Comments of the Western Maine Citizens for Clean Air & Water Concerning a Proposed Clean Air Act Title V Operating Permit for MeadWestvaco, Inc. Pulp and Paper Mill, Rumford, ME

Presented to

Maine Department of Environmental Protection,
Bureau of Air Quality
&
U.S. Environmental Protection Agency, Region I
Office of Ecosystem Protection, Air Programs Branch
& Enforcement Office

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1 Introduction

These are the technical comments of record for filing with the Maine Department of Environmental Protection (MEDEP) and the U.S. Environmental Protection Agency, Region 1 concerning a Clean Air Act Title V Operating Permit proposed for issuance by the Maine Department of Environmental Protection to the MeadWestvaco Pulp & Paper Mill in Rumford, ME. These comments are supplementary in nature to oral comments made by officers of the Western Maine Citizens for Clean Air & Water (WMCCAW) at a public meeting to be held in Rumford on November 14, 2002.

WMCCAW asks that MEDEP respond in a written responsiveness document to all WMCCAW oral comments made at the November 14, 2002 meeting and to these written comments.

WMCCAW is a non-profit organization of citizens dedicated to protection of Maine's environmental and conservation of Maine's natural resources. To this end the group has embarked on a persistent and long term examination of environmental control and management practices of selected industrial facilities in Western Maine and the quality of state regulatory efforts by the Maine Department of Environmental Protection.

Continuing air pollution problems caused by the MeadWestvaco Rumford Mill [and by its corporate predecessors] are a serious, long term problem in our region. This facility has a long history, continuing to the present, of emitting foul, obnoxious, strongly odorous emissions.

MeadWestvaco's emissions cause unreasonable interference in the comfortable enjoyment of life and property for residents of Rumford and surrounding Oxford County communities. Strong, sometimes overpowering, odors are readily and frequently apparent in and around Rumford, and strong odors can sometimes be observed a number of miles from this facility. At a minimum such strong odorous emissions degrade the quality of life for Oxford County residents, almost certainly cause depression of property values and deter tourist visitors to our community.

Some of the same chemical toxicant emissions, hazardous air pollutants and volatile organic compounds emitted by this facility are also pulmonary irritants, carcinogens and neurotoxic agents. Area residents in particular complain about the effects of such pulmonary irritants from the Rumford Mill on both children and adults with asthma and other chronic respiratory diseases.

There has never been a comprehensive, multi-exposure-pathway cancer risk assessment and past dose reconstruction to determine total, cumulative carcinogenic risks posed by the Rumford Mill from all of its emissions and effluents of carcinogenic compounds, both past and present.

The reason why serious air pollution problems are occurring from the MeadWestvaco Rumford Mill is that there is a history, continuing to the present, of operating some of their processes either without any emission control at all or with inadequate emission controls. There is a history of seriously understating their emissions in violation of emission reporting rules and taking full advantage of regulatory exceptions and loopholes to avoid emission reductions from their facility.

Maine residents should also be aware that, as a result of influence by the pulp and paper industry, the Maine Department of Environmental Protection eliminated its previously state-initiated rules going beyond minimum federal requirements to control both industrial emissions of odors and to evaluate and limit toxic air pollution.

Against this backdrop, WMCCAW offers the following comments concerning the proposed MeadWestvaco Title V Operating Permit.

2 Issues Concerning Certification, Responsible Officials and Other Matters of Form Under EPA's Part 70 Rules and the MEDEP Chapter 140 Rules

2.1 Maine DEP Must Not Issue the Proposed Permit Until MeadWestvaco Provides a Certification of all Application Materials and a Certification of Compliance by a Responsible Official of MeadWestvaco

In 1996, Boise Cascade provided a certification on the submitted Title V application and a certification of compliance concerning the Rumford Mill. The responsible official making such certifications must verify their veracity subject to civil and criminal penalties under the Federal Clean Air Act.[1] However, the Rumford Mill is presently owned by MeadWestvaco and although the responsible official is individually the same person (Gary Curtis), there has never been a new certification given on behalf of MeadWestvaco, Inc. as a corporate entity making MeadWestvaco, Inc. responsible for the veracity of application materials and the certification of compliance. The permit should not issue until the present corporate owner properly executes and provides a certification for both the complete application and the certification of compliance executed unambiguously in the name of MeadWestvaco, Inc. by a designated corporate officer acting in the name of that corporate entity.

[1] 40 CFR 70.5(d) and MEDEP Ch 140(2)(C)

2.2 Application Amendments and Compliance Reports Submitted to MEDEP by MeadWestvaco Have Not Been Certified by a Responsible Corporate Official of Top Management Rank in Violation of EPA's Part 70 and MEDEP Ch 140 Rules

Continuing quarterly and semi-annual compliance reports and supplementary Title V permit application submittals dealing with Maximum Achievable Control Technology applicable requirements and compliance {that constitute essential amendments to the Title V application), and other submittals to MEDEP have not been certified by a "responsible official" as defined by EPA's Part 70 regulations:

> "*Responsible official* means one of the following:
>
> (1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy or decision-making functions for the corporaion, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
>
> (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or
>
> (ii) The delegation of authority to such representatives is approved in advance by the permitting authority."

