NPDES Pretreatment Compliance Sampling Inspection Report

Ox Specialty Papers, LLC.

30 Champion Ave.
Carthage, New York 13812

40 CFR Parts 403 & 430
Industrial User Permit

Inspection Dates: April 4-5, 2024

Report Prepared by:

THUAN TRAN
Digitally signed by THUAN TRAN
Date: 2024.05.30 14:57:36 -04'00'

Thuan Tran, Physical Scientist

Report Approved by:

PHILIP COCUZZA
Digitally signed by PHILIP COCUZZA
Date: 2024.05.30 16:26:23 -04'00'

Phil Cocuzza, Supervisor
Monitoring Operations Section

1.0 OBJECTIVE

On April 04-05, 2024, the United States Environmental Protection Agency (USEPA) conducted a Pretreatment Compliance Sampling Inspection (CSI) at Ox Specialty Papers, LLC. – Carthage Paper Mill. The objective of the Pretreatment CSI was to gather information necessary to determine if the facility is in compliance with the requirements and limitations of the Federal Categorical Standard of 40 CFR Part 430 for Pulp, Paper & Paperboard Point Source Category- Subpart J - Pretreatment Standards for Existing Sources, the Federal General Pretreatment Regulations for Existing and New Sources of Pollution in 40 CFR Part 403, and Ox Specialty Paper, LLC Industrial User Permit issued by the Village of West Carthage, and other related federal regulations. The Industrial User Permit became effective June 01, 2023, and expired on May 31, 2024.

2.0 KEY PARTICIPANTS

Listed below are key inspection participants and contact information, grouped by organization.

U.S. Environmental Protection Agency
Thuan Tran, Lead Inspector
732-321-4455, email: tran.thuan@epa.gov
Molly Hillenbrand, Environmental Scientist

Ox Specialty Papers, LLC. – Carthage Paper Mill
Erick Austin, EH&S Manager
315-454-7936, email: eaustin@oxindustries.com
David Cronk, Superintendent
Zack Anderson, Process Specialist
Brain Keesler, Production Supervisor
John Scheerer, Corporate Environmental & Sustainability Engineer

New York State Department of Environmental Conservation (NYSDEC)
Jacqueline Smith-Gagnon, Professional Engineer 1
315-785-2403, email: Jacqueline.smith-gagnon@dec.ny.gov

Village of West Carthage WWTP
Robert Stevenson, Chief Plant Operator
315-771-6757, email: rstevenson@danc.org

3.0 FACILITY DESCRIPTION

3.1 General Information:

Carthage Specialty Paperboard, Inc. has been in business for over 125 years and produces various grades of uncoated recycled paperboard for industries such as pharmaceutical cap sealing, art mat board ridged setup box, folding cartons, and protective packaging. The mill

has been operating under financial pressure for some time and fell into bankruptcy in February of 2018.

Ox Industries acquired Carthage Specialty Paperboard, Inc. on October 25, 2018, and renamed the paper mill from Carthage Specialty Paperboard, Inc. to Ox Specialty Papers, LLC. to fit in with Ox suite of facilities. Ox Specialty Papers, LLC. produces paperboard from 100% recycled material on a continuously endless moving rollers that receives pulp with water forming a continuous sheet of paper for further drying by pressure and heat.

Ox Specialty Papers, LLC. – Carthage Paper Mill is located on 30 Champion Ave., Carthage, New York (NY). Ox Specialty Papers, LLC. – Carthage Paper Mill employs approximately 73 people, operating twenty-four (24) hours per day with 3, 8-hour shifts (6AM-2PM, 2PM-10PM & 10PM-6AM). The paper mill is categorized under Standard Industrial Classification (SIC) 2621 – Paper Mills and the North American Industry Classification System (NAICS) 322120 – Paper Mills.

3.2 Process Information

Ox Specialty Papers, LLC. – Carthage Paper Mill draws water from the Black River for use in the manufacturing operation process. The water is pumped into a receiving chest before it is directed into three (3) sand filtration units to remove unwanted solids. The filtered water is stored in a holding tank to be use in the stock system as needed. A biocide is added in select white paper grades for odor control and to prevent microbial growth.

The operation process begins with recycled pre- and post-consumer white and brown grade paper being fed into a stock trap to be shredded. The shredded paper is fed into five pulpers (blenders) with hot water to create a pulp slurry. A screen at the bottom of the blender allows the slurry to pass through to the cyclone drum (High-Density Cleaner) to be cleaned with water from the clear water chest. The High-Density Cleaner removes any unnecessary contaminates and over-size pulp fibers. The pulp continues into the filler dump chest at about 5% dilution consistency. From the filler dump chest, the pulp is further cleaned by a second cyclone drum to reduce the paper slurry to about 3% dilution consistency. After cleaning, the pulp goes into a refiner where it is fluffed to increase bonding. After the refiner, the pulp is pumped into the head box (junction box) where the pulp is diverted into a screen that further filtered out any fine plastic/glasses that made it through this far. After the screen, the pulp is distributed between the nine (9) vats that feed the paper making machine.

The pulp slurry in the 9 vats feeds the 9 cylinders on the wet end of the paper making machine. A thin layer of pulp slurry is applied onto the cylinder as it rolls continuously overlapping one another creating 9 layers while moving from the cylinders toward the pressure and heat section where the temperature is maintained between 120-125°F and

constant pressure in forming a sheet of paper. As the pulp slurry continues toward the dry end of the paper making machine, the temperature is increased between 250-300°F to drive moisture away from the paper. An infrared scanner monitors the thickness of the paper while it continuously spins onto a spool. Once the spool is full, it is removed and cut down into smaller rollers to customer specifications.

