimeter or controlled access to the entire estate ("**open industrial estate**"), the recommendations outlined in guide SFK-GS-38 apply to each individual operator.

In such cases, operators with security-relevant establishments or installations must design and implement all security measures as if they were at an isolated site.

Mutual coordination with all other parties, including operators and other tenants without security-relevant facilities within the meaning of the Security Screening Act, is recommended.

For both types of industrial estate, any changes to the framework conditions should be implemented in such a way that existing security measures are not rescinded until new security measures, adapted to the new framework conditions, have effectively entered into force.

Experience has shown that it is useful to prepare a graduated SECURITY PLAN that has been coordinated with all industrial estate partners, for example:

- Threat level 0 (no threat)
- Threat level 1 (general signs or activities which could indicate a potential threat to the establishment/company).
- Threat level 2 (signs and activities indicating a threat to/ attack on the establishment/company)
- Threat level 3 (Concrete signs and indications of a threat to or attack on the establishment/company)

Specific measures and action scenarios should be deduced and prepared for individual threat situations, and then implemented in the event of their occurrence. This includes definitions of competencies and guidelines on the implementation of information obligations. The comments on emergency management (chapter 5) shall apply analogously.

Measures to prevent interference by unauthorised individuals should be agreed early on with the competent supervisory and security authorities.

As part of the safety management system, the security measures are subject to review by both the operators themselves and the authorities. If the bulk of duties are assigned to the industrial estate operators and/or the infrastructure company, inspections by the authorities may concentrate on that particular company (cf. chapter 7).

6.3 Position of the working party

In line with guide SFK-GS 38, industrial estates with security-relevant (*vulnerable*) installations are advised to practise uniform monitoring (shared site fence and site security). If this option is not chosen, the security measures implemented by individual industrial estate partners at their own responsibility should be well-coordinated (cf. chapter 3).

7 Inspections in accordance with Article 16 of the Major Accidents Ordinance (StörfallIV) in the industrial estate¹²

7.1 Current situation

According to Article 16, paragraph (1) of the StörfallIV, the competent authority “*shall notwithstanding Article 13 establish an inspection system appropriate to the type of establishment concerned. The inspection system shall be sufficient for a planned and systematic examination of the systems being employed at the establishment, whether of a technical, organizational or managerial nature, so as to ensure in particular*

- *That the operator can demonstrate that he has taken appropriate measures, in connection with the various activities involved in the establishment, to prevent major accidents*
- *That the operator can demonstrate that he has provided appropriate means for limiting the consequences of major accidents, on site and off site.*
- *That the data and information contained in the safety report or any other report submitted adequately reflects the conditions in the establishment,*
- *That information has been supplied to the public pursuant to Article 11 para 1.*

Article 16, paragraph (2) of the Major Accidents Ordinance outlines the requirements for the inspection system. A programme of inspections must be established for all establishments pursuant to Article 3, paragraph (5a) of the Federal Immission Control Act. Establishments falling under the extended obligations of the Major Accidents Ordinance must undergo an on-site inspection at least every 12 months, unless the competent authority has prepared an inspection programme with different inspection intervals for that particular establishment based on a systematic evaluation of the risks associated with major accidents. Following every inspection, the competent authority must prepare a report; where necessary, the competent authority, together with the management of the establishment, should review the measures resulting

¹² Led by E. Moch

from each inspection within a reasonable period.

Compliance with the relevant obligations should therefore be reviewed for each individual establishment within the framework of an on-site inspection, and the result of the inspection should be documented in an inspection report for each establishment.

For single-user sites, the protection target of the Major Accidents Ordinance is achieved via one operator with overall responsibility. An inspection therefore examines the technical, organizational and management-specific systems of **one** operator.

7.2 The problem

The transition from a conventional single-user site to an industrial estate with several establishments necessitates inter-establishment regulations and agreements between the industrial estate partners, in order to effectively counteract the overall risk of a major accident – particularly due to the spatial proximity of establishments with particular hazard potential, the possibility of technical and/or organizational interdependencies, and the joint use of infrastructure facilities.

