

Guidance for handling explosive waste

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Basic principles

- We should strive to minimize the explosive waste, and the waste ALWAYS needs to be sorted out.
- There is NOT ALLOWED TO BE any other materials/substances among the explosive waste.
- All explosive waste should primarily be disposed in the blasting field.
- When returning explosive waste, you should always first contact your Key account manager.

Handling explosives

1. Sorting
2. Choosing transport package
3. Package marks and seals in order
4. Documents correctly completed

The packer, sender and transporters responsibilities.

Background: To prevent the risk for a major accident.

If any uncertainties, ask before you act!

Checklist

- Contact your Key account manager.
- Fill in Forcitr's return form.
- The transport package, its marks, seals and the delivery documents all need to be legal (according to the ADR-law).
- The packer/sender have full responsibility according to the ADR-law.
- The driver is not allowed to transport any unclear or unsealed freights.

Return form for explosives



THE REASON FOR PRODUCT RETURN	
DESTRUCTION (the product is expired or it is waste)	<input type="checkbox"/>
Additional information:	
RETURNED PRODUCT (wrong order or changes in customer's needs)	<input type="checkbox"/>
Additional information:	
NOTICE OF DEFECT (suspicion about the product being defective)	<input type="checkbox"/>
Additional information:	
OTHER REASON:	
RETURNED PRODUCT	
PRODUCT AND DIMENSIONS:	
AMOUNT (kg/pcs):	
TRANSPORT CLASSIFICATION (1.1 B, 1.1 D, 1.4 B, 1.4 S, 5.1):	
RETURNED TO OFFICE: <input type="checkbox"/> Hanko <input type="checkbox"/> Kemi <input type="checkbox"/> Kotka <input type="checkbox"/> Kuopio <input type="checkbox"/> Lapua <input type="checkbox"/> Laivakangas <input type="checkbox"/> Naantali <input type="checkbox"/> Nokia <input type="checkbox"/> Oriskorpi <input type="checkbox"/> Talvivaara <input type="checkbox"/> Urjala <input type="checkbox"/> Veikkola <input type="checkbox"/> Vihtavuori	
INFORMATION ABOUT THE RETURNER / PACKER	
RETURNER (company):	
THE NAME AND PHONE NUMBER OF THE PACKER:	
ADDRESS (site):	
CONTACT PERSON AT FORCIT: (with whom the product return has been agreed)	
DATE, RECIEVER'S SIGNATURE AND NAME IN BLOCK LETTERS (Forciti fills out)	
DATE: / / 20	

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Checklist for returns:

- Always use original or legitimate packages (markings regarding transport and storage shall be visible).
- THERE SHOULD ALWAYS BE A CONSIGNMENT NOTE ON ALL TRANSPORTS, and also a transfer document if needed.
- Agree upon the return with your Key account manager
(*firstname.lastname@forcit.fi*)

The return form for products can be printed out directly from Forciti's website:

<http://www.forcit.fi/en/archives/tuotekategoria/explosives>



BULK emulsion explosives

The waste is sorted out in the following way:

CLEAN	Emulsion explosive transport class 1.1D UN 0241	Emulsion matrix Transport class 5.1 UN 3375 (610/810 matrix)	Gassing agent Transport class 5.1 UN 3219
CONTAMINATED	Emulsion explosive cannot be transported at all	Contaminated emulsion matrix is always handled separately. Contact your Key account manager.	Gassing agent Transport class 5.1 UN 3219

Sensitized Kemiitti 510/610/810 can be transported on the highway.



Other emulsion waste

Sensitized, therefore explosive, or not sensitized

- Other emulsion waste
 - Clothes, gloves etc. contaminated with **sensitized emulsion explosives and unsensitized matrix** is primarily to be burned in the blasting field.
 - If demolition in the field is impossible, abovementioned waste is to be collected into UN-accepted barrels with a plastic bag inside. The barrels need to be properly marked (see page 6).
 - It is not allowed to pack anything else into the barrel.
 - The transfer documents for matrix waste needs to be filled out.

BULK emulsion explosives

Tests and other process waste

- Sensitized explosive samples is primarily disposed in the drillholes in the blasting field.
- If demolition in the field is impossible, abovementioned waste is to be collected into UN-accepted barrels with plastic bag inside. The barrels need to be properly marked (see page 6).
- For repairing-, installation- or test procedures of the charge devices, contact the Site Manager.

BULK emulsion explosives

Gassing agent

- It is not allowed to collect any waste in IBC-packages meant for gassing agent, not even when they are empty. The packages must be returned to Vihtavuori.
- Contaminated (or otherwise unusable) gassing agent must be kept apart and be sent properly as waste to a waste destruction company.
- Transportation of cloths etc. contaminated with gassing agent is prohibited. The waste is to be burned at the working site. If you have any problems, contact the Site Manager.

