BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of the Petition of

AS05-01

SCA TISSUE NORTH AMERICA, L.L.C.

for an Adjusted Standard from 35 Ill. Adm. Code §§ 218.301 and 218.302(c).

PETITION OF SCA NORTH AMERICA, L.L.C. FOR AN ADJUSTED STANDARD

McNAMEE, LOCHNER, TITUS & WILLIAMS, P.C.
John J. Privitera, Esq.
Attorneys for SCA Tissue North America, L.L.C.
75 State Street – P.O. Box 459
Albany, New York 12201-0459
(518) 447-3200

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PRELIMINARY STATEMENT

SCA Tissue North America, L.L.C. ("SCA"), through its attorneys, McNamee, Lochner, Titus & Williams, P.C., and pursuant to 35 Ill. Admn. Code § 104.400, *et seq.*, submits this Petition to the Illinois Pollution Control Board ("IPCB"), seeking an Adjusted Standard from 35 Ill. Admn. Code §§ 218.301 and 218.302(c) (commonly known as the "Alternative Standard Rule") as applied to the emissions of Volatile Organic Material ("VOM") at SCA's Alsip, Illinois, recycled paper mill (the "Tissue Mill" or "Facility").

Summary of Petition

Beginning more than a decade ago, the owners/operators of the Facility have worked through various process-related changes to reduce VOM emissions from the solvents used to maintain the paper recycling and manufacturing infrastructure free from intrusions – referred to herein as "stickies." The implementation of these changes has resulted in a 93 percent reduction in VOM emissions from the cleaning process described herein. Thus, the Facility, which is regulated by Rule 218.301 - the "8 lb/hr Rule" - has established its compliance with the substantive requirement of Rule 218.302(c), to achieve at least an 85 percent reduction in VOM emissions.

As set forth more fully below, Rule 218.302(c) was not drafted in a manner that contemplates the contribution of process-related changes and pollution prevention to overall emissions reduction. As a result, Illinois EPA has interpreted Rule 218.302(c) as requiring, in all instances, "add-on" pollution controls to achieve the 85 percent reduction standard, despite the benefits that might accrue from allowing non-control options to be read into the language of the rule. SCA and its predecessors have explored the few available add-on

controls for this process – none of which has proven to be as economically or environmentally feasible as current operations.

Further, Illinois EPA has rendered a determination that the process-related controls currently in effect at the Facility constitute the Lowest Achievable Emission Reduction ("LAER"), and that it is also in compliance with Ill. Admn. Code, 218, Subpart TT. Illinois EPA has also issued a Final Title I Permit, Attachment A, which effectively regulates and controls the Facility within the LAER limits.

For the reasons that follow, SCA respectfully requests that the IPCB grants the instant Petition for an Adjusted Standard.

I. BACKGROUND

Corporate Ownership/Operation of Facility

This matter arises out of the construction in 1988 - 1989, by the Chicago Tissue Company, L.P., f/k/a/ FSC Paper Company (now known as XCTC, L.P.), of a new facility at its recycled paper mill located in the Village of Alsip, Cook County, Illinois. The new facility – referred to herein as the "Tissue Mill" - was designed to recycle magazine stock into consumer-grade tissue products. Before the Tissue Mill was constructed, the Facility was primarily a Newsprint Mill, engaged in the recycling of newspapers into newsprint. The Tissue Mill operations largely duplicate the Newsprint Mill operations.

On July 3, 1993, the Newsprint Mill portion of the Facility was sold to a third-party, and FSC Paper Company, L.P., changed its name to Chicago Tissue Company, L.P. Chicago Tissue Company, L.P., continued to operate the Tissue Mill until November 5, 1995, when the Tissue Mill was acquired by WTM 1 Company, f/k/a/ Wisconsin Tissue Mills, Inc., a subsidiary of Chesapeake Corporation.

Wisconsin Tissue operated the Tissue Mill from November 5, 1995, until October 5, 1999. On October 5, 1999, Wisconsin Tissue transferred the Tissue Mill to a joint venture controlled by the Georgia-Pacific Corporation. On March 3, 2001, Georgia-Pacific sold the Facility to SCA Tissue N.A., L.L.C. SCA's sole member is SCA Tissue North America, Inc., a Delaware corporation that is a wholly owned subsidiary of Svernska Cellulosa Aktiebolaget SCA (publ), a Swedish Corporation. SCA is the current owner and operator of the Facility.