Above and beyond these regulations – which primarily concern information on possible risks, communications and cooperation in the event of an emergency – the allocation to third parties (such as infrastructure companies as central service-providers) of various tasks which are essential for meeting the obligations of the StörfallIV also necessitates inter-establishment agreements.

Therefore, the inspection of individual establishments above and beyond an examination of in-house regulations and procedures should also incorporate the corresponding site-specific inter-establishment regulations and agreements.

7.3 Problem-solving approaches

The contents of an inspection pursuant to Article 16 will not usually change following the transition from a single-user site to an industrial estate with a large number of operators. A “planned and systematic examination” by the authority should take particular care to ensure that the operator can provide evidence of adequate measures to prevent major accidents and limit their consequences.

In addition to the in-house regulations and measures, however, when inspecting establishments in industrial estates, inspections should also extend to the required inter-establishment regulations and agreements resulting from the specific framework conditions of the respective industrial estate, which are designed to ensure adequate consideration of safety-related interactions and to address overall hazards, and the implementation thereof.

When determining the inspection framework, for establishments in industrial estates, the aspects listed below should therefore be included as a minimum requirement:

7.3.1 Due consideration for safety-relevant interactions between establishments

The constellations of shared infrastructure facilities, transport structures and/or production interdependencies often found in industrial estates may lead to safety-relevant interactions between establishments. One such example is the joint supply of media/auxiliary materials, which has safety relevance for the establishments supplied. In such cases, the authorities should investigate

- Whether mechanisms have been specified and applied to identify safety-relevant interactions (e.g. risk/hazard analyses). In such cases, in particular, the operator should investigate the types of interactions or mutual influences that can arise other than the failures already taken into account in the risk/hazard analysis, of media / energy types (such as contamination/entrainment of substances)
- Whether the establishment to be inspected has taken appropriate measures to control the potential risks arising from such interactions.

If these measures include the need for information / communication between establishments, corresponding provisions should be contractually agreed and inspected by the authority.

7.3.2 Appropriate information and communication between “domino” establishments

If a possible “domino effect” has been ascertained, the authority must first investigate whether provisions exist for the establishment to be inspected

- To receive the necessary information from neighbouring “domino” establishments and
- To supply neighbouring “domino” establishments with information

so as to make allowance for the nature and extent of the overall hazard of a major accident (cf. chapter 3). These information and communication obligations should be contractually agreed between affected operators and inspected by the authorities.

For neighbouring installations not belonging to an establishment but which may nevertheless be affected by a hazard or may themselves be the cause of a hazard, inclusion in such exchanges of information represents an important precautionary measure for counteracting an overall hazard.

Additionally, it is necessary to investigate whether the (domino) establishment to be inspected has suitably adjusted its safety concept (*Major Accident Prevention Policy*) and safety management system, internal emergency plan and safety report based on the information received, in line with the overall level of hazard.

7.3.3 Consideration for the external contracting of services to third parties

Various activities such as maintenance, recurring inspections of certain work equipment etc. may be contracted out to third parties by the establishment to be inspected.

In such cases, there is a corresponding need for regulation with regard to the operator's order placement and handling procedures, which should be reviewed by the authorities. The regulations must cover the selection of a suitable and reliable contractor, together with controls to ensure that the contractor has carried out the work correctly and that the results are acceptable.

The service agreements concluded with contractors should also be inspected. Particular attention must be paid to the clear specification of the partners' obligations with regard to process safety, and the formulation of corresponding access rights and the authority to give instructions at the contracting establishment. This should also include checks to determine whether corresponding information obligations have been specified according to defined criteria.

If similar services are contracted out to the same contractor by several or all operators in the industrial estate, the authorities may limit their inspection work to the checking of similar facts in the industrial estate once only.

In such cases, the inspection programme should include

- An inspection of the contractual regulations and
- An inspection of the systems and procedures among service providers, whereby selected random checks may be carried out in the contracting establishments in order to ascertain whether the services have been performed in line with requirements. In such cases, the number of random samples may be significantly lower than in establishments that have not contracted out such services.

7.3.4 Correct specification and delimitation of individual establishments within the industrial estate

The constellations often found in industrial estates, whereby several operators are linked together e.g. via shared pipeline networks, necessitates an investigation into the precise specifications and delimitations of individual establishments. In particular, the authorities will need to investigate the specification of complete material control over individual facilities.