A pulper is stationed at the dry end of the paper making machine to receive unwanted paper. Reclaimed water from the cement chest is added to blend the paper into pulp. The pulp is pumped to the pulp filler before the High-Density Cleaners.

Any unnecessary contaminates, such as plastic, glass, metals, and grits, are removed from the paper manufacturing process and disposed of at the Tri-County Landfill.

Water used in the paper making process is recycled. Reclaimed water removed at the wet end of the paper making machine is collected in the cement chest, the overflow water chest and the water chest. Excess water from the water chest overflows into the overflow water chest. The cement chest receives majority of the reclaimed water supply for the filler pulper, dilution waters for the filler stock system, and dilution water for the pulper stationed at the dry end of the paper making machine. Excess water in the cement chest is directed to the collection pit.

Excess water exceeding the set level point in the collection pit is pumped to the drum screen. The drum screen segregates the solids into a hopper. Plastic, glass, metals, and/or grit are disposed of at the landfill. Pulp fibers are returned to the filler pulper. The filtered water from the drum screen is directed to the clarifier feed chest. The water in the clarifier feed chest is conveyed into the Dissolved Air Flotation (DAF). A polymer is injected into the DAF to reclaim as much of the fine pulp fibers that passed through the drum screen. The reclaimed pulp from the DAF is pumped into the filler dump chest. The cloudy water from the DAF is pumped into the Hycor Disco Strainer. Residual pulp is reclaimed from the strainer and is pumped to the filler dump chest. The filtered water from the Hycor Disco Strainer is pumped to the clear water chest. Excess water from the clear water chest overflows to the effluent overflow chest. The effluent overflow chest operates on a hi-lo flow sensor to discharge excess process water to the Village of West Carthage WWTP Sewer Collection System.

3.3 Facility Self-Monitoring Information

Village of West Carthage WWTP performs scheduled compliance sampling events for Ox Specialty Papers, LLC. – Carthage Paper Mill. Samples are collected from the monitoring location for BOD_5, TSS, Metals (As, Cd, Cr, Cu, Pb, Hg, Ni Ag & Zn), Total Cyanide, Total Phenolics, pH, Flow, and Temperature. Sample containers are provided by Converse

Laboratories and Life Sciences Laboratories in Watertown, New York. Converse Laboratories is contracted until May 31, 2024 to provide sample containers for BOD_5 and TSS and analytical support. Once Converse Laboratories contract expires, Life Sciences Laboratories will provide Ox Specialty Papers, LLC. – Carthage Paper Mill with the necessary support. On-site parameters are performed by the Village of West Carthage WWTP personnel for pH and temperature. Samples with COC are transported by a laboratory courier. The analytical data is emailed to the Village of West Carthage WWTP and shared with the facility.

4.0 EPA SAMPLING/INSPECTION ACTIVITIES

4.1 Sampling Activities

Two (2) ISCO automatic composite samplers were programmed to take 96 sample aliquots during the 24-hour sampling event from the monitoring location ahead of the Parshall Flume. The 24-hr composite sample was collected and analyzed for 5-Day Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS) and Metals (Cd, Cr, Cu, Pb, Hg, Ni, Ag & Zn).

Grab-composite samples were collected at various time intervals for Non-Volatile Organic Analytes (NVOAs), Total Cyanide and Total Phenolic.

A grab sample was collected for Total Petroleum Hydrocarbon (TPH).

Furthermore, on-site grab samples were collected and analyzed for pH, Temperature, and Total Residual Chlorine (TRC).

All sample containers, preservation techniques and holding times were in accordance with USEPA requirements specified in 40 CFR Part 136. Signed and dated custody seals were placed across the lids and along the sides of the sample containers. The custody sealed sample containers were placed inside plastic sample bags and sealed. All samples were transported on ice to the USEPA Laboratory in Edison, New Jersey for analysis.

Flow monitoring data were obtained directly from the facility instrumentation which was last calibrated on August 10, 2023.

Split samples were collected and given to the facility representative.

4.2 Inspection Activities

A Pretreatment Compliance Sampling Inspection (CSI) at Ox Specialty Papers, LLC. – Carthage Paper Mill was conducted between April 04-05, 2024. The inspectors met with Erick Austin; EH&S Manager, David Cronk; Superintendent, Zack Anderson; Process Specialist, Brain Keesler; Production Supervisor and John Scheerer; Corporate

Environmental & Sustainability Engineer, as well as Jacqueline Smith-Gagnon; NYSDEC Professional Engineer I, and Robert Stevenson; The Village of West Carthage Chief Plant Operator. Inspector's credential was presented, and business card was provided during the opening conference. The facility representatives were explained that the inspection purpose with supporting on-site activities was to determine if Ox Specialty Papers, LLC – Carthage Paper Mill is in compliance with the federal requirements and conditions of 40 CFR Parts 430 & 403, their Industrial User Permit and other related federal regulations.

Supporting on-site activities consist of collecting samples of the discharged effluent at the monitoring location, observing and evaluating the monitoring location, observing and evaluating Ox Speciality Papers, LLC. – Carthage Paper Mill sampling protocol, observing and evaluating the water overflows from the paper making operation, observing and evaluating the flow monitoring equipment, reviewing and evaluating the on-site sampling procedures, reviewing and evaluating the chain-of-custody, observing and evaluating the laboratory analytical data and sample containers, as well as sample preservation, and interviewing the facility's representatives.

