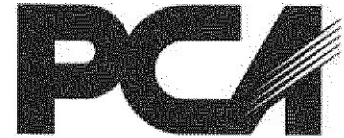


ATTACHMENT 7

Corporate Legal Department
 101 South Capitol Blvd, Suite 800
 Boise ID 83702
 T 208 805 1288
 DawnBlancaflor@PackagingCorp.com



Dawn C. Blancaflor
 Assistant General Counsel

January 29, 2020

SENT VIA E-MAIL AND FED EX

Julie A. Vergeront
 Assistant Regional Counsel
 EPA Region 10
 1200 Sixth Avenue, Suite 155, M/S 11-C07
 Seattle, WA 98101
 (206) 553-1497
 Vergeront.julie@epa.gov

Edward J. Kowalski
 Director, Enforcement and Compliance
 Assurance Division
 EPA Region 10
 1200 Sixth Avenue, Suite 155
 Seattle, WA 98101
 (206) 553-6695
 EPA-Seattle@epa.gov

Re: Packaging Corporation of America, Wallula, Washington
 Response to U.S. Environmental Protection Agency, Region 10
 Notice of Violation - General Findings

Dear EPA Region 10:

This letter responds to the Notice of Violation ("NOV") issued to Packaging Corporation of America ("PCA") on August 8, 2019 by U.S. Environmental Protection Agency, Region 10 ("EPA") that alleges noncompliance at our Wallula, Washington pulp mill ("PCA Mill"). The NOV followed after EPA's initial inspection of the mill conducted on September 19, 2018. EPA generally alleges that PCA operated two digesters (the "M&D Digesters") in violation of 40 C.F.R. Part 63, Subpart S ("Subpart S" or "NESHAP") and the mill's Title V Permit. Specifically, EPA alleges that PCA failed to control total HAP emissions from the Bauer Valves and surge bins feeding the M&D Digester systems from 2001 to at least September 2018.

PCA strongly disagrees with EPA's findings and allegations in the NOV. PCA operated the M&D Digesters in compliance with the explicit and plain language of Subpart S, its Title V Permit, the applicability determination provided by the Washington Department of Ecology ("Ecology"), and in accordance with the industry's commonly held understanding of EPA's interpretation and implementation of the standards. PCA believes EPA is erroneously interpreting the Subpart S standards to apply to equipment specifically exempted by definition. EPA ignores the plain reading of the definitions, substituting its own interpretation of the rule, thereby fundamentally changing the application and implementation of Subpart S requirements.

During the past months, EPA and PCA communicated about the NOV and the mill's compliance. On October 31, 2019, during a conference call with representatives of both organizations, PCA

{180635:0000:01839193: }

104610209.5 0081755-00003

presented to EPA the current configuration of the mill's M&D Digesters to confirm compliance. On November 21, 2019 EPA's inspector again visited the mill to observe the equipment. To date, PCA has not received the final inspection report. Subsequent to the inspection, EPA requested follow-up information on the current configuration and operation of the digesters. Based on the conversations between PCA and EPA, and follow-up e-mail questions from EPA, it is clear to PCA that there is a fundamental disagreement regarding the application of the Subpart S requirements. PCA believes it is unproductive to continue to further discuss the merits of the NOV allegations given the central differences regarding the interpretation of the application of Subpart S requirements.

As a result, on January 24, 2020, PCA requested an applicability determination from EPA's Office of Air Quality Planning and Standards ("OAQPS") in an effort to provide clarity regarding PCA's regulatory interpretation and industry's commonly held understanding that the emissions referred to in EPA's NOV allegations are not subject to Subpart S collection and control requirements.

This response echoes the analyses presented to OAQPS and provides additional information relative to the NOV allegations and enforcement action (*Attachment 1, Request for Applicability Determination*).

I. PCA Factual Corrections to the Notice of Violation

PCA reserves the right to provide additional factual clarifications and information presented in the NOV at a later date. The substantive portion of PCA's position regarding the NOV allegations is detailed below.

II. Relevant Background Information

PCA operates two digesters at the PCA Mill. The relevant digester technology, referred to as "M&D Digester," was developed in the 1950's by pulp and paper engineers, working for the Bauer Brothers Company in Ontario, Canada, named Mr. H.S. Messing and Mr. C.L. Durkee. The Bauer Brothers Company and its M&D Digester technology are now owned by Andritz, Inc. ("Andritz"), the foremost pulp and paper engineering firm located in North America. Andritz is a global provider of pulp production equipment and services. See the company's website for more information on Andritz: <http://www.andritz.com/pulp-and-paper/pp-pulp-production.htm>. Andritz prepared technical reviews that are referred to in this response.

The No. 1 M&D Digester was installed in the 1960's and has operated primarily as a sawdust digester since startup. The No. 2 M&D Digester was installed in 1995 and operated from 1995-2018 on wood chips. It was temporarily shut down from May through November 2018, converted, and restarted as a sawdust digester in November 2018. Both M&D Digesters are dry feed systems. Neither use liquor nor steam in the pre-feed screw. Each M&D Digester is equipped with a rotary Bauer Valve that feeds sawdust from the fiber storage bins and feed screw to each digester vessel. While rotating their positions from the feed screw to the digester opening and back to the feed screw, the Bauer Valves serve the same function as a chip (or sawdust) steamer, like those typically installed on a Kamyr digester ahead of the fiber feed to the digester

vessel opening. In each Bauer Valve high pressure fresh steam only (no flash steam) is used for pre and post-pocket purges.¹

III. PCA Responses to Allegations in the NOV

The NOV alleges that:

some digester gases were vented from the rotary valve feeding M&D Digester #1 to a secondary relief line, which in turn was routed either directly to the surge bin associated with M&D Digester #1, or first to the metering screw associated with M&D Digester #1 and then to the surge bin and that the bin has a vent which exhausts directly to atmosphere. NOV at 38.

The NOV also alleges that:

not all emissions from the M&D Digester #1 were routed to a control device that meets the requirements. Id.

The NOV notes that M&D Digester #2—although partially disassembled during EPA's September 2018 inspection—had the same configuration as M&D Digester #1 and did not meet applicable requirements while in operation. NOV at 40.

PCA disagrees with EPA's allegations and maintains PCA was and is in compliance with Subpart S requirements. There are two sections within Subpart S that are central to the NOV allegations and PCA's response; (1) 40 CFR 63.441 Definitions (*see pg 5 herein*); and (2) 40 CFR 63.443 Standards for the pulping system at kraft, soda and semi-chemical processes. Subpart S, 40 CFR 63.443 states the following:

(a) *The owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems, as specified in paragraphs (c) and (d) of this section.*

(1) *At existing affected sources, the total HAP emissions from the following equipment systems shall be controlled:*

(i) *Each LVHC system;*

An LVHC system is defined as the collection of equipment that is explicitly listed. Subpart S requires that the LVHC system equipment be enclosed and vented into a closed vent system that meets the prescribed requirements, 40 CFR 63.443(c). EPA and PCA agree that each LVHC system is subject to the emission standards at 40 CFR 63.443(a)(1)(i).

¹ See Attachment 1, Request for Applicability Determination for additional information regarding PCA Wallula's M&D Digester configuration.

A. The Explicit and Plain Reading of Subpart S are Clear; The Bauer Valves (using fresh steam) and Surge Bins are Not Subject to Subpart S Requirements

The explicit regulatory language and plain reading of Subpart S requirements confirms PCA was and is in compliance with Subpart S. An LVHC system is defined in 40 CFR §63.441 as [emphasis added]:

the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

The LVHC system definition can possibly be read two ways. In either case, PCA's compliance strategy for the LVHC system conforms to the regulations.

On the one hand, the explicit rule language refers to the digester, a discrete piece of equipment.² Following this reading, gases from the M&D Digesters' vapor domes (relief gases) are routed to the LVHC vent collection system and combusted in either the Lime Kiln or Hog Fuel Boiler since at least 2001 in compliance with 40 CFR §63.443(a)(1)(i).

On the other hand, the explicit rule language refers to the "digester...system", and other systems listed, as components of the regulated LVHC system. This reading is more consistent with the totality of Subpart S because "digester system" is a defined term, "digester" is not.

EPA alleges that gases vented from the Bauer Valves may eventually exhaust to atmosphere and are therefore regulated under Subpart S. However, the plain language of Subpart S, excludes gases, if any, from the Bauer Valves from Subpart S collection and control requirements, as follows [emphasis added]:

40 CFR §63.443 (a) The owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems, as specified in paragraphs (c) and (d) of this section.

40 CFR §63.441 -- Pulping system means all process equipment, beginning with the digester system, and up to and including the last piece of pulp conditioning equipment prior to the bleaching system, including treatment with ozone, oxygen, or peroxide before the first application of a chemical bleaching agent intended to brighten pulp. The pulping system includes pulping process condensates and can include multiple pulping lines.

² This reading would distinguish a "digester" from the term "digester system" used in other sections of Subpart S and would indicate that EPA intended to cover the digesters (the vessels) specifically in the scope of 40 CFR §63.443.

40 CFR §63.441 -- Digester system means each continuous digester³ or each batch digester used for the chemical treatment of wood or non-wood fibers. The digester system equipment includes associated flash tank(s), blow tank(s), chip⁴ steamer(s) not using fresh steam, blow heat recovery accumulator(s), relief gas condenser(s), prehydrolysis unit(s) preceding the pulp washing system, and any other equipment serving the same function as those previously listed. The digester system includes any of the liquid streams or condensates associated with batch or continuous digester relief, blow, or flash steam processes.

The Bauer Valves on the M&D Digesters at Wallula use exclusively fresh steam. Neither use liquor nor steam in the pre-feed screw. Only chip steamers not using fresh steam (or equipment serving the same function) are regulated components of the digester system, the LVHC system, and the pulping system covered by Subpart S control requirements, 40 CFR §63.443 (a). Andritz, industry's global manufacturer of pulp and paper mill equipment and technical expert, concluded that the Bauer Valve is the functional equivalent of a chip steamer.⁵ Therefore, it is clear, that the explicit language excludes equipment like the Bauer Valves (using fresh steam) from the Subpart S requirements for collection and control.

EPA's allegations blend portions of the regulatory framework together to allege incorrectly that:

some digester gases were vented from the rotary valve feeding M&D Digester #1[#2] to a secondary relief line, which in turn was routed either directly to the surge bin...which exhausts directly to atmosphere.

As described above, digester gases from the M&D Digesters' vapor domes are routed to the LVHC vent collection system and combusted in either the Lime Kiln or Hog Fuel Boiler since at least 2001. Gases, if any, vented from the rotary Bauer Valves (using only fresh steam) are not subject to regulation. EPA's blended reading completely ignores the plain language in the definition and creates a new requirement not expressed in the regulation.

In the August NOV, EPA hypothesizes that gases from the M&D Digesters back feed into the Bauer Valves as the wood fiber is fed to the vessels. However, the positive pressure differentials

³ Again, EPA specifically separated each continuous digester (a vessel) from the next sentence that lists the digester system equipment components.

⁴ Notably, Subpart S does not define "chips" or "sawdust," although the term "chips" is used throughout the rule. An examination of the rulemaking history reveals that EPA's data collection survey asked facilities to identify the sources of fiber furnish, including chips produced on-site, chips produced off-site, and sawmill residues. EPA did not make a distinction between digesters pulping chips versus digesters pulping sawmill residues, and grouped all fiber furnish as "wood-fibers." Subpart S bundles all the wood fiber sources into a single category indicating that the rule makes no regulatory applicability distinction between digesters processing chips and sawmill residues.

