

# Terms of delivery and acceptance of waste materials for disposal in the class IV waste disposal site ("UTD") of Glückauf Sondershausen Entwicklungs- und Sicherungsgesellschaft mbH ("GSES") in Sondershausen

Valid as from: June 2017

## 1. Properties of the Waste Materials

Waste materials with properties listed below are excluded from underground disposal in the UTD:

- Waste materials that are explosion-prone, highly or easily inflammable, or self-combustible
- Waste materials that, in the deposition areas, either by reaction with each other or with the salt rock:
  - increase their volume
  - form self-igniting, toxic or explosive substances or gases
  - cause other dangerous reactions
- Waste materials emitting gases or generating toxic substances
- Waste materials that cause significant odour nuisance or have a pungent odour
- Waste materials containing infectious wastes, body parts or organs, or contain or give rise to pathogenic organisms that cause communicable diseases
- Waste materials that are radioactive
- Waste materials that are liquid, contain free liquid or possibly release free liquids after long periods of storage or through shocks
- Waste materials with a caloric value > 6,000 kJ/kg (exceptions possible)
- Waste materials with a temperature > 50°C

## 2. Declaration Analysis

A representative sample of the waste material shall be subject to the following scope of examination by a suitable testing institute, and submitted as a declaration analysis:

- Sample taking report
- Toxicity, carcinogenicity, skin resorption
- Gas generation potential (H<sub>2</sub> resp. toxic gases as HCN, nitrogen oxide, SO<sub>2</sub>, PH<sub>3</sub>, AsH<sub>3</sub>, SbH<sub>3</sub>) with acids, bases and water
- Compatibility with other substances
- Exothermic behavior, TOC
- Exclusion criteria as stated in section 7 (2) of the waste disposal site regulations
- Quantitative content of hazardous substances
- Caloric value

Upon request, this analysis can be commissioned in addition to the mine expertise from K-UTEC via GSES.

## 3. Authorisation Procedure

The sales department of GSES is responsible for the authorisation procedure. Producers and owners of waste materials shall submit directly to GSES the EN/VN forms and notification documentation, declaration analyses, safety data sheets, material data and sample taking reports required under the verification regulations and movement of waste regulations. Specific regulations in the country of origin, e.g. exporting restrictions, have to be adhered to. The sales department of GSES will be happy to clarify questions concerning procedure, transport and packaging. As a matter of principle, only those waste materials for which there is a positive declaration of acceptance and a signed disposal contract can be disposed within the UTD.

## 4. Packaging

Waste materials must be delivered packaged. The type of packaging (steel sheet drums, steel sheet containers, big bags) shall be appropriate for the properties of the waste materials, and is bindingly defined within the framework of the authorisation procedure. Only new and unused types of packaging will be accepted. Pallets will be lost and not be re-used.

Waste materials with pH values of  $\leq 2$  and  $\geq 12$  must be delivered in a suitable corrosion-resistant inner packaging to protect steel sheet drums or containers.

Waste materials that might release liquids must be delivered in steel sheet drums or containers, unless the material resists a load of  $7.5 \text{ N/cm}^2$  without releasing liquids.

Waste packages must be marked in accordance with the regulations to label goods, for example the hazardous substances regulations, TRGS 201 and the hazardous goods regulations.

The packaging must be clean, dry and in a structurally safe condition.

The permissible gross weight of the individual packages must not be exceeded.

### 4.1 Big Bag

Big bags must always be delivered on pallets maximum  $1,200 \times 1,200 \text{ mm}$ .

The maximum dimensions of big bags are  $1,100 \times 1,100 \times 1,200 \text{ mm}$ . The big bag must not overhang the pallet. The maximum approved weight of the big bag, as well as the Safe Working Load (SWL) with a Safety Factor (SF) of 5:1 must not be exceeded; in case of dangerous goods the SF is 6:1. The gross weight must not exceed 1,500 kg. The big bag must be approved by test certificate to be capable of being stacked four high.

The big bag design used must be suitable for the properties of the relevant waste materials and agreed in cooperation with GSES. Only antistatic, hard inflammable, mining-hygienic harmless and dust-proof (with PE-liner) big bags can be used (UN 13H4Y). Big bags must be used that have at least a sealed bottom, four handling loops at the top corners and appropriate labeling (certification of loading capacity and design).

