

Interoffice Communication

To Mr. J. O. Gibson, Process Engineering Department, Ponca City
From D. L. Edwards, Maintenance Engineering Department, Ponca City
Date November 10, 1976
Subject Incineration of VCM Plant Tars

Don't plan to burn this stuff and recover the heat. The boiler tubes will plug off or become severely restricted in a short time. A matter of hours!

Your best bet is to build an incinerator for the tar that uses a quench system. Use the existing design only for the vent gases and light ends.

A tar incinerator requires better brick. High Alumina, 90%, is recommended. Trade names in use by other folks are:

Carborundum	Mulfrax 202
Harbison-Walker	Korundal
Babcock & Wilcox	SR-90

The 90% Alumina brick will cost us at least 6 to 8 times what the KX99BF will cost.

If you can figure out some way to get all the solids out of the tar, then you can probably burn them in the existing design.

Sounds like paying someone else to burn or cart off the tars is a good idea.

Cecil Saylors and I reckon you could recover heat if you can keep the temperature of the gases to the boiler below 1400°F. Then the solids might go on through.



Don L. Edwards
Materials Consultant
Corrosion and Metallurgy Division

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CC: JFL-JHD-LDW-AJM-DHS-DEH-CLS-Jim Holcomb-DEB

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- Our tars contain an average of 200 wt ppm Na and 1000 wt ppm Fe. As for your 10.000 ppm Na we think the best way to tackle that problem is to install some type of water wash after the EDC caustic wash system. Treatment of tars may introduce more troubles than it solves.
- Our continuous process vents contain only traces of VCM and other chlorinated lights. They pass through the caustic vent scrubber. Emergency blow-offs have not occurred so far. We are now installing a deep-cooled EDC scrubber for treatment of continuous ventstreams.
For planned stops the tower will be vented to the incinerator or to the new deep-cooled EDC-scrubber.

With best wishes for your HCl recovery job and my best personal regards,

Sincerely Yours,
Akzo Engineering bv
Dept. E-PC


A.H.M. Beekwilder --

Enclosure: Annual Report Akzo

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