⁵ Andritz published a Technical Memorandum (dated March 2000, revision March 2004) outlining the functional equivalency of the Bauer valve to a chip steamer. The fresh steam impregnation in the Bauer valve pre-conditions the wood fiber (chips or sawdust) before entering the digester. A Bauer valve is functionally equivalent to a chip steamer from a practical and technical standpoint, and this equivalent function is further verified in technical memoranda by the technology experts in the industry. When exclusively using fresh steam, this component of the digester system is not covered by Subpart S. An excerpt from the Andritz Technical Memorandum reads: *Compared to the more-familiar Kamyr digester system, the rotary valve, in spite of the deceptively simple name, performs the same roles of the low pressure feeder, steaming vessel, high pressure feeder and top separator.*

between the Bauer Valves and the digester provide the motive force for steam addition *into* the digester through the pre and post-pocket fresh steam valves. This motive force of steam into the digester, prevents feedback flow of gases from the digester. The Bauer Valves, as operated at the Wallula mill, with exclusive use of fresh steam, prevent gases from escaping; and therefore, are properly excluded from Subpart S controls.

EPA relies on test data from other mills to support its allegation that emissions from the surge bins violate Subpart S. The presence of regulated pollutants in process gases moving through the LVHC system, however, does not automatically subject emissions, if any, from the either the Bauer Valves or the surge bins to the collection and control requirements of Subpart S. The language is clear and unambiguous: chip steamers using only fresh steam are not covered by the rule. And the regulatory history, summarized below reconfirms that EPA chose not to regulate all emissions under the final rule. To conclude otherwise ignores the plain language and rulemaking intent, creating new obligations under Subpart S.

The language in Subpart S is clear and unambiguous; chip steamers using fresh steam are specifically excluded from Subpart S controls. Bauer Valves, the functional equivalent of a chip steamer, using fresh steam, are similarly excluded from Subpart S. To conclude otherwise ignores the plain language and intent of the rule.

1. PCA Proactively Requested and Received an Applicability Determination by Ecology

In order to ensure compliance with the new MACT Subpart S requirements, PCA requested an applicability determination from Ecology in 2001. During the initial compliance period, Ecology confirmed in a letter dated June 13, 2001 that:

Ecology agrees that the No.1 M&D pocket feeder vent is not subject to the LVHC collection requirements when using only fresh steam in the pre-[s]teaming process.

Ecology further confirmed the veracity of this compliance strategy in several statements over the last nineteen years that are consistent with the plain reading of the regulations. Ecology reaffirmed this interpretation over the past two decades in the mill's Title V Permit Statement(s) of Basis (AOP No.0003697), most recently on April 1, 2018, page 35 of 123, [emphasis added]:

*The No. 1 M&D Digester chip/sawdust bin was determined to be an insignificant source of HAPS emissions and to be exempt from regulation under the MACT I [Subpart S] regulatory requirements (Letter dated June 15, 2001).*⁶

2. PCA has Operated in Good Faith

PCA has operated in good faith, and in reasonable reliance on Ecology's applicability determination since 2001, the continued renewals of its Title V permits, and industry's general

⁶ EPA's NOV acknowledges that the No. 2 M&D Digester had the same configuration as the No. 1 M&D Digester; therefore, the statements regarding one digester would apply to both M&D Digesters at the Wallula mill.

understanding and acceptance of Subpart S standards. Until initiation of this enforcement action, EPA did not directly notify PCA of its disagreement with Ecology's conclusions. Further, since 2001, the mill has completed four separate Title V permit renewals and EPA Region 10 has never objected to the M&D Digester exemption.

B. The Regulatory History Illustrates EPA Headquarters Did Not Intend to Regulate Emissions from the Bauer Valves (using fresh steam) or Surge Bins

While the plain reading of the regulation is unambiguous, the regulatory history unmistakably shows that EPA Headquarters ("EPA HQ") did not intend to regulate emissions, if any, from the Bauer Valves and surge bins.

PCA is aware that EPA's allegations against PCA are consistent with allegations against other pulp and paper companies in Region 10. PCA is aware of five other operators of M&D Digesters that EPA confronted with allegations of noncompliance under Subpart S. While each company's M&D Digester configuration is unique, each company presented similar regulatory interpretations of Subpart S to EPA representing a common understanding of industry's approach to implementation of compliance strategies for Subpart S.

I. Not all gases are Required to be Controlled

Only gases from the listed equipment are required to be collected and controlled. Rulemaking documents confirm that EPA HQ did not intend to regulate all emissions from digester systems, and EPA HQ statements during the rulemaking confirm that insignificant emission points and vents that were not typically controlled by industry were outside the scope of the regulations. Specifically, EPA HQ did not identify chip bins, bins feeding continuous digesters, batch digester capping and filling operations, or rotary valves feeding continuous digesters as emission points to be controlled.

In the initial proposal, EPA HQ included "all vents and pulping wastewater streams in pulping and bleaching areas . . . with the exception of certain small vents and wastewater streams defined by numerical cutoffs."⁷ Based on industry comments and its own further evaluation, however, the EPA HQ determined that approach would be unwieldy for both industry and regulators, requiring an excessive amount of testing of pulp mill vent streams to determine whether they were above or below specified cutoffs, and likely resulting in over-regulation in some cases and under-regulation in others.⁸

In the final rule, EPA HQ changed its approach to "naming specific vents and streams subject to the standard instead of determining affected emission points and wastewater streams based on broad groups of equipment with exclusions for small streams not currently being controlled, as was done at proposal."⁹ EPA HQ stated "the applicability cutoffs contained in the proposed rule

⁷ 61 Fed. Reg. 9383, 9385 (March 8, 1996).

⁸ 61 Fed. Reg. at 9389; *see also* 63 Fed. Reg. 18,504, 18,520 (April 15, 1998); Pulp, Paper, and Paperboard Industry – Background Information for Proposed Air Emission Standards – Final EIS; Manufacturing Processes at Kraft, Sulfite, Soda, and Semi-Chemical Mills, EPA-453/R-93-050b, October 1997 ("Final EIS") at pp. 1-30 to 1-31.

⁹ 61 Fed. Reg. at 9388; 63 Fed. Reg. at 18,19

have been replaced in favor of specifically naming process equipment and condensate streams that would be required to meet the rule.”¹⁰ By naming the particular equipment required to be controlled, EPA HQ intended to encompass equipment vents that were controlled at the “MACT floor,” as contemplated at proposal, without the potential for covering many smaller, insignificant emissions.¹¹

EPA HQ did not intend to require collection and incineration of minor vents associated with pulping and not typically controlled by industry. For example, EPA HQ never identified rotary valves feeding continuous digesters, batch digester capping and filling operations, nor chip bin vents, nor the point where chips are fed into the digester, as covered sources of emissions.¹² At that time, EPA HQ and industry discussed continuous digester blow tank gases and digester relief gases, without mentioning of chip bins, digester feed valves, or emissions from chip bins. EPA HQ undertook to “determine a control strategy *for the identified pulping and bleaching emission points*” (emphasis added).¹³ EPA HQ identified emission points noting that “[t]he air emission points selected for today’s proposed regulations include all significant points in the pulping and bleaching processes....”.¹⁴ EPA HQ did not include chip bins or digester feed equipment to be controlled as part of the “MACT floor”.¹⁵ EPA HQ noted that “there exist low flow or episodic pulping and bleaching component vents for which no information was gathered, but which are believed to be uncontrolled” and therefore not identified in the proposed rule.¹⁶

Even if there were insignificant levels of regulated pollutants detected from PCA’s surge bin vents or the Bauer Valve pockets, through the natural degradation or warming of organic wood fiber, Subpart S did not require sources to collect and control these gases. EPA’s assertions that all emissions must be controlled reflects an incorrect presumption that all pulping system or digester system emissions must be controlled. **To the contrary, as explained above, EPA HQ made a very deliberate decision *not* to take that approach in the regulations.**

¹⁰ *Id.*

¹¹ See, e.g., 61 Fed. Reg. at 9389 (“At proposal, EPA had limited data to characterize some of the smaller emission points...within the pulping component. However, based upon experience and engineering assumptions, these small vents and condensate streams were assumed to be uncontrolled at the floor and not reasonable to control beyond the floor. . . . [B]y specifically defining the equipment systems and associated wastewater streams subject to the MACT standard (i.e., only the equipment systems and wastewater streams specifically enumerated would be subject to the standard)[.] EPA believes this change will result in the same level of control at the MACT floor for both wastewater and process equipment contemplated in the proposal . . .”). See also Final EIS at p. 1-31 (final rule requires “specific vent and condensate streams . . . to be controlled” based on “information presented in response to industry surveys used to characterize controls that are installed at existing mills and in comments on the proposed rule”), p. 4-68 (additional information obtained after proposal “allowed EPA to identify which vent and condensate streams are actually controlled at the floor level of control”), p. 4-69 (the “emission points and condensate streams that are being controlled in the final rule are fundamentally the same emissions sources that EPA intended to be controlled in the proposed rule”).

¹² Pulp, Paper, and Paperboard Industry – Background Information for Proposed Air Emission Standards; Manufacturing Processes at Kraft, Sulfite, Soda, and Semi-Chemical Mills, EPA-453/R-93-050a, October 1993 at 2-9 to 2-13

¹³ See 58 Fed. Reg. 66,078, 66,135

¹⁴ *Id.* at 66, 138-40.

¹⁵ *Id.* at 66, 139

¹⁶ *Id.* at 66, 142

2. *Emissions from the Chip Bins do not Require Control*

EPA's NOV specifically expresses concern about emissions from the surge bin vents. The bins are not listed in Subpart S as regulated components of the digesters systems or pulping systems and as noted above were not identified by EPA HQ as part of the MACT floor. EPA HQ's own applicable guidance states that chip bins "are not subject to any requirements under the NESHAP, except in one circumstance."¹⁷ Meaning only if the bin is serving "the same function as a chip steamer," and the steam entering the bin is not fresh steam, then the bins (effectively chip steamers not using fresh steam) would be covered by the digester system definition at 40 C.F.R. § 63.441, and subject to regulation.

A chip steamer is defined as "a vessel used for the purpose of preheating or pretreating wood chips prior to the digester." 40 C.F.R. § 63.441. PCA's bins are not chip steamers, as defined in Subpart S; therefore, emissions from the bins are not subject to emissions controls.

Furthermore, confirming the intent of the rule, in an e-mail dated April 21, 2001, from Ms. Penny Lassiter of EPA to Mr. Bill Dameworth with Pope and Talbot, Ms. Lassiter wrote:

"The intent of the rule is to control venting of the chip steamers and venting off the chip bins if the chip steamer vents through the chip bins where waste or flash steam is used. As I recall, we did not intend to capture situations where only fresh steam is used."

Based on the plain language of the regulation, as well as the regulatory history, including MACT floor survey information, it is clear that the EPA HQ expressly excluded the Bauer Valve (when using fresh steam) and the surge bins (when not operating as a chip steamer) from Subpart S requirements. As a result, PCA maintains it has been, and currently is, in compliance with Subpart S.

IV. **PCA Proactively Invested Significant Capital Upgrading the LVHC System**

PCA was tangentially aware of Region 10 enforcement actions against other industry partners that had M&D Digesters though no announcement of any kind was ever communicated to industry by EPA. As part of a larger capital project, and reacting to the uncertainty in Subpart S interpretation from EPA, PCA decided make alterations to its LVHC system and No. 2 M&D Digester. Given this was not an "off-the-shelf" technology, it had to be engineered and designed specifically for PCA's operations. As a result, in 2018 and 2019 PCA spent \$4.0 million to make alterations to its systems. The LVHC system changes in 2018 included:

- Installation of supporting vessels, piping, and process control equipment for secondary exhaust collection on both M&D Digesters;
- Modifications to the No. 2 M&D digester blow tank separator vessel and vent condenser to handle the increased secondary exhaust; and

¹⁷ Questions and Answers for the Pulp and Paper NESHAP Second Volume, March 31, 2000 ("EPA Guidance"), Question 8.