7.3.5 Due consideration for the overall risk in the emergency response planning of establishments in the industrial estate

Within the framework of inspections pursuant to Article 16 of the Major Accidents Ordinance, the authority must investigate whether the Ordinance's requirements governing emergency plans have been met by the establishment in question (cf. chapter 5).

If plans have been broken down into a "site plan" containing general regulations for all operators at a site, and individual "installation plans" containing detailed information for individual installations / units / buildings (which is both expedient and advisable), the authorities should also investigate whether the Ordinance's requirements have been met in full by the establishment in question by considering the sum total of existing emergency plans available. When examining the emergency plans, particular consideration should be given to a clear and comprehensive allocation of competencies for emergency response, and clear specification of the individuals authorised to give instructions in case of an incident.

It is also necessary to investigate whether the emergency plan for the establishment in question makes appropriate allowance for the nature and extent of the overall hazard of a major accident, and contains appropriate prevention measures. This means that the establishment's emergency plan should also give adequate consideration to potential hazards from other establishments.

As well as the identified "domino establishments", the obligation to consider an overall inter-establishment hazard must also concern all establishments in an industrial estate from which hazardous impacts on neighbouring establishments or installations may emanate (cf. also UBA-FB FKZ 299 48 325 "Industrieparks und Störfallrecht, Erarbeitung von Kriterien zur Regelung der Sicherheitsverantwortung bei Störfallbetrieben in Industrieparks" (Industrial Estates and Major-Accidents Law: Criteria for regulation of safety responsibilities with establishments under major-accidents law in industrial estates), margin note 558).

7.3.6 Adequate specification of security measures to prevent third-party intervention

In a "closed" industrial estate, it is necessary to investigate whether a uniform security concept for the entire industrial estate, similar to a factory, is sufficient for the establishment in question, or whether certain particularly vulnerable areas require additional protection (cf. chapter 6).

In this regard, the inspection programme should include

- An examination of the contractual regulations with the inter-establishment security team, and
- An examination of the systems and procedures for security measures.

In "open" industrial estates, the security concept of each individual establishment should be examined separately.

7.4 Position of the working party

The authorities should devise an inspection system which makes allowance for the particular situation of establishments in the industrial estate.

As well as verifying that individual operators in the industrial estate have met their obligations, it is also important to ascertain whether adequate consideration has been given to the overall risk of a major accident in the industrial estate.

The inspection system should be efficiently designed to avoid duplicate inspections at the same site.

8 Summarising recommendations

As a general rule, major-accidents law imposes the same requirements on the operators for safe operation of an industrial estate as for a conventional single-user site. However, since there is no longer one manager in sole charge of the site and responsibility for the overall risk is shared between individual operators, this must be compensated by means of clear, contractually protected regulations. Only in this way are individual operators able to effectively prevent potential charges of negligence. There is no need for any farther-reaching statutory regulations in this regard, with a few exceptions. The involvement of a capable infrastructure company is particularly well-suited for meeting the cooperation obligations of the industrial estate operators.

The working party has examined various aspects with relevance to application of the Major Accidents Ordinance (StörfallV) vis-à-vis their implementation in industrial estates. In addition to comments reflecting “best practice”, we have also given our views on a number of issues. These can be summarised as follows:

- It is not appropriate to afford neighbouring companies inside the industrial estate equal status with neighbours outside of the industrial estate, provided the industrial estate has a tenable, contractually regulated, “factory-like” joint emergency management system (including training and drills) (cf. chapter 2). We recommend legal clarification of the term “neighbourhood” within the context of immission control law.
- The interfaces between the industrial estate partners also necessitate intensive cooperation in order to control the overall risk to the site. To this end, the corresponding mechanisms (e.g. committees) must be in place, and where possible, contractually protected (cf. chapter 3). Communication with authorities and neighbours must also be agreed.
- Certain elements of safety management systems, which are defined in greater detail in chapter 4, are site-specific. The systems of the industrial estate partners should make allowance for this.
- Particularly in the case of industrial estates where several establishments are subject to the provisions of the StörfallV, a joint emergency response and emergency management system should be in place. In particular, this should also include a site fire brigade with responsibility for the entire industrial estate (cf. chapter 5). The corresponding fire and disaster protection legislation of the Federal

States (Länder) should facilitate this.