Description of Operational Processes

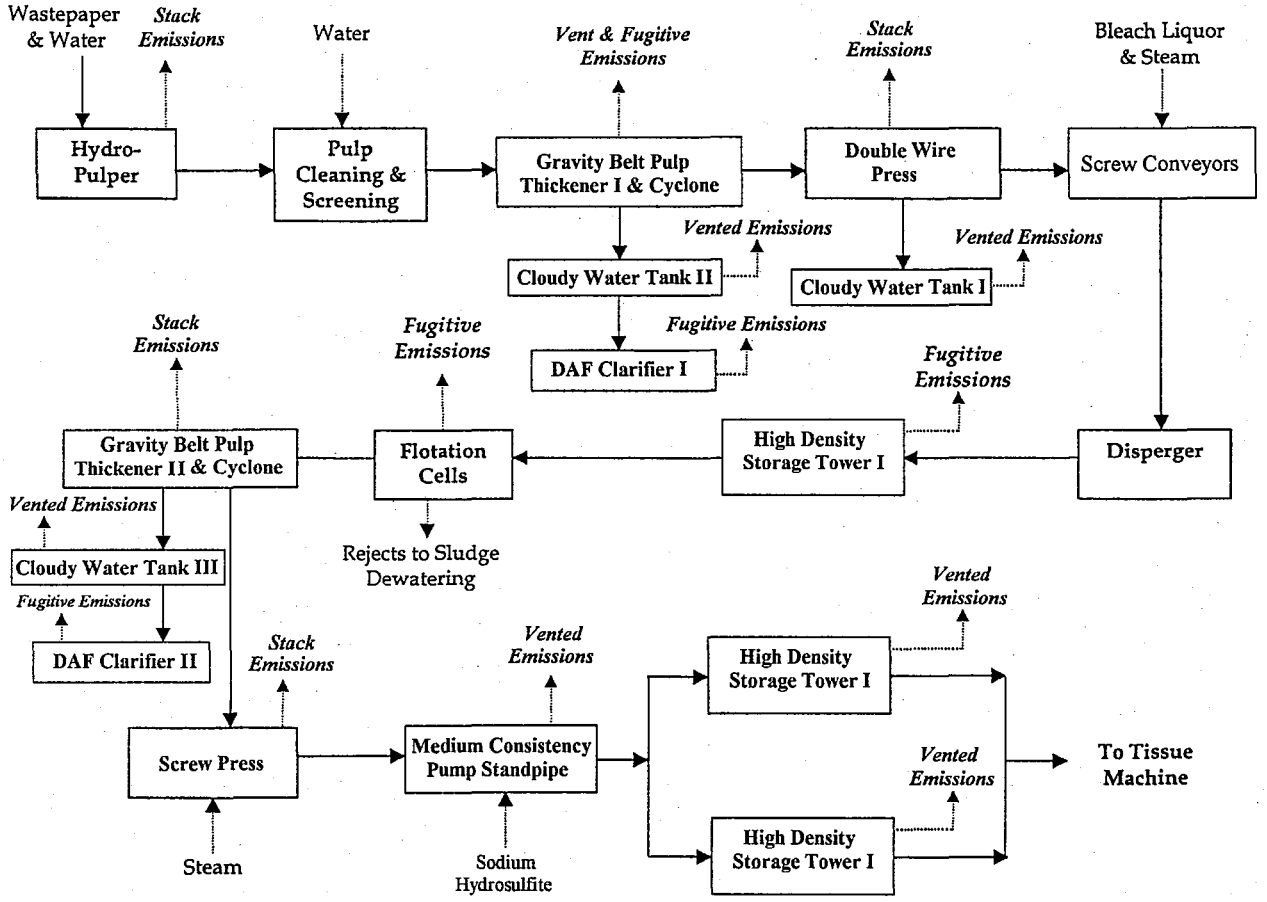
Initial operation of the Tissue Mill began in December 1989, and continuous production began in February of 1990. The Facility currently manufactures tissue and toweling products from recycled wastepaper at a rate of approximately 200 tons per day of product. The wastepaper received by the mill requires pulping, cleaning, de-inking and bleaching to produce a clean fiber source for papermaking. Once the fiber stock is prepared, it is fed between two rapidly moving wires on the paper machine. As the paper sheet progresses through the paper machine, water is drained, pressed and evaporated from the sheet. At the end of the paper machine, the product is continuously wound into large rolls. These large rolls constitute the Tissue Mill's final product.

Pulping Process

The Pulping Process encompasses those processes to convert the wastepaper into a fiber slurry (pulp) suitable for use on a paper machine. The major steps include pulping, contaminant removal, de-inking, bleaching and storage. Figure 1 shows the process flow diagram from the Tissue Mill Pulping Process.

FIGURE 1

Alsip Pulping Process Area Flow Diagram



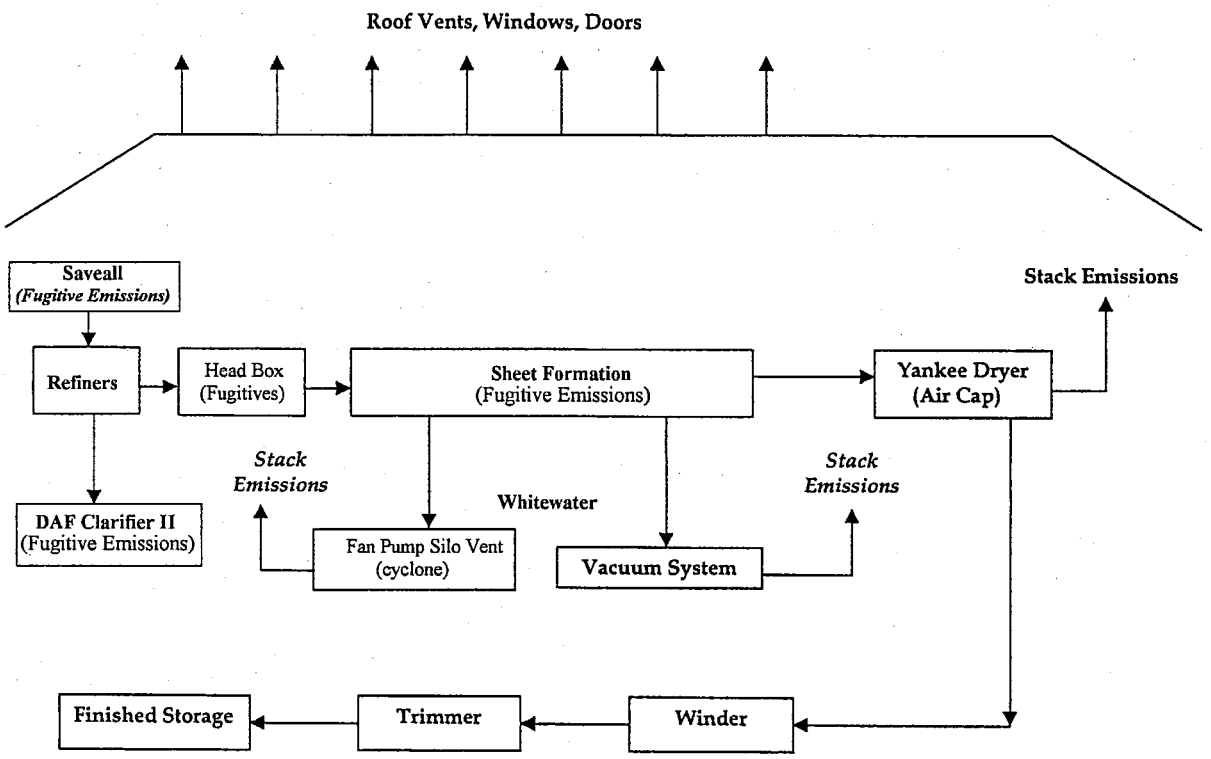
The pulp thereafter undergoes a series of cleaning and screening steps to remove increasingly finer contaminants. Reject streams are further processed to recover usable fiber prior to being conveyed to the reject system. The cleaning and screening steps are conducted in enclosed units in which no chemicals are added, and from which no emissions occur. After the process of de-inking, bleaching and storage has occurred, the pulp is ready to be introduced to the paper machines.