- Upgrades to steam ejectors to provide sufficient motive force for the increased LVHC system volume.

This work was completed in October 2018 and allowed the LVHC system to collect and control the secondary exhaust from the Bauer Valves that was previously routed to the surge bins in conformity with the EPA Guidance to industry. In June 2019, the following additional subsequent upgrades on the No. 2 M&D Digester collection system were completed to account for sawdust carryover. The changes included:

- Installation of supporting piping and process control equipment to collect secondary exhaust from enclosed standpipe and sidehill screen;
- Upgrades to the water system for gas collection showers and flush water; and
- Installation of a fiber collection bunker.

PCA performed all the above work to achieve a greater level of collection and control than required by Subpart S. Prior to these changes, the LVHC system and digester systems were configured and operated in compliance with the plain meaning of Subpart S.

VI. Penalizing PCA for Past Conduct is a Violation of Due Process

The cover letter to EPA's NOV expressly foreshadows that EPA is pursuing "an appropriate penalty" against PCA. Under the circumstances presented in PCA's matter and as summarized below, further action to impose any penalty would be contrary to established case law.

A. EPA Must Provide "Fair Notice" to the Regulated Entity

The Constitution's Due Process Clause requires that parties receive fair notice before being deprived of property. Fair notice is evaluated "by reviewing the regulations and other public statements issued by the agency, [and asking if] a regulated party acting in good faith would be able to identify, with '*ascertainable certainty*,' the standards with which the agency expects parties to conform." *General Elec. Co. v. U.S. EPA*, 53 F.3d 1324, 1329 (D.C. Cir. 1995) (emphasis added).

In determining whether a party received fair notice, courts "look at the facts as they appear to the party entitled to the notice, not to the agency." *United States v. Hoechst Celanese Corp.*, 128 F.3d 216, 226 (4th Cir. 1997). If a regulation is susceptible to more than one interpretation and the agency has not consistently announced and embraced a particular reading or application, then the fair notice doctrine prohibits the agency from imposing its preferred interpretation retroactively. *Rollins Environmental Services, Inc. v. EPA*, 937 F.2d 649, 653 (D.C. Cir. 1991). So long as a regulated entity had "reason to believe that its interpretation . . . was accurate," EPA cannot retroactively enforce a more restrictive interpretation. *Hoechst*, 128 F.3d at 226.

In the *Hoechst* case, the Fourth Circuit held that EPA failed to provide fair notice where it promulgated NESHAP with an exemption susceptible to more than one reasonable interpretation, and then brought an enforcement action based on its narrow interpretation of the exemption. *Id.* at 227. **Only after** EPA communicated its interpretation to Hoechst did the company have “fair notice.” *Id.* at 229 (emphasis added).

Courts are likely to find a lack of fair notice where multiple regulated entities have an interpretation differing from an agency’s interpretation underlying its enforcement actions. In *Christopher v. SmithKline Beecham Corp.*, “industry generally, for years assumed” that certain sales representatives were exempt from certain Fair Labor Standards Act provisions. 567 U.S. 142, 155–59 (2012). Then, in 2009, the Department of Labor (“DOL”) issued an interpretation that such representatives are not exempt. The Supreme Court was concerned that petitioners in the case were attempting to “invoke the DOL’s interpretation of ambiguous regulations to impose potentially massive liability on respondent for conduct that occurred well before that interpretation was announced,” and that this “would seriously undermine the principle that agencies should provide regulated parties fair warning of the conduct [a regulation] prohibits or requires.” *Id.* at 155–56 (internal quotation and citation omitted). Prior to DOL clarifying its interpretation, the industry “had little reason to suspect that its longstanding practice” transgressed the statute. *Id.* at 156. The Court underscored how the industry had acted for years according to its understanding of the standard in question, during which time the DOL had not initiated enforcement actions nor suggested that the industry was acting unlawfully. *Id.*¹⁸ The Court noted that where “an agency’s announcement of its interpretation is preceded by a very lengthy period of conspicuous inaction, the potential for unfair surprise is acute.” *Id.*¹⁹

In this case, EPA’s allegations present a clear lack of “ascertainable certainty” as to which emissions required controls to achieve compliance, in contrast with explicit language of Subpart S, EPA’s Guidance to industry, and commonly held positions of the other companies. This is particularly apparent when “look[ing] at the facts as they appear to [PCA], not [EPA].” *Hoechst*, 128 F.3d at 226 (4th Cir. 1997). Subpart S enumerates specific pieces of equipment from which emissions must be controlled. Equipment like the surge bins, as EPA referred to them, and the Bauer Valves are conspicuously absent. PCA had every “reason to believe that its interpretation” and its emissions controls were consistent with the requirements. *Hoechst*, 128 F.3d at 226.

¹⁸ See also *SmithKline*, 567 U.S. at 156 (“[W]hile it may be possible for an entire industry to be in violation of [a given law or regulation] for a long time without the [regulatory agency] noticing, the more plausible hypothesis is that the [agency] did not think the industry’s practice was unlawful.”) (internal quotations and citation omitted); *id.* (“Our practice of deferring to an agency’s interpretation . . . has important advantages, but this practice also creates a risk that agencies will promulgate vague and open-ended regulations that they can later interpret as they see fit, thereby frustrating the notice and predictability purposes of rulemaking.”) (internal quotation and citation omitted).

¹⁹ See also *Barboza v. California Ass’n of Prof’l Firefighters*, 799 F.3d 1257, 1267 (9th Cir. 2015) (“Where an agency announces its interpretation for the first time in an enforcement proceeding and has not previously taken any action to enforce that interpretation, the potential for unfair surprise is acute.”) (internal quotation and citation omitted); *Indep. Training & Apprenticeship Program v. California Dep’t of Indus. Relations*, 730 F.3d 1024, 1035 (9th Cir. 2013) (“[A]gencies should provide regulated parties fair warning of the conduct a regulation prohibits or requires.”) (internal quotation and citation omitted).

The lack of ascertainable certainty regarding which emission control approaches were compliant with the NESHAP is underscored by other companies targeted by EPA Region 10. Each company rejected EPA's allegations as unfounded and inconsistent with prior readings. Those entities—like PCA—operated for many years without any EPA enforcement or clarification making “the potential for unfair surprise . . . acute.” *SmithKline*, 567 U.S. at 156.

As in the *SmithKline* case, the pulp and paper industry has operated for two decades on its understanding of the application of Subpart S, and EPA has only relatively recently applied its novel compliance interpretation through these enforcement actions. EPA Region 10 still has not issued any industry notice of its new interpretation of Subpart S. Additionally, EPA never objected to the Bauer Valve/Surge exemption specifically identified in the mill's Title V permit, which has been renewed four times since 2001. Under these circumstances, the “fair notice” doctrine prohibits EPA from imposing its present interpretation retroactively and imposing civil penalties in enforcement proceedings.

B. EPA failed to provide a “reasoned explanation” for its new policy, and civil penalties represent an unlawful retroactive application of a new interpretation

Under the Administrative Procedure Act, an agency may not “depart from a prior policy *sub silentio*” and must do the following when changing a policy:

- (1) display “awareness that it is changing position,”
- (2) show that “the new policy is permissible under the statute,”
- (3) “believe” that the new policy is better, and
- (4) provide “good reasons” for the new policy, which, if the “new policy rests upon factual findings that contradict those which underlay its prior policy,” or if “its prior policy has engendered serious reliance interests,” must include “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.”

F.C.C. v. Fox Television Stations, Inc., 556 U.S. 502, 515–16 (2009); *Organized Vill. of Kake v. U.S. Dep't of Agric.*, 795 F.3d 956, 966 (9th Cir. 2015).

Fox involved the FCC's revised interpretation whereby the agency would treat certain types of profanity in television broadcasts as indecency—a change from prior policy. *Fox*, 556 U.S. at 508–10. The Court found that the FCC's “new enforcement policy” based on its revised interpretation was neither arbitrary nor capricious. *Id.* at 517. However, the reasons why the FCC's actions were not arbitrary or capricious show why EPA's proposed penalties in the present case are arbitrary and capricious.

First, the FCC issued an order *declaring that it was changing its policy from prior practice* (thereby putting the regulated community on notice and demonstrating awareness that the agency was changing its position). Second, the agency concluded that because “existing precedent would have permitted” certain profanity at issue, regulated entities “did not have the requisite

notice to justify a penalty.” *Id.* at 509–10. The Court noted that because the agency “knew it was making a change,” it appropriately “declined to assess penalties; and it relied on the [order] as removing any lingering doubt.” *Id.* at 517.²⁰

The *Fox* case provides an example of what an agency should do when revising or clarifying interpretations and engaging in a stricter enforcement policy: namely, clearly communicate the change and the reasons for doing so to the regulated community and decline to assess penalties for conduct prior to the notice of change in interpretation and enforcement policy. In the present case, by contrast, EPA did not provide any reasoned explanation of its changed policy.²¹ Furthermore, EPA had a duty to provide “good reasons” for the change because PCA, like other regulated entities in the industry, reasonably relied on the explicit language of Subpart S, EPA’s Guidance, and EPA’s years of non-enforcement. EPA Region 10 has failed to complete *any* of the 4 steps articulated by the Court in *Fox*.

A civil penalty imposed against PCA would represent an impermissible retroactive application of a new interpretation and policy. An agency cannot apply a “specific interpretation to impose liability” with “retroactive effect”²² unless authority to do so is “conveyed by Congress in express terms.” *Nat’l Min. Ass’n v. U.S. Dep’t of Interior*, 177 F.3d 1, 8 (D.C. Cir. 1999). Even where an agency “merely narrows a range of possible interpretations to a single precise interpretation,” it may “change the legal landscape in a way that is impermissibly retroactive.” *Arkema Inc. v. E.P.A.*, 618 F.3d 1, 7, 9 (D.C. Cir. 2010) (internal quotations and citation omitted) (EPA’s interpretation of Section 607 of the Clean Air Act “contradict[ed] past practice . . . altering the legal landscape” and was “impermissibly retroactive”).²³ Here, even if EPA merely clarified a single precise interpretation regarding emissions controls for insignificant emissions under Subpart S, it may not rely on that interpretation to impose civil penalties on PCA for past practices prior to EPA’s communication of that clarification, absent express authority from

²⁰ See also *Organized Vill. of Kake v. U.S. Dep’t of Agric.*, 795 F.3d 956, 966 (9th Cir. 2015) (USDA Record of Decision failed to provide “good reasons” under *Fox*); *Nw. Envtl. Def. Ctr. v. Bonneville Power Admin.*, 477 F.3d 668, 687–88 (9th Cir. 2007) (“[A]n agency must clearly set forth the ground for its departure from prior norms [because] if an agency glosses over or swerves from prior precedents without discussion it may cross the line from the tolerably terse to the intolerably mute.”) (internal quotations and citations omitted).

²¹ Although EPA may contend that there has been no change in policy, a court would consider the facts as they appeared to PCA and other regulated entities—not the agency—and would consider circumstances such as years of agency non-enforcement while regulated entities were known to have had pulping system configurations that the agency has more recently deemed to be noncompliant with the NESHAP.

²² Retroactive effect entails “tak[ing] away or impair[ing] vested rights . . . or creat[ing] a new obligation, impos[ing] a new duty, or attach[ing] a new disability in respect to transactions or considerations already past.” *Nat’l Min. Ass’n*, 177 F.3d at 8 (internal quotation and citation omitted).