The facility's representatives were briefed on the inspection activities throughout the inspection and during the closing conference. On-site sample results and concerns discovered during the inspection were communicated to the facility's representatives so that they understand their responsibilities to comply with the conditions and limitations set forth in the federal regulations and their industrial user permit.

5.0 ANALYTICAL RESULTS

Table 1: 40 CFR Part 430.106 Subpart J
(PSES for secondary fiber non-deink facilities where paperboard from wastepaper is produced)
Inspection Dates: April 04-05, 2024

Pollutant	Maximum for Any 1 Day		Calculated Limit	EPA Result
	Milligrams/liter (mg/l)	Kg/kkg (or pounds per 1,000 lbs) of product*	Milligrams/liter (mg/l)	(mg/l)
Pentachlorophenol	(0.032)(7.2)/y	0.00096	0.19	U
Trichlorophenol	(0.010)(7.2)/y	0.00030	0.06	U L
y = wastewater discharged in kgal. per ton of product				

Note: * **:** The following equivalent mass limitations are provided as guidance in cases when POTWs find it necessary to impose mass effluent limitations.
: 24-hour discharge flow during sampling event: 209,195 gallons
: Production w/in 24-hr sampling event: 175.26 tons of product
: U- The analyte was not detected at or above the Reporting Limit.
: L- The identification of the analyte is acceptable; the reported value may be biased low.

Table 2 – Ox Speciality Papers, LLC. Industrial User Permit
Inspection Dates: April 04-05, 2024

PARAMETER	UNIT	EFFLUENT LIMITATION		RESULT
		Daily Maximum	Monthly Average	
Flow	gpd	850,000	425,000	209,195
BOD_5	lbs/d	6,300	3,800	3,275
TSS	lbs/d	8,500	4,500	1,016
Temperature	°F	150 (65.5°C)	N/A	92.3 (35.5°C)
pH	SU	6.0 (Daily Minimum)	9.0 (Daily Maximum	7.66
Metals: Arsenic (As)	lbs/d	0.9981	---	U
Cadmium (Cd)	lbs/d	4.4469	---	U
Chromium (Cr)	lbs/d	9.5869	---	0.01
Copper (Cu)	lbs/d	29.7844	---	0.026
Lead (Pb)	lbs/d	2.0175	---	U
Mercury (Hg)	lbs/d	1.1456	---	0.0001
Nickel (Ni)	lbs/d	8.2280	---	U
Silver (Ag)	lbs/d	0.5480	---	U
Zinc (Zn)	lbs/d	1.3841	---	0.26
Cyanide (CN)	lbs/d	1.0775	---	U L
Phenolics, Total	lbs/d	0.80	---	**0.81**
TPH [40 CFRP 403.5(b)(6)]	mg/l	Not cause interference & pass-through	---	U

Notes:* : Mass Loading (lbs/d) = Concentration (mg/l) X Flow (MGD) x Conversion Factor (8.34 lbs/gal.)
: U- The analyte was not detected at or above the Reporting Limit (RL).
: L- The identification of the analyte is acceptable; the reported value may be biased low.

6.0 FINDINGS

6.1 Sampling Result Findings

The EPA analytical results obtained during this inspection show the following parameter(s) as being outside of the acceptable limits:

6.1.1 According to the Industrial User Permit, the effluent daily maximum mass loading limitation for Total Phenolics is 0.80 pounds per day (lbs/d). The mass loading calculation for Total Phenolics was determined to be 0.81 lbs/d.

6.2 Inspection Findings

In addition to the analytical data, an inspection of the facility operations was conducted as discussed in Section 4.2 above. During the inspection, the following observations were noted which may contravene the requirements of the applicable federal regulations and industrial user permit:

6.2.1 The sampling tubing was observed to be dirty and visible algal growth was observed on the sampling tubing inner wall. In addition, the attached stainless-steel tube to the sampling tubing was observed to be dirty as well. During the purging cycle, dirt and/or algal growth could potentially become dislodged and be part of the composite sample. Hence, the analytical result could be bias high. The sampling tubing and the stainless-steel tube should be cleaned or replaced to ensure the composite sample is representative of the effluent. According to Part 5 C. 1. – Representative Sampling of the Industrial User Permit (Page 11), it states, "*Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge."* Furthermore 40 CFR Part 403.12(b)(5)(ii) of the General Pretreatment Regulations for Existing and New Sources of Pollution, it states, " *In addition, the User shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the Standard or Control Authority) of regulated pollutants in the Discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations."*

6.2.2 The working thermometer inside the portable refrigerated composite sampler was observed without a correction factor. A correction factor is necessary to ensure the composite sample is maintained at 6°C or less during the sampling event. The correction factor should include the temperature correction factor, date of calibration, and the analyst that performed the calibration. According to Part 5 C. 3. – Analytical Methods to Demonstrate Continued Compliance of the Industrial User Permit (Page 12), it states, *"All handling, preservation and collection of samples and laboratory analyses of samples shall be performed in accordance to 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit."* Furthermore 40 CFR Part 136 Table II – REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES under footnote 2, it states, "*Except where noted in this Table II and the method for the parameter, preserve each grab sample within 15 minutes of collection. For a composite sample collected with an automated sample (e.g., using a 24-hour composite sample; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), refrigerate the sample at ≤6 °C during collection unless specified otherwise in this Table II or in the method(s)."*

6.2.3 The approaching flow to the Parshall Flume is turbulence. As a result, the ultrasonic flow sensor is recording high flow. According to Part 5 C. 2. – Flow Measurements of the Industrial User Permit (Page 12), it states, "*If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained in accordance with manufacturer's recommendations to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of*

less than 10 percent from true discharge rates throughout the range of expected discharge volumes."