Paper Machine Operations

The paper machine operations begin with refining pulp, and end with the paper reel at the end of the paper machine. Figure 2 shows the process flow diagram for the Tissue Mill paper machine.

FIGURE 2

Alsip Paper Machine Process Flow Diagram



The paper machine forming section or "wet end" is where formation of the sheet occurs. Dilute pulp from the headbox is distributed across the convergence gap of the two fast moving wires of the twin wire press, creating a wire web. Sheet formation is nearly instantaneous. The remainder of the wire section is for dewatering of the sheet. The dewatering action is due to pressure set up by the tension in the two wires and by water drainage elements outside of the wires. The sheet is transferred from the twin wires to a fast

moving felt. Most of the water generated during this process is screened for useable fiber and recycled back into the process.

Paper Machine Wire and Felt Cleaning

During initial operation of the Tissue Mill, it was discovered that the recycling of magazines and similar wastepaper containing glued-on labels or other glued-on material resulted in "stickies" adhering to one of the two, tissue machine forming wire webs described above. The "stickies" remain attached to the wire web and felt rolls and often leave holes in the sheet with each rotation of the wires, thus degrading the product. This represents a significant operational constraint.

The problem is most severe with the paper machine wires. The paper machine wires are therefore cleaned periodically, dependent upon the quality of the furnish (wastepaper), the effectiveness of screening and filtering operations in the stock preparation area, and the grade of paper being produced. As detailed below, this cleaning operation is the source of the VOM emissions that are addressed in the instant Petition for Adjusted Standard.

Removal of Stickies

To remove the "stickies," the Facility operators spray solvent onto the wire web to wash away the glue and paper material so that it will not interfere with production. SCA and its predecessors have refined this process to the extent that Illinois EPA has formally determined that the use of pulp screening and cleaning systems and process operations that restrict the use of cleaning solvents and that limit the cleaning solvent VOC content to 50 percent by weight, complies with Part 218, Subpart TT and constitutes LAER.

Enforcement/Compliance with LAER and Subpart TT

On March 27, 1998, U.S. EPA Region V, issued a Notice of Violation to Wisconsin Tissue, alleging that VOM emissions from the paper machine at the Tissue Mill were in violation of the federal Clean Air Act and pertinent portions of the Illinois air regulations, specifically Subpart TT, 35 Ill. Admn. Code §§ 218.980 through 218.988 (the "1998 NOV"). Subpart TT requires overall 81% control of VOM emissions unless the solvent can be considered a "coating." U.S. EPA and Illinois EPA took the position that the solvent clean-up operation described herein does not constitute a "coating" operation under Illinois regulations.

On May 17, 1999, U.S. EPA, Region V, issued a Notice of Violation to XCTC, L.P., alleging that construction of the Tissue Mill in 1988 and 1989 violated the Illinois Environmental Protection Act and Illinois New Source Review regulations, 35 Ill. Admn. Code §§ 203.301 and 203.601. On May 18, 1999, the Illinois EPA issued separate Notices of Violation to both Wisconsin Tissue and XCTC alleging violations at the Tissue Mill of 35 Ill. Admn. Code §§ 218.986, 203.201, 203.202, 203.301 and 203.302. These Notices of Violation were substantially identical.

In January 2000 (as amended from time to time thereafter), Georgia-Pacific caused to be filed with Illinois EPA (with copies to U.S. EPA, Region V), a LAER Evaluation Report, seeking a determination that the process modifications and other improvements unilaterally implemented at the Facility constituted LAER under the Non-Attainment New Source Review provisions of the federal Clean Air Act. See Attachment B. The salient conclusions of the LAER report may be summarized as follows:

1. Because of the lack of any state or federal regulatory standards for paper machine-specific VOC limits, there are no VOC emission limitations which establish a baseline from which to evaluate VOC emission control requirements for the Facility's paper mill operations;

2. No add-on VOC emission controls have been applied to paper machine operations in the United States that are of the same class or category as the paper machine at the Facility. The sole paper machine identified in the country which utilizes an add-on VOC control device for paper machine emissions is controlled only during the cleaning operation and has potential VOC emissions which are 100 times greater than the solvent cleaning emissions from the Facility;

3. While the application of add-on controls may be technically feasible, the resulting increase in emissions of nitrogen oxide and carbon monoxide generated by an emission control device could be greater than the reduction in VOC achieved. Moreover, the substantial cost-per-ton of VOC emission reductions with add-on controls would, as described more fully below, be greatly out of proportion with the minimal VOC reductions that would result.

