Emergency Response and investigation for Road Incidents involving Dangerous Goods

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1. Overview of road incidents
2. Emergency response system
3. Investigation Process and method
4. Rent work
• China is going through rapid industrialization, output and usage of petroleum and chemical products is very large. Gross output value of petroleum and chemical industry enterprises above designated size reached 12 trillion yuan.

• Due to the cross-regional distributions of enterprises in the supply chain, 95% of which need cross-regional transport.
According to the analysis made by the fire department on 100 dangerous goods incidents they dealt with in recent 5 years, 77% of incidents happened in the transport process, while 10% in the production process, 9% in the storage process, and 4% in the use, management and recycle process.
42 kinds of hazardous materials are involved in the above incident. Accordance with the number of accidents sorted from most to least, the first seven dangerous goods are:

- diesel/gasoline
- LNG/LPG
- Linquid chlorine
- Linquid ammoria
- Hydrochloronic
- Sulfurie acid
- Methanol.
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Emergency response basic principles

- Decrease death and injury, Reduce environmental hazards, Reduce property loss
- Quickly response, Response according to different level accidents
- Specialist handling, Organize standardized and orderly
- Different departments shall be responsible for their respective duties, Coordinated among departments
Carrier

Develop emergence response plan, and organize regular emergency drills

Necessary emergency equipment should be carried in the vehicles
Drivers and Supercargo shall take the training and get Employee Qualification certificate.

Take warning and safety measures immediately and report to the competent authority when accidents happened.
Emergency response process transport accident of Dangerous Goods by Road
Duties of competent authorities

SAWS
- Keep the record of ERP, coordination of communications with consignor, government to rescue

MPS (fire department)
- Taking the remedial actions for the protection of life, property and the environment. Control traffic of the site of an incident.

MOT
- Assist in disposal the accidents, organize the safe movement of people and relief supplies

MEP
- Environmental monitoring, damage control, Give disposal advice

MH
- Toxicity identification, Rescue people

Emergency response
Emergency response method

For example, emergency response of Guangzhou

Unified command of the emergency response work

On-site commander

Related Government Agencies

Specialists team

Emergency response team

Unified command on-site emergency response

Arrange related working according to commander

Provides professional advice and technical support

Emergency handling, including firefighters, third-part emergency response organization, carrier, etc.
Emergency response method

For example, emergency response of Guangzhou

1. Accident report
2. Response according to different accident level
3. Response handling
4. Accident information publish
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Based on: *Production safety incident reporting and investigation Disposal Regulation*

Duties:

1. Identify the process and cause of the accident, people casualties and direct economic losses;
2. Determined the nature of the accident and accident liability;
3. Make treatment comments for related responsible parties of the accident;
4. Summarize the lessons of the accident, preventive and corrective measures;
5. Submission accident investigation report.
• Extremely significant
  • More than 30 people death;
  • More than 100 people injures;
  • More than 100 million yuan in direct economic losses

• Very significant
  • 10-30 people death;
  • 50-100 people injures;
  • 50 million-100 million yuan in direct economic losses

• Significant
  • 3-10 people death;
  • 10-50 people injures;
  • 10 million-50 million yuan in direct economic losses

• General
  • Less than 3 people death;
  • Less than 10 people injures;
  • Less than 10 million yuan in direct economic losses
The people’s government at county level where accident happened is responsible for investigating the accident.

Investigation group set up relevant departments of the State Council, or the State Council authorized organizations investigate the accident.

- Extremely Significant Accident
- Very Significant Accident
- Significant Accident
- General Accident

The people’s government at provincial level where accident happened is responsible for investigating the accident.

The people’s government at district level where accident happened is responsible for investigating the accident.
Based on: Production safety incident reporting and investigation Disposal Regulation
Investigation Method

- Detection and Identification
- Survey on Site
- Simulation test
- Investigation and evidence collection
- Expert Demonstration
Based on: *Production safety incident reporting and investigation Disposal Regulation*
Accident Investigation Process and method in transport of dangerous goods by road

Accident Investigation Group should be submitted the accident investigation report in **60 days** from the date of the accident happened; In special circumstances, approved by the people's governments in charge of accident investigation, the group may be extended appropriately the time period submitted to the accident investigation report, but the extended time period can not be up to 60 days.
The accident investigation report includes:

- Overview of the accident happened company;
- The accident process and emergency response situations;
- People casualties and direct economic losses caused by the accident;
- The cause of the accident and the nature of the accident;
- Accident responsibility cognizance and treatment comments for related responsible parties of the accident;
- Accident prevention and corrective measures.
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1 - Translation of ERG
Founded Dangerous Goods Transportation Alliance of China
Thank you!