

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

**Permitting and Compliance Division  
1520 E. Sixth Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901**

**Stone Container Corporation  
NW1/4 of Section 24, Township 14 North, Range 21 West in Missoula County  
P.O. Box 4707  
14377 Pulp Mill Road  
Missoula, MT 59806-4707**

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

<b>Facility Compliance Requirements</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Source Tests Required	X		Methods 1-4, 5, 7, 8, 9, and MACT testing
Ambient Monitoring Required	X		
COMS Required	X		
CEMS Required	X		TRS, H <sub>2</sub> S, NO <sub>x</sub> , SO <sub>2</sub> and O <sub>2</sub>
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required	X		
Quarterly Reporting Required	X		
<b>Applicable Air Quality Programs</b>			
ARM Subchapter 7 Preconstruction Permitting	X		Permit #2589-09
New Source Performance Standards (NSPS)	X		40 CFR 60, Subparts D and BB
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart S
Major New Source Review (NSR)/ Prevention of Significant Deterioration (PSD)	X		Defined as a major source, but has not yet triggered a PSD/NSR review
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
State Implementation Plan (SIP)	X		General SIP

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## SECTION I. GENERAL INFORMATION

### A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emissions units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the U.S. Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the original application submitted by Stone Container Corporation (Stone) on June 7, 1996, additional information submitted on April 7, 2000, and administrative amendment requests submitted on December 18, 2001, and March 8, 2004.

### B. Facility Location

Stone's Missoula mill is located at 14377 Pulp Mill Road in Missoula, Montana, which is close to Frenchtown, Montana, 10 miles northwest of Missoula. The legal location of the facility is the NW ¼ of Section 24, Township 14 North, Range 21 West in Missoula County, Montana.

### C. Facility Background Information

Stone underwent a major expansion during the mid-1970s, which added several NSPS units. The basic plant capacity was designed for about 1850 tons per day of air dried pulp. An air quality permit covered individual units at that time. Two substantial production changes to the permit were made since that time. In 1987, the permit was revised to allow Stone to burn petroleum coke in all four lime kilns. In 1989, the permit was revised again to allow Stone to install and operate a recycled cardboard facility at the plant. This revision increased the capacity of the plant by approximately 400 air-dried tons per day.

On July 1, 1987, the EPA promulgated new ambient air quality standards for particulate matter with an aerodynamic diameter of 10 microns or less (PM-10). The annual standard is 50 micrograms per cubic meter and the 24-hour standard is 150 micrograms per cubic meter. These standards were adopted by the Montana Board of Health and Environmental Sciences on April 15, 1988. Due to violations of these standards, Missoula was designated as a PM-10 nonattainment area. As a result of this designation the Montana Department of Health and Environmental Sciences and the Missoula County Air Pollution Control Agency were required to develop a plan to control these emissions and bring the area into compliance with the federal and state ambient air quality standards.

In order to identify the emission sources contributing to the violation of the PM-10 standard, Missoula County conducted a chemical mass balance study (CMB) of the area. Stone's recovery boilers were identified as significant contributors to this area. Permit **#2589-M** was a modification to add general fugitive dust control measures to this facility, and to correct emission limitations for the #5 Recovery Boiler and the #4 Lime Kiln to agree with NSPS limits. These corrections decreased the allowable emissions enough to satisfy the SIP control plan for the area.

Stone requested an alteration to their permit to allow for the installation of a new Fiber Optimization and Raw Material Management (FORMM) System. This permit allowed the construction of the new screening room and the addition of the needed fugitive sources to allow Stone to better use the raw materials available and was given Permit **#2589-02**.

In August of 1992, the EPA submitted comments on the Missoula SIP concerning a completeness determination and requesting additional information. In response to EPA's concern about the correlation between opacity and mass emissions, the Air Quality Division modified Stone's permit to clarify the language in the permit. The Air Quality Division also addressed the opacity requirements for the equipment at Stone and the opacity monitor range for the #5 Recovery Boiler. This permit was given Permit #2589-03.

