



NRBCe

A PARTICULAR CATEGORY OF HAZARDOUS WASTE

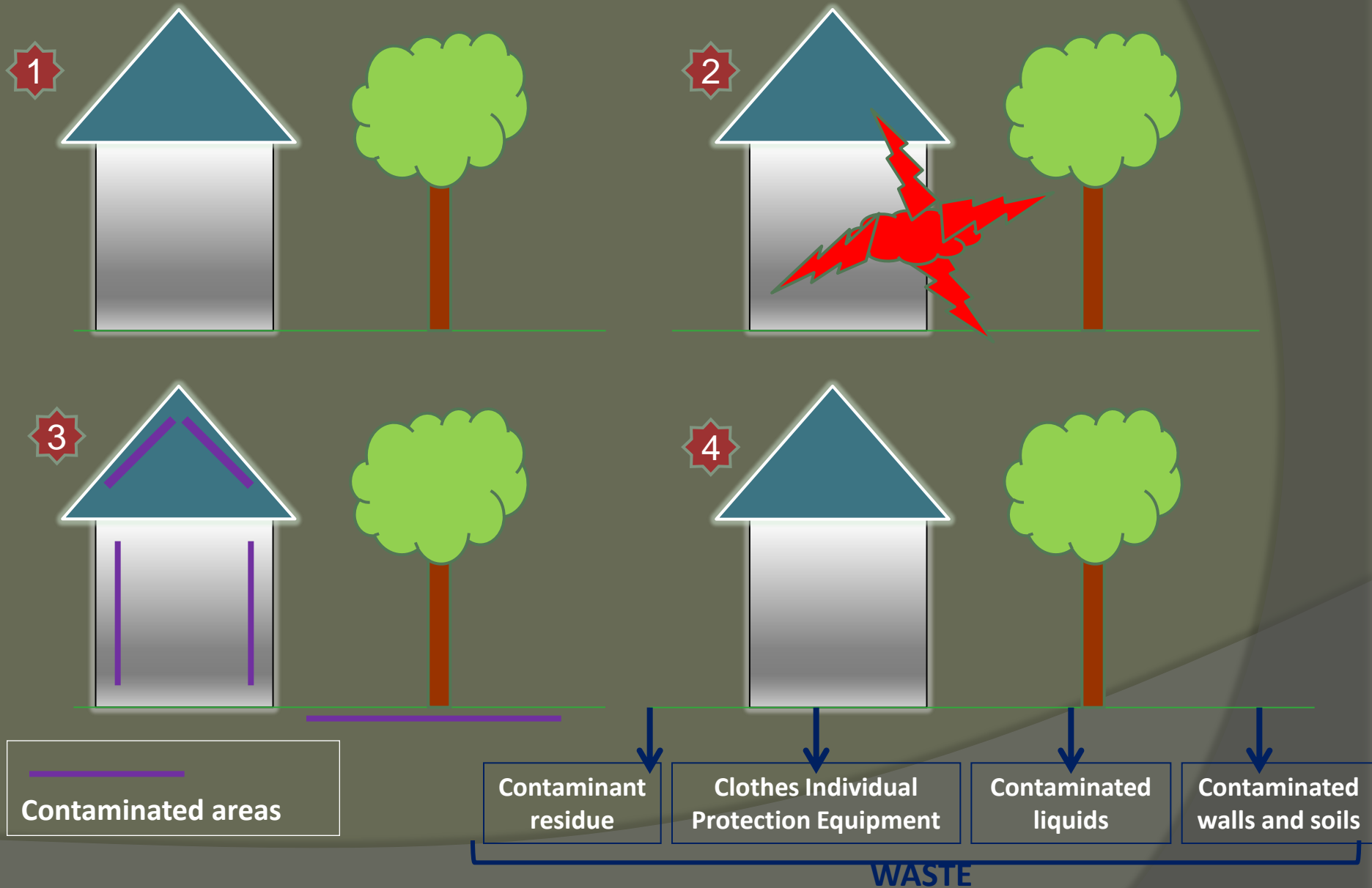
ISWA MUNICH

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Representing French Gie NBC

What are NRBCe waste ?