7.0 ATTACHMENTS

Attachment #1. An overview site plan shows Ox Specialty Papers, LLC. – Carthage Paper Mill besides Black River.

Attachment #2. A floor plan shows the manufacturing operation process at Ox Specialty Papers, LLC. - Carthage Paper Mill.

Attachment #3. A flow schematic of the Stock Systems shows the pulping process.

Attachment #4. Reclaimed water from the paper making process is shown in the Water System.

Attachment #5. USEPA Chain of Custody for Samples was submitted to the USEPA Lab.

Attachment #6. USEPA Analytical Data Package was received on 04/23/2024.

8.0 PHOTOGRAPHS

Photo #1. Composite samplers were set-up ahead of the Parshall Flume.

Photo #2. The sampling tubing to the facility's composite sampler was observed to be dirty.

Photo #3. River water is pumped into the water receiving chest for treatment.

Photo #4. Shredded recycled paper and reclaimed water are added into the pulper.

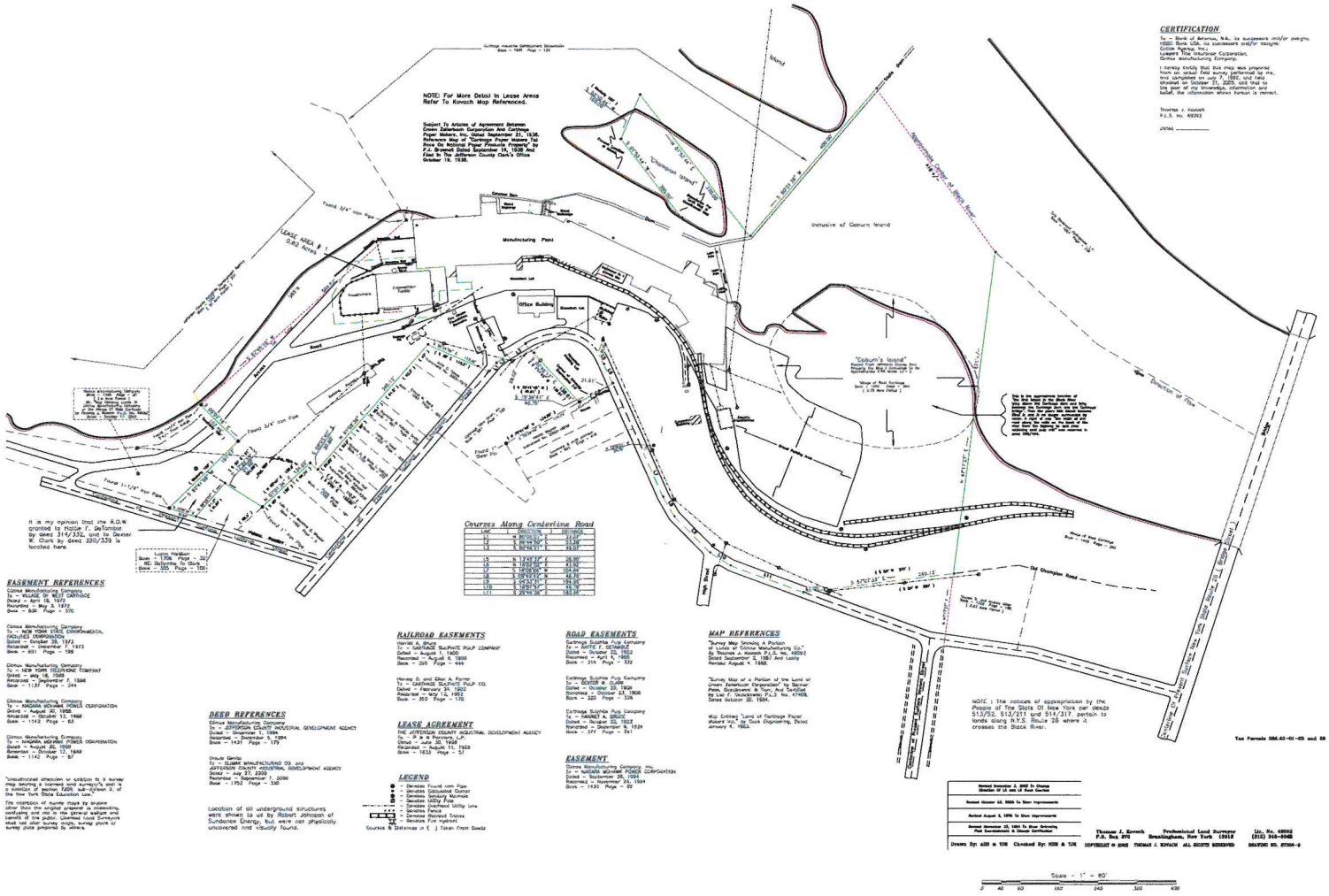
Photo #5. Fine pulp fibers are feed onto the cylinders of the paper making machine.

