

Bayerisches Staatsministerium des
Innern



Oil defense in Bavaria by the example of the MERO- Pipeline

UNECE pipeline workshop, 08./09.06.2005 Berlin



The Company

MERO Pipeline GmbH
is the German operating company of the
Mid-European Crude Oil Pipeline
(Mittleuropäische Rohölleitung – MERO)

Company figures 2004:

employees:	35
throughput:	2,6 Mio. m ³ crude oil
turnover:	21 Mio. €

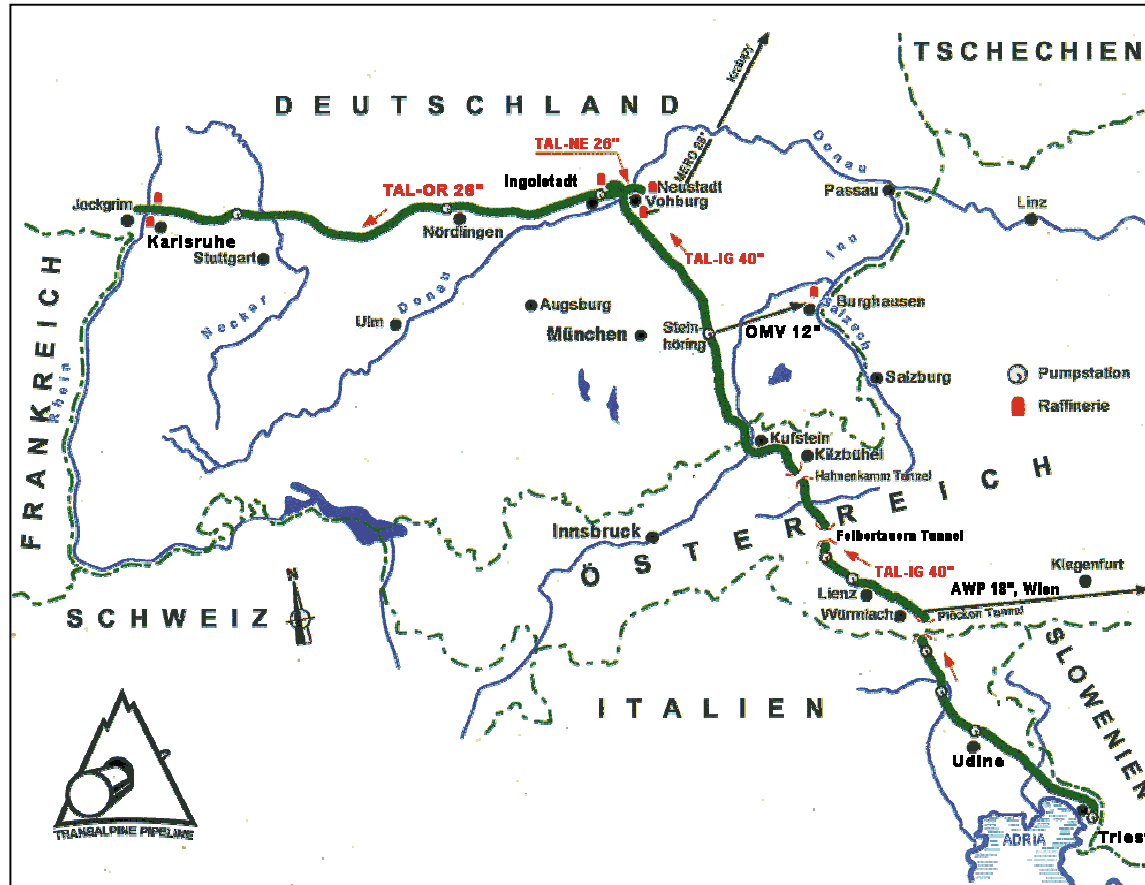
Mother company and only shareholder is the Czech joint-stock company
MERO CR, a.s., Kralupy nad Vltavou.

Stock holder of MERO CR, a.s. is the National Property Fund of the
Czech Republic