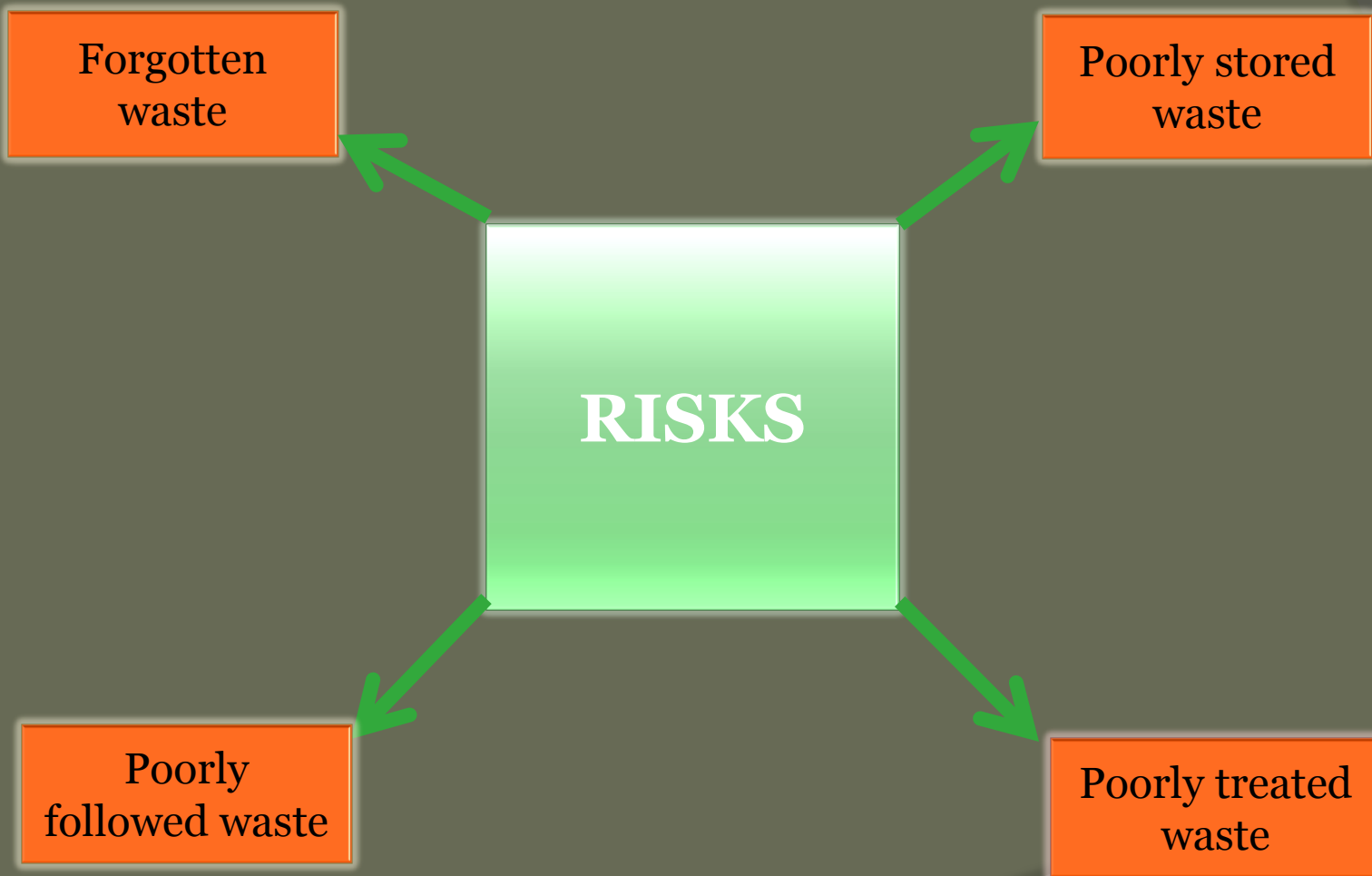
When are they generated ?

A typical example : There is a terrorist attack on a bus, the bus has been blasted.

Questions :

- ✓ **What to do with the carcass ?**
- ✓ **What explosive was used ?**
- ✓ **How to dress the intervening staff ?**
- ✓ **Who goes first into the carcass ?**
- ✓ **...**

What are the risks of a poor NRBCe waste management ?



Example of a poor waste management

A FORGOTTEN WASTE SINCE 1978



Amoco Cadiz case closed

02.08.2008

Article from *Le Parisien*

« **Thirty years after** the accident the French government wants to close the case by establishing the list of the sites where waste arising from the coast cleaning have been "dumped" »





Why is a NRBCe approach needed ?

1- Evolution of the THREATS

- ✓ Military attack
- ✓ Terrorism
- ✓ Industrial accident

2- Evolution of the nature of the agressions

- ✓ Nuclear
- ✓ Radiological
- ✓ Biological
- ✓ Chemical
- ✓ Explosive

3- Protection of the environment

- ✓ New requirements



What is the background ?

Need for multidisciplinary organization because of :

- ✓ **The variety of threats**
- ✓ **The variety of tasks and therefore the variety of staffs involved**
- ✓ **The variety of locations where action is needed**
- ✓ **The necessary coordination among staffs involved (police, army and firefighting forces, medical squads, administration...)**

→ The EU launched a call for tender in 2012 for the implementation of a NRBCe policy in Europe



What stands for NBC Gie ?