In other words, a top management official with broad policy-making authority and/or supervision over whole plant operations must act as the "responsible official;" lower level officials in the Rumford Mill's environmental control department cannot be designated as a "responsible official" under the Part 70 rules.

2.3 Applicant's Certification of Compliance is Defective Because Applicant Has Failed to Certify on All Applicable Requirements

Applicant's Regulatory Analysis qualifies and limits its Certification of Compliance by limiting the extent of the compliance assessment in a manner not permitted. In discussing the applicable requirements binding on the Rumford Mill, Applicant's submittal provides the following qualifiers:

> "....Some of these requirements are source-and pollutant-specific, particularly those specified in air licenses. Other requirements apply to groups of sources or the facility as a whole. Still other requirements reflect goals for the entire facility without a clear mechanism for demonsrating compliance, such as generic

prohibitions on creating air pollution. While all of these requirements are included in this regulatory analysis, the compliance assessment presented later in this section considers only those applicable requirements which are enforceable as a practical matter."[2]

"The objective of the compliance assessment is to comprehensively evaluate the current compliance status of the facility with respect to each applicable requirement. As indicated previously, the compliance assessment focused on those applicable requirements that are enforceable as a practical matter."[3]

The Applicant cannot pick and chose which applicable requirements it wants to comply with/certify and others which it will chose to ignore because of a unilateral subjective determination that somehow the Applicant considers that an applicable requirement is "not practically enforceable."

Applicant's submittal qualification goes on to raise questions as to whether it can certify that it has complied with all requirements in the past to obtain permits for New Source Review:

"In addition to currently applicable requirements, several latent requirements exist which could become active as a consequence of some types of ***prospective modifications***. These ***latent requirements*** include Prevention of Significant Deterioration (applicable to significant net increases in facility-wide emissions), Nonattainment Area New Source Review, New Source Performance Standards, and proposed federal regulations implementing Section 112(g) of the Clean Air Act."[4] (Emphasis added)

It isn't good enough for Applicant to just certify that they will comply with such requirements as PSD and New Source Review in the future for future modifications. The language cited above appears to be carefully written to avoid certifying that Applicant has complied at all times in the past with New Source Review. For example, in the year 2000 EPA inspection report, Applicant admitted to EPA inspectors that it had done boiler tube and generator section replacements at Boiler #5.[5] Applicant is subject to rules that declare that increased utilization of such equipment after such a change that increased emissions over a prior 2 year baseline would cause the modification to become subject to

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[2] Section 5.3 on "Applicable Regulatory Requirements," P. 5-21 to 5-3 of the 1996 Boise-Cascade Title V Application.

[3] Section 5.4 on Compliance Assessment, P. 5-9 of the Title V Application

[4] Section 5.3.2 of the Title V Application, P. 5-8

[5] Page 17 of EPA Inspection Report of Rumford Mill, March 28-30, 2000

New Source Review.

As a result, Applicant's submittal and Certificate of Compliance must be considered incomplete and defective because it is qualified in a manner to avoid such such certification on matters such as general duties to prevent air pollution, the need for good air pollution control practice and on past New Source Review compliance.

2.4 Aspects of MEDEP's Proposed Permit Contain Objectionable Provisions that Impermissibly Limit Effectiveness to "State-Only" Enforcement

Condition #4 (page 30 of proposed permit) states that fugitive particulate matter controls at the facility are a matter of "state only" enforement. This is objectionable to the extent that fugitive particulate controls were required in any major or minor source review permitting action issued under federally delegated state authority. Such fugitive emission controls must always be federally enforceable.

Condition #7 (page 30 of proposed permit) states that the requirement to "maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions" is a "state-only" enforceable condition. This is objectionable since this is the precisely the federally binding requirement articulated at 40 CFR 60.11(d) in the preamble section to the New Source Performance Standards.

Condition #12 (page 31 of proposed permit) prescribes aspects of compliance stack testing programs. Aspects of these procedures go to federally enforceable matters found at 40 CFR Sec. 60, Subpart A requirements in the preamble sections of federal New Source Performance Standards for compliance testing. These requirements cannot be designated as "state only" enforceable. In addition, permit provision 12(a) objectionably provides for:

> "(a) perform stack testing under circumstances representative the facility's normal process and operating conditions."

Commentors assert that this language either conflicts with 40 CFR Sec. 60.8 requirements to conduct performance testing at the "maximum production rate" or can be impermissibly interpreted by regulated parties to allow for testing a less than the maximum production rate.

Condition #13 provides for enforcement-related interpretation of when a source is considered in violation following a stack test showing a violation of emission limitations and this section is objectionably marked as "state only" enforceable. Designation of this provision as "state only" enforceable appears to contradict long-standing interpretations of EPA's continuous compliance policy and interpretations of EPA's enforcement

authority under the Clean Air Act and the "state only" enforceabiliy designation should be removed.