Photo #6. Moisture is driven away from the pulp in the heat and pressure section.

Photo #7. Paper is rolled onto a spool.

7.0 Attachments

Attachment #1. Ox Specialty Papers, LLC. - Carthage Paper Mill is stationed along the Black River.



Climax Mfg
Paperboard Div.
30 Champion St.
Carthage, NY 13619
(P) 315/493-5533
(C) 315/493-0812
email: jon.lacroix@climaxpkg.com

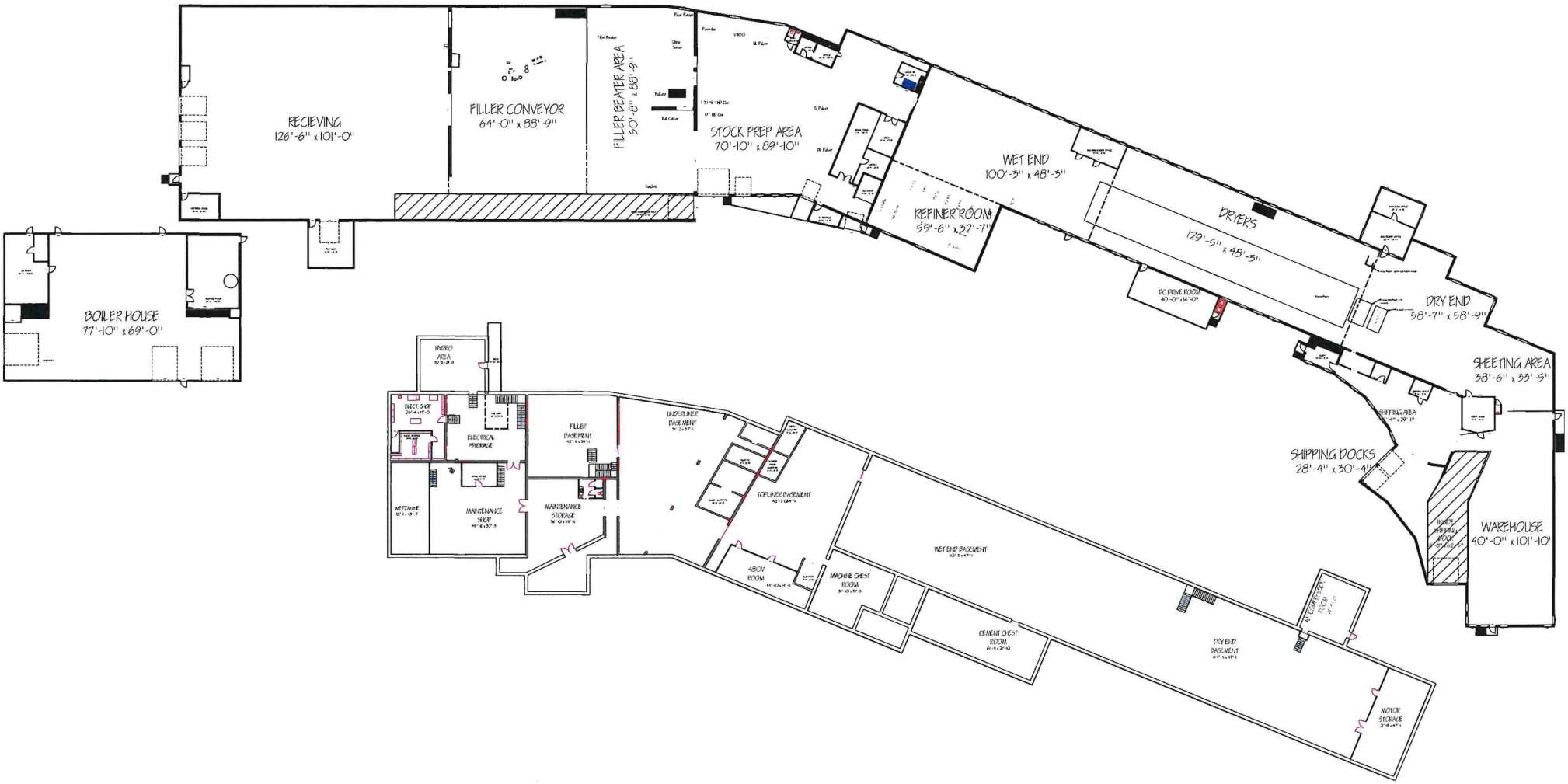
Climax Manufacturing Paperboard Mill

Land Survey - Site Plan

SIZE	SCALE	DWG NO.	REV
A		051407001	A

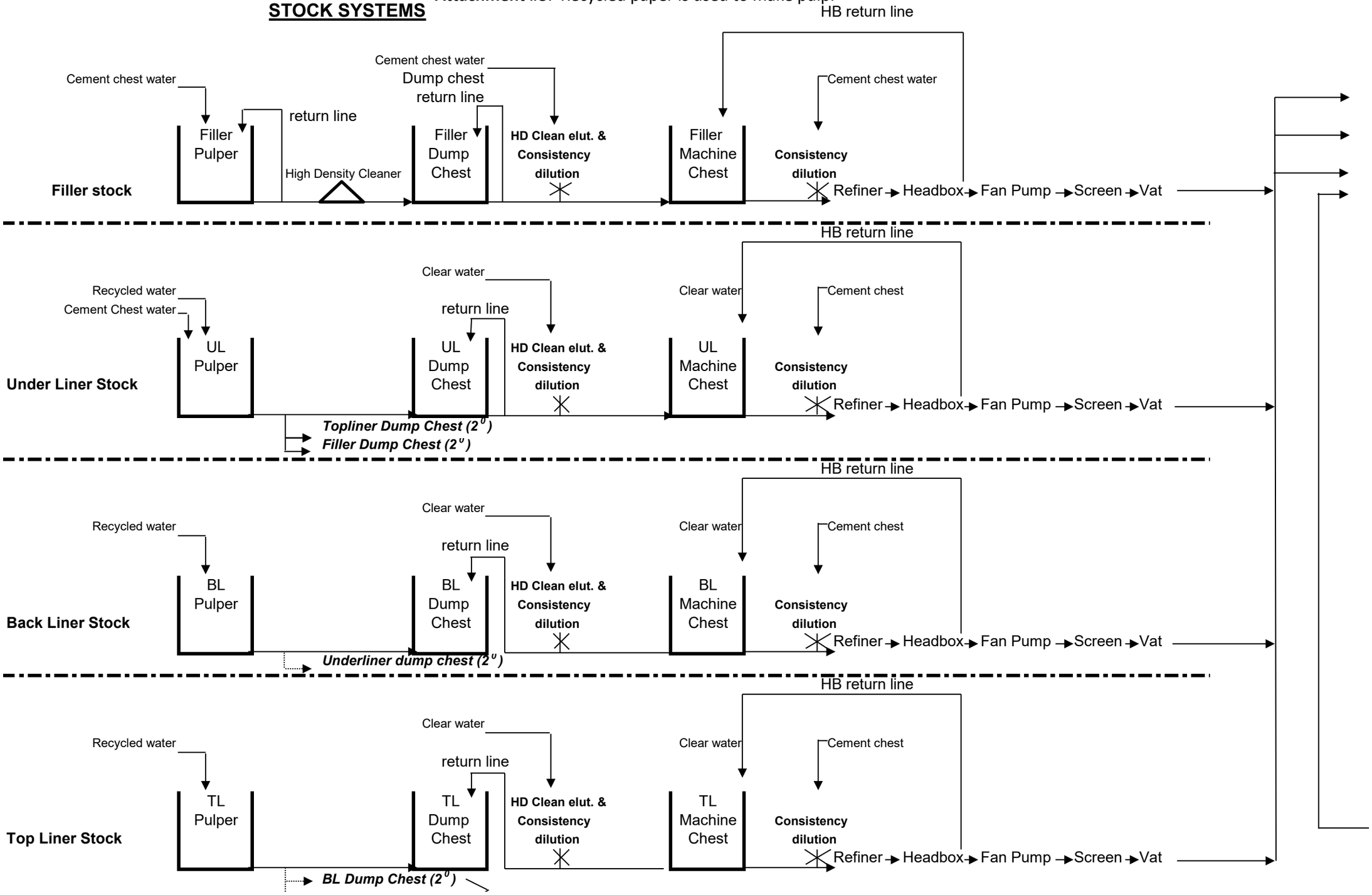
DRAWN BY	CHECKED BY	SHEET
TK	JL	1 of 1

Attachment #2. The floor plan shows the paper making operation process from one end of the building to the other.



Attachment #3. Recycled paper is used to make pulp.