In the spring of 2002, the Illinois EPA referred the Alsip Tissue Mill permit matter to the Illinois Attorney General for enforcement. In June 2002, the Illinois Attorney General filed an enforcement action in the Circuit Court for Cook County. The named defendants in that suit are SCA Tissue (the current owner of the Alsip Tissue Mill) and all three former owners of the Facility: Georgia-Pacific, Wisconsin Tissue/Chesapeake and XCTC. The lawsuit seeks civil penalties for past violations of the Illinois air permit laws and for injunctive relief mandating compliance with the State air permit requirements.

Subpart G Compliance Issues

In September 2002, the parties commenced settlement negotiations with the Illinois Attorney General and Illinois EPA with regard to the enforcement case. In early 2003, a complication developed in the settlement negotiations regarding the Tissue Mill's compliance

with Subpart G – Rule 218.301. The general rule under Subpart G requires the Tissue Mill to meet a VOM emission limit of 8 lbs/hr. However, Rule 218.302(c) provides an "Alternative Standard" from the Rule 218.301 emission limitation if approved "Air Pollution Control" equipment is used to reduce organic material emissions, including VOM, by 85 percent or more. Rule 211.410 defines the phrase "Air Pollution Control Equipment" as "any equipment or apparatus of a type intended to eliminate, prevent, reduce or control the emission of air contaminants to the atmosphere."

In late 2003, SCA presented Illinois EPA with a "Subpart G Compliance Demonstration," in which it maintained that a reasonable regulatory definition of "apparatus" would include the various process related changes that had been implemented at the Facility to reduce VOM emissions over the last decade and that the Facility did in fact comply with Subpart G, since it had achieved a 93 percent reduction in historic VOM emissions, which exceeds the Subpart G, 85 percent reduction standard.

In or about April 2004, Illinois EPA rejected SCA's Subpart G compliance demonstration, finding "the definition does not support equating the process-related changes referenced in the [Subpart G Compliance Demonstration] with the types of conventional control technologies that are mentioned throughout the Board's Part 218 regulations" and "While Illinois EPA encourages pollution prevention, including the types of process-related equipment changes that resulted in emission reductions from the spray solvent operations, [Illinois EPA] is not prepared to depart from its traditional notions of what constitutes air pollution control equipment." See Attachment C.

On or about May 23, 2004, the Illinois EPA circulated for public review and comment a Federally Enforceable State Operating Permit ("FESOP"). The FESOP was

issued in its final form on July 23, 2004. The FESOP states, "Illinois EPA has determined that the plant will meet the Lowest Achievable Emission Rate," and also establishing the Facility's compliance with Subpart TT. See Attachment A.

The parties also agreed on the terms of a Consent Order, which was entered in the Circuit Court of Cook County, Illinois County Department, Chancery Division, on August 13, 2004. The Consent Order, attached hereto as Attachment D, provides as follows, in contemplation of the instant Petition for Adjusted Standard:

> (5) SCA shall file a petition for adjusted standard ("Petition") with the Board within 60 days following entry of this Consent Order, pursuant to Section 28.1 of the Act, 415 ILCS 5/28.1 (2002), and the regulations of the Board under 35 Ill. Adm. code Part 106. The petition shall address the factors set forth in Section 28.1(c) of the Act and shall seek the Board's approval of an adjusted standard that authorizes SCA to comply with the Illinois EPA LAER determination, as well as the requirements of an approvable equivalent alternative control plan under Subpart TT, in lieu of the 8 lbs/hr limitation of 35 Ill. Adm. Code 218.301.
>
> (6) The Illinois EPA shall timely submit a recommendation to the Board pursuant to 35 Ill. Adm. Code 106.714 that the Board grant the Petition of SCA. In the event that the Board grants SCA's Petition, the Illinois EPA shall thereafter timely submit notice to USEPA/Region 5 of the Board's adjusted standard ruling and request that the State Implementation Plan ("SIP") be modified accordingly.

Attachment D, pp. 16-17.

With execution of the Consent Order, the Illinois EPA and AG agree that the facility complies with Part 203 and Part 218, Subpart TT. Attachment D, pp. 15.

After carefully examining its operations to determine the feasibility of using traditional, add-on controls to comply with Subpart G, and having concluded for the reasons set forth below that it is infeasible to do so, SCA is compelled to petition the IPCB for an

adjusted standard. Accordingly, SCA offers the following reasons as to why it should receive an adjusted standard with respect to the 8 lb/hr rule:

II. 35 ILL. ADMN. CODE § 104.406 REQUIREMENTS

A. Standard From Which Relief Is Sought – Section 104.406(a)

SCA requests an Adjusted Standard from 35 Ill. Admn. Code § 218.301 (use of organic material, otherwise known as the "8 lb/hr. rule") and 218.302(c) (requirement to use add-on controls to achieve capture rate). Illinois' organic material emission limitations were last amended at 17 Ill.Reg. 16636, effective September 27, 1993. Section 218.301 now provides:

> No person shall cause or allow the discharge of more than 3.6 kg/hr. (8 lb/hr.) of organic material into the atmosphere from any emission unit, except as provided in Sections 218.302, 218.303, 218.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material.