In April 1994, Stone applied for Permit #2589-04 that allowed Stone to make a change in the existing FORMM system. The FORMM transfers the fines from the chip screens and the fines from the sawdust screens to the hog fuel pile. This alteration allowed Stone to transfer material from the FORMM, via an enclosed belt conveyor, to an enclosed storage bin rather than to the hog fuel pile. This material could then be transferred to trucks for distribution off site. To accomplish this, Stone needed to construct a storage bin, a storage bin unloading system, and an enclosed belt conveying system. This proposed system and the existing system can not be physically operated at the same time, but rather can be operated interchangeably. This alteration resulted in a net decrease in total particulate emissions of 44.09 tpy and a net decrease in PM-10 emissions of 15.89 tpy. There was an emission decrease because the material is conveyed by an enclosed conveyor into an enclosed storage bin.

In addition to the change in the FORMM system, the permit also reflected the fact that in June 1992, Stone replaced the existing #2 Lime Slaker with a larger lime slaker. The new #2 Lime Slaker has a maximum capacity of 550 gpm of green liquor and is controlled by a natural draft wet scrubber. The new #2 Lime Slaker has the same permit limits as the previous slaker. Emissions from the new slaker are also expected to be similar to the old slaker. Even though the new slaker is slightly larger than the old slaker, the emissions did not increase since the vapor velocity in the new slaker was lower than the vapor velocity of the old slaker.

On March 24, 1995, Stone applied for Permit #2589-05 that would allowed Stone to utilize dewatered sludge from the sludge dewatering facility as fuel for the existing waste fuel and hog fuel boilers at the facility. The dewatered sludge was very similar in nature to hog fuel with the exception that a lab analysis conducted on the sludge indicated the sludge contains approximately 0.178% sulfur and 1420 mg/kg of chloride (dry weight basis). Stone supplied the Department of Environmental Quality (Department) with additional information indicating the sulfur content of the dewatered sludge may be as high as 0.4%. The maximum rated output from the sludge dewatering facility is 60 ton/day. Both boilers have an alkaline scrubber for control; therefore, this change in fuel would result in a maximum actual emission increase of 17.5 ton/year of SO<sub>2</sub>. Stone still had to comply with the existing facility-wide SO<sub>2</sub> limit of 5000 lb/day. There was no increase in emissions of NO<sub>x</sub>, TSP, PM-10, CO, or VOCs as a result of this change in fuel. Permit #2589-05 replaced Permit #2589-04.

Once the Department issued its Preliminary Determination (PD) on Stone's permit application, the Department received extensive comments on the proposal. All of the comments received were answered and are available from the Department upon request. The majority of the comments were received from the Missoula City-County Health Department asking the Department to regulate the hog fuel and waste fuel boilers as incinerators and to require a health risk analysis to determine if there would be any adverse health impacts from dioxin/furan emissions from this proposal as well as from the June 14, 1989, permit that allowed Stone to burn OCC rejects in these boilers. In response to these comments, the Department performed an extensive review of the incinerator definition and of the potential health impacts of dioxin/furan emissions from this proposal. The Department concluded that these boilers do not fit the definition of an incinerator and because there would be no increase in dioxin/furan emissions at Stone's facility from this proposal, this permitting action would not result in an adverse impact to human health or the environment. Also, Stone was limited to 15.1 tons per day

of OCC rejects from this project. The Department reported these findings at a meeting of the Missoula Air Pollution Control Board on June 15, 1995, and Permit #2589-05 was issued final on July 2, 1995.

Permit Alteration **#2589-06** was issued on February 25, 1996, and allowed Stone to replace the existing third press in the #3 Paper Machine with a shoe press. The change increased the quality of the liner board produced and allowed the machine to be operated at a higher production rate, from the current capacity of 59.6 tons of air-dried pulp per hour to 64.8 tons air-dried pulp per hour. The permit alteration also limited the yearly production of the #3 Paper Machine. Minor wording changes were also made to the permit at the request of Stone. A more detailed description of the change is included in the analysis for Permit #2589-06.

On June 7, 1996, Stone was issued Permit **#2589-07** for modifications to the existing scrubbing system on the #4 Smelt Dissolver. A venturi scrubber was added prior to the current scrubber and the internal design and packing of the current scrubber was modified. The allowable emissions from the dissolver did not change as a result of this action; however, because the new system operates with an increased efficiency, actual particulate emissions from the dissolver were expected to decrease by 9 ton/year.