²³ See also *Mexichem Fluor v. Envtl. Prot. Agency*, 866 F.3d 451, 461–62 (D.C. Cir. 2017), *cert. denied sub nom. Honeywell Int’l v. Mexichem Fluor*, 139 S. Ct. 322 (2018), and *cert. denied sub nom. Nat. Res. Def. Council v. Mexichem Fluor*, 139 S. Ct. 322 (2018) (“[I]f EPA concludes that it has authority for ‘retroactive disapprovals’ [of hydrofluorocarbons (“HFCs”) as substitutes for ozone-depleting substances under the Clean Air Act], EPA must explain the basis for its conclusion and explain its change in interpretation [U]nder the retroactive disapproval approach, EPA would in effect require manufacturers to replace their HFCs Such a change in EPA’s approach would require an explanation. Moreover, to the extent that EPA’s prior approach had engendered serious reliance interests, EPA would need to provide a more detailed justification for its change.”).

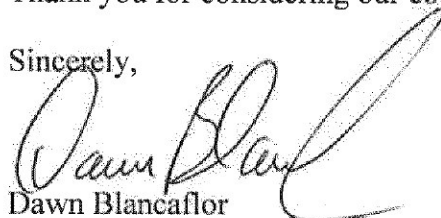
Congress. Neither the CAA nor Subpart S provide such authority. Thus, it is unlawful and a violation of Due Process for EPA to impose civil penalties on PCA.²⁴

VI. Conclusion

The plain reading of the regulation is clear. During rulemaking, EPA HQ intentionally excluded the Bauer Valve (using fresh steam) and surge bins from Subpart S requirements. While this is expressly clear in the plain reading of the regulation, this conclusion is also amply supported by the legislative history of the rule. For EPA to enforce its different interpretation of the rule, it must provide Fair Notice to regulated entities before enforcing and/or assessing penalties. Notice has never been provided to industry. EPA's enforcement action against PCA is an impermissible retroactive application of a new interpretation and policy, and is unjust. PCA acted in a responsible and diligent manner and has been, and continues to be, in full compliance with Subpart S obligations.

Thank you for considering our cooperative efforts to respond.

Sincerely,



Dawn Blancaflor

Attachment

cc: OAQPS: Robin Dunkins
OAQPS: Kelley Spence
OAQPS: Cheryl Vetter

PCA: Paul Butkus
PCA: John Piotrowski

²⁴ The prohibition on impermissibly retroactive applications of an agency's clarified interpretation is closely related to the "fair notice" doctrine described above. For example, in the *Mexichem* case (*see supra* note 13), the court observed: "To satisfy the Due Process Clause, EPA must at a minimum provide regulated parties fair warning of the conduct a regulation prohibits or requires. . . . [E]ven if EPA has statutory authority to retroactively disapprove the replacement of an ozone-depleting substance with HFCs, EPA plainly may not impose civil . . . penalties . . . based on the manufacturer's *past* use of HFCs" prior to EPA's clarified interpretation. 866 F.3d at 46.

Attachment 1

to

Packaging Corporation of America's

January 29, 2020

Letter to the U.S. Environmental Protection Agency, Region 10



January 24, 2020

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Pulp & Paper Sector
Attention: Robin Dunkins
109 T.W. Alexander Drive
Mail Code: E143-03
Research Triangle Park, NC 27709

Re: 40 CFR 63 Subpart S Applicability Determination Request

Dear Ms. Dunkins:

Packaging Corporation of America ("PCA") owns and operates an integrated unbleached kraft/neutral-sulfite semi-chemical pulp and paper mill in Wallula, WA ("Mill") that is subject to 40 CFR 63 Subpart S. The Mill operates two Messing-Durkee continuous digesters ("M&D Digesters" or "Digesters").

Unlike typical Kamyr continuous digesters which utilize a low-pressure feeder valve followed by a chip steamer and finally a high pressure feeder valve to feed chips to the digester, M&D Digesters utilize Bauer valves to transfer sawdust from the feed bin to the Digester. As described in a M&D Digester Technical Memorandum (March 2000, revision March 2004, Attachment 1) the Bauer rotary valve *"performs the roles of the low-pressure feeder, steaming vessel, high pressure feeder and top separator...."* when used to transfer sawdust into an M&D digester.

PCA recognizes that M&D Digester system configurations vary. The Mill's M&D Digesters feature dry-feed systems and do not utilize any cooking liquor in the feed screws (to convey sawdust from the feed bin to the Bauer valve). Instead, both Digesters apply only high-pressure fresh steam (i.e., no digester flash or relief steam) to their respective Bauer valves. All of the steam required for Digester operation is introduced through the Bauer valve as fresh steam at a pressure 25 psig greater than the Digester operating pressure.

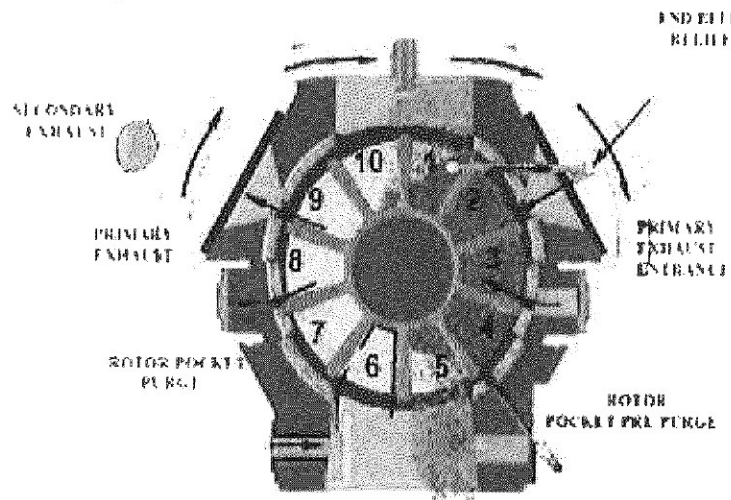
The Mill's Digesters are similarly configured; each Digester Bauer valve transfers sawdust into the head of the Digester as shown in Figure 1 which illustrates the 10 positions of the clockwise-rotating Bauer valve. Positions 1-5 of the valve constitute the descending side and 6-10 positions are on the ascending side.

Each Digester Bauer valve transfers sawdust from a feed bin to the head of the Digester as follows (Figure 1):

- In positions #10 and #1, sawdust, delivered by a dry feed system, drops into the top of the Bauer valve.

- Displaced air from position #1 is fed into the Bauer valve chamber located in the #2 position via the End Bell Relief line.
- In position #3, the primary exhaust steam, received from the high pressure side of the Bauer valve (position # 8), raises the pressure in the #3 pocket and serves to pre-steam the sawdust.
- In position #4, high pressure fresh steam (i.e., rotor pocket pre-purge), nominally 25 psig greater than the digester vessel operating pressure, is fed into the Bauer valve chamber.
- In positions #5 and #6, sawdust is discharged into the digester vessel.
- In position #6, high pressure pocket purge fresh steam, nominally 25 psig greater than the digester vessel operating pressure, is fed into the Bauer valve chamber to empty the pocket and fill it with the purge steam.
- In position #7, the pocket is empty of sawdust.
- In position #8, the pocket is depressurized by routing steam to the valve pocket in the #3 position (i.e., primary exhaust steam).
- In position #9, any residual pocket steam is exhausted through the secondary exhaust port.
- In position #10, the pocket returns to the top of the rotation cycle to repeat the process.

Figure 1: Bauer valve configuration



PCA notes the following pertinent Subpart S rule language (emphasis and explanation added):

§63.441 Definitions.

Low volume, high concentration or LVHC system means the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems and any other equipment serving the same function as those previously listed.

Pulping system means all process equipment, beginning with the digester system, and up to and including the last piece of pulp conditioning equipment prior to the bleaching system, including treatment with ozone, oxygen, or peroxide before the first application of a chemical bleaching agent intended to brighten pulp. The pulping system includes pulping process condensates and can include multiple pulping lines.

Digester system means each continuous digester or each batch digester used for the chemical treatment of wood or non-wood fibers. The digester system equipment includes

associated flash tank(s), blow tank(s), chip steamer(s) not using fresh steam, blow heat recovery accumulator(s), relief gas condenser(s), prehydrolysis unit(s) preceding the pulp washing system, and any other equipment serving the same function as those previously listed (*Bauer valve serves the same function as a chip steamer as discussed above*). The digester system includes any of the liquid streams or condensates associated with batch or continuous digester relief, blow, or flash steam processes.

Sawdust is a wood-fiber source included within the term "chips". Notably, Subpart S does not define "chips" or "sawdust," although the term "chips" is used throughout the rule. An examination of the industry survey data collected by NCASI and analyzed by EPA affirms that the survey asked facilities to identify the sources of fiber furnish, including chips produced on-site, chips produced off-site, and sawmill residues (Attachment 2). However, in its analysis of the data, EPA did not make a distinction between digesters pulping chips versus digesters pulping sawmill residues but grouped all fiber furnish as "wood-fibers" in the definition. Subpart S combines all wood fiber sources into a single category indicating that the rule makes no regulatory applicability distinction between digesters processing chips and those processing sawmill residues.

§63.443 Standards for the pulping system at kraft, soda, and semi-chemical processes.

(a) The owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems, as specified in paragraphs (c) and (d) of this section.

(1) At existing affected sources, the total HAP emissions from the following equipment systems shall be controlled:

(i) Each LVHC system;

(c) Equipment systems listed in paragraphs (a) and (b) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (d) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450.

PCA is required to collect and control emissions from LVHC system. The LVHC system definition refers to the digester system definition at §63.441 that specifically excludes from regulatory applicability chip steamers using fresh steam. Per the digester system definition, chip steamers not using fresh steam are part of the digester system; chip steamers using fresh steam are not. Additionally, in an email dated 04/21/1998 addressed to Mr. Bill Dameworth of Pope and Talbot, Ms. Penny Lassiter of EPA, who was responsible for writing Subpart S, confirmed this intent as reproduced below (Attachment 3):

"The intent of the rule is to control venting off the chip steamers and venting off of the chip bins if the chip steamer vents through the chip bins where waste or flash steam is used. As I recall, we did not intend to capture situations where only fresh steam is used."

In August 2019 PCA received a Notice of Violation from EPA Region 10 alleging failure comply with 40 CFR 63.443(a)(1)(i) to collect the vent gases from the Bauer valves on the #1 and #2 M&D Digesters based on a Region 10 mill inspection conducted in September 2018. As outlined above, PCA believes that the regulatory intent and the plain reading of the Subpart S rule affirm that the regulation covering the LVHC system refers to sources in the digester system definition. That definition specifically lists components covered by Subpart S and omits chip steamers using fresh steam (or the functionally equivalent equipment, like the Bauer valves) from Subpart S requirements.

A fundamental tenet of regulatory interpretation requires that every word of a regulation must be given meaning and the plain meaning governs. *See Safe Air For Everyone v. U.S. EPA*, 488 F.3d 1088, 1097 (9th Cir. 2007) (“As a general interpretative principle, the plain meaning of a regulation governs . . . Other interpretative materials, such as the agency’s own interpretation of the regulation, should not be considered when the regulation has a plain meaning.”)

For all the reasons detailed above, PCA believes that EPA Region 10’s August 2019 enforcement action contradicts the plain meaning and intent of the rule, in effect, changing the fundamental tenet of the regulation. This belief is buttressed by a 2001 WA Ecology determination that the Mill’s #1 Digester (sawdust-fed, fresh steam-supplied Bauer valve) was exempt from the collection and control requirements of §63.443 (Attachment 4).

In the interest of regulatory clarity, PCA seeks an Applicability Determination from EPA OAQPS.

