

# Group Exercise on Hazard Identification and Risk Assessment: Responsible Production in Practice



- Examples: What can go wrong when delivering /picking-up chemicals
- Responsible Production risk assessment in practice: manufacturer of steel tubes
  - Group Exercise: You assess the risk



# Accidents at SME Galvanization Plants in Germany: 2014

- Accident when transferring HCl (37%) to storage tank: 37 people injured
- Accident when transferring Nitric Acid to transport vessel: evacuation, several injuries
- Causes: not following SOP's and adhering to SDS information



1. IDENTIFY RESPONSIBLE PRODUCTION ISSUES

2. GET THE RIGHT PEOPLE INVOLVED

3. DEVELOP YOUR PLAN

4. PUT PLAN INTO PRACTICE, TRAIN AND COMMUNICATE

5. EVALUATE HOW WELL YOU DID



# Tools for the first step of Responsible Production



## Focus of this session

Tool 1.1  
Prepare  
process flow  
chart

Tool 1.2  
Chemical  
inventory and  
hazard  
classification

Tool 1.3  
Identify risks

Tool 1.4  
Hazard  
hotspots map

Tool 1.5  
Legal register

Tool 1.6  
Hazard  
classification  
(control  
banding)



# Tool 1.1 Prepare a process flow diagram

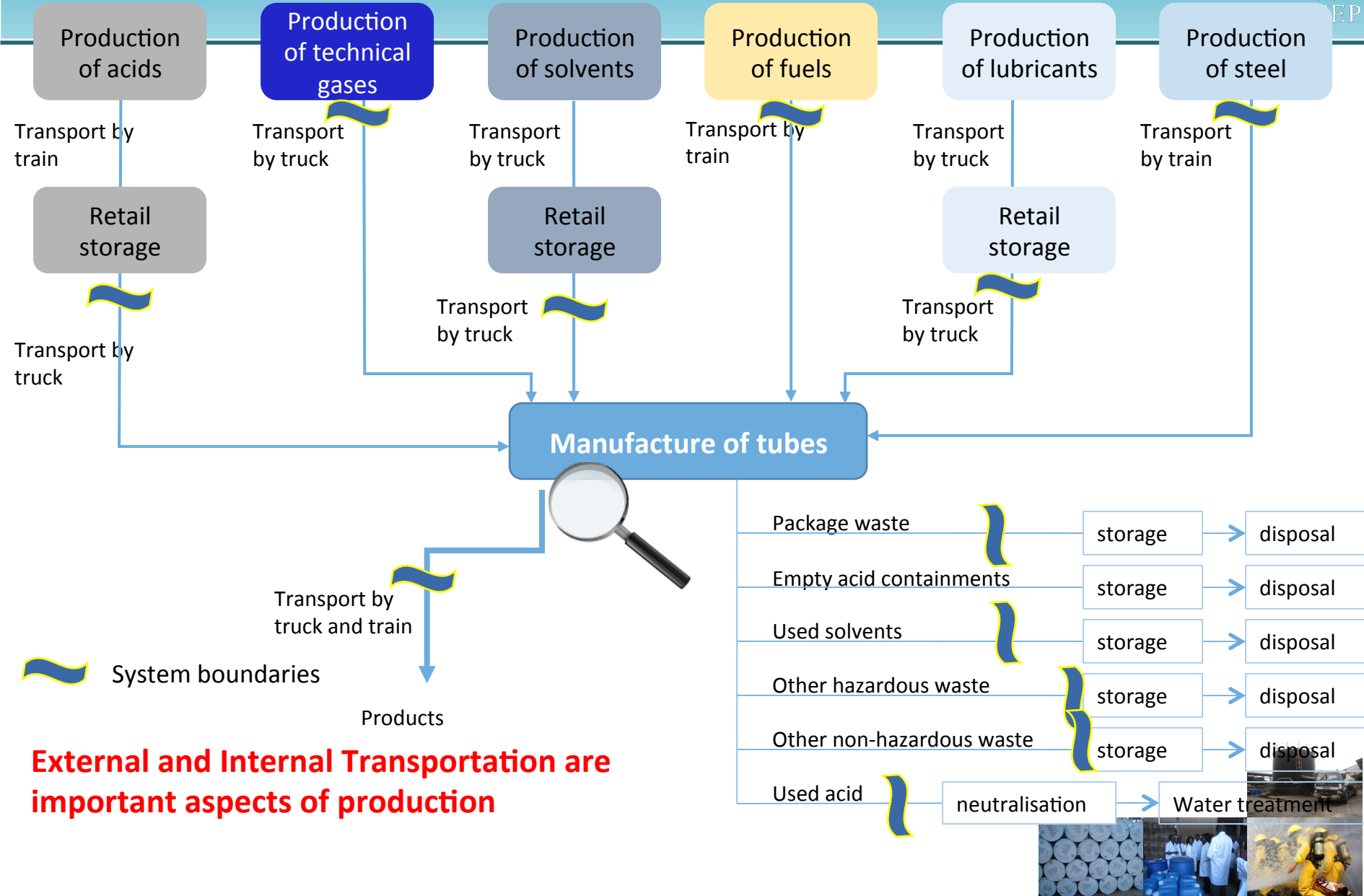
## Step 1: Prepare your process flow diagram