- In line with Guide SFK-GS 38, shared security arrangements (site fence and site security) are advisable for industrial estates with security-relevant (*vulnerable*) installations. If this option is not chosen, the security measures implemented by the individual industrial estate partners at their own responsibility should be well-coordinated (cf. chapter 6).
- The authorities should set up an inspection system which makes allowance for the specific situation in industrial estates. As well as verifying compliance with the obligations of the industrial estate partners, it is also important to ascertain whether adequate allowance has been made for the overall risk of a major accident in the industrial estate. The inspection system should avoid duplicate inspections, where there is no material justification for them (cf. chapter 7).

Anhang 1

Anpassung des Sicherheitsmanagementsystems nach Störfall-Verordnung von Betriebsbereichen an die Randbedingungen in einem Industriepark

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
1. Konzept zur Verhinderung von Störfällen Gesamtziele allgemeine Grundsätze des Vorgehens zur Begrenzung der Gefahren von Störfällen	§ 3 Allgemeine Betreiberpflichten § 4 Anforderungen zur Verhinderung von Störfällen § 5 Anforderungen zur Begrenzung von Störfällen § 6 Ergänzenden Anforderungen § 7 Anzeige § 8 Konzept zur Verhinderung von Störfällen unter Berücksichtigung der Grundsätze des Anhangs III • schriftliche Ausfertigung	Abstimmung auswirkungsbegrenzender Maßnahmen unter Berücksichtigung Gefährdungspotential der Nachbarn (§3(3) StörfallV) Ggf. gemeinsames Konzept der Betreiber für bereichsübergreifende Regelungen

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
2. Sicherheitsmanagementsystem (SMS) generelle Anforderungen	<p>§ 9 (1) Nr. 1</p> <p>Umsetzung des Konzeptes zur Verhinderung von Störfällen und Anwendung eines SMS gemäß Anhang III</p>	Abstimmung von Schutzmaßnahmen aufgrund von Gesamtgefahr (§6(2) Nr.1 StörfallV)
3 a Organisation und Personal Aufgaben und Verantwortungsbereiche	<p>§ 5 (2):</p> <p>Beauftragung einer Person oder Stelle, die für die Beratung der für die Gefahrenabwehr zuständigen Behörde und Einsatzkräfte verantwortlich ist und diese der Behörde benennen</p> <p>§ 12 (1) Nr. 1:</p> <p>Unterhaltung einer geschützten Kommunikationsverbindung zur Informationsweitergabe an Behörde (auf bes. Anordnung)</p> <p>§ 12 (1) Nr. 2:</p> <p>Beauftragung einer Person oder Stelle, die für die Begrenzung der Auswirkungen von Störfällen verantwortlich ist</p>	<p>Informations- und Kommunikationspflichten der Betreiber untereinander und Gefahrenabwehrorganisation festlegen</p> <p>Abstimmung erforderlich; ggf. Beauftragung eines Dritten</p> <p>Abstimmung erforderlich; ggf. Einrichtung einer zentralen Stelle für den gesamten Industriepark</p>

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
Ausbildungs- und Schulungsbedarf	§ 6 (1) Nr. 4: Schulung des Personals bzgl. der Inhalte der Bedienungs- und Sicherheitsanweisungen	nur unternehmensspezifisch
	§ 10 (3) Unterweisung der Beschäftigten über die für sie in den betrieblichen Alarm- und Gefahrenabwehrplänen für den Störfall enthaltenen Verhaltensregeln	nur unternehmensspezifisch
Einbeziehung der Beschäftigten	§ 10 (3) Vor der Erstellung hat der Betreiber die Beschäftigten des Betriebsbereiches über die vorgesehenen Inhalte zu unterrichten und hierzu anzuhören	nur unternehmensspezifisch
Einbeziehen der Subunternehmen	§ 6 (1) Nr. 4: Vorbeugen von Fehlverhalten – bei Einsatz von Fremdpersonal in der Anlage – durch geeignete Bedienungs- und Sicherheitsanweisungen	nur unternehmensspezifisch
	§ 10 (3): Unterweisung in Verhaltensregeln im Störfall bei Einsatz von Fremdpersonal in der Anlage	Abstimmung von Unterweisungsinhalten; ggf. zentrale Unterweisung in betriebs- / unternehmensübergreifende Sicherheitsvorkehrungen und Verhaltensregeln