The scrubber system modification was scheduled to be completed in two phases. Phase I consisted of modifications to the existing scrubber including replacing the current packing with structured packing, reinforcing the shell to allow for the higher vacuum required for the operation of the venturi scrubber and installing new mist eliminators and spray bars. After completion of Phase I, the efficiency of the scrubber should be comparable to the current unmodified scrubber. Phase II of the project consisted of installing the additional venturi scrubber upstream of the modified scrubber. The addition of the venturi scrubber was expected to increase the efficiency of the system and result in the anticipated decrease in actual emissions.

Permit Alteration #2589-07 allowed Stone to modify the scrubbing system on the #4 Smelt Dissolver. The scrubber was a packed tower design using an alkaline solution as the scrubbing liquid. Scale and particulate build-up on the existing packing caused channeling in the scrubber, which decreases the efficiency of the system. Acid cleaning to remove the scale was needed up to three times a year. The modifications to the scrubber system changed the internal design and packing of the original scrubber and installed a venturi scrubber prior to the modified scrubber. The proposed scrubber system would reduce the need for acid cleaning as well as provide increased particulate removal efficiency. Based on the manufacturer's specifications, actual particulate emissions from the #4 Dissolver would decrease by approximately 9 ton/year.

After issuance of the preliminary determination on May 2, 1996, it was determined that installation of a more efficient control device did not warrant increasing the operational monitoring requirements. The Department determined that the current requirement to monitor scrubber operation weekly, along with annual stack testing, was sufficient to ensure compliance with emission limitations. The scrubber monitoring requirements in Section II.F.5.d. of the Preliminary Determination of Permit #2589-07 were deleted. Reporting requirements for the dates of construction of the scrubber modification were also added. Permit #2589-07 would replace Permit #2589-06.

On February 27, 2000, Stone was issued Permit **#2589-08** for the operation of a thermal oxidizer and steam stripper that would be installed as part of the MACT I Cluster Rule requirements. Stone is subject to 40 CFR 63, Subpart S (MACT I), for the pulp and paper industry. In order to comply with the regulations, Stone proposed to install and operate a steam stripper and a thermal oxidizer. A steam stripper will be installed to reduce air emissions by removing potential pollutants from

segregated high methanol condensates. The steam stripper will replace the current air stripper. The thermal oxidizer will be installed for combustion of SOG and LVHC gases from the digester, black liquor evaporator, and turpentine recovery systems.

The Department also approved the project as a pollution control project (PCP) under the Prevention of Significant Deterioration regulations. The Department has reviewed the project and the 1994 EPA memo entitled Pollution Control Projects and New Source Review (NSR) Applicability. The Department determined that the project would be environmentally beneficial. The potential emissions for NO<sub>x</sub> were determined to exceed the significance levels under the PSD regulations. Stone conducted modeling based on these results to determine the impacts of the NO<sub>x</sub> emissions. The Department reviewed the modeling results along with previous modeling completed by Stone. The Department determined the thermal oxidizer would not cause or contribute to a violation of the national ambient air quality standards, PSD increment, or adversely affect visibility or other air quality related values.

The two substantive requirements that Stone was required to meet to have an approved PCP is (1) have departmental approval that the project is a PCP, and (2) provide the public the opportunity to comment. The Department agreed that the project is a PCP and the public would be allowed to comment during the issuance of the preliminary determination.

Conditions contained in Section II.F.31, 32 and 33 were added as a result of the permitting action on Permit #2589-08. The project also included other activities, such as construction of the LVHC-NCG system and re-configuration of the batch digester vent. Also, the permit format and the rule references were updated as well as an update to conditions in which ARM 17.8.321 Kraft Pulp Mills applies. The conditions that were updated are in Sections II.F.1.i, 2.i, 3.i, and 6.i, Section III.A.1, and Section V.B.2.f of Permit #2589-08. Permit #2589-08 replaced Permit #2589-07.