- Define boundaries of process
- Decision on level of detail to be included in the diagram
- Identify steps and activities in the process
- Describe sequence of activities
- Discussion and revision of flowchart with relevant stakeholders

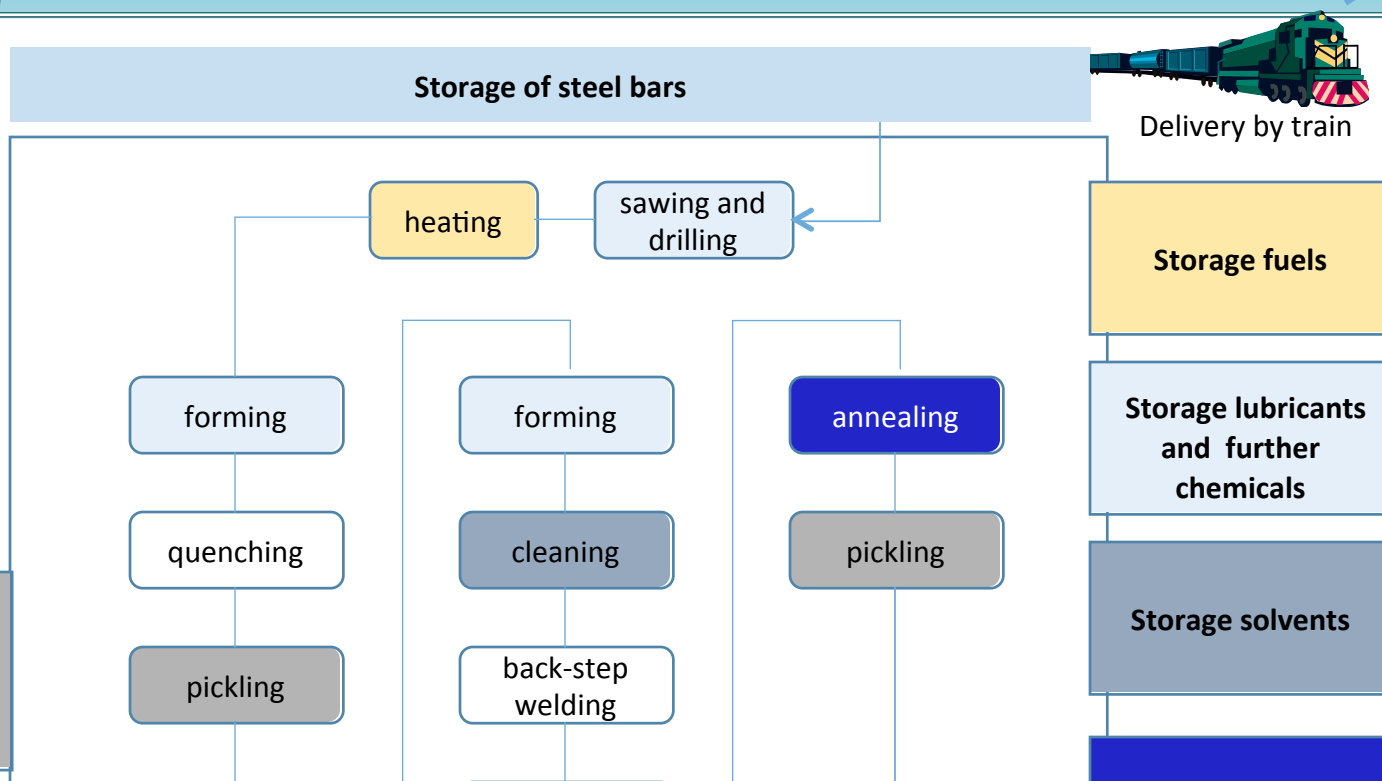
e.g.      Workers and supervisors  
             Suppliers  
             Transporters  
             Customers  
             Maintenance companies



# Boundaries of the process



# Level of detail to be included in the flow diagram



预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_16311](https://www.yunbaogao.cn/report/index/report?reportId=5_16311)