The waste contained in the big bag must be chemically, physically and mechanically suitable for big bags and, in particular, must not contain any sharp-edged or lumpy objects.

The big bag must be tightly closed, if necessary, a cable string must be used.

### 4.2 Steel Sheet Drums

Steel sheet drums will only be accepted in the form of so-called drum packages. A drum package consists of four 200 liter steel sheet drums standing on a pallet. Pallets measuring max  $1,200 \times 1,200 \text{ mm}$  have to be used.

The individual drums have to be strapped together, and the drum package must be secured against slipping on the pallet by strapping (at least  $2 \times 25 \text{ mm}$  strip).

The steel sheet drums must be steel crimp lid drums and type-approved for use in the UTD (UN coding, BAM approval).

The steel sheet drums must be approved by test certificate to be capable of being stacked six high.

Drums with a sampling hole or bung hole in the lid (for gas measurement) and a locking-ring closure must be used. The locking-ring closure must face outwards to enable it to be opened for the purpose of taking samples on receipt.

### 4.3 Steel Sheet Containers

The gross weight of the container must comply with the relevant authorisation, but must not in any case exceed 1,500 kg.

The steel sheet containers must be approved by test certificate to be capable of being stacked six high.

The steel containers must have screwable lids or other inspection openings.

The steel containers must be type-approved and suitable for use in the UTD (UN coding, BAM approval number).

The maximum dimensions are  $1,900 \times 1,200 \times 1,100 \text{ mm}$ .

## 5. Delivery of the Waste Materials

If different waste materials are loaded on the same truck or wagon, it is necessary that the different materials are loaded clearly separated from each other.

### **Delivery by truck:**

Waste materials must always be delivered to the Receiving Inspection, Shaft V, Schachtstrasse 64 in 99706 Sondershausen. The responsible employee will then allocate the load to the transfer point.

The StVO (Road Traffic Regulations) apply on the works site and the maximum speed on the site is 10 km/h.

The carrier must guarantee that all packing units can be discharged without any additional work and expenses.

The load must be protected against weather impact.

### **Delivery by rail:**

Delivery by rail can only be made in sealed waste containers (drum, container, big bag) in closed wagons with appropriate transport securing devices.

### **Receival times:**

Deliveries will be accepted between 6:00 a.m. and 3:00 p.m. from Monday to Friday, but not on public holidays. Time slots for delivery must be agreed in writing with the dispatcher UTD (fax: 0049 (0) 3632 / 655 113 or by email: [dispo@gses.de](mailto:dispo@gses.de)).

For each delivery a time slot will be given. It is awarded one timeslot for each waste material. The time slot is 2 hours and shall allow for the whole unloading operation.

A receiving inspection will be carried out on all waste delivered. If this has a positive result, the waste will be assigned for unloading and subsequent transfer. In general, clearance takes up to 150 minutes, but may take longer depending on individual circumstances of the material and the packaging.

GSES shall be entitled to refuse to accept waste materials which do not correspond with the declaration or are packaged unsatisfactorily. If possible at all, GSES reserves the right to mitigate any shortcomings in respect of declaration and/or packaging in mutual agreement with the customer. The additional work and expenses will be charged to the customer (e.g. re-packaging in standard big bags 50.00€/big bag; new declaration 450.00€).

The accompanying documentation to be submitted depends on the type and origin of the waste (complete waste-accompanying documents as stated in the certification regulations, transfer notes, notification forms, kind and quantity of the packing units, and if applicable, accident report form and safety data sheet as stated in the legal regulations). The accompanying documentation must be completely filled in on delivery of the material. GSES shall be entitled to reject the delivery if the above-mentioned accompanying documentation is not submitted in full.

GSES shall not accept any liability for damage during unloading of a truck or wagon resulting from incorrectly loaded or slipped pallets, pallets which do not correspond with UTD terms or an additional load which has not been reported to the unloading personnel before unloading, unless caused by intentional or grossly negligent breach of duty by GSES, its legal representatives or its agents.

**Glückauf Sondershausen Entwicklungs- und Sicherungsgesellschaft mbH**