2.5 The Proposed Permit Doesn't Contain Clear, Unambiguous References to Binding Federal Regulations Found in the Preambles to Federal New Source Performance Standards and the Maximum Achievable Control Technology Standards

A thorough search of the permit shows no clear and unambiguous reference to federal requirements found at 40 CFR Sec. 60, Subpart A and 40 CFR Sec. 63, Subpart A. These referenced sections contain important federal requirements for applicable New Source Performance Standards and Maximum Achievable Control Technology Standards and such references must be explicitly included in the proposed Title V permit.

3 The Proposed Permit Relies Upon Out of Date and Improperly Drawn Reasonably Available Control Technology and Best Practical Technology Determinations for Brown Stock Washers and Other Uncontrolled VOC Emission Sources

The Reasonably Available Control Technology determination for the subject facility relies on submittal made by the "Paper Industry Information Office" in support of MEDEP Chapter 134 rulemaking conducted in 1994-95. No site-specific RACT determination for the Rumford Mill has ever been performed. RACT and Best Practical Technology determinations that dismiss emission controls on the basis of excessive cost per ton of emissions controlled or technological infeasibility must be properly supported by site-specific determinations where significant mill variability exists.

The Paper Indusry Information Office (PIIO) RACT submittal considered a RACT review on a brownstock washer with only 72 tons per year VOC emissions and a chip bin with 1.74 tons per year emissions. These low emission levels cannot be considered representative of the significantly higher emissions from such sources at the Rumford mill (over 200 tons per year historic VOC emissions from brownstock washing units) since potential emission reduction benefits would be far larger for high efficiency VOC control systems.

The PIIO RACT submittal considered as the prime emission control technique the construction of a stand-alone thermal oxidizer to handle VOC destruction. Such a control technology option would be a considerable expense compared to incineration of VOC streams in existing combustion devices. Moreover the PIIO study never identified process modification techniques such as inherently low emission brownstock washers and use of less contaminated process water as available and economic VOC reduction techniques.

The PIIO study assumptions of both small VOC emissions (inappropriate for the Rumford Mill), the failure to consider process modification pollution prevention techniques and the selection of inappropriate high cost combustion control techniques gave a forgone conclusion benefitting industry that allowed many uncontrolled emission sources to continue unabated and considered as both RACT and BPT.

4 Applicant Has Failed to Properly Characterize Wastewater-Related Emissions, Has Failed to Identify all Wastewater-Related Emission Units, Has Failed to Properly Report Annual Emission Inventories of Wastewater-Related Emissions and Has Failed to Establish a Proper Basis for Applicant's Position that Wastewater Equipment Units Are Insignificant Emission Units; Complying with a Wastewater Discharge Permit Does Not Constitute Reasonably Available Control Technology for Volatile Organic Compounds

The proposed permit objectionably contains no provisions to regulate VOC emissions from wastewater equipment. Although the statement of basis considers that compliance with the facility's National Pollution Discharge Elimination System (NPDES) permit is considered compliance with the RACT requirement, there are no enforceable elements of the proposed permit that actually provide compliance assurances for such alleged RACT compliance.

In its 1996 Title V submittal, Applicant showed the primary clarifier, the secondary clarifiers and the aeration basis as "insignificant" emission units on the basis of the "size or production rate" criteria of Chapter 140, Appendix B, Part 22 which provides for treatment as an insignificant emission unit for:

> "22. Water and wastewater treatment units, provided the facility performs only the following function of disinfecting, softening, filtration, flocculation, stabilization, taste and odor control, clarification, carbonation, sedimentation and neutralization."

Applicant's claim of exemption that the listed wastewater treatment emission units are insignificant under the rule is defective because the units in question act, in part, as air stripping processes to cause a transfer of volatile organic compounds from the aqueous wastewater media to the air media. Commentors have observed strong odors of volatile compounds downwind of the wastewater treatment equipment. These odor observations were also noted during EPA's year 2000 inspection. Air stripping is particularly enhanced in the wastewater basin where large agitation units are used to maximize air/water contact.

Applicant's 1996 Title V application submittal is also deficient because it does not identify all wastewater-related emission units and the fugitive emissions inherent in such

units. There is no mention of process wastewater sewers, junction boxes, pumping stations and manholes that all have the potential for VOC emissions from the handling and management of kraft mill process wastewater.

Compliance with a NPDES permit cannot be relied upon as determinant surrogate indicator of compliance with VOC Reasonably Available Control Technology requirements. NPDES permits focus on limiting end of pipe effluent control discharge performance. Nothing in such a permit will limit air stripping of VOCs from wastewater as a means of limiting biological oxygen demand and chemical oxygen demand in the final effluent. Air stripping represents an uncontrolled cross media transfer from wastewater to air media. And even if an NPDES permit were effective as an air pollution control measure, nothing in the proposed Title V operating permit binds Applicant to any particular effluent limitations, air discharge limitations or air-related compliance assurance measures.