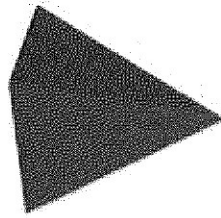
Sincerely,



John Piotrowski
Vice President, Environmental Operations
Packaging Corporation of America
N9090 County Road E
Tomahawk, WI 54487

cc: Kelley Spence, EPA OAQPS
Cheryl Vetter, EPA OAQPS

Attachments (4)



Tetrahedron

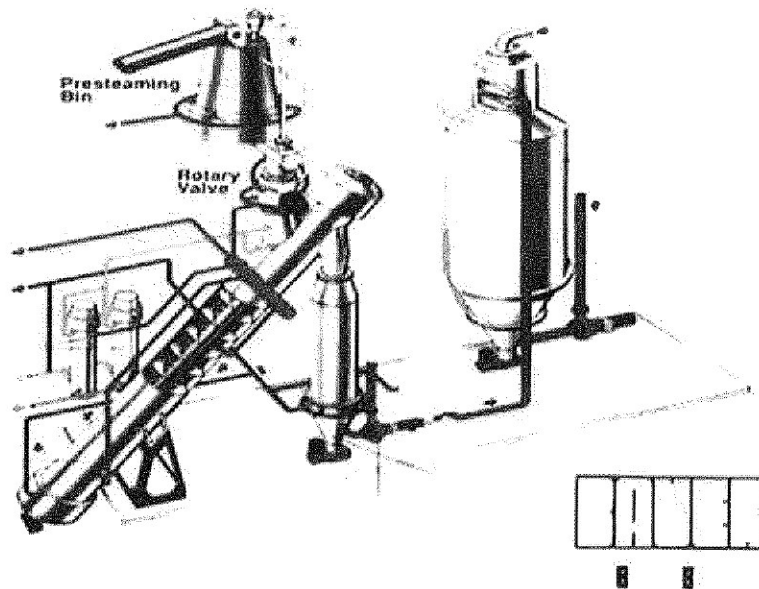
Performance Resources

Strategic Importance of Sawdust Pulping at Mackenzie

Bauer M & D Digester Technology

ANDRITZ

M & D Continuous Digester System



R. T. Boughner
General Manager, Mackenzie Operations
March 07, 2000
Revised January 23, 2002; January 30, 2003; March 03, 2004

Bauer M & D Digester Technology

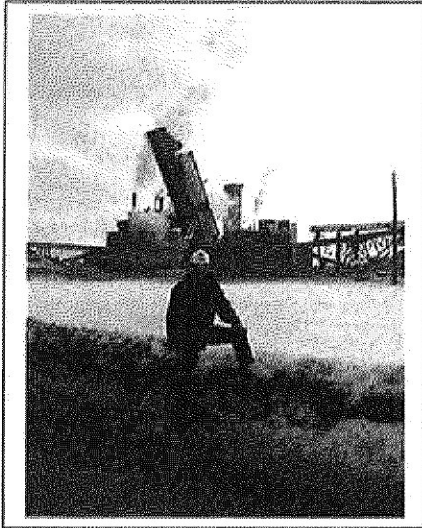
The Bauer M & D digester system was initially developed by Bauer Brothers Company in the late 1950s. Bauer's Canadian headquarters was in Brantford, Ontario. The initial concept was developed by two of Bauer's staff, H.S. Messing and C.L. Durkee, after whom the process is named. It is covered under Canadian patents 893,465 and 928,546 and is also patented in the United States, Austria, Finland, Brazil and a number of other countries.

In a classic ongoing story of merger, acquisition and divestment, Bauer Brothers was acquired by Combustion Engineering in 1973. In 1989, Combustion Engineering was, in turn acquired by ASEA Brown Boveri. ABB then decided that the Sprout-Bauer division, a merger of Bauer Brothers and Sprout-Waldron put together by Combustion Engineering, did not fit their strategic vision; Sprout-Bauer was sold to Andritz in 1990. As of the late 1990s, the Andritz M & D digester was no longer the only one available since, due to patent expiry, Ahlstrom, was also offering the M & D. As of April 2000, however, Andritz is in the process of acquiring Ahlstrom.

Strategic Importance of Sawdust Pulping

As a strategic Pope & Talbot, Inc. corporate capability, we are now producing 108,000 ADt per year of short fibre pulp from sawdust. With no other significant consumer of sawdust within viable transportation distance, this 220,000 BDU per year of sawdust had been burned, with subsequent environmental impact, prior to the startup our sawdust pulping line late in 1996. Our sawdust consumption is supplied from the Mackenzie sawmills of Canfor Corporation 50%, Abitibi-Consolidated 10-15% with the remainder coming from Winton Global in Bear Lake 10-12% and Canfor in Chetwynd 20-25%. Our Andritz-Bauer M & D digester installation consumes the equivalent of what five beehive incinerators would earlier have incinerated in the region, and does so with no atmospheric discharge of particulate.

Unloading, Storage and Reclaiming



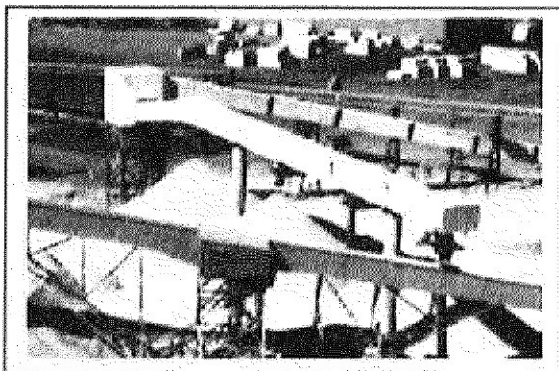
The short fibre handling and storage system is a series of conveyors, chutes, reclaimers and auxiliary equipment that transports truck-delivered sawdust and shavings to the surge bin ahead of the M & D digester. The system starts at the Megatech drive-through truck dumper 20-1100 from which the fibre is dumped into a hopper.

The dumper is an 85-foot tilt-table system designed for six truckloads per hour at a nominal 20 BDU/load. Four 4-stage hydraulic cylinders of 11 $\frac{7}{8}$ ", 10 $\frac{3}{8}$ ", 9 $\frac{1}{8}$ " and 7 $\frac{7}{8}$ " cylinder diameter and 40-ft extension raise the table to a 63-degree incline to permit the chips to dump by gravity into the receiving hopper.

The hopper is 32 feet long and 22 feet wide at the top to receive the flow out of the trailer and converges to 34 feet long and 10 feet wide over the live bottom. It is 17 feet deep at the north end and 8 feet deep at the south end as the live bottom conveyor 20-1130 is inclined 15° upwards towards the discharge.

The chain conveyor is 10 feet wide and 33 feet long and is hydraulically driven by a Hagglands Marathon MB 400 hydraulic drive. The conveyor discharges onto the #1 unloading conveyor 20-1150.

This #1 belt conveyor is a 40 foot long 48-inch belt conveyor that serves to lift the fibre stream 9 feet from the low elevation at the drop-off from the bin bottom and lifts it high enough to dump onto #2 unloading conveyor 20-1160. #2 is another 48-inch belt unit running perpendicular to the #1 with a 478-foot long run sufficient to lift the fibre stream 112 feet vertically from below ground to an elevation above the height of the storage piles.



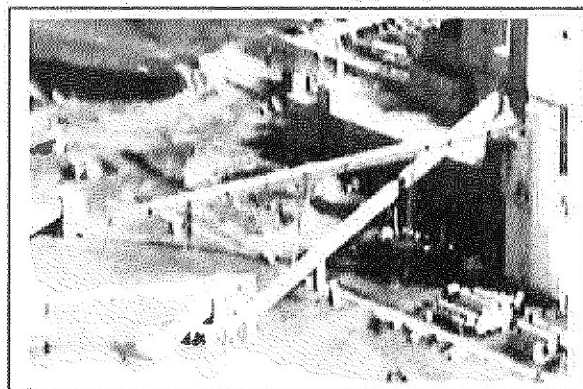
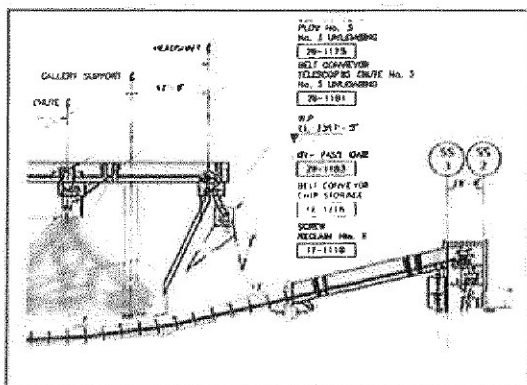
The transfer point between #2 unloading conveyor and #3 unloading conveyor is located in the transfer tower 80 feet above the ground at the elevation above the top of the three conical sawdust piles.

The #3 unloading conveyor 20-1180 is a 54-inch belt that has an initial uphill run but essentially runs out 352 feet horizontally to the east, above the three piles. It has three adjustable plows with "elephant trunk"

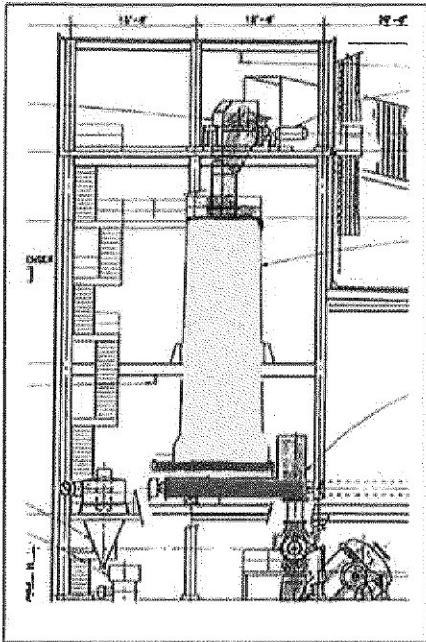
telescopic chutes to form the three conical short fibre piles which are centred 75 to 100 feet apart.

Technical drawing of a telescope mount. The drawing shows a side view of the mount with various components labeled and dimensions provided. Key labels include: "24\"/>

With the big chunks removed, the fibre stream from the scalping screen discharges onto #2 infeed conveyor 17-1160, a 48-inch belt which runs 588 feet to the southeast top of the Kone surge bin. Due to the long run device with a 20-25-ft drop at midlength.



Sawdust Bin 31-1205 and Bin Discharger 31-1210

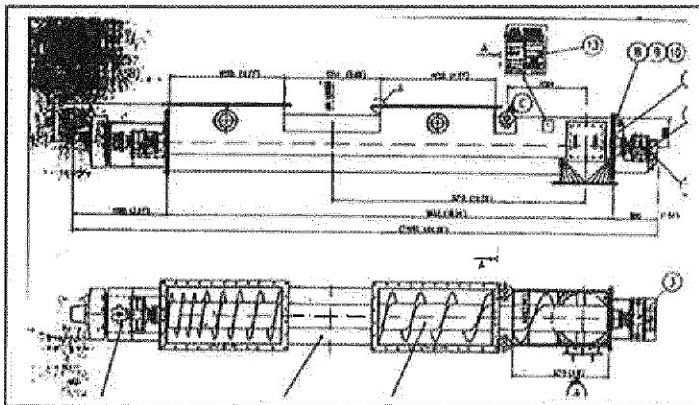


Sawdust from the 48-inch #2 infeed conveyor discharges at a transfer point that is 130 feet above the ground, into the top of the surge bin. The surge bin is 35 feet high and expands in diameter from 10.5 feet at the top to 13.5 feet at the bottom. The negative taper minimizes the risk of hang-ups. The bin nominal capacity of 90 cubic metres or 12 BDU provides 20-25 minutes retention time

Attached to the bottom of the bin is the Andritz-Kone 4-armed HELP bin discharger with double-cylinder hydraulically drive: 31-1212 and 31-1213. This device scrapes back and forth across the bottom of the bin to ensure a constant positive delivery of sawdust to the metering screw conveyor. The action of the discharger, which sweeps the entire bottom surface of the bin, along with the shape of the bin itself, ensures a uniform plug flow. This minimizes channelling of

sawdust down through the bin. The discharger loosens the compaction at the bottom level of the bin and permits the sawdust to drop by gravity into the metering screw.

