

# Startings points

Decisive fire scenario's:

? "Largest possible tank surface"?

#### Defined as:

- Largest tank (mineral: d = 89 m; h = 22 m)
- Largest tank (polar : d = 65 m; h = 30 m)

Existing equipment Unified Industrial & Harbour Fire Department insufficient:

Maximum capacity 3 industrial fire trucks + 3 large monitors insufficient: → 45 meter diam. (18.000 l/min)



## **Analysis**

#### Mobile FiFi system with a capacity of:

- Mobile large surface (NFPA 11):
- Mineral: 89 m → 6221 m2
- Polar: 65 m → 3318 m2
- Concentrate ind.: (3%) → 2 m3/min

- → 10,4 liter/m2/min
- → 65 m3/minuut
- → 35 m3/minuut
- → 120 m3 (3%) + 100% spare
- Distance: 115 m to centre of tank at 22 m height
- Transportation length: max. 1500 m from waterside
- And employable within 4 hours



#### **Finances**

- Who?
  - √18 companys (by regulations of environmental agency)
  - √ Volunteers
- How?
  - √ By memberships
  - √Three types: A, B of C
  - A = Only foam concentrate
  - B = A + monitors (Fifi-units)
  - C = Total system

## Which companies























#### **IBP**

- Equipement
  - 3 Hoseretrievers
  - 1 Manifold-unit
  - 2 FiFi-units
  - 1 Hose-unit
  - 6 trailer with foam concentrate 20 m<sup>3</sup>
  - 4 (5) quick foam concentrate containers 10 m<sup>3</sup>
- Organisation





## Hoseretriever



- 1.5 km transport length.
- 8 \* 8" hoses at once.





### Manifold-unit

- Anchor point
- T-junction
- 24 connections for 8" hoses





# FiFi-un

- 2 units
- 37.500 I/min per unit
- Throw:115 meter at 22 meter height







#### Hose-unit

 Reels with 'short' hoses (10,15, 25, 40 en 50 meter)

Barrows



### Foam concentrate trailers

- 6 trailers
- 20 m³ foam concentrate
- Moussol APS 3/3





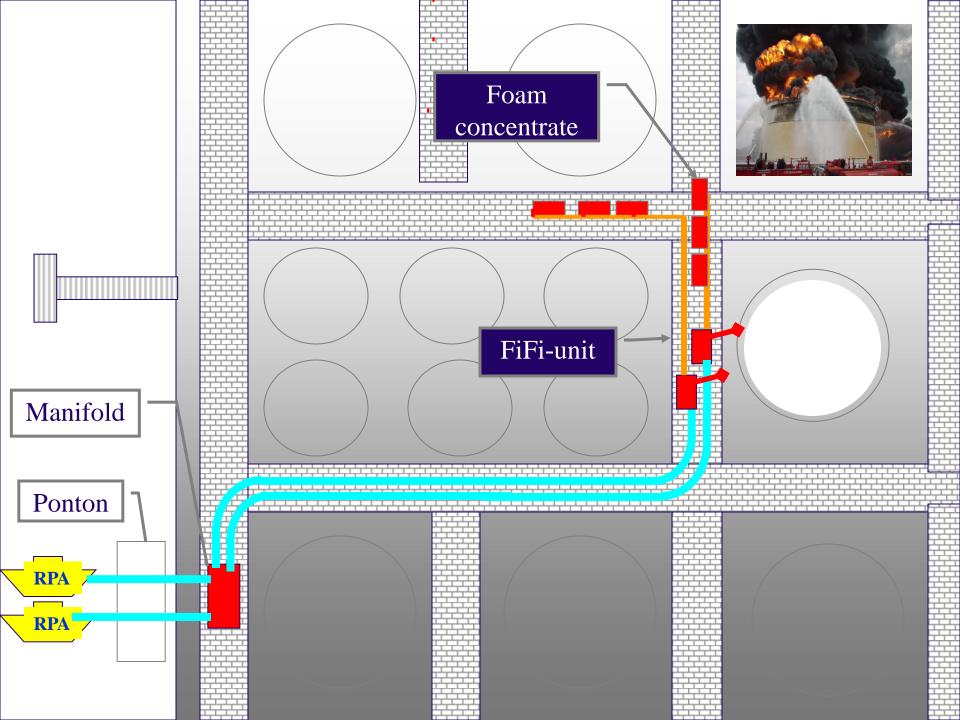
# 4 quick response containers

- 10 m³ foam concentrate
- Moussol APS 3/3









# Organisation

- Testresults very important for:
  - Pre-planning
  - Procedures
  - Education and training
- Logistics:
  - Agreement with transport company
  - Preparing special trucks
  - Maintenance
  - Smart storage



#### Foam concentrate

- Tests to determine if our standard foam concentrate is usable;
- Method: Like Lastfire suited for IBP;
  - (Crude oil, leaded petrol);
- Good results with Moussol APS 3/3;
  - Also with 1% induction;
- 120 m<sup>3</sup> bought.





#### Time line

- September 12th, official delivery;
- November 2006, IBP employable;
- Januari 1st 2007, personnel fully trained;
- Total system practice in April 2007.



# Area of employability

- First priority is the Rotterdam Harbour and Industry area;
- Afterwards examining if the IBP is useable outside this area.