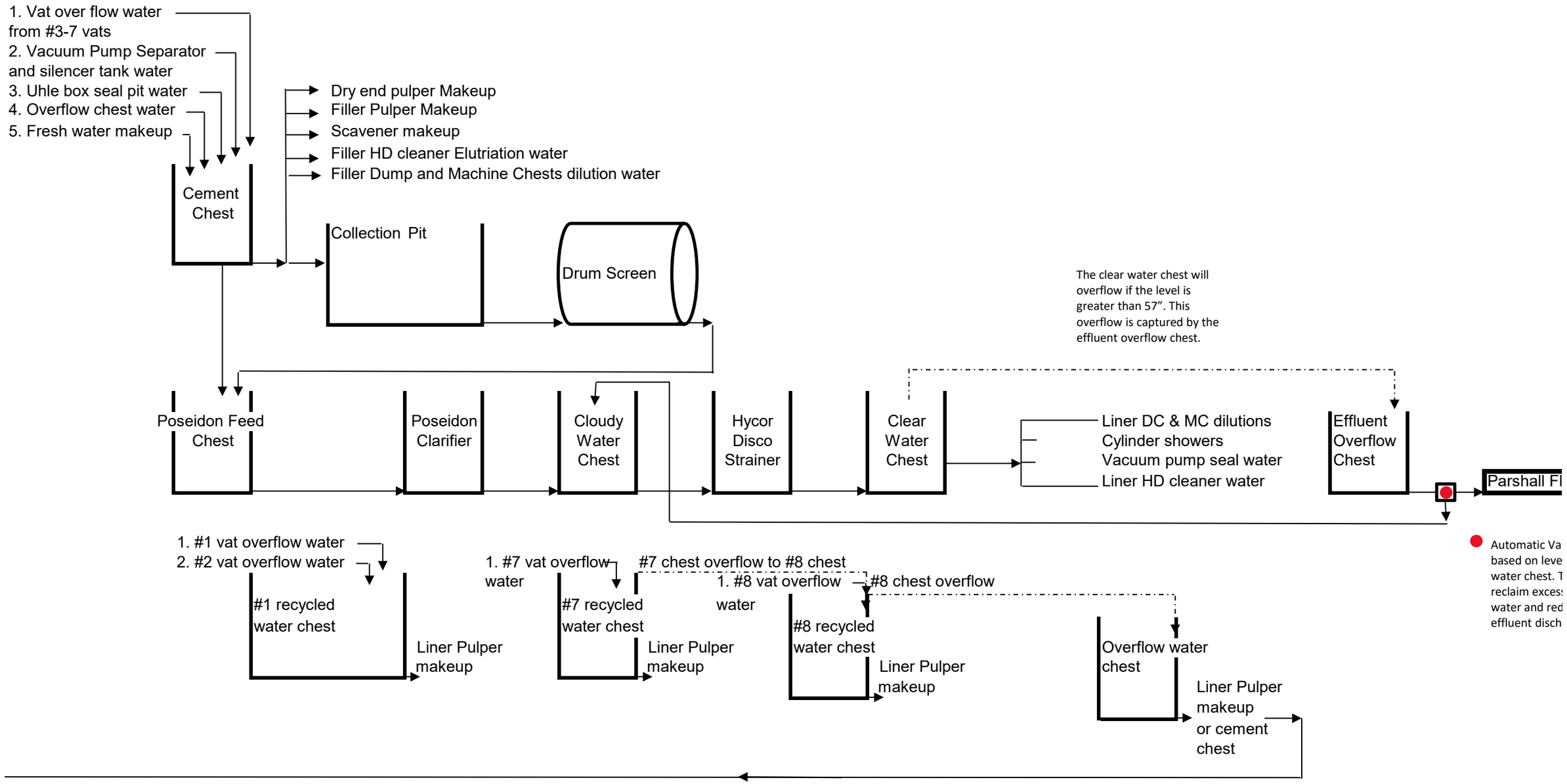
STOCK SYSTEMS

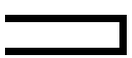


UL Dump chest (2^0) Through BL pulper pump

Attachment #4. Pulp and process water are recovered and reuse in the paper making operation.

Water System





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This allows us to
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arge.

Attachment #5. Samples were submitted to the EPA Laboratory for analysis.

US EPA REGION 2 LABORATORY

Page 1 of 1 pages

CHAIN OF CUSTODY/ FIELD DATA FORM

SURVEY NAME & LOCALITY ___ Ox Specialty Papers, LLC

PROJECT LEADER _____ Thuan Tran

PROGRAM: SF ☐ : SITE ID _____ OPERABLE UNIT _____ PROGRAM RESULTS CODE _____

Decision		RCRA ☐	RCRA ENF ☐	NPDES ☐	SDWA ☐	AM ☐	CAA ☐	TSCA ☐	OD ☐	FIFRA ☐	CRIMINAL ENF ☐
Unit Code	Y206	D210	D307	B304 X	C215	B224	A305	L306	B253		

Permit #: _40 CFRP 430 & 403 & IU_

LAB ID/ FIELD ID	# OF CONTERS	MATRIX	CHECK IF SPLIT SAMPLE	DESCRIPTION & INSTRUCTIONS INCLUDING LOCATION, ESTIMATED CONCENTRATIONS, SPECIAL REPORTING LIMITS, SPECIAL TEST REQUIREMENTS & ALIQUOTING	Res CL Checked	Preservative (circle)	Collection Time (24hr clock) Begin	Collection Time (24hr clock) End	Collection Date mm/dd/yy
Pretreated Discharge - Comp	5	B	☐	2, 1-L HDPE bottles: BOD5: 24-Hr Comp.	☐	2404017-01 0	10AM	10AM	4/4-5/24
		B	☐	1, 500-ml HDPE bottle: TSS: 24-Hr Comp.	☐	0	10AM	10AM	4/4-5/24
		B	☐	1, 250-ml HDPE bottle: Metals*: 24-Hr Comp	☐	02	10AM	10AM	4/4-5/24
		B	☐	1, 250-ml HDPE bottle: Mercury: 24-Hr Comp	☐	02	10AM	10AM	4/4-5/24
Pretreated Discharge - G-C (4Xs	5	B	☐	1, 125-ml HDPE bottle: Cyanide: Grab-Comp.	☐	-02 049	10:30AM	8AM	4/4-5/24
		B	☐	1, 250-ml Amber glass: Phenolics: Grab-Comp.	☐	014	10:30AM	8AM	4/4-5/24
		B	☐	3, 3-L Amber glasses: NVOAs*: Grab-Comp	☐	04	10:30AM	8AM	4/4-5/24
Pretreated Discharge - Grab	3	B	☐	3, 1-L WM clear glasses: Total Petroleum Hydrocarbons	☐	-03 03		8:35AM	4/5/2024
			☐		☐	4/5/24 0 1 2 3 4 5 6 7 8 9 10			
			☐		☐	0 1 2 3 4 5 6 7 8 9 10			

COMMENTS & SPECIAL REQUIREMENTS:

Notes: Metals*: As, Cd, Cr, Cu, Pb, Ni, Ag & Zn

NVOAs*: Pentachlorophenol & Trichlorophenol

TRC: 0.45 mg/l

Preservative Added & Checked

0=ice
1=H2SO4 pH<2
2=HNO3 pH<2
3=HCl pH<2
4=Na2S2O3
5=NaOH pH>9
6=Ascorbic Acid
7=FAS
8=ZnAc
9=NaOH pH>12
10=NH4Cl