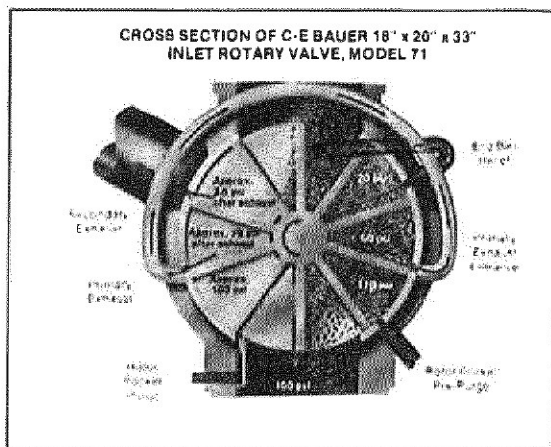
Digester Feed Metering Screw 31-1215



The Andritz-Kone metering screw is driven by a Hagglunds Viking UK44-03300 hydraulic drive and provides accurate metering of sawdust to the digester and an initial impregnation with weak black liquor injected through nozzles, into the sawdust. The metering screw is the device that determines the system production. The geometrically determined delivery rate is 3.9 cubic feet per

revolution. Operating speed is about 30 RPM which delivers almost 120 ft³ per minute, a rate corresponding to 330 unbleached tonnes per day. Variations in screw pitch allow for the even draw down from the bin and ensure a full volume of this screw into the metering shroud. At the discharge of the metering shroud, the screw pitch is doubled to provide an even flow of raw material into the rotary valve.

The original process design had allowed for presteaming provided in the metering screw by utilizing all of the vented steam from the rotary valve. Flash steam was to enter the dome of the metering screw, so that any sawdust carried over in the vent steam is returned to the digester infeed. This was never successful, however, probably



Viewed from the adjusting end, farthest from the stairwell, the valve rotates clockwise. Understanding the operation is helped by visualizing the ten pockets and corresponding ten pocket positions. Consider the orientation with the dividing vane vertical; positions 1-5 are on the descending side and positions 6-10 on the rising side. Sawdust from the metering screw drops through the 26" inlet port in positions #10 and #1, into the valve rotor which makes a half rotation and drops the sawdust out through the 28" outlet port at the #5 and #6

position, down into the main digester vessel. The rotor's ten pockets successively fill and empty.

Typical operating speed of the rotary valve is 65% of the metering screw speed so should be about 20 RPM which delivers about 135 ft³ per minute at a 330 tpd production rate. This corresponds to about 30 RPM on the metering screw and the rotary valve volumetric delivery rate is about 115% of that of the metering screw to provide a "take-away" factor to prevent "backup".

The steaming vessel function is performed through the injection of recycled steam and fresh virgin steam in sequence to elevate the pocket pressure from atmospheric to digester conditions and then back down again through the rotation.

After being filled with sawdust in the #10 and #1 positions, the pocket moves to #2 position where end bell relief recycled steam enters through a 4" diameter connection to elevate the pressure to 20 psig. Next, in the #3 position, the primary exhaust steam from the high pressure side comes in through a 4" connection at lowest point of the pocket to further elevate pressure to 60 psig. Together, these recycled streams provide the first phase of preheating to digester conditions. The preheating is completed with three 190 psig steam connections by injection of 10,000-12,000 lb/hr of fresh steam.

First, through the 2" FCV "A" which generally runs wide open, pre-purge steam comes into the #4 position from the header through two 1" nozzles that enter radially, one at each end of the pocket. These channel steam to the bottom of the pocket to aid in blowing the sticky wetted sawdust out of the pocket and finish elevating pocket pressure toward digester pressure.

As the pocket reaches the discharge nozzle at the #5 position, the sawdust falls down into the digester inlet. Nozzle purge steam can be supplied through 4" FCV "C" through a 6" nozzle, pointing downwards below the #5 position, to keep the discharge passage down to the digester clear. Generally this is not run since it causes back pressure and restricts pocket emptying. In the #6 position, emptying is completed by pocket purge steam supplied through 6" FCV "B" through a 6" nozzle on rising side of

the pocket directed by a turning plenum upward to scour the pocket clear of residual sawdust. This valve generally runs 45-50% open. As the pocket passes the #7 position, it is cleanly emptied but holding digester pressure which must be vented.

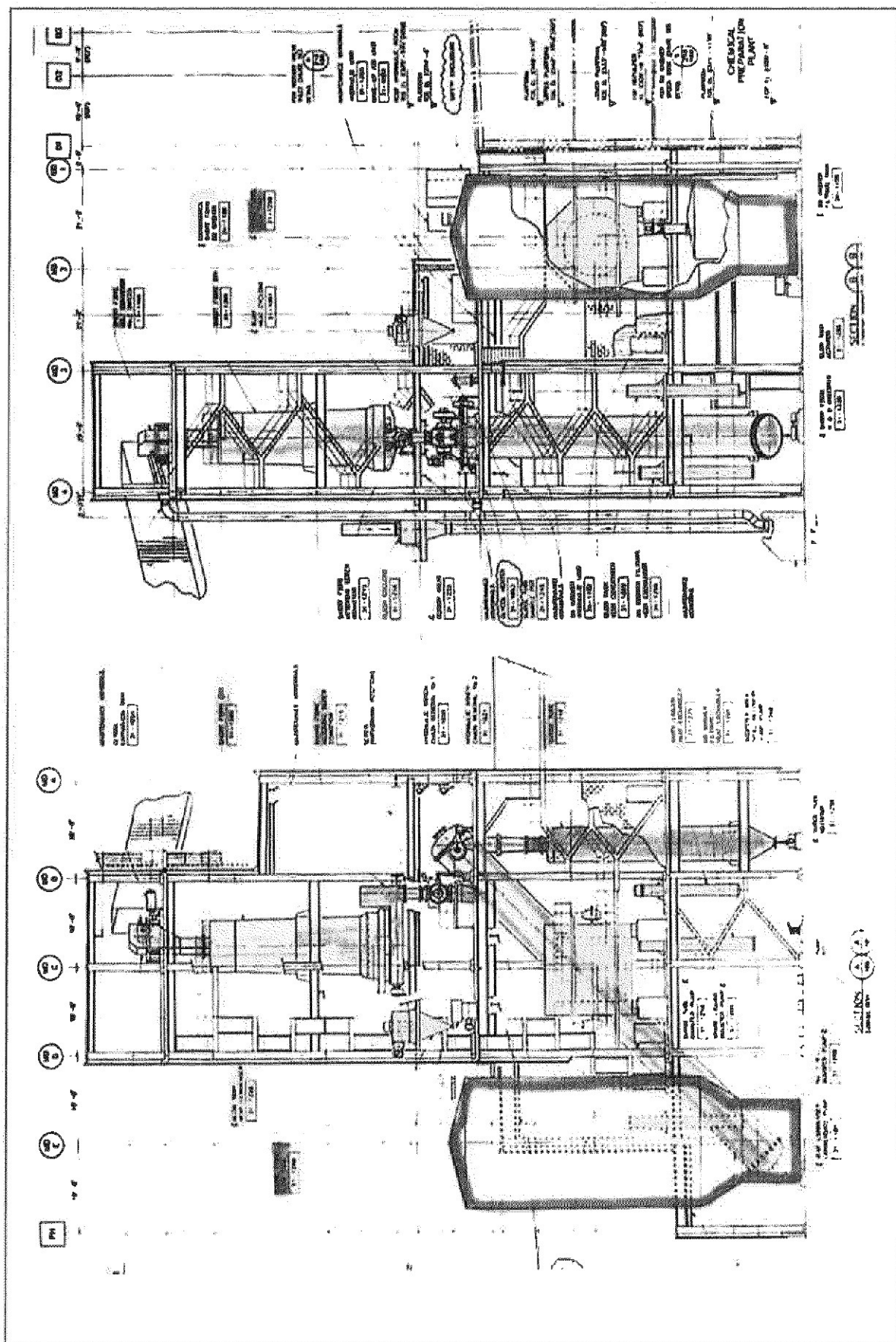
There are two more nozzles, 2" in diameter, located on the 28" diameter bottom discharge nozzle of the rotary valve. These allow for the direct addition of a portion of the white liquor charge. The first phase of depressurization occurs in the #8 position where the primary exhaust port, a 4" nozzle drops the pressure to about 70 psig by allowing transfer, as noted above, around to the #3 pocket which operates at about 60 psig.

As the pocket moves into the #9 position, the trailing vane is passing the 16" secondary exhaust port which allows depressurization to 3-5 psig by venting up the pipe to the sawdust bin for most effective re-use. The pocket then moves into the #10 position at the top where filling begins, to initiate a new cycle. With a 10-pocket rotor and the rotor at 15 RPM, there are 150 pocket-cycles per minute. The most apparent indicator of this frequency is the rapid chug-chug-chug pattern as the pockets pass the secondary exhaust port in the 8 o'clock position.

During operation, small quantities of steam and sawdust blow through the operating clearance between the rotor and the valve body and on into the end bell cavities of the rotary valve. This material is exhausted from the end bells through the manifolds to the previously mentioned 16" diameter connection at the 2 o'clock position and back into the feed pockets. This relieving of the end bell pressure improves feeding efficiency and reduces loading on the thrust bearings packing. If the rotor is poorly seated, the clearance between the rotor and the housing is too great and sawdust build-up in the end bells further aggravates seating, resulting in excessive steam blowback up into the metering screw, ultimately stalling it out.

Mackenzie's species mix is the same blend that makes our MK - 90 chip pulp a global quality leader: 40% western white spruce, *Picea glauca*, 40% lodgepole pine, *Pinus contorta* and 20% alpine fir, *Abies lasiocarpa*. But the characteristics of our "sawdust" furnish are significantly different from typical sawdust. It is 20% green saw kerf and 20% green chip screens undersize fraction; this portion is typical. The other 60% is planer shavings; lumber is planed after the drying kilns, so this 60% is kiln dried. The overall feed stream has an average bulk density of 9.25 OD lb/ft³ or 150 kg/m³. The moisture content ranges 10-30%, very dry by conventional standards.

The general arrangement elevation views of the principal sawdust pulping process equipment: sawdust bin, M & D digester, surge tube, blow tank, brown stock washer and auxiliaries are shown in the following views from the east looking west and from the south looking north.



Bauer Digester Vessel 31-1230



Our M & D digester is a nominal 300 tonne per day unit, 90 feet long flange to flange, 100 inches diameter for a calculated volume of 5,175 ft³ and nominal working volume of 3,450 ft³, mounted at the M & D characteristic 45° angle. It was fabricated by Nooter Corporation in St. Louis, Missouri in 1996 and is rated for 200 psig and 400 °F. It is divided into upper and lower halves by the midfeather. The internal chain conveyor moves the fibre from the discharge of the rotary valve down the upper side of the midfeather to the bottom of the digester and back up the underside to the outlet to the surge tube at the top end. It is driven by a hagglunds Marathon MB 400 hydraulic drive on the head shaft.