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
<p>3 b Ermittlung und Bewertung der Gefahren von Störfällen</p> <p>Systematischer Verfahren zur Ermittlung von Gefahren von Störfällen bei bestimmungsgemäßem und nicht bestimmungsgemäßem Betrieb</p> <p>Abschätzen von Wahrscheinlichkeit und Schwere von Störfällen</p>	<p>§ 3 (2):</p> <p>Störfälle verhindern unter Berücksichtigung von betrieblichen und umgebungsbedingten Gefahrenquellen, sowie Eingriffe Dritter</p>	<p>Informationspflichten der Betreiber über Gefahren- und Gefährdungspotentiale; Ermittlung der Gesamtgefahr und Schutzmaßnahmen, Abstimmung zum Mindeststandard</p>
	<p>§ 3 (4):</p> <p>Beschaffenheit und Betrieb nach dem Stand der Sicherheitstechnik</p>	<p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p>
	<p>§ 4 Nr. 1:</p> <p>Maßnahmen zur Verhinderung von Bränden und Explosionen</p>	<p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p>
	<p>§ 4 Nr. 2:</p> <p>Ausrüstung des Betriebsbereiches mit ausreichenden Warn-, Alarm- und Sicherheitseinrichtungen</p>	<p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p>
	<p>§ 4 Nr. 3:</p> <p>Ausrüstung der Anlagen des Betriebsbereiches mit ausreichend zuverlässigen MSR-Einrichtungen</p>	<p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p>

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	§ 4 Nr. 4: Schutz der sicherheitsrelevanten Teile des Betriebsbereiches vor Eingriffen Unbefugter	Abstimmung zu bereichsübergreifenden Sicherungsmaßnahmen
	§ 5 (1), Nr. 2: Ausrüstung der Anlagen des Betriebsbereiches mit den erforderlichen sicherheitstechnischen Einrichtungen sowie Treffen technischer und organisatorischer Schutzworkehrungen	Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen
	§ 8 (1) Konzept zur Verhinderung von Störfällen	Ggf. gemeinsames Konzept der Betreiber für bereichsübergreifende Regelungen
	§ 9 Sicherheitsbericht entsprechend Anhang II Nr. IV	Abstimmung über bereichsübergreifenden Teil des Sicherheitsberichtes
	§ 10 Alarm- und Gefahrenabwehrpläne entsprechend Anhang IV Nr. 3 und 4 interne AGAP's Informationen für externe AGAP's bereitstellen	Abstimmung und Erstellung der AGAP's unter Berücksichtigung der Gesamtgefahr; ggf. Beauftragung eines Dritten

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
3 c Überwachung des Betriebes <ul style="list-style-type: none"> • Verfahren und Anweisungen für den sicheren Betrieb, Wartung, zeitlich begrenzte Abstellungen 	<p>§ 3(4): Beschaffenheit und Betrieb nach dem Stand der Sicherheitstechnik</p> <p>§ 6 (1) Nr. 1: Prüfung vor Errichtung und Betrieb der sicherheitsrelevanten Anlagenteile sowie ständige Überwachung und regelmäßige Wartung</p> <p>§ 6 (1) Nr. 2: Durchführung der Wartungs- und Reparaturarbeiten nach dem Stand der Technik</p>	nur unternehmensspezifisch
	<p>§ 6 (1) Nr. 4 Vorbeugen von Fehlverhalten durch geeignete Bedienungs- und Sicherheitsanweisungen</p>	nur unternehmensspezifisch
	<p>§ 6 (2) Führen von Lagerlisten</p>	nur unternehmensspezifisch
3 d Sichere Durchführung von Änderungen <ul style="list-style-type: none"> • Planung von Änderungen • Auslegung neuer Anlagen und Verfahren 	<p>§ 3 (2) Störfälle verhindern unter Berücksichtigung von betrieblichen und umgebungsbedingten Gefahrenquellen, sowie Eingriffe Dritter</p> <p>§ 3 (4) Beschaffenheit und Betrieb nach dem Stand der Sicherheitstechnik</p>	Mitteilung relevanter Änderungen an ggf. betroffene Betreiber,