MEDEP and EPA should require Applicant to conduct an air emission modeling study using accepted EPA emission modelling techniques for wastewaster equipment. Such modelling should also consider the potential for up to 10% downtime for the facility's steam stripping unit and the resulting potential for sewering of contaminating condensates and the effects of such a practice on wastewater equipment VOC emissions.. Finally, MEDEP and U.S. EPA should require Applicant to file annual emission inventory reports that provide reporting of wastewater-related VOC emissions. Applicant has failed to provide any such reporting to MEDEP.

5 The Proposed Permit Fails to Incorporate Adequate Compliance Assurance Parameter Monitoring for Scrubber-Controlled Emission Sources

To the best of Commentor's knowledge, TRS, sulfur dioxide, sulfuric acid and chlorine dioxide emission control performance and compliance with emission limitations depends on alkaline scrubbing at the two smelt dissolving tank vents, the lime kiln, at boilers #3 and 5 and at the bleaching lines. Nothing in the proposed permit requires compliance assurance parameter monitoring on the alkalinity of scrubber fluids. This is particularly crucial at the smelt dissolving tank vents which have no continuous emission monitors for total reduced sulfur or sulfur dioxide. The permit should be amended to ensure parameter monitoring to require adequate alkalinity in such scrubber systems.

6 Issues Associated with the Continuous Kamyr Digester Chin Bin/Chip Steaming Vessel Process Emissions Unit

6.1 Introduction to Physical Aspects of Chip Bin Emissions

At the MeadWestvaco Rumford Mill, the Line A Chemical Pulp Mill incorporates a Kamyr continuous digester. One element of this apparatus is a "chip bin" which receives the output of a chip conveyor where the chips are first charged to the apparatus. Chips in the chip bin are steamed with either contaminated flash steam or clean steam. The chips are then conveyed via a low pressure feeder to a chip steaming vessel where more steaming takes place with either contaminated flash steam or clean steam.

Because of the direct use of flash steam in the chip bin, leaks and discharge from the low pressure feeder and the resulting potential conveyance of flash steam through such leaks from the chip steaming vessel to the chip bin, the chip bin has the potential to release emissions from the point at which conveyors dump chips into the bin. Such emissions will occur at any time that pressure in the chip bin exceeds atmospheric pressure.

When contaminated steam is either used in the bin or is conveyed into the bin from either discharges from rotary low pressure chip feeders or otherwise from leaks in such feeders, any bin pressurization will cause very high emissions of total reduced sulfur compounds, hazardous air pollutants and volatile organic compounds. Subsequent emissions will contaminate areas to which mill workers are exposed in the continuous digester building and will be discharged to the atmosphere through building ventilation. Bin pressurization can be caused by variations in the chip bin chip level (and subsequent ability of the chips to condense the steam) and excessive steam input to such bins.

Such chip bin emissions represent completely untreated, uncondensed, raw digester gas relief and will likely contain hundreds of different chemical compounds generated from pulping digester reactions. Such emissions would cause very strong and brutally apparent odors in both the digester building and in exterior locations around the facility (particularly as a result of discharge from roof-top ventilation openings with little dispersion and frequent/severe downwash conditions).

6.2 Having Obtained Evidence of Serious Emission Problems at the Chip Bin, MEDEP Has Abused Its Discretion by Failing to Require Full Disclosure of the Complete Stack Testing Study Conducted by Mead on Chip Bin Emissions and by Failing to Prosecute Rule Violations Inherent with Such Evidence

Prior to January, 2002 file reviews by Commentors of MEDEP files concerning MeadWestvaco, Commentors had requested all stack test studies conducted at the Rumford Mill. Commentors subsequent review of materials indicated evidence

suggesting that a 1998 stack test study of chip bin emissions by a contractor to Mead, Westin, Inc., had been carried out on chip bin emissions and that very high total reduced sulfur and volatile organic compound emissions were indicated. At the time of Commentors January, 2002 file review, MEDEP had not disclosed the actual stack test report despite a clear request covering all such stack testing information provided by the Rumford Mill. A spreadsheet discovered during this file review indicated the following:

1997 Emissions, Kamyn Chip Bin*				**Future Uncontrolled Emissions, Kamyr Chip Bin**			
lbs/hour		**tons/year**		**lbs/hour**		**tons/year**	
TRS	**THC**	**TRS**	**THC**	**TRS**	**THC**	**TRS**	**THC**
64.0	113.0	295	520	22.9	40.5	100	177
* From 10/98 Weston Stack Test Data							

On October 31, 2002, a second FOIA request was made by Commentors specifically requesting the 1998 Westin Stack Test on the chip bin and all other stack testing studies at any time on the chip bin and all other stack testing studies conducted at the Rumford Mill filed or dated since January 31, 2002. Pursuant to this request MEDEP officials disclosed a total of 4 pages of TRS and total hydrocarbon emission calculations labelled "1998 chip bin test Weston," saying that they did not have the complete report. The 4 pages did not constitute a complete stack emission report since such reports will contain significantly more information concerning test methods, plant operating conditions, narratives of testing activity, quality assurance/quality control reporting and significant other content.