This 45° inclination gives the M & D digester its uniquely characteristic features of the vapour phase impregnation zone at the inlet as in the Kamyr and Impco designs along with the positive movement and guaranteed retention time associated with the Black Clawson Pandia digester. The decantation and vapour phase blow stream is unique to this design.

The Digester operating pressure of 150 psig is maintained by the injection of 25,000-35,000 lb/hr of 190 psig steam to the inlet rotary valve. As a pressure vessel, the digester is designed for a maximum pressure of 200 psig and a maximum temperature of 400 °F. Digester operating temperature is controlled by the combined effects of direct injection of 190 psig steam to the digester body and assisted by 8500-10,000 lb/hr of 80 psig steam to the liquor heater which raise the liquor temperature to 300 °F. This digester design provides the potential for three distinct temperature zones: top, mid- and bottom although at Mackenzie we generally run at 350-360°F throughout. It is particularly critical to maintain a bottom temperature of 355-358 °F.

The chain conveyor speed is adjusted according to production rate and head shaft rotational speed should be about 2.4% of the metering screw speed. So at a 300 tonne per day production rate at 28 RPM on the metering screw, the head shaft speed would be about 0.67 RPM.

The running mechanism consists of two 11.625" diameter steel shafts: head shaft at the upper end and tail shaft at the lower end. The head shaft is driven by a Hagglunds Marathom MB 400 hydraulic motor; the tail shaft is an idler with tension adjustment capability. The upper shaft has a pair of 39" diameter 12-tooth sprockets mounted on the shaft, centred about 50 inches apart. The lower shaft is attached to a

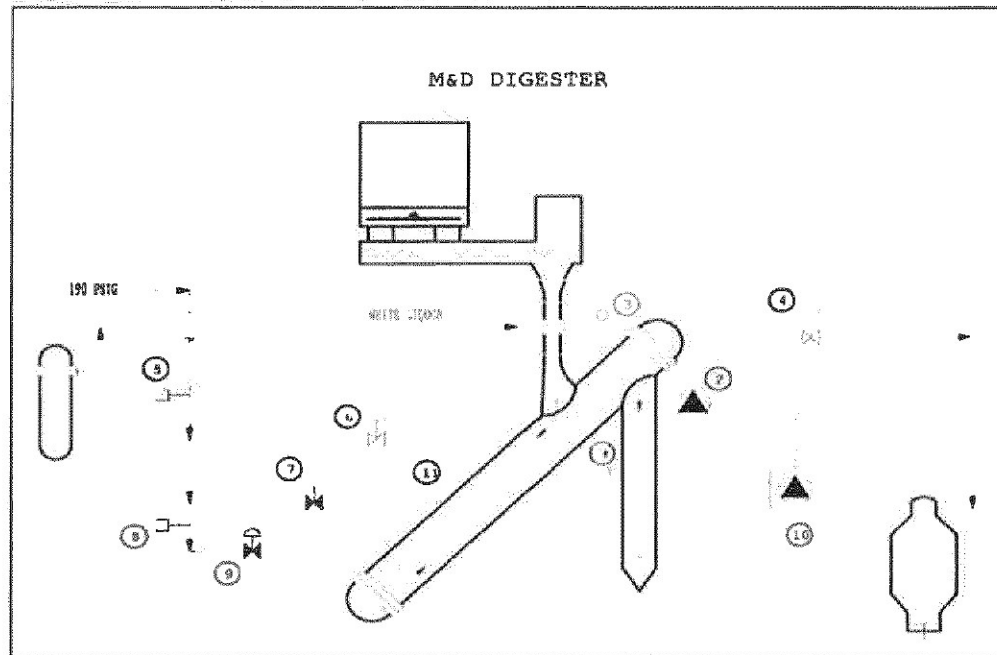
hemispherical inner head that forms a housing, similar in section to the lower head of the vessel.

This hemispherical head and lower idler shaft are permitted to move in the inward direction along the digester axis. The degree of this movement is controlled by a shaft attached to the idler lower end and extending through the bottom head of the digester for connection to compression springs. The hemispherical inner head and lower idler shaft are limited in outward movement to indicate chain wear and keep spring force at design load. The chain assembly consists of two parallel strands of 20" links, one running on each pair of upper and lower sprockets.

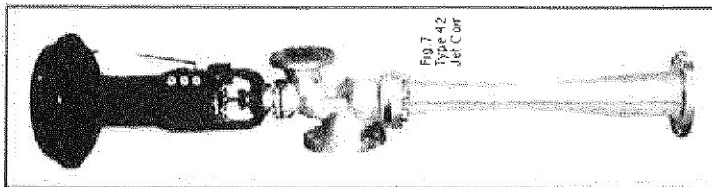
There is a conveying flight on every third link for a total of 36 flights. The size and shape can be described as a segment of a 100" diameter circle, cut by a chord 20" displaced from the diameter, therefore enclosed by 133° of the circumference. That makes it approximately 90 inches wide along the chord and 30 inches maximum height, measured along the radius, chord to circumference. The flights are bent on a line, parallel to the base and 16" away from the base to provide a 140° included angle, making a pocket effect. At a typical chain speed of 0.58 RPM on the head shaft, the chain will travel at 6 feet per minute, or 10 feet per sprocket revolution, and the 180 foot running length of the chain will make a cycle in 30 minutes. The chain running length, inlet nozzle to outlet nozzle is 159 feet and with a normal liquor volume of about 85% of the total vessel volume, the liquor phase cooking time would be about 25 minutes.

Once retention time is set, K-no control is achieved by adjusting the E.A.:wood ratio. The main cooking liquor addition is directly to the digester body and a smaller fraction to the rotary valve. White liquor at about 200 usgpm is diluted with about 25 usgpm of weak black liquor and the combined stream is heated from 145 °F to 280 °F in the liquor heater before being injected into the upper shell.

Cooking is essentially at constant H-factor; temperature at 355-365 °F or 180-185 °C and retention time at 20-24 minutes remain constant over the normal range of production rates.



Thermocompressor 72-4001 and Desuperheater System Operation



Because of its need for steam of higher pressure and temperature than other mill applications, the M & D digester system includes a Schutte & Koerting model 426 venturi-type thermocompressor

to provide 190 psig steam. The unit is 101 inches overall length and has a 4" inlet for 625 psig steam, 6" inlet for 165 psig steam and a 6" outlet for 190 psig steam.

Physically, it is oriented horizontally and installed along the west side, nearly at the roof level of the Power Boiler, on the fourth floor level, adjacent to the power boiler drum and the two deaerator heads. The digester's consumption rate of up to 35,000 lb/hr is produced by using 10,000 lb/hr of boiler header pressure steam at 625 psig to elevate the pressure of 25,000 lb/hr of 165 psig high pressure steam. Because of the proximity of supply of 625 psig steam, the thermocompressor is located in the Power & Recovery building although it is dedicated to the M & D digester.

Outlet Surge Tube 31-1240

Cooked fibre discharges by gravity from the digester vessel into the surge tube. The surge tube is nominally 50 feet high and 90 inches in diameter, with a vertically mounted bottom agitator, 31-1255, providing five minutes retention time at typical conditions. The stock temperature is reduced from 350 °F at the top inlet to 280 °F at the bottom outlet by recirculation of about 200 usgpm of weak black liquor filtrate from the D-D washer first stage filtrate tank. The liquor for both surge tube dilution and subsequent further dilution in the blow tank is cooled from 185 °F to 125 °F by circulation through the filtrate cooler before return to the surge tube. The cooling water from the cooler is at 160 °F and goes to the hot water system.

The stock is then directed to one of two blow lines to the blow tank. There is a sampling device off the surge tube for stock tests.

Blow Tank 31-1260

The stock enters the flat bottom short fibre blow tank at approximately 5.5% consistency. The blow tank has an overall height of 70 feet and a nominal volume of 24,000 cubic feet or 180,000 usgal. The main storage section of the blow tank is 26'-3" feet in diameter and 48 feet high for a nominal capacity of 100 ADt. The bottom of the blow tank is a 16'-6" foot diameter, 12 feet high dilution zone with side-mounted agitator, 31-1265.

About 200 usgpm of primary dilution is added to the bottom zone of the tank itself and another 100 usgpm is added as secondary dilution to the pump suction. This dilution supply is also cooled in the filtrate cooler. The stock transfer pump, 31-1270

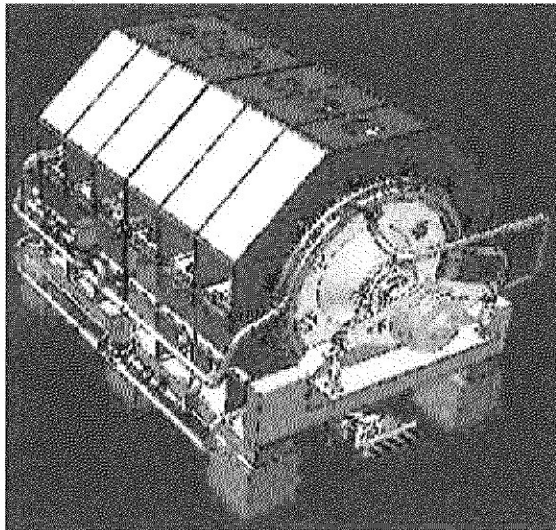
delivers to the Ahlstrom D-D (drum displacer) but this next washing phase of the operation is beyond the scope of this section.

Blow Heat Cyclone 31-1261 and Vent Condenser 31-1290

The blow tank is equipped with a vent system consisting of a blow heat cyclone and vent condenser. The cyclone underflow returns by gravity to the blow tank. This cyclone separates any entrained stock from the gas stream. The "cleaned" vapour stream then passes on to the vent condenser which condenses any condensable gases with the resulting foul condensate pumped to the evaporator seal tank. The remaining stream of noncondensibles, (NGGs) goes on to the Kamyr relief condenser.

Stock spills in the digester area are collected in the spill recovery sump. They are then pumped to the clean fibre salvage or to general sewer.

Short Fibre Brown Stock Washing



The heart of the Andritz-Ahlstrom 4040 drum displacer washer 34-1100 is a rotating drum, 4.00 meters in diameter and 4.00 meters wide. The drum is driven by two Hagglunds Marathon MB 800 hydraulic drives, one on each end of the trunnion.

The cylindrical surface has 40 axial compartments, each 4 metres long across the drum width and about 30 cm wide in the circumferential direction. Perforated screen plate material forms the bottom of the compartments. There is no traditional face wire or fabric required on the drum. Under the perforated plates are the filtrate compartments which are connected to the collection chambers at the end of the drum. The pulp at 3-9 psig enters the inlet box for

even distribution into the pulp compartments on the drum face. It is then thickened into a uniform cake that fills each compartment in turn.

Sealing bars separate the feed box from the washing zone and the outlet box. The sealing bar of the wash zone serves the second function of wiping off the pulp cake so the compartments are uniformly filled as they enter the wash zone. The closed pressurized feed box, stable control of feed pressure and precise thickness of the cake to be washed all combine to achieve very efficient washing. The discharge sheet consistency ranges from 9-13%.

Our D-D washer is a 3-stage unit. The wash liquor is distributed evenly from the washer casing at 7-15 psig over each wash zone. During washing, the pulp and filtrate compartments are hydraulically flooded to ensure air-free sheet formation and constant speed of displacement of the wash liquor through the sheet. The surface of the rotating drum has been divided into pockets by ribs surrounding the drum is a casing to which sealing elements are attached.

Sealing elements separate different washing zones and are connected to the ribs. The feed zone extends from the 6:30 o'clock position to the 8:00 o'clock position; the first washing stage from 8:00 o'clock to 10:30; the second washing stage from 10:30 to 1:00 o'clock; the third washing stage from 1:00 to 4:00 o'clock; the thickening zone from 4:00 to 6:00 o'clock and the pulp outlet at the 6:30 position.