35 Ill. Admn. Code § 218.104 states that "the definitions of 35 Ill. Admn. Code 211 apply to this Part." Pursuant to 35 Ill. Admn. Code § 211.1950, "emission unit" means "any part or activity at a stationary source that emits or has the potential to emit any air pollutant." Additionally, Section 211.4250(b) defines "organic material" as:

> Any chemical compound of carbon including diluents and thinners which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents, but excluding methane, acetone, carbon monoxide, carbon dioxide, carbonic acid, metallic carbonic acid, metallic carbonates, and ammonium carbonate.

B. Nature of the Regulation of General Applicability – Section 104.406(b)

This regulation was promulgated to implement the federal requirements under the Clean Air Act, 42 U.S.C. § 7401, *et seq.*

C. Level of Justification – Section 104.406(c)

The regulation of general applicability from which SCA seeks an Adjusted Standard does not specify a level of justification for an Adjusted Standard.

D. Facility and Process Description – Section 104.406(d)

A description of the Facility and the process that is the subject of the instant application is provided in the "Background" section, supra. In summary, SCA utilizes low-VOC photochemically reactive solvents to remove stickies from the wire web that it uses to dry pulp into fiber, suitable for installation on rolls. As a result of the proactive activities described below, SCA has reduced VOM emissions from this aspect of its operations in excess of the 85 percent reduction mandated by Subpart G.

E. Investigation of Compliance Alternatives: Methods for Reducing VOM Emissions from SCA's Mill – Section 104.406(e)

SCA and its predecessors have performed extensive evaluations and improvements at the Tissue Mill to reduce VOM emissions to their Lowest Achievable Emissions Rate, as reflected in the FESOP. In approximately 1991, the process of continuous, unmetered spraying of cleaning solvent for 10 to 25 minutes was replaced with a three-part process, utilizing new equipment that applies a controlled solvent spray, followed by a soak cycle, and power wash with water. The equipment for this new process was designed and engineered to reduce the release of solvents to 3 to 5 minute spray periods, followed by a "rest" period to allow the solvent to "soak in" and loosen the stickies. A high-pressure water wash was subsequently designed and installed to physically remove the stickies. On infrequent occasions, this "spray-wait-power wash" cycle is repeated.

The Facility also changed the pulp detacifier and wire polymer application equipment to reduce stickie build up and, hence, reduce the number of wire solvent cleanings required.

This redesign and reengineering of the process equipment for solvent cleaning did not increase the number of solvent cleaning cycles and, therefore, a 30 to 80 percent reduction in VOM emissions for each cleaning cycle was realized due to less solvent usage per cleaning. This process redesign is described in Attachment E, which is SCA's Solvent Reduction Equipment Procedures Protocol ("Solvent Reduction Protocol").

Additional process and equipment modifications were made in the late 1990s to further reduce the amount of solvent that is used on the machines. To physically remove a greater quantity of stickies prior to applying pulp furnish to the paper machine wires, the centrisorter screens were redesigned to reduce the slot size and the c-slot was redesigned. These engineered changes increased the removal of stickies by approximately 80 percent, thus reducing the overall number of required solvent cleanings. Second, the solvent spray nozzles were replaced with a reconfigured design to reduce solvent overspray. This modification reduced the quantity of solvent utilized during each solvent cleaning event.

The equipment changes described above resulted in substantial organic material emission reductions, based on VOM emission data previously submitted to the Illinois EPA. For instance, 1990 solvent cleaning VOM emissions were documented at 182.25 tons per year at a corresponding production rate of 36,900 machine dried tons (MDT) of production during that year. For comparison purposes, SCA normalized VOM emission rates on a production specific basis because current production rates are nearly twice those during the early years of the machine operation. The 1990 VOM emission rate prior to the equipment changes described above was 9.9 pounds per MDT. After the implementation of the equipment changes, the average VOC emission rate due to the use of cleaning solvent decreased to 5.0 pounds of VOM per MDT. This emission rate is based on the 1991 through

1994 solvent usage information presented in Attachment F to this Petition. These years were used because a solvent change occurred in 1995 that further reduced VOM emissions. That subsequent reduction in VOM emissions is not included in the calculation of VOM emission reductions achieved by the above equipment changes; therefore, actual emissions have been reduced to an even greater extent than is reported.

The VOM emission reductions due to the air pollution control equipment changes in the late 1990's can be documented in a similar manner by comparing the actual solvent cleaning emissions prior to the changes with those subsequent to the changes. Again, using the data presented in Figure 1 of Attachment F, the solvent cleaning emission rates prior to the air pollution control equipment changes are represented by VOM emissions during the years 1995 and 1996 which averaged 3.5 pounds VOM per MDT. The solvent cleaning emissions subsequent to the equipment changes are represented by VOM emissions during the years 1997 through 2000, which averaged 0.6 pounds of VOM per MDT. Emission calculations are presented in Attachment G that document an overall VOM emission reduction due to equipment changes of 93 percent, substantially in excess of the 85 percent requirement.

Section 6.63 of the attached LAER Report (Attachment B, p. 26) documents that the application of add-on controls is economically infeasible, due to the extremely high cost-per-ton of VOC emissions reduction. Preliminary budget level cost estimates were developed for five (5) different potential add-on VOC emission control technologies. The cost estimates for these control technologies were based on guidance adapted from the U.S. EPA Office of Air Quality Planning and Standards, Control Cost Manual (EPA 453/B-96-001, Fifth Ed., February 1996) and appropriate escalation indices.