The four pages reveal the following information:

Date of Stack Testing Run	**Total Hydrocarbon lb/hr as Carbon**	**Hydrogen Sulfide, lb/hr**	**Methyl Mercaptan, lb/hr**	**Dimethyl Sulfide, lb/hr**	**Dimethyl Disulfide, lb/hr**	**Total Reduced Sulfur, lb/hr as H2S**
10/06/98, Average Emission		2.0	39	56.6	1.8	62
10/08/98, Average Emission	113	3.0	42.8	52.4	2.2	63.5

The following table compares calculated emissions from the chip bin at 8400 hours per year with the 1995 actual emissions and the potential to emit calculations (taking into account the maximum physical capacity of the equipment) contained in the Title V application.[6] The reader should note that there were 0 emissions attributable to the chip bin in the 1996 Title V Application depiction of 1995 emissions and the facility's maximum potential to emit:

Pollutant	**Emissions solely from chip bin at 8400 hrs/yr at the hourly rate in the 1998 Westin stack test**	**1995 Actual Emissions as Depicted in Title V App. for Entire Plant (with chip bin reported at 0 for 1995 emissions) (Table 4-2)**	**Maximum Potential to Emit from the Entire Plant in Title V Application (0 PTE shown on chip bin) (Table 4-1)**
TRS	267 tons/yr	74.14 tons/yr	110 tons/yr
VOCs	475 tons/yr[7]	454.82 tons/yr	690.59 tons/yr

MEDEP thus had the few pages of a stack testing report showing, at a minimum, that Mead massively understated its plant emissions inventory for annual reports in 1997 and 1998. However MEDEP failed to compel Mead to disclose the fullWestin chip bin stack test report and failed to collect other such evidence of violation of Mead's emission reporting responsibilities. On November 8, 2002, a WMCCAW Officer requested that MeadWestvaco environmental officials disclose the entire 1998 Westin stack test report for the chip bin to the group, but the MeadWestvaco official refused to disclose the report. A review of a March 28-30, 2000 EPA inspection report of the Rumford Mill shows no indication that Mead Oxford Corporation disclosed the Westin Report information to U.S. EPA during the March, 2000 EPA inspection.

In the case of volatile organic compounds from the chip bin, the Westin stack testing method apparently reported these emissions "as carbon." Determinations of volatile organic compound emission streams containing a majority of chemical compounds with significant constituents of sulfur and oxygen will be grossly underestimated on a total mass of VOC compound emission basis by the VOC test method selected by Mead/Westin. Mead/Westin did chose a method that fully characterized the total mass rate of emissions of methyl mercaptan, dimethyl sulfide and dimethyl disulfide and a valid common conversion to total reduced sulfur reported as hydrogen sulfide.

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[6] See Table 4-1 and 4-2, 1996 Application for a Title V permit by Boise-Cascade

[7] This emission was reported as total hydrocarbons reported as carbon.

However, the method for reporting VOC emissions used could not have adequately characterized the total speciated mass rate emissions for alcohols, aldehydes, ketones, phenols and other oxygenated compounds [as well as the sulfur containing compounds that would contribute to total mass rate of speciated VOC emissions] that would be emitted. In actuality, the 475 ton per year VOC estimate would likely be 2-3 times higher if the full mass emissions of all the principle VOC species were properly considered. Just the total mass rate of sulfur-containing VOCs speciated compound emissions alone comes to 409 tons per year at 8400 operating hours per year; all of the total mass emissions of alcohols, aldehydes, etc. would be in addition to the 409 tons per year of sulfur- containing VOCs.

6.3 Commentor's Hypothetical Contingent Assumption Arguments Concerning the Regulatory Consequences of the Rumford Mill's Uncontrolled Chip Bin Emissions

6.3.1 Introduction to Commentor's Hypothetical Contingent Assumptions Concerning the History of Uncontrolled Chip Bin Venting Emissions

Although Commentors understand that MeadWestvaco has taken some steps to bring the uncontrolled chip bin emission problem under control as of sometime in year 2000-2001, the past occurrance of uncontrolled chip bin venting still raises important regulatory questions. Commentors have not inspected the interior of the Rumford Mill at any time and have only the limited 1998 Westin stack test evidence and the MeadWestvaco admission of similar uncontrolled emission levels from a spreadsheet for 1997.

For purposes of the subsequent analysis in this section, Commentors make five hypothetical contingent assumption scenarios about the nature of the uncontrolled chip bin venting problem. Contingent assumption #1 is that the excessive emission problem occurred in a time isolated fashion starting in 1997 through the time of the control program sometime in year 2000 to 2001. Contingent assumption #2 is that uncontrolled chip bin venting problems occurred as usual consequence of operation of the continuous digester line ever since it was installed in the 1960s. Contingent assumption #3 is that company officials defend the emissions as process malfunctions and Commentors rebut by asserting that uncontrolled chip bin venting was the product of poor air pollution control practice and defective operation, design and maintenance. Contingent assumption #4 is that after the 1998 Westin stack test, mill managers unambiguously knew that chip bin venting was an enormous emission problem but then failed to perform certain required acts in violation of the federal and state requirement.