Stone submitted a complete permit application on December 27, 2000, for the installation and operation of seven temporary, diesel-fired generators at their facility. This application was assigned Permit #2589-09. Stone asserted that the generators were necessary because the high cost of electricity had significantly impacted operations at Stone, forcing a reduction in manufacturing at the Frenchtown facility. The operation of the generators would not occur beyond 2 years and was not expected to last for an extended period of time, but rather only for the length of time necessary for Stone to acquire a permanent, more economical supply of power. Integral to the diesel generators are the electronic engine controls (EEC) and intake air cooling (IAC) for NO<sub>x</sub> emission control.

The temporary generators would only be used when commercial power is too expensive and is impacting mill operations; therefore, the amount of emissions expected during the actual operation of these generators was not anticipated to be major. In addition, the installation of these generators qualifies as a "temporary source" under the PSD permitting program because the permit would limit the operation of these generators to a time period of less than 2 years. As a result, Stone would not need to comply with ARM 17.8.804, 17.8.820, 17.8.822, and 17.8.824. Even though the portable generators were considered temporary, the Department required compliance with best available control technology and public notice requirements; therefore, compliance with ARM 17.8.819 and 17.8.826 would be ensured. In addition, Stone was responsible for complying with all applicable ambient air quality standards. Permit #2589-09 replaced Permit #2589-08.

The Department received comments on the PD. The comments generally asserted that the best available control technology analysis was incomplete or inadequate, asserted that the Environmental Assessment performed was incomplete or inadequate, requested either operational or emission controls be applied to the temporary generators, and stated that modeling should be conducted prior to permit issuance to assure compliance with ambient air quality standards.

The Department did perform modeling prior to issuing the PD on January 3, 2001, which demonstrated that emissions from the operation of the proposed temporary generators, at maximum potentials, would not violate either the National Ambient Air Quality Standards (NAAQS) or the Montana Air Quality Standards (MAAQS). The Department has since performed additional modeling using a refined model (ISC3) and 5 years of Missoula Meteorological data. The refined modeling also predicted compliance with both the NAAQS and the MAAQS standards at the maximum potential emissions of the proposed generators.

The Department updated the EA to address comments received on the PD. The revised EA expanded the discussion of 7(F) - Air Quality, and 8(E) - Human Health, to acknowledge the modeling conducted prior to issuance of the PD and the refined modeling that followed. In addition, the Department expanded the BACT analysis in response to the comments. The expanded BACT analysis was contained in Section III of the permit analysis.

Permit Action #2589-09 would not be included in the Title V operating permit because it addressed temporary sources.

On December 11, 2001, Stone was issued Permit **OP2589-00** for the operation of the mill. This was the original Title V operating permit to be issued for the facility.

On December 18, 2001, Stone submitted a request to modify Permit OP2589-00. The changes could be categorized as typographical and corrections that were agreed upon during the proposed stage of Permit OP2589-00 and discussed in Section III.F of TRD2589-00, but were not made in the permit. The changes included the removal of reporting time over the standard contained in Sections V.B.26.b, V.I.33, and V.I.36. The time over the standard has no connection to compliance with the limitation. The Table for Section V.G was corrected. The frequency of compliance demonstration for condition V.G.8 should have been daily/quarterly and not ongoing. Section V.G.23 and V.G.42 were clarified to correctly state that the dewatered sludge used in the Multi-fuel Boiler has to originate from the primary clarifier. Section V.I.37 was corrected to state monitor and not monitors. Finally, the requirements for the starch and clay handling was moved back to Section VI.A. The Department had incorrectly moved the requirements for starch and clay handling and the salt cake/lime unloading all to Section V.J. Only the salt cake/lime unloading was to be moved to Section V.J. The Department had made the editorial and typographical changes in this permit amendment. Permit OP2589-01 became final and effective on January 22, 2002. Permit **OP2589-01** replaced Permit OP2589-00.

#### **D. Current Permit Action**

On March 8, 2004, Stone submitted a request for an administrative amendment to add an alternate responsible official. William Kohl, Operations Manager, fits the definition of "Responsible Official" listed in ARM 17.8.1201(29) and has been listed in addition to Robert Boschee, General Manager in Permit OP2589-02. Permit **OP2589-02** replaces Permit OP2589-01.

#### **E. Taking and Damaging Analysis**

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 105, MCA, the Department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications. The checklist was completed on April 6, 2004.

