

Note:

This is a translation of the ESK document entitled
“Anhang 2 der Empfehlung der Entsorgungskommission vom 01.03.2018:
Informationswürdige Ereignisse, die keine oder sehr geringe sicherheitstechnische Bedeutung haben, aber relevante
Betriebs Erfahrungen unterhalb der Meldeschwelle darstellen und einem systematischen Informationsaustausch
unterliegen sollten”

In case of discrepancies between the English translation and the German original, the original shall prevail.



Annex 2 to the recommendation of the Nuclear Waste Management Commission of 1 March 2018:

Events worth of informing about with no or very low safety significance but representing relevant operational experience below the reporting threshold and which should be subject to a systematic exchange of information

Note:

Annex 2 was subsequently adopted at the 65th meeting of the Nuclear Waste Management Commission on 19 April 2018.

Occurrences that have no or very low safety significance may involve experience relevant for operation. These occurrences are not subject to the obligation of reporting according to concrete criteria as specified in Annex 1. However, from the ESK's point of view, the evaluation of such occurrences is quite supportive for the undisturbed handling of radioactive waste during conditioning and storage and serves to maintain the safety culture.

For this purpose, procedures are suitable that ensure the exchange of experience (e.g. on the basis of operating reports) between the operators at appropriate intervals in accordance with the ESK guidelines for the storage of radioactive waste with negligible heat generation.

Examples of such occurrences are listed below for the different areas of handling of radioactive waste from waste generation to storage.

Area of waste generation and waste collection:

- Errors in the collection and sorting of solid waste:
This includes all deviations from specifications, e.g. sorting instructions, with negative effects on product quality.
- Errors in the collection and sorting of liquid waste:
Unintentional combination of liquid wastes, e.g. with chemical reactions then taking place.

Area of *conditioning*:

- Non-compliance with the boundary conditions of the specification:
e.g. too high rubber content during compaction, deviation from drying criteria, errors in the clearance procedure without completed clearance (e.g. during decision measurement).
- Deviation from the process qualification:
Deviation from approved work and inspection schedules and subordinate specification documents.
- Unexpected chemical reactions.

Area of *determination of product properties and documentation*:

- Deviations in the documentation of data and information, such as:
content, mass, other waste properties, dose rate or activity inventory which have resulted in the context of deliveries to a storage facility and, if applicable, subsequent documentation reviews.
- Differences between planned and achieved product properties (e.g. residual moisture, dimensional stability, composition) or from internal regulations (see also Area of *storage and conditioning*).

Area of *storage equipment*:

- Single failures in connection with transport and handling equipment which could be of fundamental importance.
- Fire:
Local small fires in connection with modification or maintenance work for which precautionary fire protection measures have been taken and which were successful in firefighting.

Area of *internal transport and handling*:

- Container crash also without potential for release:
Crash of a package requiring repair of the package.
- Container damage:
Damage requiring repair (see also Area of *storage*).
- Crash of moving loads e.g. on containers also without potential for release from the package with damage requiring repair.

Area of *storage*:

- Findings on packages:

Outwardly recognisable findings

Outwardly recognisable findings are deviations visible to the naked eye without optical magnification. For further investigation, further aids (e.g. magnifying glass, microscope, camera) are appropriate.

Paint damage

- Scratches down to the base material.
- Flaking of the coating system which may result from corrosion processes inside the package or from inadequate repair coating and can also reach down to the base material.

Mechanical damage:

- Deformations on packages which impair handling and stackability.
- Lid bulging due to internal pressure, which may result e.g. from gas formation due to digestion, fermentation or corrosion processes in the waste products or from mechanical expansion of the waste products.
- Holes, cracks in the container.
- Loss of mechanical integrity without release from packages. This means the sum of damages is so high that safe handling of the packages is no longer possible without further measures.

Findings not recognisable from the outside

- Individual deviations from the documentation, e.g. in the case of information on content, mass, dose rate or activity inventory which have resulted, for example, in the context of deliveries to a storage facility and, if applicable, in a subsequent documentation review (see also Area of *determination of product properties and documentation*).