6.3.2 Commentor's Regulatory Concerns Under the Contingent Hypothetical Assumption #1 that Chip Bin Venting Occurred in a Time Interval Isolated to 1997-2000 as a Result of an Action that Should Have Triggered New Source Review and Thus the Proposed Title V Permit Cannot be Approved in its Current Form

Commentors first contingently assume that chip bin venting occurred in a time isolated fashion in the time frame of 1997-2000. The 1996 Title V permit application by MeadWestvaco predecessor Boise-Cascade provides a superficial implied admission by the Rumford Mill environmental staff that chip bin venting could have been isolated to the time interval identified above if one assumes their submittal is correct. This superficial implied admission arises from the Boise-Cascade assertion in the 1996 Title V application that the chip bin and associated equipment were not significant emission sources as shown in the table below[8]:

Emission Unit	Designator	Emission Point	Comment and Classification
KAM-006	Kamyr Chip Bin	KAM-1	Exempt per Ch 140, App. B, Sec. A, Part 150
KAM-007	Low Pressure Feeder	a.v.	Exempt per Ch 140, App. B, Sec. A, Part 154
KAM-008	Steaming Vessel	KAM-2	Insignificant per Ch 140, App. B, Sec. B, Part 1
KAM-009	Chip Chute	a.v.	Exempt per Ch 140, App. B, Sec. A, Part 154

If such venting commenced in a discreet time interval when it previously did not take place, Commentors first assume the cause would have been either a physical change or change in the method of operation of the continuous digester line of unknown nature. Under EPA New Source Review rules at 40 CFR Sec. 52.21, *et seq*., a non-exempted physical change or change in the method of operation of a major stationary source like the Rumford Mill that increases emissions beyond PSD major modification significance emission levels must be subject to New Source Review. A total of 267 tons/year of TRS emissions and 475 tons/year of VOCs would have triggered the NSR significant emission levels of 10 tons and 40 tons, respectively. Either PSD and/or non-attainment NSR permits would have been required along with Best Available Control Technology and/or Lowest Achievable Emission Rate review and air quality analysis.

[8] Information derived from Table 3-1, Page 4 of 25, Emission Unit Inventory List

No such permitting that would have been required under this circumstance took place to allow the large venting of chip bin emissions to commence. If the large chip bin emissions occurred as a result of a physical change or change in the method of operation during any time of the national effectiveness of the prevention of significant deterioration or other NSR review rules, the proposed permit could not issue because the certification of compliance would be defective and erroneous. Title V applicants must certify compliance with all NSR review requirements contained in the federally approved Maine State Implementation Plan. In addition, under this contingent assumption, the Applicant would be subject to findings and notice of violation by U.S. EPA and/or MEDEP for violation of NSR.

In addition, under this contingent assumption, such a modification that was a physical change or change in the method of operation that increased emissions in this fashion would also trigger applicability of the kraft mill NSPS to the continuous digester line. The NSPS regulation would never allow raw digester gases to be emitted uncontrolled in the manner that Applicant has allowed, so any such operation of the plant would violate NSPS regulations under this contingent assumption. Applicant is presently denying applicability of NSPS for this line and the proposed permit is written with such treatment which would be unapprovable as written under the contingent assumed circumstances.

6.3.3 Commentor's Hypothetical Contingent Assumption #2 that Chip Bin Venting Detected by the 1998 Westin Stack Test Represented a Long-Standing Pattern of Excessive and Large Emissions by Applicant's Chip Bin Process Equipment Since the Original Construction of the Continuous Digester Line

Commenter's Contingent Assumption #2 is that uncontrolled chip bin venting of raw digester gases from flash steam is a longstanding emission occurrence. The regulatory consequence of such an assumption is that Boise-Cascade submitted false and defective information in its Title V application and that the certification of this information by the Boise-Cascade responsible official was false and defective.

If uncontrolled chip bin venting was well known to Boise-Cascade officials, then significant elements of the Application violate the Clean Air Act, the EPA Part 70 rules and the MEDEP Chapter 140 rules. Such false and defective information would be grounds for finding and notice of violation and the Applicant's Certification of Compliance would also be defective under the circumstances.

Commentor's first assert that a longstanding process of very high uncontrolled TRS and VOC emissions from the chip bin is not a matter that could long escape notice by plant environmental and top management officials, including the designated responsible official. To the extent that such emissions were emitted to the interior of a digester building, the strong odors would be readily apparent and the emissions would

pose potentially serious occupational health and safety problems for operation and maintenance workers. Exposure to such emissions in the workplace environment is expected to be a cause and/or exacerbating factor for occupational asthma. Such emissions would also cause a pronounced plume of highly odors gases on Applicant's property. Under any such circumstances, Applicant either knew or should have known that the chip bin was releasing very significant air pollution.

If Applicant knew, or should have known, that the chip bin was a longstanding emission problems, they should have been aware of such a fact in 1996 when the Mead-Westvaco predescessor, Boise-Cascade, submitted the Title V application. Under these circumstances, the depiction of the chip bin and related equipment as insignificant and/or exempt emission units and the depiction that the chip bin emission unit had zero and/or insignificant emissions in the 1995 emission inventory and potential to emit calculations contained in the Boise-Cascade submittal would be false, erroneous and misleading information in violation of Title V rules and a potential cause for civil and/or criminal enforcement under the Clean Air Act.

