

CLUSTER RULE MACT I SURVEY

Summary of Preliminary Results

A survey of U.S. kraft mills was conducted during October-November, 1998 to learn how the industry was approaching compliance with the Cluster Rule (MACT I portion). Compliance must be achieved by spring 2001 for the condensate treatment portion of the rule. For the non-condensable gas treatment portion, the strong gases (LVHC) must be collected within three years, while collection of the weak gases (HVLC) must be completed within 5-8 years, depending on state regulations. Of the 121 operating kraft mills identified, 76 had been contacted as of November 13, 1998, and from those contacted 67 survey forms were completed. Total coverage of the survey was therefore 55%. Responses were obtained from all regions of the country and from twenty-three different states.

Stripping is the Main Approach

Of the mills contacted, 28 already had stripping columns (41%), although only 10 believed that their existing system would already comply with the regulation. Most mills had either already decided which route would be taken to meet the condensate treatment portion of the Rule, or had a clear front-runner. Of those, 54% were looking at condensate stripping, and 34% were looking at hard-piping to an existing treatment

system. Though several mills mentioned separate biological treatment of condensates, in only two mills was that the clear plan at this point.

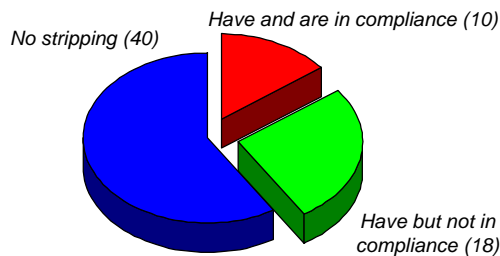
Three mills were planning on shutting down and cited the Cluster Rule as at least one of the factors in the decision. Two other mills mentioned closure as a possibility, though no firm plans had been made yet.

Noncondensable gas systems

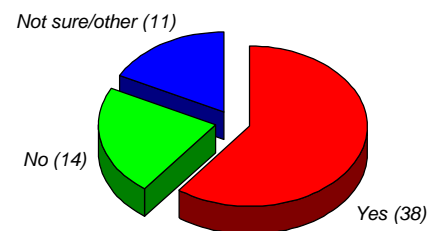
Most mills contacted (60%) believed they already collected all of the concentrated (LVHC) gases that the Cluster Rule requires. However, very few mills (14%) were already collecting all of the weak gases (HVLC).

There was a larger percentage of "don't know" responses in these categories, compared to the condensate treatment questions, perhaps indicating that less emphasis is being placed on NCGs at this point. Of the mills which did not yet collect all of the weak gases, most were planning to eventually collect them; a few mentioned the possibility of pursuing the "clean condensate alternative" in order to avoid having to collect brown stock washer hoods.

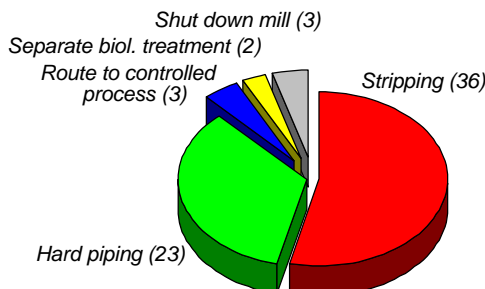
Mills with Stripping



All LVHC Sources Collected?



Which route is most likely?



All HVLC Sources Collected?