**F. Compliance Designation**

The Department annually inspects the Stone Missoula Mill. The last inspection was conducted on July 8, 2003. Stone was in compliance with the terms and conditions of its permits at that time.

## SECTION II. SUMMARY OF EMISSION UNITS

### A. Facility Process Description

Stone produces unbleached linerboard products from the combination of sawmill residuals (sawdust and chips), roundwood, and recycled fiber. Pulp is produced in batch and continuous pulping digesters using the Kraft (sulfate) cooking process. Recycled fiber is also recovered from post-consumer paper sources on the recycling fiber line. Other major processes include raw materials handling, steam and energy production, chemical recovery, paper production, and finished product handling and shipping. Stone is divided into five major process areas: the Pulp, Chip Dock, and Recycled Fiber Department; the Paper Mill Department; the Power, Recovery, and Reausticizing Department; the Environmental and Technical Department; and the Engineering and Maintenance Department.

The Department has determined the applicable requirements for the Title V permit from the Administrative Rules of Montana Title 17, Chapter 8, the federally enforceable preconstruction permit, and any applicable federal regulations, such as NSPS or MACT requirements, as well as any applicable requirements from the Missoula County regulations. For those conditions that did not have any or adequate compliance demonstrations, the Department determines the appropriate compliance demonstration as required by ARM 17.8.1212 and ARM 17.8.1213.

### B. Emission Units and Pollution Control Device Identification

Stone consists of five departments each containing several emitting units to produce the linerboard product. A complete list of emitting units is contained in Section II of the permit. Also, the Department has designated two areas of the permit as Facility Wide-General (Section III.A) and Mill-Wide Permit Conditions (Section III.B). The Facility-Wide-General section is defining, in general, the regulations that apply to the facility and the general reporting requirements for the facility. The Mill-Wide Permit Condition section specifically defines permit conditions, compliance demonstrations, recordkeeping, and reporting requirements that apply to the whole facility and not individual emitting units.

#### Pulp, Chip Dock, and Recycled Fiber Department

The Pulp, Chip Dock, and Recycled Fiber Department consists of the wood handling area, the pulping process, the brownstock washing and screening, and the recycled fiber area. The wood handling area includes the sawdust handling units, chip handling units, and storage piles. These units process and store wood in the form of chips, sawdust, chip screened fines, and hog fuel at the facility.

The pulping process dissolves enough lignin to release the cellulose fiber in a form that renders them useful for the type of paper product to be made. The emission units involved in the pulping process include 8 batch digesters and 3 continuous digesters. The digesters use the Kraft process to cook the wood to produce papermaking quality fiber for processing on the paper machines.

The brownstock washing and screening process involves the base stock brownstock washers, CB washers, PC washers, and top stock washing emitting units. The general operations in brownstock washing and screening include hot stock refining to abrade the softened chips; screen the pulp to remove knots and incompletely cooked chips; reject refining rejects to the screening process, wash to recover spent cooking liquor, and thicken chips by removing water from the pulp.

Stone also uses post-consumer paper sources and reduces the paper into pulp for the facility. The remaining emitting units involved with this Department are the non-condensable gas system and the cyclones and chip thickness baghouse to control air emissions.

#### Power, Recovery, and Reausticizing Department

The Power, Recovery, and Reausticizing Department provides steam, process water, and electricity to the facility. This Department includes the evaporators and steam stripper, recovery boilers, steam generation, reaustricizing area-liquid generation, reaustricizing area-lime recovery, and any additional recovery area operations. The Kraft process includes evaporating water out of the black liquor until the solids are at a high enough concentration to support their own combustion in the recovery boilers. The condensates from the evaporators, turpentine and digester process areas are steam stripped to produce clean condensates for recycling. The stripper off-gas is routed to the thermal oxidizer for combustion. The emitting units used in this process include the evaporators, steam stripper, and the thermal oxidizer.