Finally, Applicant installed a 250 ton blow tank in the continuous digester line in the late 1980s according to a year 2000 EPA inspection report. The question Commentors pose is whether any calculation of emission increases associated with this installation and defenses against subsequent NSPS applicability for the continuous digester line could continue to be considered valid if potential to emit calculations from increased utilitization never considered the effect of such increased utilization on the uncontrolled emission rate from the chip bin (assuming this is a longstanding and continuing problem).

6.3.4 Commentor's Hypothetical Contingent Assumption #3 that Applicant Considered Past Uncontrolled Chip Bin Venting Problems as Artifacts of Excess Emission and Malfunctioning Process Equipment and Commentor's Rebuttal that Such Conduct by Applicant Would Constitute Impermissible Poor Air Pollution Control Practice and Unreported Malfunction Events

It is conceivable that Applicant would take the position that its past uncontrolled chip bin venting practices were excess emission artifacts of process and equipment malfunction. However, Commenters were unable to find any evidence that Applicant treated such emissions as mandatory reportable events of excess emissions from process and equipment malfunction or that MEDEP treated such events in this manner.

Any position taken by Applicant that ongoing and/longstanding uncontrolled chip bin venting problems should be treated as malfunctioning process equipment should be dismissed as invalid as such uncontrolled venting practices constitute operation contrary to good air pollution control practice for minimizing emissions. Prior to the most recent corrective measures, Applicant's previous physical chip bin design was defective because

it didn't incorporate gas collection capability to guarantee against bin pressurization, Applicant engaged in chip steaming in a manner that caused bin pressurization or Applicant did not incorporate use of only clean steam for bin chip steaming. Applicant also admitted in its startup, shutdown and malfunction plan that it had changed the type/configuration of the low pressure chip feeder to help ameliorate problems, which is, again, an implicit admission that its past bin design configuration was defective.

6.3.5 Commentor's Hypothetical Contingent Assumption #4 is that MeadWestvaco Officials Knew that Uncontrolled Chip Bin Problems Were Serious But that Such Officials Failed to Take Required Measures in Violation of Federal and State Title V Rules

Commentor's hypothetical contingent assumption is that MeadWestvaco officials knew, or should have known by 1998, that chip bin emission problems were serious, but such officials failed to carry out duties required by the Clean Air Act. MeadWestvaco officials should have known in 1998 that they had serious problems requiring certain actions after the Westin stack test. They should have known previously as well.

Once MeadWestvaco officials knew of the nature of excessive chip bin problems, they had a duty under state and federal Title V rules to amend the 1996 Boise-Cascade Title V application to correct false information contained in that document showing chip bin-related process equipment to be exempt and/or insignificant emission units. They also had a duty to amend the depiction in that document of both the 1995 emission inventory and the potential to emit calculated emission inventory. They failed to carry out these required duties.

Once a stack test had been conducted in 1998 showing very high chip bin emissions, at a minimum MeadWestvaco had a duty to submit accurate and complete emission inventories to MEDEP that accurately reflected VOC emissions from their facility. However, MeadWestvaco predescessor Mead continued to submit inaccurate and erroneous emission inventories at least for emission invenory years 1998 and 1999 that showed zero VOC emissions attributed to the chip bin when this was the largest VOC emission unit at the facility. Mead thus deliberately submitted false, misleading and inaccurate information concerning their facility emissions to Maine DEP in violation of federal and state law.

Applicant was further under an obligation to certify that it was employing best practicable technology to control emissions and its previously made such assertions. However operating kraft pulp mill digestion equipment in a manner that allows uncontrolled raw digester flash steam emissions from the chip bin making such bins the largest single VOC emission unit at a facility cannot possibly be considered as embodying best practicable technology for controlling mill emissions.

Finally, MeadWestvaco and its predecessors had an obligation to submit accurate Toxic Release Inventory reports to U.S. EPA and biannual toxic emission inventory reports to Maine DEP.

6.3.6 If MeadWestvaco or its Predecessors Have Been Responsible for One or More Issues of Noncompliance Articulated in the Forgoing Discussion of Hypothetical Contingent Assumptions, Then the Application and the Certification of Compliance Are Not Approvable in Their Current Form and Maine DEP May Not Issue the Proposed Permit Until These Defects Are Remedied

The prior discussion under the 5 contingent assumptions involving emissions from the chip bin articulates one or more circumstances which mitigate for a non-compliance designation for MeadWestvaco and/or its predecessors. Under any such circumstances of non-compliance, the existing certification of compliance and application cannot be approved in its current form without significant amendment.