- **NBC** is the name of the French « NRBCe partner »
- **Gie** is the French name for an « Economic Association of Companies » with « Common Interests » (goods, systems and services in France and for exportation)



What is NBC Gie ?

- ✓ **NBC Gie was created in 1981**
- ✓ **NBC Gie represents today 85% of the French market and groups some 20 companies (Small and Medium Companies and Multinational Groups)**
- ✓ **Its goal is to :**
 - ❖ **pool the French know-how in the field of NRBCe protection**
 - ❖ **give an industrial answer to military and civil security needs against NRBCe agressions in France and in the world**
- ✓ **NBC Gie contributes to the answer given by our democracies for the safety of their populations, their patrimony and their territories**

NBC Gie's Areas of expertise



Equipments for detection, alarm, identification and control



Decontamination



Individual protection



Medical treatment

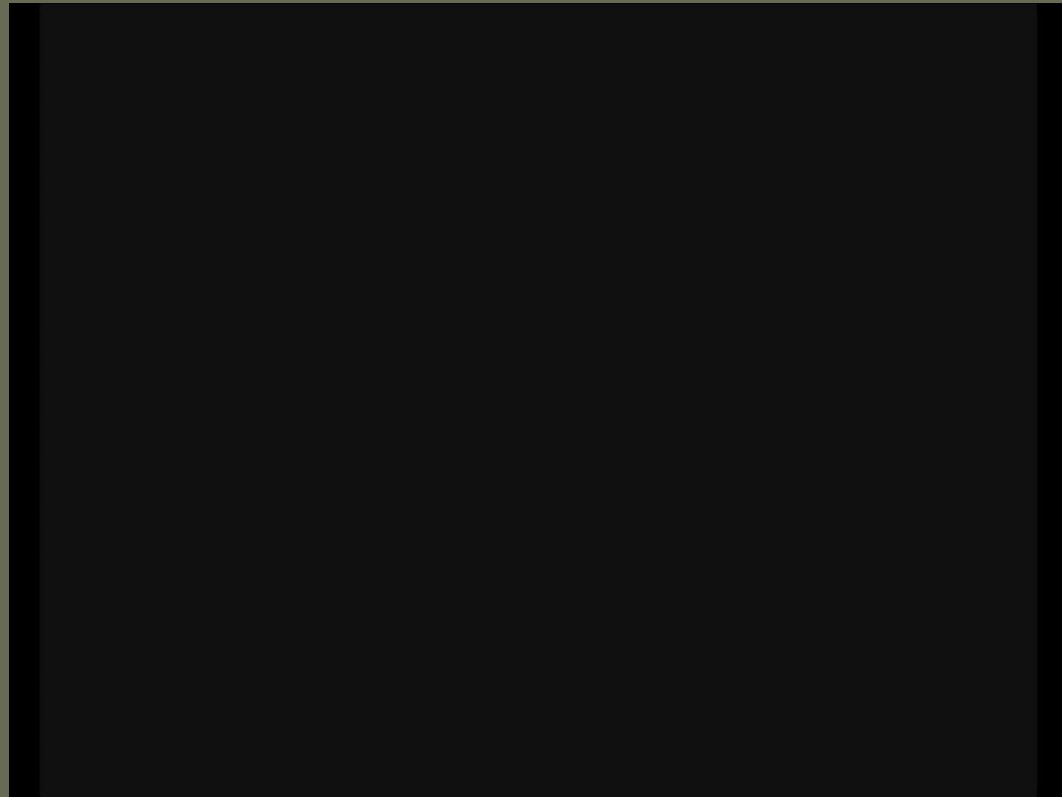


Collective protection



Traceability and proper management of toxic substances and hazardous materials

Video :
Terrorist attack simulation
involving NRBCe means
(Avignon - 2011)



What Approach for a proper management ?