The LAER Report concludes that, of the scenarios analyzed, the application of catalytic regenerative incineration to the cyclone exhaust was the most cost effective. This scenario would result in a total annualized cost of approximately $265,734 per year for the removal of 5.8 tons per year VOC. See Figure 3. Thus, the cost effectiveness of this proposal is $45,706//ton of VOC removed. That cost is clearly excessive when compared to the potential increase of emissions of other pollutants and the minimal VOC reduction that would be achieved through add-on controls.

FIGURE 3

Emission Control Cost Summary

Scenario	Catalytic Regenerative Incineration ($/ton VOC Controlled)	Catalytic Recuperative Incineration ($/ton VOC Controlled)	Thermal Regenerative Incineration ($/ton VOC Controlled)	Thermal Recuperative Incineration ($/ton VOC Controlled)	Carbon Adsorption ($/ton VOC Controlled)
All sources	$107,362	$152,757	$120,596	$204,887	Not Feasible
All Paper Machine Sources	$84,647	$120,180	$98,063	$158,521	Not Feasible
All Pulping Process Sources	$170,057	$252,040	$194,930	$327,771	Not Feasible
Vacuum System	$99,574	$136,605	$118,349	$171,946	Not Feasible
Cyclone	$45,706	$63,903	$58,346	$79,915	$48,312
Washers	$152,196	$228,141	$178,672	$293,727	Not Feasible
Yankee Dryer	$380,857	$541,565	$468,117	$703,191	Not Feasible

Furthermore, on March 8, 1996 the US EPA proposed NESHAP at pulp and paper mills. The goal of the NESHAP is to require implementation of maximum achievable control technology ("MACT") to reduce hazardous air pollutant ("HAP") emissions. The proposed rule included standards for MACT III sources, which includes secondary fiber deinking mills and paper machines such as the paper machine at the Facility. Essentially all of the HAP addressed in the MACT rule are also VOC.

For the MACT III source category, the US EPA contacted representatives of major industry, state and environmental groups and held discussions with a team of state and industry representatives. The team evaluated the existing information and established "Presumptive MACT" for mills such as the Facility. The information gathered during the Presumptive MACT process indicates that there are no air pollution control devices in place on MACT III sources, except for those associated with chlorine bleaching processes – which are not at issue here. Based on this finding, US EPA determined that the "MACT Floor" for these sources is no control at all, at least with respect to pulping and the associated wastewater, paper machines and nonchlorine bleaching.

SCA has also concluded that no cleaning solvent alternatives are available that provide acceptable cleaning characteristics and can reduce VOM emissions below 8 pounds per hour or be nonphotochemically reactive. Figure 4 provides a summary of some seventeen solvent trials completed by SCA to support this conclusion. The cleaning products evaluated were either low or non-VOM products or those using nonphotochemically reactive constituents. See also Attachment H. Additionally, Figure 5 provides a regulatory summary of other States' treatment of this issue and supports the conclusion that there has been no demonstration of a non-photochemically reactive material that can be used as a cleaning solvent for tissue mills. See also Attachment I.

FIGURE 4

Solvent Trial Results

Trial Date	Method	Product	Results	Comments
10/8/02	Machine	Felt Solv II	Stripped the wire, no effect on stickies	Conducted trial last year with lower VOC product
7/10/03	Bench	Acetone-Walgreens 100%	No results	Evaporated too fast for the produce to react to stickeis
7/12/03	Bench	Aquamark, Inc Degreaser-1	No effect on stickies	Applied at 50% and 100% strength with similar results
8/5/03	Machine	Anchor 7860	No effect	Used in the printing industry to remove ink
8/5/03	Machine	Anchor 7427	No effect	The product separated too fast.
8/5/03	Machine	Tabco 84	Stripped the wire coating, but no effect on the stickies	
8/14/03	Machine	Johnson-Diversey X-Cell 242	No effect	Odor did not irritate operators, stickies were white latex type
8/14/03	Machine	Tabco 79	No effect	Solvent produced a nail polish remover odor which strongly affected the operators, stickies were white latex type
8/14/03	Bench	West Penetone HTSR-3	Removed only small black stickies	Had to heat solvent to 200 F. Would need to develop handling and application system.
8/14/03	Bench	West Penetone HTSR-2	Removed only small black stickies	Had to heat solvent to 176 F Would needed to develop handling and application system.
8/18/03	Bench	West Penetone HTSR-2	Removed only small black stickies	Had to heat solvent up to 188 F. Would need to develop handling system to apply at high temp.
8/18/03	Bench	West Penetone HTSR-3	Removed only small black stickies	Had to heat solvent up to 195 F, Heavy solvent odor, Would need to develop handling and application system.
9/15/03	Bench	Nalstrip 2634	Stripped the wire, no effect on stickies	
9/15/03	Bench	Nalstrip 1702	Stripped the wire, no effect on stickies	
9/17/03	Bench	Penetone CFW4	Stripped the wire, no effect on stickies	
9/17/03	Bench	Penetone CBO1A	Stripped the wire, no effect on stickies	
9/17/03	Bench	Buchman 2460	No effect	

FIGURE 5

Results of State Regulatory Review

State	Photochemically Reactive Material Limits	Applicability Threshold	Applicable to Tissue Mills
Alabama	No	-	-
Florida	No	-	-
Georgia	No	-	-
Indiana	Yes	100 tons / year	Yes
Maine	No	-	-
Michigan	No	-	-
Minnesota	No	-	-
New Hampshire	No	-	-
Ohio	Yes	3 pounds / hour or 8 pounds / hour (1)	No
Oregon	No	-	-
South Carolina	No	-	-
Virginia	No	-	-
Washington	No	-	-
Wisconsin	Yes	3 pounds / hour or 15 pounds / day	Yes (2)

Notes:
(1) Limit depends on whether solvent is exposed to direct flame or heated.
(2) Allows compliance via non-photochemically reactive compounds or demonstration that facility is utilizing the "latest available control techniques and operating practices".