6.3.7 Commentors Assert that the Proposed Permit Fails to Incorporate Sufficient Compliance Monitoring Measures to Ensure That the Chip Bin Will Not Emit Uncontrolled Digester Gases from One or More Discharge Locations in the Future

Title V permits must include sufficient compliance monitoring measures in order to determine that an emission limitation has been achieved. During times when chip levels in the chip bin drop excessively while flash steaming of the bin continues, during failures of seals in the low pressure feeder, during excessive steam input into the bin, when steam is lost or reduced to the evacuation eductor and when downsteam elements of the chip bin HVLC system become clogged causing subsequent loss of flow in the gas evacuation system, the chip bin will again discharge emissions from chip conveyor input location.

While the permit requires reporting of venting, it is not clear that Applicant has ensured that all venting incidents can be detected and recorded. Section 3.3.8 of the Applicant's Startup, Shutdown and Malfunction Plan indicates that "several," **not all**, of the rupture disks, pressure relief valves and bypass vent valves are monitored in a way to trigger an alarm and that only some of these devices cause an operator alert. Under this circumstance, Applicant's design of the HVLC system creates the potential for unmonitored venting of gases originating as digester flash steam from the chip bin. This is unacceptable and the permit should be amended to require parameter and venting monitoring devices covering all such venting capability, not only for the chip bin HVLC system, but also for the LVHC and the SOG systems as well.

In particular, there appears to be no parameter monitoring or continuous emission monitoring mentioned anywhere in Applicant's submittals that address chip bin pressure and the need to monitor such pressure to ensure it remains below atmospheric pressure under all circumstances. No mention of alarmed pressure indicators or reverse flow indicators is provided in the proposed permit and in Applicant's startup, shutdown and malfunction plan. Merely monitoring pressure relief valves will not ensure compliance with the need to eliminate venting from the chip bin.

7 MEDEP's Annual Emission Inventory Reporting System Fails to Require Collection of Total Reduced Sulfur Emissions Information

The proposed permit binds the Applicant to annual emission inventory reporting requirements contained in MEDEP Chapter 137. The problem is that Maine has not established a requirement to collect emission inventory information on the regulated pollutant, Total Reduced Sulfur (TRS). The result is that the Rumford mill and other Maine pulp mills are able to evade public inquiry into and disclosure of their total annual TRS emissions. Many other states require such TRS annual emission inventory data collection. Maine's failure to incorporate annual TRS emission inventories is an especially objectionable omission from its obligations to protect Maine citizens and their communities from the adverse effects of TRS emissions generated by the pulp and paper industry.

8 Other Comments

Condition 27(C) on page 44 shows the lime kiln with a PM limit of 0.067 grains/DSCF corrected to 10% oxygen for PM and PM10. However, 40 CFR Sec. 63.862(a)(i)(C) requires that the limit be 0.064 grains/DSCF corrected to 10% oxygen for this limit which will come into effect in the future. Existing language at condition 27(I) only binds the Applicant to the future recordkeeping and recording provisions of that MACT standard and not the substantive emission limitations.

Condition 28(C) on the recovery boiler does not reference future compliance to the MACT standard requirement at 40 CFR Sec. 63.862(a)(i)(A) and Condition 28(L) only references the record keeping and reporting requirements.

The Applicant never submitted stack testing data or an emissions-supported basis for either inclusion or exemption of all HAP emitting miscellaneous process vents throughout the mill for purposes MEDEP determinations on MACT Subpart S compliance.

Condition 34(B)(1) appears to have an error with a reference to 40 CFR Part 60, Subpart S [sic] which should be 40 CFR Part 63, Subpart S.

Applicant's 1996 Title V submittal considered the saltcake mix tank and the precipitator mix tank as exempt emission units and the emission characterization in the application failed to indicate any emissions from these units. However, these units have the potential for significant VOC and TRS emission as a result of salt cake and collected preciptator solids significantly raising the temperature of strong and weak black liquor. Applicant should have fully considered annual emissions from these tanks.[9]

MEDEP permits authorizing collection and incineration of chip bin vent emissions and stripper off-gases may have improperly considered potential sulfur dioxide increases in boilers #3 and #5. Analysis in one permit shows emissions were evaluated by an "actual to actual" test rather than and "actual to potential" test. Inappropriate use of the "pollution control exception" for physical changes and changes in the method of operation may have occurred. Finally, future emission calculations may have inappropriately used unrealistic sulfur compound overall removal efficiencies for handling of chip bin emissions.

The proposed permit lacks specificity on required stack testing methods. For PM and PM-10, the lack of specificity in the proposed permit appears to objectionably open the way for Applicant to interpret compliance on the basis of only "front half" (filterable) PM as opposed to total filterable plus condensible PM (both "front half" and "back half"). Lack of specificity on VOC test methods appears to objectionably open the way for Applicant to use VOC test methods measured "as carbon" or "as methane" rather than measuring the total mass of all VOC speciated compounds present. For a source that discharges sulfur, oxygen and chlorine containing chemical substances, allowing "as carbon" or "as methane" testing methods severely and objectionably underestimates VOC emissions.

[9] Commenters are familiar with a similar situation at a Champion kraft mill in Michigan where TRS emissions from these tanks is significant and emissions had to be collected. When a gas evaluation system failed for such tanks, backup into the recovery boiler exhaust cause TRS emission limitations excursions in a high ACFM stream.