

Supplemental Acceptance Conditions for Underground Recovery Facilities (UTV) of the K+S Group

Last amended 11/2019



Waste Characteristics

- All wastes need to be pneumatically transportable.
- Wastes may not contain agglutinations, chunks, sharp-edged materials or the like.
- Wastes may not contain foreign materials, in particular metal parts.

Applies to silo and big-bag deliveries via big-bag evacuation facility only.

- Wastes may not outgas.

The following applies to explosive gasses:

UTV HW-Hattorf 12,5% UEG¹

UTV HW-Wintershall 10% UEG

UTV Zielitz 10% UEG

UTV UB (above-ground facility) 0% UEG

The following applies to toxic gasses:

≤ MAK / AGW² (NH₃, CO₂)

- Wastes may not be dust-explosive:

Theoretical aluminium content < 10%; determined for atomized, aluminium-containing wastes from determining gas development in strongly alkaline environment (caustic soda).

- At the time of silo-delivery waste temperature may not exceed 80°C.

Packed Wastes

- Packaging in compliance with the requirements of the proof of disposal / notification.
- Double-sided labeling of big-bags with K+S code.
- Reactions within the packaging units are not permissible.

- Maximum waste temperature for big-bag delivery:

UTV HW-Hattorf 50°C

UTV HW-Wintershall 70°C

UTV Bernburg 45°C

Lorry Drivers

- During unloading of the silo-truck, drivers need to be present in the vicinity of the silo outlet, in order to monitor the unloading process and to immediately react to problems.
- Drivers need to have basic command of German language.

- Personal protective gear i.e. safety shoes, helmet, goggles, mask, gloves need to be kept in the vehicle, and should be worn on request. UTV Unterbreizbach: Personal protective gear needs to be worn (do not wait for request).

Vehicles

- Trucks and containers need to be in good technical condition.
- All containers or silos used need to be outfitted with size C or B (extraction size A) air connection Storz-couplings for unloading; coupling connections need to be equipped with clamps for securing.
- Legally prescribed inspections of containers need to be conducted as required, and need to be marked on nameplate.

- Silo-containers or silos may not be equipped with gauge glasses in conveyance equipment.
- Silo tanks need to be equipped for an operating pressure of at least 2 bar (overpressure); the admissible operating pressure needs to be recorded on the nameplate.
- The pressure relief valve need to be adjusted to the maximum operating pressure, and needs to be fully functional.

- UTV HW-Wintershall: ONLY preparations EXEMPT from labeling requirements may be delivered.
- UTV-HW-Hattorf: At the time of tank truck delivery liquid waste temperature may not exceed 50°C.

- UTV Unterbreizbach: Unloading is to be stopped at wind speeds exceeding 7.

¹ UEG: Untere Explosionsgrenze = LEL: Lower Explosive Limit

² maximum concentrations at the workplace / workplace limit values