MERO delivers crude oil to the Czech Republik form the Vohburg tank farm



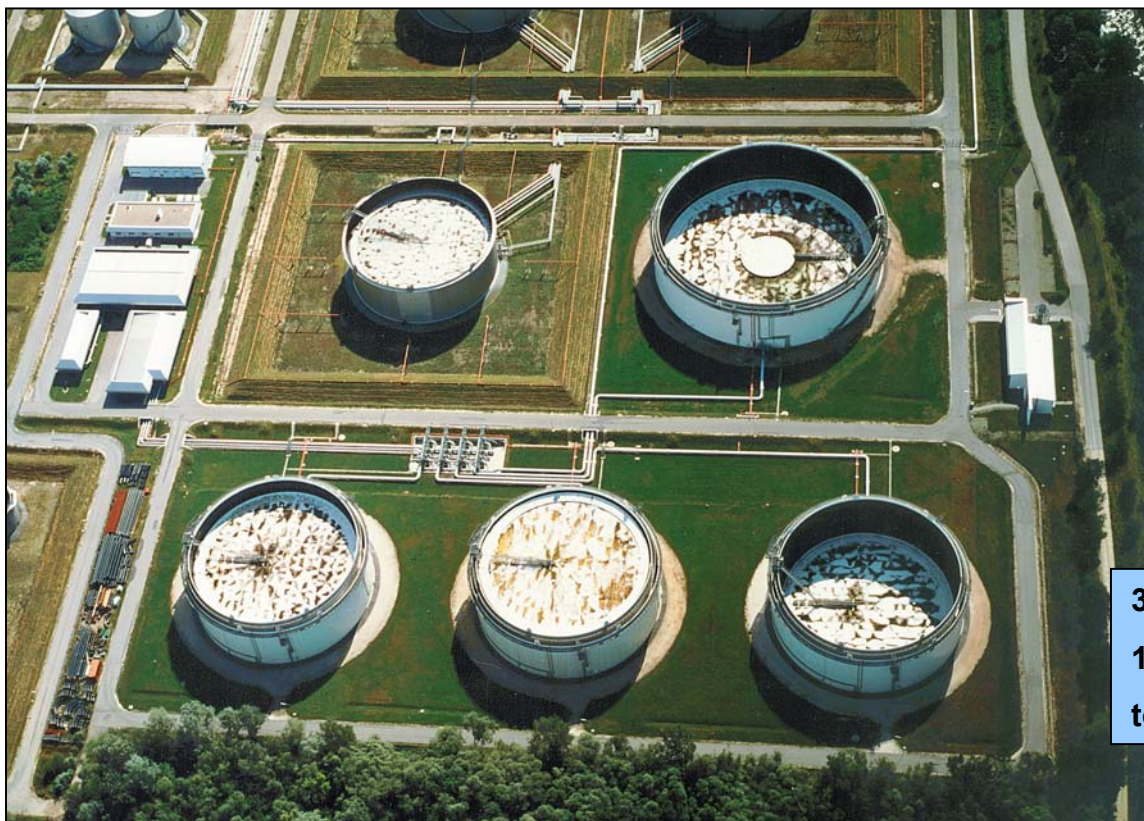
The way of the crude oil from Triest via the Transalpine Oelleitung (TAL)





The way of the Crude oil ...

... into the MERO-tank farm at Vohburg ...



3 tanks	40.000 m ³ each
1 tank	80.000 m ³ each
together	200.000 m ³



The way of the Crude oil through the MERO-pump station at Vohburg...

booster pump station



max. throughput	1.750 m ³ /h
max. output pressure main pumps	65 bar



main pump station



The way of the
Crude oil
through the
pipeline ...



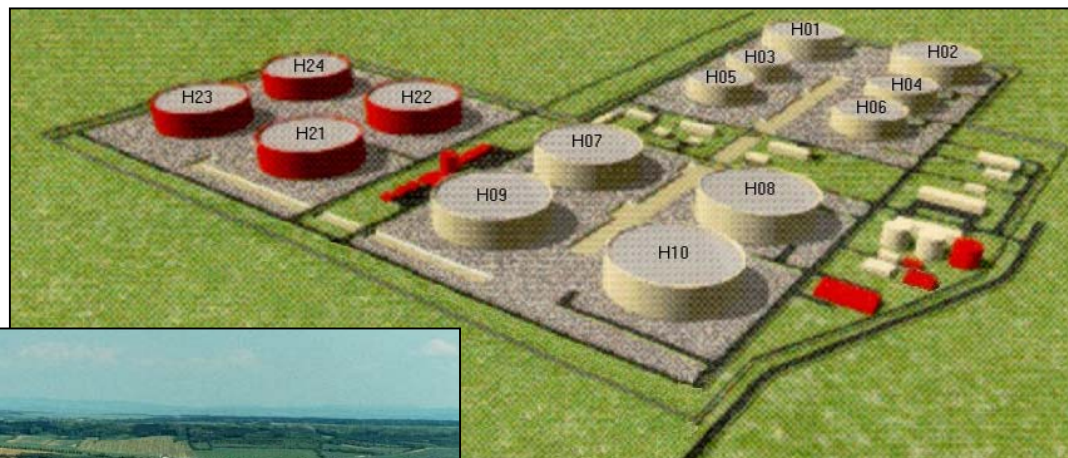
length	344 km, in Bavaria 179 km
diameter	700 mm (28")
valve stations	54 in Bavaria 28
pump station	Vohburg
capacity	10 MTA





The Way of the Crude Oil ...