Charging pipes

- Pipes that are congested or otherwise contains explosive waste are disposed in the drillholes during other detonation.
- If you are certain that all the explosives are removed from the pipe, the pipe can be disposed as normal waste.
- If you have any problems, contact the Site Manager.

BULK emulsion explosives

Transport packages

- Clean, unsensitized emulsion waste is to be transported in a **UN-type accepted IBC-package or barrel, that has been properly sealed by the packer.**
 - you can order seals from Vihtavuori
- The IBC-package can be used for 2 years starting from the control of the implementation.
- The IBC-package needs to be appropriate for transportation:
 - The lid, valve and valve cap needs to be in place and the metal frame in order
 - The package needs to be clean
 - The marks need to be ADR-qualified
- Matrix waste can only be put into Forcitr's IBC-package meant for waste.

Cartridges and pipes

- Products that are intact and returned need to be divided separately and sent to Vihtavuori or Hanko
 - Vihtavuori: Anfo, Kemix A and Kemix-pipecharges
 - Hanko: Fordyn, Redex, Forprime, K-, KK- and F-pipecharges, detonating cord
- Intact Kemix-cartridges and –pipecharges need to be packed in their own packages.
- The initial charges and detonators must absolutely be removed from the products! **The packer needs to be sure that there are no detonators and/or initial charges within the returned products.**
- Broken cartridges/pipes can not be packed for transportation.

ANFO

- Anfo is primarily disposed at the blasting field by burning or by blasting.
- Intact bags can be sent as they are, **defective bags or unpacked Anfo is not allowed to be transported on the road.**
- The waste is transported to Vihtavuori for disposal.
- There is not allowed to be any other explosives, nor any material or items within the waste.

Detonating cord

- Detonating cord can not be put together with other waste, it always needs to be handled separately!
- Primarily dispose of the detonating cord in drill holes along with other blasting.
 - NOTE! Please make sure that the explosive charge in the drill hole is big enough to dispose of the detonating cord!
- NOTE! When you handle detonating cord, please note that it may contain detonate sensitive pentrit, which always needs to be disposed in the blasting field. If needed, the edges of the cord can be taped.

Detonators

- Detonators are primarily to be disposed in drillholes, taped to a cartridge (NOT inside the cartridge).
- Bigger amounts of disposable detonators need to be sent to Vihtavuori in their original packages. The disposal always needs to be agreed upon separately. Please contact your Key account manager.

Explosive packages

- Explosive packages (cartons, bags etc.) are disposed mainly by burning them in the blasting field.
- The explosive packages can also be brought to a recycling station with the explosive marks properly overlined. More information is given by the recycling stations.
- Package material (cartons, bags etc.) that is contaminated with explosives is sorted so that it can be packed on the same pallet as similar explosives.
- Contaminated cartons of detonating cord has to be burned separately (contains penitrit).

NOTE!

- The sender and the driver needs to sign the consignment note before the transportation (signature, clarification of signature and date).
- Forcitr can, for an hourly rate, take care of the sorting and packing of explosives waste for the customer.
- Packages that meet the transportation requirements can be ordered from Forcitr.
- If you have any questions concerning waste disposal, please contact your Key account manager.

Contact persons

For more information about handling waste: Matti Vähäpassi tel. +358 500 219 118

Site Managers:

Jussi Saavalainen
Timo Halme
Jukka Aho
Tomi Palomäki
Jani Turtiainen

Technical information:

Ari Rahkonen
Tomi Kouvonen

Key account managers:

Janne Järvinen
Mari Halonen
Saila Savolainen

For ordering barrels and IBC-packages

tel. +358 207 440 553

Boxes for transports

Hanko tel. +358 207 440 400

Vihtavuori tel. +358 207 440 553

You can also order the packages at your nearest service station.

Sorting

Cartridges and pipes	Anfo	BULK- Emulsion explosives
Products separately Vri/Hanko	Loose	1.1D Explosives, CLEAN
Defective	In packages	1.1D Explosives, DIRTY
Detonators		1.1D Other explosive emulsion waste
Single detonators		5.1 Emulsion matrix, CLEAN
Big amounts of detonators		5.1 Packages with emulsion matrix (IBC). EMPTY, DIRTY
Detonating cord		
Intact rolls		5.1 Emulsion matrix, DIRTY
Packages for explosives		
Boxes, bags etc.		5.1 Other emulsion waste
5.1 Packages with gassing agent (IBC), UNWASHED		5.1 Gassing agent

**Red background: CAN NOT BE
TRANSPORTED!**