For these reasons, it is not possible for SCA to comply with the 8 lb/hr rule of Section 218.302(c). Moreover, having achieved the lowest achievable emission rate according to Illinois EPA and U.S. EPA, an Adjusted Standard reflecting these facts is warranted. SCA prays that the Board grant the requested Adjusted Standard.

F. SCA's Proposed Adjusted Standard – Section 104.406(f)

As set forth above, the rule of general applicability from which SCA seeks this adjusted standard is Rule 218.302(c), which authorizes:

> Emissions in excess of those permitted by Section 218.301 of this Part . . . if such emissions are controlled by one of the following methods:

> (c) any other pollution control equipment approved by the Agency and approved by the USEPA as a SIP revision capable of reducing by 85 percent or more the uncontrolled organic material that would be otherwise emitted into the atmosphere.

Because Illinois EPA will not allow the already implemented (and proven successful) process and design adjustments to qualify as "any other pollution control equipment" under Rule 218.302(c), SCA cannot technically qualify for an Alternative Standard under Rule 218.302(c), notwithstanding that it exceeds the substantive criterion of 85 percent reduction of organic material. Accordingly, SCA proposes that, in lieu of being subject to the "add on control" provisions of 35 Ill. Admn. Code § 218.302(c), SCA shall continue to implement the process and operational changes that have resulted in a 93 percent reduction in VOM emissions and those changes shall be deemed to comply with Rule 218.302(c) as an approvable Alternative Standard, in addition to constituting LAER under the federal Clean Air Act. Thus, the only adjustment sought herein is the IPCB's approval, in this instance, of process-related improvements in lieu of add-on controls to reach the desired result of environmental protection.

SCA proposes that the IPCB's order granting the Adjusted Standard establish the applicable requirement as follows:

> Process and operational changes resulting in a reduction by 93% from uncontrolled emissions of VOM from the wire cleaning process shall constitute compliance with 35 Ill.Adm.Code § 218.302(c) at SCA Tissue, N.A., LLC., located at 13101 South Pulaski Road in the Village of Alsip, Cook County, Illinois 60803.

G. Quantitative and Qualitative Description of SCA's Impact on the Environment Before and After the Proposed Adjustment Standard – Section 104.406(g)

Because SCA's operations meet LAER requirements and meet or exceed the substantive limitation of 85 percent reduction in VOM emissions, there will be no adverse incremental impact on the environment as a result of the Adjusted Standard sought herein. In fact, because SCA's operations exceed the percentage reduction requirements of § 218.302(c), there will be a qualitative improvement to the environment resulting from this Adjusted Standard.

H. Justification – Section 104.406(h)

Under Section 28.1 of the Environmental Protection Act ("Act"), the Board may grant an Adjusted Standard for persons who can justify such an adjustment consistent with Subsection (a) of Section 27 of the Act. 415 ILCS 5/28.1. Moreover, if a regulation of general applicability does not specify a level of justification required of a petitioner to qualify for an adjusted standard, the Board may grant individual Adjusted Standards upon an adequate showing that: (1) factors relating to Petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that Petitioner; (2) the existence of those factors justifies an Adjusted Standard; (3) the Adjusted Standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and (4) the adjusted standard is consistent with any applicable federal law.

1. Factors Relating to SCA are Substantially and Significantly Different.

The factors relating to SCA's operations are substantially and significantly different than the general factors relied upon by the Board in promulgating 35 Ill. Admn. Code §

218.301. Rule 218.301 was adapted from 35 Ill.Adm.Code § 215.301, which was first promulgated in 1971 as Chapter 2: Air Pollution, Rule 205. Because § 215.301 was adopted over 30 years ago, it is difficult, if not impossible, to know exactly what factors the Board relied upon in adopting this Rule. However, based upon Illinois Pollution Control Board case law and a common sense reading of the Rule, SCA believes that the factors primarily relied upon by the Board involved concerns about preventing ozone formation. In fact, it appears that the main intent of the Rule was to ensure that operations emitting organic material utilize control equipment already in place to ensure that their facilities do not cause a violation of the one-hour ozone standard nor create an odor nuisance. For example, in Illinois v. Processing and Books, Inc., the IPCB explained:

> Rule 205: Organic material emission standards serve both to achieve and maintain compliance with the Federal Air Quality standard for photochemical oxidants (0.08 ppm for one hour not to exceed more than once per year, 36 Fed. Reg. 22 385, November 25, 1971) and to prevent local nuisances ... The major purpose of these regulations is for control of photochemical oxidants. In addition, odor causing organic emissions were included if a local odor nuisance exists ... These provisions are designed to require the use of equipment that is already in use in numerous facilities ...
>
> 1977 WL 9986, *4 (Illinois Pollution Control Board).