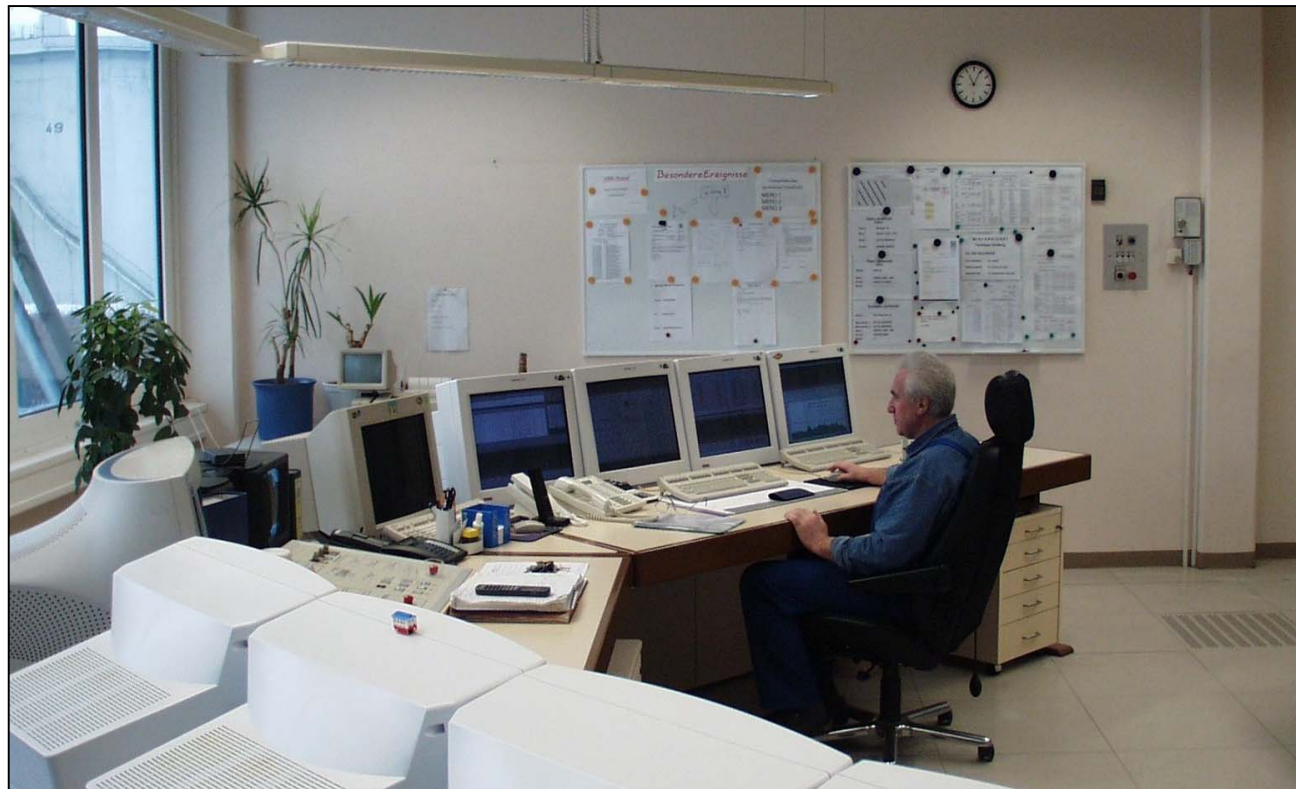
... into the Czech central crude oil tank farm at Nelahozeves.





The way of the Crude Oil ...

... is supervised and controlled by our Vohburg control center
round-the-clock via fiber optic cable.





Pipeline Hazard Protection



extensive oil spill fighting organisation
97 water oil barriers,
ca. 120 fire brigades, 9 firms

official and internal alert and action plan

emergency shutdown plan



Official alert and action plan (disaster control special plans)

- ▶ Since 1996 a new national security concept for pipelines
- ▶ Improvements:
 - smaller extent
 - better clearness
 - more safety
- ▶ Regulation „who does what“



Systematics of disaster control special plans

- ▶ Pipeline sections between every two line valves
- ▶ Assignment of duties
 - + Set up of instructing and gathering points for the task forces and equipment
 - + Leak location
 - + Oil barrier installation



Systematics of disaster control special plans

Continuation

- + Oil gathering
- + Oil disposal
- + Fire protection
- ▶ Allocation task forces to each of the measures with order sheets
- ▶ Alarming planning for the task forces
- ▶ Exercise concept section-wise