The heavy black liquor, fuel oil, and natural gas can all be burned in the three recovery boilers. The particulate emissions are controlled by electrostatic precipitators (ESPs) and the SO<sub>2</sub>, opacity, and total reduced sulfur compounds are measure by CEMs on each recovery boiler. The molten smelt flows from the recovery boilers into smelt dissolving tanks, where it is dissolved in weak wash from the reaustricizing cycle which results in a green liquor. The green liquor is then slaked with lime resulting in a white liquor that is reused as cooking liquor. Particulate emissions from the smelt dissolving tanks are controlled by wet scrubbers. The emitting units involved include the recovery boilers, the smelt dissolving tanks, the lime slakers, white and black liquor handling, and hog fuel handling.

The emitting units used for steam production for pulp and papermaking are the recovery boilers, the Power Boiler, and the Multi-fuel Boiler. The Power Boiler operates on natural gas, which constitutes the emission controls needed on this unit. The Multi-fuel Boiler can operate on OCC rejects, fuel oil, hog fuel, dewatered sludge, and natural gas. A wet venturi scrubber is used to control emissions from the Multi-fuel Boiler. Also, Stone operates CEMS for NO<sub>x</sub>, SO<sub>2</sub>, and oxygen on the Multi-fuel Boiler.

The green liquor that is sent to the lime slakers is treated and the precipitate is lime mud. The lime mud is diluted with water, filtered, and sent to the lime kilns. In the lime kilns it is dried then heated to the calcining slaking operation. The calcined product is the quicklime for the slaking operation. The lime kilns are fired with natural gas and/or fuel oil, and Stone is also permitted to burn petroleum coke in the future. The petroleum coke conditions are contained in Section V.J of the permit as an alternative operating scenario. The emitting units involved include the lime kilns, the quicklime/dry lime handling, and any coke handling that may become necessary. The remaining emitting units associated with this Department are the non-condensable gas system, ash handling, and the tall oil reactor.

Stone has established correlation equations for the #4 Recovery Boiler and the #5 Recovery Boiler. These equations correlate the particulate emissions and the opacity from these units. The equations are used to determine particulate mass emissions from the #4 Recovery Boiler and the #5 Recovery Boiler. The applicable conditions are contained in Section V.B and V.C of the permit. The equations are listed in the following table.

<b>Emitting Unit</b>	<b>Stack Exit Air Flow (dscfm)</b>	<b>Grain Loading (gr/dscf)</b>
EU002-#4 Recovery Boiler	0.2322*(Total Air)+14637	[-0.1303*ln(1-Opacity)]+0.0008
EU003-#5 Recovery Boiler	0.2823*(Total Air)-7330	[-0.237*ln(1-Opacity)]+0.0006

#### Paper Mill Department

The Paper Mill Department contains Stone's three paper machines and is where the production of linerboard takes place. The Kraft pulp and Recycled pulp are mixed in the buffer or machine chests at one of the three paper machines. The paper machines use various additives to enhance linerboard properties and machine operation. The emitting units involved include the paper machines, the starch handling, clay handling, the salt cake/lime unloading, and chemical storage tanks. The emissions are controlled with baghouses.

#### Environmental and Technical Department

The Environmental and Technical Department is responsible for the mill laboratories and compliance with regulatory requirements. The major emitting unit included in this Department is the effluent treatment system. The permit requires a Method 9 be conducted to demonstrate compliance with the opacity demonstration on this source. It should be noted that the physical properties of the effluent treatment system (warm/hot water and cool/cold air) have the potential to create extremely foggy conditions.

#### Engineering and Maintenance Department

The Engineering and Maintenance Department is responsible for the design and construction of civil, mechanical, electrical, and process projects. The emitting units from this Department include unpaved roads, any welding/blasting, part cleaning, paint booths, liquid fuel handling, and CFC recycling.

