

(17)

Tasks of Department of supply for engine attendance and transport of OKM (SkI Adm. Cu III).

In Allied occupied German territories the Navy owns considerable stocks of raw materials for fuels and lubricants not yet dressed for use.

In particular there are about 180 tons rawmaterials for composition of fueloil.

At the end of April the stocks were stored mainly in the following districts:

a) Pacura (residue of crude oil) residue of lignite tar, residues of crack and hydrogen process:

Achim near Bremen	85000 tons
Bleekede near Hamburg	6000 "
Wesermünde/Norderham	10000 "
Flemlunde near Kiel	2000 "
Sande near Wilhelmshaven	10000 "
Linz/Donau	19000 "

b) Crude oil:

Achim near Bremen	40000 "
Bleekede near Hamburg	13000 "

total: 185000 tons

Singly stored in different districts the above mentioned rawmaterials are not usable. The German production of petroleum was almost completely used for the production of benzine, gasoline and lubricating oils. Therefore usable liquid fuels out of petroleum were not available.

Petroleum, which was not fit for preparation of lubricating oil, was cracked for gasoline. Only the residues of the latter process and also the residues of lubricantproductions were available for fuels.

For

For the production of fuels were furthermore used:

shale-oil

residue of lignite-tar distillation

residue of hydrogenation of pit-coal and lignite

pitch-coal crude tar

steam coal pitch.

All these rawmaterials were not without further ceremony usable as fuel because they partly

1. were too solid and got into a liquid state only at a temperature of 40° Celsius,
2. contained too much asphalt,
3. contained too much liberated carbon,
4. were difficult to spray by the fuel burners on account of their high surface tension.

To compensate these bad qualities, the rawmaterials had to be mixed with artificial oils produced in Germany such as tar oil of lignite and pitchcoal. The quality thus reached was not yet to compare with the normal quality of the worldmarket. Therefore high valued burners had to be developed.

To precipitate the freed carbon and to prevent the precipitation of asphalt and paraffine the mixture of the original rawmaterials had to be carried out under a certain sequence and under different temperatures.

A part of the available tar-oil of pitch-coal was mixed with crude-tar or terpitch of pitch-coal from the Ruhr-district. The result was a "pitch-fuel" with 40 % pitch in it. It suited well the general situation of the german economy during the last two years.

There are

about 2000 - 3000 tons

of rawmaterials of lubricating oil and waste, which can be transformed into usable lubricants for the Navy in the naval

plants

plants of Hamburg, Flomhude and Wilhelmshaven. Specific demands have to be considered thereby. Lubricating oils for the minesweepers of the type M 35 for example have to undergo a special refinery to secrete all wear-out materials as the quality of the lubricating-oil filling would decline to quickly caused by the high temperature of the working steam.

As there was a shortage of animal fats the required grease lubricants had to be produced from synthetic fatty acids.

A high grade and special distillat as feed water is necessary for the smooth and delicate working of the highpressure steamengines on the minesweepers. It needs permanent admixture of a certain dose of NaOH, Na₂ PO₄, Na₂ SO₃.

This distillat was purified and prepared by the Department Qa III in special plants at Hamburg and other places.

The Navy disposes of 23 tankplants in different districts with a capacity of 2 1/2 million cubicmeters, which were used so far as necessary for the fore mentioned tasks.

The Department Qa III also had under its direct management the "Trosschiffverband" a shipping company with 26 great and small tankers. Specified shiplist is attached. It was their task to supply ships at sea with fuels, ammunition, water and provision as well as to carry out any required transport of liquids.

At the outbreak of war the "Trosschiffverband" was militarized and the shipspark enlarged according to the requirements of the Navy.

Several of the tankers are damaged and need repairing.

All the spareparts for deck and engine of the supplyships under 1 to 5 are stored in different localities in the Northsea-region.

Dockpossibilities for them are only to be found in Hamburg, Bremerhaven or Wilhelmshaven.

ALL

All the tankers of the arsenals and the naval supplybases were also directed by the Department Qu III (List of these tankers will be forwarded).

It is evident, that the main-work of the Department Qu III lies in the Northsea-region, chiefly at Hamburg.

The difficulties of the working process need an early, circumferential and careful preparation of the different working stages. Therefore it seems necessary, to send some members of the staff of Qu III to Hamburg. We beg to grant permission for an official trip to Hamburg (also asked for at OKM Skl) to two officers and one official.

It furthermore seems essential by reasons mentioned above to transfer the staff of the "Großschiffverband" (6 officers) to Hamburg.

This staff is embarked on fishingcraft "C.I. Busch" (505 gross tons) temporarily used as floating office.

To be refitted and used as fishingcraft "C.I. Busch" also will have to return to her Northsea-homeport.

It is begged to grant sailing permission for "C.I. Busch" from Flensburg to Hamburg.

Skl. Adm. Qu III

Eng. Rear Admiral and Dipl. Ing.