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	<p>§ 4 Nr. 1: Maßnahmen zur Verhinderung von Bränden und Explosionen</p> <p>§ 4 Nr. 2: Ausrüstung des Betriebsbereiches mit ausreichenden Warn-, Alarm- und Sicherheitseinrichtungen</p> <p>§ 4 Nr. 3: Ausrüstung der Anlagen des Betriebsbereiches mit ausreichend zuverlässigen MSR-Einrichtungen</p> <p>§ 4 Nr. 4: Schutz der sicherheitsrelevanten Teile des Betriebsbereiches vor Eingriffen Unbefugter</p>	<p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p> <p>Abstimmung der Systeme</p> <p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p> <p>Abstimmung zu bereichsübergreifenden Sicherungsmaßnahmen</p>
	<p>§ 5 (1), Nr. 2: Ausrüstung der Anlagen des Betriebsbereiches mit den erforderlichen sicherheitstechnischen Einrichtungen sowie Treffen technischer und organisatorischer Schutzvorkehrungen</p>	<p>Berücksichtigung sicherheitsrelevanter Wechselwirkungen zwischen Betriebsbereichen</p>
	<p>§ 6 (1) Nr. 1: Prüfung von Errichtung und Betrieb der sicherheitsrelevanten Anlagenteile sowie ständige Überwachung und regelmäßige Wartung</p>	nur unternehmensspezifisch

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	§ 8 (3) Konzept zur Verhinderung von Störfällen aktualisieren	Ggf. andere Betreiber informieren und Abstimmung über bereichsübergreifende Regelungen
	§ 9 (5) Sicherheitsbericht aktualisieren	Abstimmung zu Änderungen des bereichsübergreifenden Teils des Sicherheitsberichtes
	§ 10 (4) Alarm- und Gefahrenabwehrpläne aktualisieren	Überprüfung der Gesamtgefahr und Anpassung der externen AGAP's
3 e Planung für Notfälle	§ 3 (3) Vorbeugende Maßnahmen, um Auswirkungen von Störfällen so gering wie möglich zu halten	Ermittlung Gesamtgefahr und ggf. Abstimmung über bereichsübergreifende Schutzmaßnahmen
• Ermittlung vorhersehbarer Notfälle	§ 5 (2): Beauftragung einer Person oder Stelle, die für die Begrenzung der Auswirkungen von Störfällen verantwortlich ist und diese der Behörde benennen	Abstimmung über Gefahrenabwehrorganisation; ggf. Beauftragung eines Dritten
	§ 6 (2): Bereithalten der Lagerlisten für die Gefahrenabwehr	Information der Nachbarn bzw. der zuständigen Stelle
	§ 8 Konzept zur Verhinderung von Störfällen, Gefahrenanalyse und getroffene	Abstimmung des bereichsübergreifenden Teils des Konzeptes

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	Sicherheitsmaßnahmen	
	§ 9 Sicherheitsbericht gemäß Anhang II Nr. V	Abstimmung des bereichsübergreifenden Teils des Sicherheitsberichtes
Erstellung, Erprobung und Überprüfung der Alarm- und Gefahrenabwehrpläne	§ 10 (1) Nr. 1: Aufstellung eines internen Alarm- und Gefahrenabwehrplanes § 10 (1) Nr. 2: Übermittlung erforderlicher Informationen an die zuständigen Behörden für die Erstellung externer Alarm- und Gefahrenabwehrpläne § 10 (3) Anhörung und regelmäßige Unterweisung der Beschäftigten über die für sie in den betrieblichen Alarm- und Gefahrenab- wehrplänen für den Störfall enthaltenen Verhaltensregeln	Berücksichtigung von Art und Ausmaß der Gesamtgefahr eines Störfalles sowie Festlegung entsprechender Maßnahmen Abstimmung mit anderen Betreibern; ggf. Benennung eines Dritten für die Information der Behörden nur unternehmensspezifisch
	§ 11 (1) Information der Personen, die von einem Störfall im Betriebsbereich betroffen werden können, über Sicherheitsmaßnahmen und richtiges Verhalten im Falle eines Störfalles	Informationspflichten der Betreiber über Gefahren- und Gefährdungspotentiale; Berücksichtigung von Art und Ausmaß der Gesamtgefahr eines Störfalles sowie Festlegung entsprechender Maßnahmen im Rahmen der Alarm- und Gefahrenabwehrplanung