### **C. Categorically Insignificant Sources/Activities**

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emission unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to section 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

The following table of insignificant sources and/or activities were provided by Stone. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

<b>Emission Unit ID</b>	<b>Description</b>
IEU01	Chip Fines to Hog Fuel (& Sawdust Fines)
IEU02	Shower Water Tank Stack
IEU03	Black Liquor Charge Tank
IEU04	Liquor Filter Vent
IEU05	No. 1 Filtrate Tank Vent (SD Filtrate)
IEU06	No. 4 Evaporator Feed Tank
IEU07	Spill Tank in Batch Area
IEU08	Pins Kamy Low Pressure Feeder Relief Cyclone

IEU09	M&D Digester Chip Feeder Vent
IEU10	Kamyr Chip Bin Vent
IEU11	Recycled Fiber Bale Storage
IEU12	Turpentine Storage Tank
IEU13	No. 5 Recovery Building Roof Steam Vents
IEU14	Coke Storage Tank
IEU15	No.6 Fuel Oil Tank
IEU16	Dregs Wash Tank
IEU17	No. 1 Green Liquor Clarifier Tank Vents
IEU18	No. 1 Green Liquor Storage Tank Vents
IEU19	No. 2 Green Liquor Clarifier Tank Vents
IEU20	Raw Green Liquor Storage Tank Vent
IEU21	No. 3 Mud Washer Tank Vents
IEU22	No. 1 Mud Washer Tank Vents
IEU23	No. 1 & No. 2 Mud Filter Hood
IEU24	No. 1 Mud Storage Tank – Serves No. 1 & No. 2 Lime Kilns
IEU25	No. 2 Mud Washer Tank Vent
IEU26	No. 2 Mud Storage Tank
IEU27	No. 3 Kiln Mud Filter Hood
IEU28	No. 3 Lime Kiln Mud Filter Vacuum Pump Exhaust Stack
IEU29	No. 3 Mud Storage Tank Vents
IEU30	No. 4 Lime Kiln Mud Filter Hood
IEU31	No. 4 Lime Kiln Mud Filter Vacuum Pump Exhaust Stack
IEU32	Warehouse/Shipping Dock Roof Vents
IEU33	Diesel Tank Vent
IEU34	Gasoline Tank Vent
IEU35	Paved Road Fugitives

## SECTION III. PERMIT CONDITIONS

### A. Emission Limits and Standards

Emission limits and standards in the Title V operating permit were established by Stone's Montana Air Quality Permit (#2589-09), NSPS requirements, NESHAP requirements, and MACT requirements. The limitations are contained in the permit, which is organized by process and emitting unit. Stone is currently in the process of installing a thermal oxidizer and a steam stripper to comply with 40 CFR 63, Subpart S. The steam stripper will replace the air stripper. The nomenclature "lime kiln/thermal oxidizer" contained in Section V.N of the permit pertains to the conditions before and after the start-up of the thermal oxidizer. The conditions required to maintain compliance with 40 CFR 63, Subpart S, are contained throughout the permit, but have been summarized in Section V.A of this document.

### B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor for all emissions units. Furthermore, it does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for a insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (**i.e., no monitoring**) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

### C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

Stone is required to conduct testing in accordance with the permit. The permit contains testing and monitoring on a monthly, quarterly, and annual basis and only on a as-required basis in some cases. Stone is also required to conduct testing to determine the methanol mass in accordance with 40 CFR 63, Subpart S. The testing will be completed in accordance with the NCASI 94.03 Direct Injection Test Methods. Stone will measure methanol mass using the factors from the testing in a 60-day rolling average. This testing shall be conducted initially and once every 5 years after the initial test. This permit also requires Method 1-5 and Method 7-9 tests to be performed. These testing requirements were established by the Department's testing policy and by the preconstruction permit.

#### D. Recordkeeping Requirements

Stone is required to keep all records listed in the operating permit as a permanent business record for at least five years following the date of the generation of the record.

#### E. Reporting Requirements

Reporting requirements are included in the permit for each emission unit and Section VIII, "General Conditions", of the operating permit explains the reporting requirements. However, Stone is required to submit monthly, quarterly, semi-annual, and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation. The Department will work with Stone to ensure that multiple submittals of the same data does not occur in most situations.

To eliminate redundant reporting, a source may reference previously submitted reports (with at least the date and subject of the report) in the semi-annual and annual reports instead of resubmitting the information in monthly, quarterly, and/or other reports.

Also, Stone was involved in a settlement in federal court of MT-CHEER et. al. vs Stone Container (Civil Action No. CV-96-24-M-CCL), which contains reporting requirements for Stone Container.

### SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

#### Requirements Not Identified as Non-Applicable

Pursuant to ARM 17.8.1221, Stone requested a permit shield for all non-applicable regulatory requirements and regulatory orders identified in the tables in Section 8 of the permit application. In addition, the Stone permit application also requested a permit shield for both the facility and for certain emission units. The Department has determined that the requirements identified in the permit application for the individual emission units are non-applicable. These requirements are contained in the permit in Section VII, Non-applicable Requirements.

The following table outlines those requirements that Stone had identified as non-applicable in the permit application, but will not be included in the operating permit as non-applicable. The table includes both the applicable requirement and reason that the Department did not identify this requirement as non-applicable.

<b>Applicable Requirement</b>	<b>Reason for Not Including</b>
40 CFR 61, Subpart A - General Provisions 40 CFR 64 Compliance Assurance Monitoring	These federal regulations consist of an applicability statement. These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.

<p>40 CFR 50 National Primary and Secondary Ambient Air Quality Standards  40 CFR 51 Requirements for Preparation, Adoption, and Submittal of the Implementation Plan  40 CFR 71 Federal Operating Permit Program  ARM 17.8.101 Definitions  ARM 17.8.102 &amp; 103 Incorporation by Reference  ARM 17.8.130 Notice of Violation  ARM 17.8.142 Rehearing Procedure Reviews  ARM 17.8.201 Definitions  ARM 17.8.202 Incorporation by Reference  ARM 17.8.301 Definitions  ARM 17.8.302 Incorporation by Reference  ARM 17.8.321(1) Definitions</p>	<p>These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.</p>
<p>40 CFR 52, Subpart A Prevention of Significant Deterioration  40 CFR 52, Subpart BB Approval and Promulgation of Montana State Implementation Plan Rules</p>	<p>These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.</p>
<p>40 CFR 70 State Operating Permit Programs  ARM 17.8.111 Circumvention  ARM 17.8.210 Ambient Air Quality Standards for SO<sub>2</sub>  ARM 17.8.211 Ambient Air Quality Standards for NO<sub>x</sub>  ARM 17.8.212 Ambient Air Quality Standards for CO  ARM 17.8.213 Ambient Air Quality Standards for Ozone  ARM 17.8.214 Ambient Air Quality Standards for H<sub>2</sub>S  ARM 17.8.220 Ambient Air Quality Standards for Settled Particulate Matter  ARM 17.8.221 Ambient Air Quality Standards for Visibility  ARM 17.8.222 Ambient Air Quality Standards for Pb  ARM 17.8.223 Ambient Air Quality Standards for PM<sub>10</sub>  ARM 17.8.230 Fluoride in Forage</p>	<p>These rules are always applicable to a major source and may contain specific requirements for compliance.</p>
<p>ARM 17.8.131 Appeal to Board of Environmental Review  ARM 17.8.140 Rehearing Procedures Forms  ARM 17.8.141 Rehearing Procedures Filings  ARM 17.8.325 Motor Vehicles  ARM 17.8.340 Standards of Performance for New Stationary Sources</p>	<p>These are procedural rules that have specific requirements that are always relevant to a major source during the permit span.</p>

## SECTION V. FUTURE PERMIT CONSIDERATIONS

### A. MACT Standards

Stone is currently subject to is 40 CFR 63, Subpart S- National Emissions Standards for Hazardous Air Pollutants (NESHAP) for the Pulp and Paper Industry (also referred to as MACT I for pulp and paper mills) and 40 CFR 63, Subpart MM (also referred to as MACT II for pulp and paper mills). The requirements for MACT II will be incorporated in a future permit action. 40 CFR 63, Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters MACT is potentially applicable to Stone. Subpart DDDDD has been proposed and signed as final, but has yet to appear in the Federal Register with a final date.

### B. NESHAP Standards

As of April 9, 2004, the only NESHAP standards that Stone is currently subject to include Subpart M - Asbestos. The Department is unaware of any proposed or pending NESHAP standard that may be applicable to Stone.

### C. NSPS Standards

As of April 9, 2004, the only NSPS standards that Stone is currently subject to include Subparts D and BB. The Department is unaware of any proposed or pending NSPS standard that may be applicable to Stone.

### D. Risk Management Plan

As of this date (April 9, 2004), Stone does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, Stone is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.