The distribution valve connects the drum channels and filtrate circulation pipes for filtrate removal and counter-current washing. The distribution valve, located at one end of the drum, has been divided into sectors corresponding to the washing stages so the filtrates are not mixed. Filtrate from the thickening zone and from the first washing stage zone are discharged through two separate droplegs into the D-D washer filtrate tank 34-1150. It is 18'-0" in diameter and 21'-6" high, a nominal 32,000 usg tank with an internal seal well to submerge the discharge from each downleg. Weak black liquor from this tank is pumped to the main storage tanks, 60-1001 and 60-1002.

The D-D washer can have 1 to 4 washing zones, depending on the application. Our washer has 3 washing zones. In addition, the washer has a feed zone and a discharge zone. Pulp is removed below the discharge zone by a discharge screw.

The pulp is pumped to the feed zone at a pressure of 1.5 - 7.0 psig and at a consistency of 4.0 - 4.5 %. The pressurized pulp is thickened on the surface of the perforated plate of the drum and fills the pockets separated by the ribs. Concurrently the filtrate passes the perforated plate.

When the pocket filled with pulp passes the first sealing element, excess pulp is wiped off keeping the thickness of the pulp cake constant. The feed pressure is controlled along with the feed consistency. This results in the porosity of the

pulp cake being uniform. This gives the optimum washing result at each operating rate.

The pulp cake entering the first washing zone is of uniform thickness and porosity and at 10 - 12 % consistency. As the drum rotates, 3 displacement washings are carried out using the counter-current washing principle. The dirtier liquor present in the pulp cake in the previous stage is displaced by the filtrate of the cleaner stage. Then the filtrate is fed to the previous dirtier stage as washing liquid.

Filtrate from the decker filtrate tank is used as washing liquid in the third washing stage. The maximum pressure of the wash water is 14.5 psig. The pressure of the wash filtrate is increased somewhat by circulating filtrate pumps located between the washing stages.

The complete washing and filtrate circulation is pressurized by the wash water pressure and intermediate filtrate pumps. This prevents the air from mixing with the pulp.

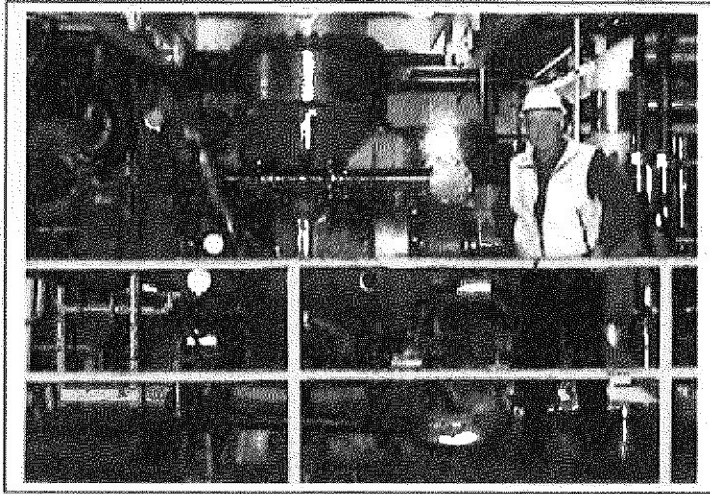
From the last washing stage the pulp enters the discharge stage. When the cake is by the last sealing element, a connection opens from the filtrate channel to the vacuum pump which increases cake consistency by drawing the filtrate from below the perforated plate. After the cake has passed the suction point, a short pressurized air impulse is introduced below the perforated plate. This air impulse loosens the cake so the pulp falls onto the discharge screw.

After the pulp has been discharged, the perforated plate of the drum is washed by the wash water showers. The perforated plate shower pump increases the shower water pressure to 116-145 psig.

Washing of the perforated plate can occasionally be made more effective by the supplying the showers through the high-pressure wash pipe, e.g. with wash intervals of 5 min. The maximum allowable wash water pressure in the pipe is 1450 psig.

Conclusion

Our M & D digester based sawdust pulping system has been an extremely successful addition to the Mackenzie facility. Higher temperature-pressure and higher alkali:wood charge makes the M & D digester a high-intensity cooking machine! An M & D digester doesn't have to "look big" to "produce big". Volumetric productivity is 4-5 times that of a Kamyr or batch system...~60 tpd per 1,000 ft³ compared to ~15 tpd per 1,000 ft³.



Tom Boughner
Mill Manager, Pulp Operations
Norske Skog Mackenzie
September 20, 2000

MEMORANDUM

TO: Penny Lassiter, EPA/WCPG

FROM: Danny Greene, Radian Corporation

DATE: February 29, 1996

REVIEWER: Roy Oommen, Radian Corporation

SUBJECT: Baseline Level of Controls

1.0 INTRODUCTION

The purpose of this memorandum is to present the basis of the baseline level of control for kraft, semi-chemical, soda, and sulfite pulping processes, and for paper-grade and dissolving-grade bleaching processes. The baseline level of control (i.e., what controls are being used in how many mills) will be used to identify the best performing sources, which will be used to determine the maximum achievable control technology (MACT). Table 1 presents the summary of baseline controls for pulping vents and wastewater streams while Table 2 presents the summary of baseline controls for bleaching vents. The summary tables reflect the controls that are frequently used by the industry to reduce emissions. Additionally, the summary tables present considerations for new source controls that are less frequently practiced by the industry.

Section 2.0 of this memorandum presents the information used to determine the baseline level of control for pulping and bleaching processes. Section 3.0 discusses additional data and memoranda used to develop the performance level of the control technologies or strategies identified in Section 2.0. Attachment A contains a summary of the principle data used in this analysis; these data were obtained using the 1992 National Council of the Paper Industry for Air and Stream Improvement, Incorporated (NCASI) voluntary mill survey (air docket A-92-40, item II-D-27). The survey was distributed to all mills by NCASI to obtain information for the development of pulp and paper MACT emission standards. The NCASI voluntary survey requested information regarding the number of emissions points and types of control for pulping, bleaching, and wastewater emission sources at chemical pulping mills. However, some additional industry comments and data have been used to supplement the information collected in the NCASI survey. This information is identified in the appropriate sections below.

**INFORMATION REQUEST
PULPING, BLEACHING, PAPERMAKING, AND WASTEWATER**

ATMOSPHERIC EMISSIONS

A. Chemical pulping and recovery vent gases

1. For each chemical wood pulping line at this mill, please provide the following information:

Line No.	_____	_____	_____
Line design capacity (ADTPD brownstock)	_____	_____	_____
Pulping Method:			
Kraft	_____	_____	_____
Kraft green liquor	_____	_____	_____
Sulfite	_____	_____	_____
NSSC	_____	_____	_____
Non-sulfur based semi-chemical	_____	_____	_____
Fiber Source:			
Chips produced on-site	_____	_____	_____
Chips produced off-site	_____	_____	_____
Sawmill residues	_____	_____	_____
Wood Species:			
Hardwood only	_____	_____	_____
Softwood only	_____	_____	_____
Mixed hardwood/softwood	_____	_____	_____
Average percentage softwood	_____	_____	_____
Swing line	_____	_____	_____
Average Kappa Number of	_____	_____	_____
pulp leaving digesters:			
Hardwood	_____	_____	_____
Softwood	_____	_____	_____

For the following digester area sources, please indicate the fate of the vent gases using the following codes:

- L - gases sent to low volume-high concentration kraft NCG collection and incineration system
- H - gases sent to high volume-low concentration kraft NCG collection and incineration system
- A - gases vented to atmosphere
- B - gases vented into a building
- S - gases routed to sulfite or NSSC acid making system
- D - gases routed directly into a combustion device
- NA- source not present on this pulping line
- N - source present, but no gases are vented

Line No.	_____	_____	_____
Chip bin	_____	_____	_____
Chip steaming vessel	_____	_____	_____
Batch digester relief gases	_____	_____	_____
Batch digester blow gases	_____	_____	_____
Continuous digester relief gases	_____	_____	_____
Continuous digester blow gases	_____	_____	_____

Digester evacuation system	_____	_____	_____
Turpentine decanter vent	_____	_____	_____
Other digester area vents not listed above:	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Is extended delignification practiced on this line?	_____	_____	_____
---	-------	-------	-------

2. For each brown/red stock washer line at this mill, please provide the following information:

Washer line no.	_____	_____	_____
Washer line capacity (ADTPD brownstock)	_____	_____	_____
From which pulping line(s) does the brown/red stock come from?	_____	_____	_____

Please indicate the fate of the vent gases for the following sources, using the same codes as for the digester area;

Brown/red stock washer (vacuum drum) hoods	_____	_____	_____
Brown/red stock washer (vacuum drum) filtrate tanks/foam towers vents	_____	_____	_____
Brown/red stock washer (diffusion) hoods	_____	_____	_____
Brown/red stock washer (diffusion) filtrate tanks	_____	_____	_____
Pressure washer	_____	_____	_____
Belt/Fourdrinier washer	_____	_____	_____
Screens	_____	_____	_____
Deckers	_____	_____	_____
Deknotters	_____	_____	_____
Thickeners	_____	_____	_____
Weak black liquor storage tank	_____	_____	_____
Other washer system vents not listed above:	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

If the washer system line has rotary drum vacuum washers, how many washing stages are there?	_____	_____	_____
--	-------	-------	-------



LASSITER,PENNY@e
pamail.epa.gov
04/21/1998 11:42
AM

To: Bill Dameworth/POPTAL
cc:
Subject: Re: Cluster Rules -Reply

To: Bill Dameworth, Pope and Talbot - Halsey, OR

I apologize for not responding to your E-Mail. As you can imagine, I am getting many questions from all over the industry and States. My problem is that I am getting similar related questions set in a specific mill context. We are working to compile the questions and responses to put into a guidance document. I am reluctant to tell one mill something at this point for fear of telling another mill something different.

Your question on the chip steamer has been a very "popular" question in the industry. Unfortunately, the question has been posed differently every time I've heard it. I have had some communication with Rob Kaufmann of AF&PA. I have requested some diagrams and some writeups to help me understand the problem. I understand that AF&PA is putting something together, but I have not received anything to date. The questions I have received thus far have related to Impco and Kamyr continuous digesters. I'm not familiar with the M&D digester so I don't know how it compares to these two. The intent of the rule is to control venting off the chip steamers and venting off of the chip bin if the chip steamer vents through the chip bin where waste or flash steam is used. As I recall, we did not intend to capture situations where only fresh steam is used.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

June 13, 2001

Mr. Kevin Scott
Environmental Manager
Boise Cascade Wallula Mill
P.O. Box 500
Wallula, WA 99363

Dear Mr. Scott:

On May 15, 2001, Boise Cascade submitted a letter to Ecology containing information regarding Wallula mill's No. 1 M&D Digester pocket feeder vent and its inapplicability to the rule, 40 CFR 63.443, Standard for Pulping System at Kraft, Soda, and Semi-chemical Processes. The rule states that chip steamers not using fresh steam are subject to the LVHC collection requirements in the National Emission Standard for Hazardous Air Pollutants for the Pulp and Paper Industry. Boise Cascade believes the rule should not apply because the steam supply system provides only fresh steam to the pocket feeder.

After reviewing the information, related rules, EPA's guidance, Ecology agrees that the No. 1 M&D pocket feeder vent is not subject to the LVHC collection requirements when using only fresh steam in the pre-teaming process. If you have any questions regarding this approval, please contact me at (360) 404-6948.

Sincerely,

Teddy V. Le, P.E.
Industrial Section

cc: Merley McCall, Ecology