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	§ 12 (1) Nr. 1: Unterhaltung einer geschützten Kommunikationsverbindung zur Informationsweitergabe an Behörde (auf bes. Anordnung)	Abstimmung der Betreiber untereinander und ggf. Benennung eines Dritten
3 f Überwachung der Leistungsfähigkeit des SMS <ul style="list-style-type: none">• ständige Bewertung der Erreichung der Ziele• Korrektur bei Nichteinreichung der Ziele• Meldung von Störfällen und Beinahe-störfällen (Versagen von Schutzmaßnahmen), inklusive Untersuchung und Folgemaßnahmen		Überprüfung der Einhaltung bereichsübergreifender Regelungen und Ziele durch die Gesamtheit der Betreiber Erfahrungsaustausch, Analyse und Auswertung von Störfällen / Störungen mit Domino-Effekt
	§ 9 (5) Sicherheitsbericht überprüfen und ggf. aktualisieren	Information der anderen Betreiber und ggf. bereichsübergreifenden Teil des SB aktualisieren
	§ 10 (4) Alarm- und Gefahrenabwehrpläne aktualisieren	Information der anderen Betreiber und ggf. AGAP's aktualisieren
	§ 11 (2) Informationen über Sicherheitsmaßnahmen	Information der anderen Betreiber und ggf. bereichsübergreifende

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	überprüfen und ggf. aktualisieren	Regelungen aktualisieren
3 g Systematische Überprüfung und Bewertung Bewertung der Wirksamkeit und An- gemessenheit des SMS Aktualisierung des SMS Dokumentation durch Leitung des Be- triebsbereiches		Bewertung der bereichsübergreifenden Regelungen durch die Gesamtheit der Betreiber (Standortgremium) und ggf. Aktualisierung
	§ 8 (3) Konzept zur Verhinderung von Störfällen aktualisieren	Mitteilung relevanter Inhalte an ggf. betroffene Betreiber; Abstimmung über bereichsübergreifende Regelungen
	§ 9 (5) Sicherheitsbericht aktualisieren	Mitteilung relevanter Inhalte an ggf. betroffene Betreiber; Abstimmung über bereichsübergreifenden Teil des Sicherheitsberichtes
	§ 6 (1) Nr. 4: Nachweis der Schulung des Personals bzgl. der Inhalte der Bedienungs- und Sicher- heitsanweisungen	nur unternehmensspezifisch
	§ 10 (3) Nachweis der Unterweisung in Verhaltens- regeln im Störfall	Abstimmung der Dokumentation des Nachweises zentral durchgeföhrter Unterweisungen

Anforderungen des Anhangs III der StörfallV 04/2000	Zuordnung zu den Einzelanforderungen aus StörfallV 04/2000	unternehmensspezifisch / standortspezifisch / Koordinierungsbedarf
	<p>§ 12 (2) Nr. 2: Dokumentation der Überwachung und regelmäßigen Wartung der Anlage</p> <p>§ 12 (2) Nr. 4: Dokumentation der Funktionsprüfungen der Warn-, Alarm- und Sicherheitseinrichtungen</p> <p>§ 12 (2) Nr. 3: Dokumentation der sicherheitstechnisch bedeutsamen Wartungs- und Reparaturarbeiten</p>	Bei gleichartigen Fremdvergabe von Dienstleistungen durch mehrere oder alle Betreiber im Industriepark Abstimmung von Dokumentationsform und -inhalt

Anlage 1

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Herr MinRat Friedrich

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