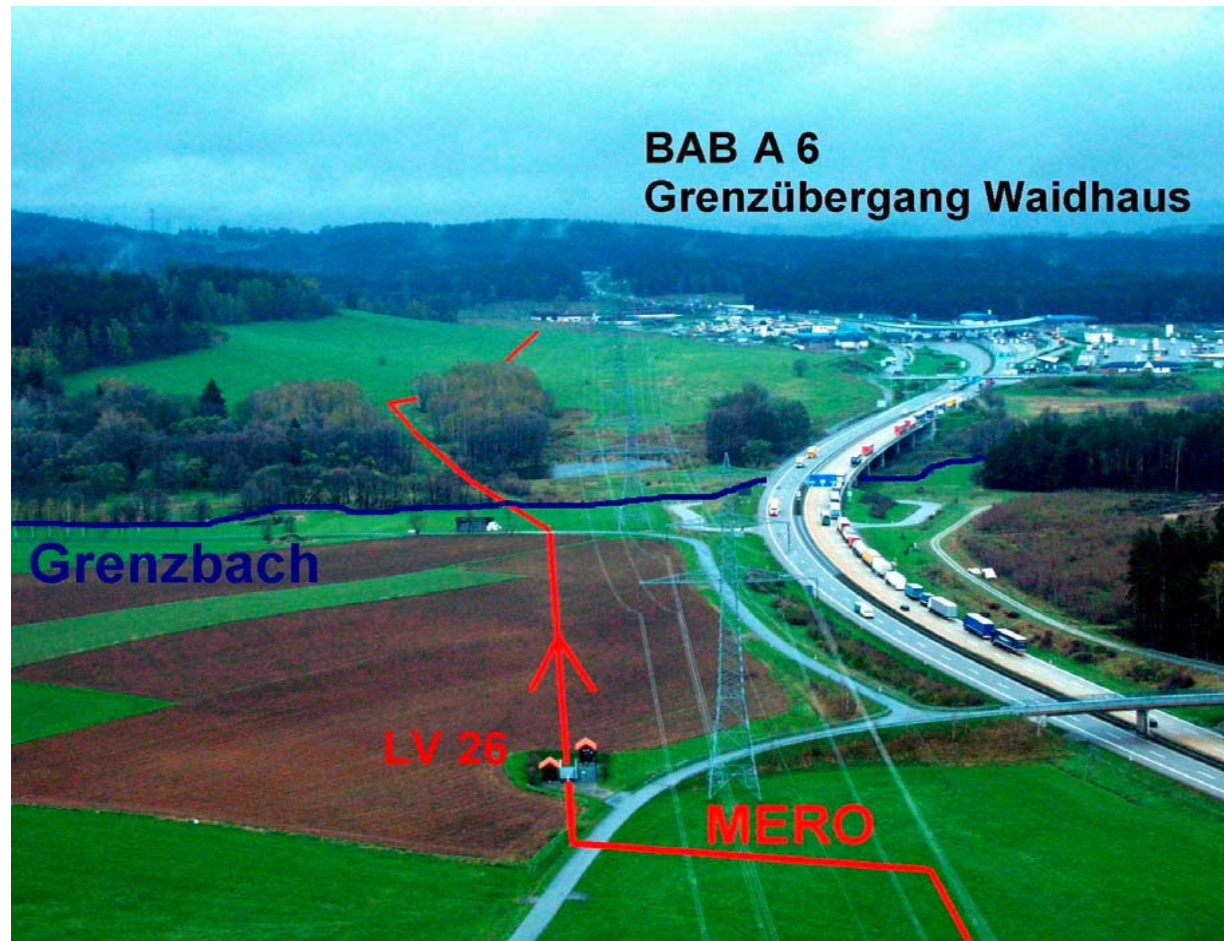


Experiences with the Bavarian Oil defense system

- ▶ The system works very well
- ▶ Concentration of measures to valve sections is appropriate
- ▶ Firm allocation of equipment and task forces to valve sections is appropriate



MERO LV 26





Emergency response on the German side of the border in case of an oil spill

- ▶ Alarm for all assigned task forces in the affected valve section
- ▶ Orders to be carried out automatically:
 - Establishing a gathering point for task forces and equipment
 - Leak location
 - Oil barrier installation



Emergency response on the German side of the border in case of an oil spill – continuation -

- Oil gathering
 - Oil disposal
 - Fire protection
-
- ▶ Information of MERO CR control center
 - ▶ Activate of the “Nationalen Meldeköpfe”



Thank you

I would like to thank the MERO Pipeline GmbH cordially for providing pictures and documents as well as for their support