

announced the availability of new data related to the proposed air emissions standards; that new data is located in Air Docket A-92-40. EPA did not solicit comment on that data in the notice. EPA will seek comment on that information in a subsequent notice.

EPA Sampling Activities

Following the December 1993 Notice of Proposed Rulemaking, EPA conducted a sampling and analysis program to collect additional data characterizing the performance of bleached papergrade kraft and papergrade sulfite mills employing advanced pulping and bleaching technologies.

Wastewater samples from bleached kraft mills were collected at Louisiana-Pacific Corporation (Samoa, California); Crestbrook Forest Industries, Ltd. (Skookumchuck, British Columbia, Canada); Stora Billerud AB—Gruvön Mill (Grums, Sweden); and Enocell Oy (Uimaharju, Finland). The pulping and bleaching technologies evaluated at these kraft mills are: 1) oxygen delignification in conjunction with elemental chlorine-free (ECF) bleaching; 2) ECF bleaching in addition to both oxygen delignification and extended delignification; and 3) totally chlorine-free (TCF) bleaching.

Wastewater samples for both ECF and TCF bleaching at a papergrade sulfite mill were collected at Stracel SA in Strasbourg, France.

The information relating to these sampling activities that has been added to the Docket includes: Pre-sampling site visit reports; Sampling and Analysis Plans; Analytical laboratory reports; Data quality review memoranda; and Correspondence and telephone contact reports.

AF&PA/NCASI Industry Surveys

In response to several of the data solicitations described in the Notice of Proposed Rulemaking, five separate surveys were developed and administered by the National Council of the Paper Industry for Air and Stream Improvement (NCASI) on behalf of the American Forest & Paper Association (AF&PA). Completed surveys were provided to EPA for consideration in developing the final regulations. Each survey is described below. Except as noted, the survey data are now available in the Docket.

a. Data Request for Secondary Fiber Non-Deink Mills. This data request collected information about water use, wastewater treatment, and wastewater recycle and reuse at mills that make products from non-deinked secondary fiber. The survey sought to evaluate the

technical feasibility of zero discharge (100% wastewater recycle) as a basis for new source performance standards by identifying characteristics, if any, distinguishing zero discharge mills from mills not currently achieving zero discharge.

NCASI mailed the questionnaires to mills with production comprised of a high percentage (at least 80%) of non-deinked secondary fiber and several other mills that previously claimed they achieve 100% recycle. NCASI forwarded the completed survey forms to EPA. About half of the mills responding claimed the survey data as confidential business information. Survey forms for the remaining mills are available for public review in the Docket.

b. Recovery Furnace Capacity Survey. The survey objective was to compile a detailed inventory of the recovery furnaces operated by the industry. Information requested included furnace capacity data, current operating rates, and a history of the modifications and capacity upgrades which have been made to each recovery furnace. This information was collected to help resolve the disparity between AF&PA and EPA cost estimates for the proposed rule.

NCASI distributed the questionnaires to companies with bleached and unbleached kraft mills and requested information on the recovery furnaces. Survey data for over 100 mills have been provided to EPA. Survey data not claimed as confidential business information have been placed in the public Docket.

c. Best Management Practices Questionnaire. NCASI conducted this survey to collect general information regarding the existing infrastructure (e.g., tanks, curbing) and control systems in place at mills for preventing and controlling pulping liquor leaks and spills. The survey also requested information about the costs associated with implementing spill prevention and control programs. Survey forms were sent to a group of bleached, unbleached and dissolving kraft mills; dissolving and papergrade sulfite mills; semi-chemical mills; and non-wood chemical pulp mills.

d. Capital and Operating Cost Requests. The Capital and Operating Cost Request collected engineering cost information for process technologies forming the basis of the proposed effluent limitations guidelines and standards. NCASI distributed the surveys to several mills that recently (1) installed extended delignification, oxygen delignification, or pressure screens; (2) upgraded brown stock

washers; (3) increased chlorine dioxide capacity; or (4) upgraded recovery furnace capacity. The objective was to collect cost information that could be used to modify, if appropriate, cost curves used by EPA to estimate the costs of complying with the proposed regulations or other control options. Information not claimed as confidential business information are available for review in the Docket.

e. Operating Data Requests for Recently Installed Pulping and Bleaching Technologies. This survey was developed to collect information from mills that have made pulping and bleaching process changes in the last three years. These data were collected to update the status of the process technologies in place at the mills to better evaluate industry comments and revise mill-specific compliance cost estimates, if appropriate.

NCASI distributed the questionnaires and provided the results to EPA. Information not claimed as confidential business information is available for review in the Docket.

Other Data Added to the Docket

EPA has collected and received other data since proposal in addition to that described above. EPA and its contractors have visited several mills to further assess controls considered at the time of proposal and to collect information to fully evaluate comments and data submitted by the industry and other interested parties. EPA has met with industry representatives and other interested parties, and has participated in several technical conferences since the proposal.

Many of these activities are documented by materials now included in the Docket. These materials include site visit reports, meeting reports, correspondence with industry and other interested parties, and technical literature.

EPA is also adding to the Docket data and other information characterizing performance, costs, and technical feasibility of regulatory control options. For example, EPA has received and added to the Docket effluent performance data from several mills that use complete chlorine dioxide substitution, which is key to the industry's suggested technology basis for papergrade kraft mills. The industry-suggested alternative was described in the proposal at 58 FR 66078, 66173 (December 17, 1993), but was not fully analyzed at that time due to insufficient data. The Agency is now reviewing the new data and will give serious consideration to the industry's