From this explanation it is evident that the Board was most concerned with: (1) protecting ambient air quality by preventing any violation of the one-hour ozone NAAQS; and (2) controlling any odor nuisances from manufacturing operations. A review of SCA's operations shows that the main purposes of this rule are not furthered through its strict application to SCA: first, as thoroughly discussed in Section II G of this petition, SCA meets the 85 percent reduction Alternative Standard; therefore, approval of the instant Petition would not cause a violation of the ozone NAAQS. Second, SCA has the technology in place

and permit controls as explained in Attachment A to ensure that its operations do not cause an odor nuisance.

The above quote from the Illinois Pollution Control Board also shows that, when adopting the Rule in 1971, the Board most likely relied upon the fact that facilities would have no problem complying with the rule by utilizing equipment already available and in use by most facilities subject to the rule. It is clear that this rule was promulgated as a catch-all provision, intending to cast a wide net over all operations that emit organic materials. However, the Board could not possibly have contemplated all of the circumstances in which organic material would be emitted as technology advanced, and in fact, there is no indication that the Board considered the fact that is peculiar to paper manufacturing when adopting this rule. Put simply, stickies are a substantial barrier to producing the recycled tissue rolls and the solvent cleaning operations with low VOM materials and controls described herein are the only demonstrated technology for reducing and/or eliminating that problem.

Finally, there is no indication that the IPCB considered the advantages to the environment obtained through pollution prevention in adopting § 218.302(c). With advancing technology, relatively new products have enabled SCA to reduce the VOM content of the clean-up solvents used in this process. This allows compliance with the emissions reduction requirement of § 218.301(c) in a manner not anticipated just a little over a decade ago. While SCA's efforts have demonstrated dramatic reductions in yearly solvent use, those efforts have still not allowed the Facility to contain organic compound emissions below 8 lb/hr due to the amount of solvent that must be used in each solvent cleaning event. The large surface area of the wires to be cleaned necessitates the use of substantially more than 8 pounds of solvent during each cleaning event.

As pollution prevention is currently recognized as perhaps the preferred means of reducing pollutant exposure to the environment, this Adjusted Standard reflects approaches not necessarily available or considered preferable at the time that § 218.302(c) was adopted. Moreover, although it cannot achieve an emission rate of 8 lb/hr consistently, SCA is achieving LAER at the Facility.

2. The Existence of Those Factors Justifies an Adjusted Standard.

As discussed fully in Section II E of this Petition and its Attachments, SCA has investigated numerous compliance alternatives that have proven to be neither economically nor technically feasible due to the substantially different factors relating to paper manufacturing operations. The existence of these factors, coupled with Illinois EPA's anticipated support of SCA's efforts to obtain an Adjusted Standard, and express finding of SCA's compliance with LAER, justifies the granting of the instant request.

3. The Requested Standard Will Not Result in Adverse Environmental Health Effects.

As discussed previously in Section II G of this Petition, the requested Adjusted Standard will have little, if any adverse impact on the environmental health. SCA has dramatically reduced its VOM emissions through the implementation of the measures described herein. SCA's emissions technically meet the Subpart G, 85 percent reduction Alternative Standard. Therefore, SCA's operations do not cause or contribute to any adverse environmental health effects. In fact, with reductions exceeding the 85% requirement of § 218.302(c), this Adjusted Standard will result in a qualitative benefit to the environment.

4. The Requested Standard is Consistent with Federal Law.

The granting of this proposed Adjusted Standard is consistent with federal law and will not violate any provision of the Federal Clean Air Act. Specifically, there is no Clean Air Act equivalent rule or regulation prohibiting paper manufacturers' from utilizing process-related controls to reduce VOM emissions below the 85 percent Alternative Standard. Because SCA is proposing to comply with Subpart G, albeit through an Alternative Standard, the proposed Adjusted Standard will be consistent with federal law. Moreover, under federal law the Board's grant of this adjusted standard will be submitted to US EPA for inclusion in Illinois' SIP. It will also comport with federal procedural requirements of notice and comment.

I. Hearing - Section 104.406(j)

SCA requests a hearing in this matter.

J. Supporting Document - Section 104.406(k)

Attachments A through I, to this Petition constitute the relevant technical documents that support the instant request.

A. Title I Federally Enforceable State Operating Permit;

B. LAER Report, RMT, Inc., November 2000;

C. April 22, 2004, Letter from Illinois EPA;

D. Final Consent Order, People of State of Illinois ex rel. Lisa Madigan, Attorney General of State of Illinois v. XCTC Limited Partnership, et al., No. 03-CH-09501;

E. SCA Solvent Equipment Procedures Protocol, 12/2003;

F. Table "Cleaning Solvent VOM Emissions";

G. Emissions Calculations;

H. SCA Solvent Trial Results; and

I. Regulatory Evaluation Memoranda, RMT, Inc., September 16, 2003.

III. CONCLUSION

The requested Adjusted Standard should be granted as an alternative to SCA's compliance with 35 Ill. Admn. Code § 215.302(c). To require SCA to comply with the Rule of general applicability would result in substantial economic hardship to SCA with minimal environmental benefit, and would ignore a decade's worth of process-related and design improvements that have resulted in VOM emissions reduction far in excess of the regulatory standard of 85 percent reduction, which reductions already constitute the Lowest Achievable Emission Rate.

WHEREFORE, SCA respectfully requests an Adjusted Standard from 35 Ill. Admn. Code § 215.302(c), authorizing the process-related improvements described herein in lieu of add-on controls to reach the desired result of environmental protection.

DATED: October 8, 2004
Albany, New York

Respectfully submitted,

McNAMEE, LOCHNER, TITUS & WILLIAMS, P.C.

By: _____

John J. Privitera
Attorneys for SCA Tissue North America LLC
75 State Street – P.O. Box 459
Albany, New York 12201-0459