- **Need for preparation of :**
 - **the crisis and**
 - **post crisis situations**



What approach for a proper management - prior crisis

- **The NBC Gie has decided to start a normalization process of every equipments, systems and services (training of specialists, technical requirements...) needed for NRBCe activities**
- **The goal is to have normative standards for equipments, systems and services, to achieve a better purchase policy**



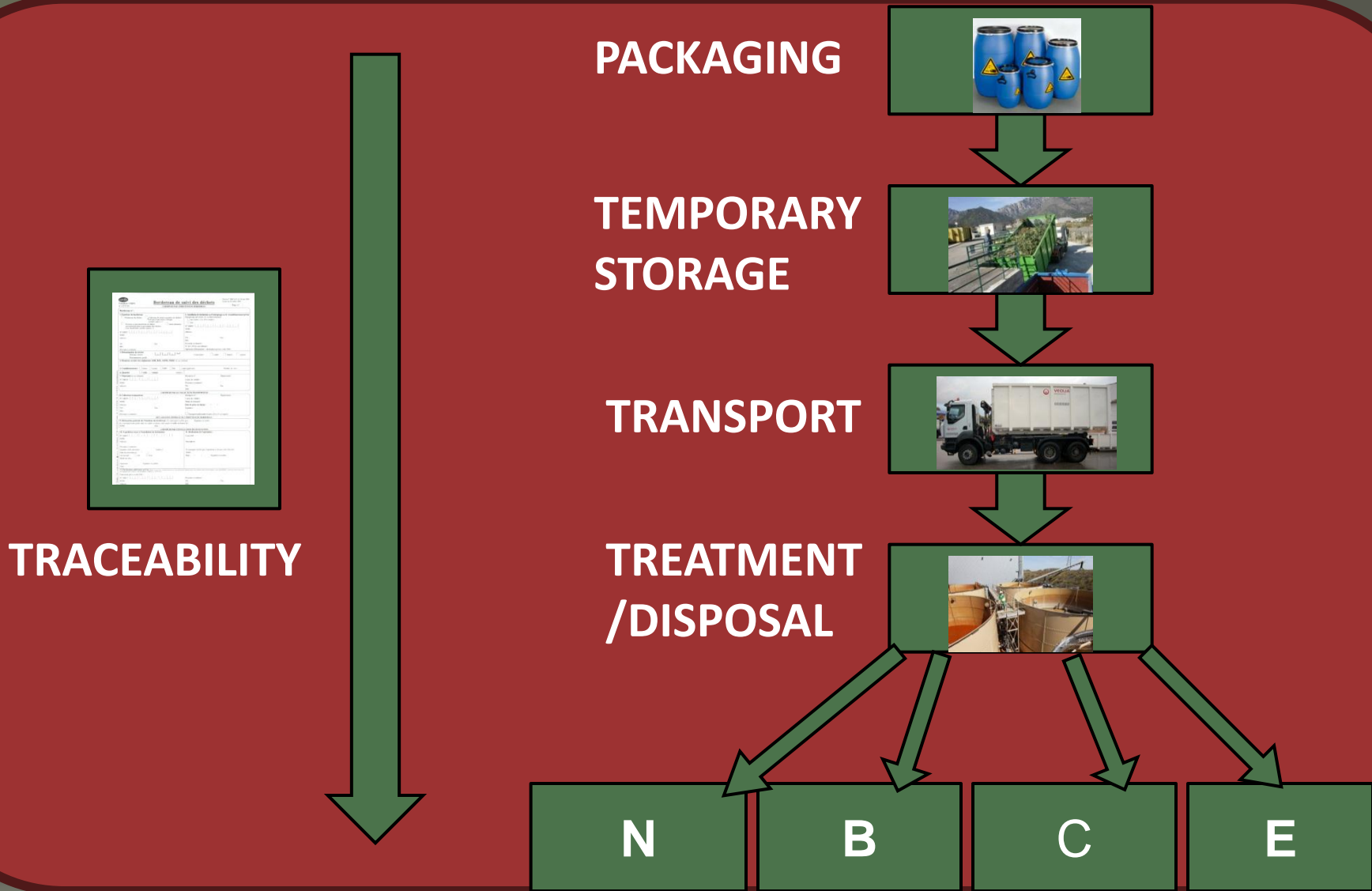
What Approach for a proper management - post crisis

The NBC Gie has reported systematic arising of situations where, after field operations are over, no provision exist to manage the remaining waste :

- ✓ Who discards ? Who has the intention to discard ?
- ✓ Did the fire force produce waste ?
- ✓ Who is responsible and “sign” for the transfer, storage disposal documents (and pay for it) ?
- ✓ Who endorse the responsibility for the treatment and or final disposal ?
- ✓ ...

→ NBC Gie has a clear methodology (see below)

A methodological process for comprehensive waste management : that's what is at stake for normalization





Conclusions and Recommendations

1 - Need for normalization / standardization of equipments for the safety of the persons intervening on crisis sites considered as the PRIORITY ACTION for NRBCe Partners (same technical requirements for the entire market)

2- Safe protection of the environment requires International and National Authorities to secure LEGAL AND FINANCIAL PROVISIONS FOR THE SAFE DISPOSAL OF THE REMAINING WASTE (i.e. comprehensive waste management) to prevent them to “disappear” or being unsafely handled