		Time	Date
Person Assuming Responsibility for Sample(s): Thuan Tran		5:24pm	4/5/24
Relinquished By: Thuan Tran	Received By:	17.24	4/5/24
Relinquished By:	Received By:		
Relinquished By:	Received By:		

Matrix:

A=aqueous
B=aqueous (chlorinated)
C=soil
D=sediment
E=sludge
F=multiphasic
G=solvent
H=biota
I=oil
J=other

Survey Complete? Y ☑ N ☐

Direct from Sampling, chilling Iced Cooled. 4/5/24

revised 10/25/2004

Attachment #6. Analytical Data was received from the laboratory on April 23, 2024.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory
2890 Woodbridge Avenue
Edison , New Jersey 08837
732-906-6886 Phone
732-906-6165 Fax

April 23, 2024

Thuan Tran
Monitoring & Assessment Branch
LSASD/MAB
Edison, NJ 08837

RE: Ox Specialty Papers, LLC - 2404017

Enclosed are the results of analyses for samples received by the laboratory on 04/05/2024. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 2404017 and contact the laboratory.

Sincerely,

John R. Bourbon
Chief, LSASD/LB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Project Narrative:

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

Condition Comments

None

Comment(s):

The "Sample Analysis Date and Time" is included in the results section for any analyte with a prescribed holding time of 72 hours or less.

Data Qualifier(s):

U- The analyte was not detected at or above the Reporting Limit.
J- The identification of the analyte is acceptable; the reported value is an estimate.
K- The identification of the analyte is acceptable; the reported value may be biased high.
L- The identification of the analyte is acceptable; the reported value may be biased low.
NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Reporting Limit(s):

The Laboratory was able to achieve the appropriate limit for each analyte requested.

SUMMARY REPORT FOR SAMPLES

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pretreated Discharge - Comp	2404017-01	Aqueous	04/05/2024 10:00	04/05/2024 17:24
Pretreated Discharge - G-C (4Xs)	2404017-02	Aqueous	04/05/2024 10:00	04/05/2024 17:24
Pretreated Discharge - Grab	2404017-03	Aqueous	04/05/2024 08:32	04/05/2024 17:24

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

SUMMARY REPORT FOR METHODS

Analysis	Method	Certification	Matrix
625.1 SVOA NPDES	EPA 625.1 SOP C-90 Rev 3.9	NELAP	Aqueous
Biochemical Oxygen Demand	SM 5210B SOP C-21 Rev 2.8	NELAP	Aqueous
Cyanide, Total	EPA 335.4 SOP C-28 Rev 2.8	NELAP	Aqueous
Mercury	EPA 245.1 SOP C-110 Rev 2.8	NELAP	Aqueous
Metals ICP TAL NPDES/DW	EPA 200.7 SOP C-109 Rev 3.7	NELAP	Aqueous
Petroleum Hydrocarbons, Tot.	EPA 1664A SOP C-126 Rev 1.7	NELAP	Aqueous
Phenolics, Total	EPA 420.4 SOP C-29 Rev 2.8	NELAP	Aqueous
Residue, Non-Filterable	SM 2540D SOP C-33 Rev 3.8	NELAP	Aqueous

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
Field ID: Pretreated Discharge - Comp			**Sample ID: 2404017-01**			
Metals ICP						
Arsenic	---	U	8.00	ug/L	B404067	
Cadmium	---	U	3.00	ug/L	B404067	
Chromium	5.69		5.00	ug/L	B404067	
Copper	14.6		10.0	ug/L	B404067	
Lead	---	U	8.00	ug/L	B404067	
Nickel	---	U	20.0	ug/L	B404067	
Silver	---	U	5.00	ug/L	B404067	
Zinc	151		20.0	ug/L	B404067	
Mercury CVAA						
Mercury	0.056		0.050	ug/L	B404079	
Sanitary						
Biochemical Oxygen Demand	1870		2.00	mg/L	B404032	04/10/2024 14:55
Total Suspended Solids	580		10.0	mg/L	B404038	
Field ID: Pretreated Discharge - G-C (4Xs)			**Sample ID: 2404017-02**			
NVOA GCMS						
Acenaphthene	---	U L	5.10	ug/L	B404047	
Acenaphthylene	---	U J	5.10	ug/L	B404047	
Anthracene	---	U L	5.10	ug/L	B404047	
Benzo(A)Anthracene	---	U L	5.10	ug/L	B404047	
Benzo(A)Pyrene	---	U L	5.10	ug/L	B404047	
Benzo(B)Fluoranthene	---	U L	5.10	ug/L	B404047	
Benzo(G,H,I)Perylene	---	U L	5.10	ug/L	B404047	
Benzo(K)Fluoranthene	---	U L	5.10	ug/L	B404047	
Chrysene	---	U L	5.10	ug/L	B404047	
Dibenzo(A,H)Anthracene	---	U L	5.10	ug/L	B404047	
Fluoranthene	---	U L	5.10	ug/L	B404047	
Fluorene	---	U L	5.10	ug/L	B404047	
Indeno(1,2,3-Cd)Pyrene	---	U J	5.10	ug/L	B404047	

NOTE: The results recorded in this report relate only to the samples as received on the date and at the time noted

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
Field ID: Pretreated Discharge - G-C (4Xs)					**Sample ID: 2404017-02**	
NVOA GCMS						
Naphthalene	---	U J	2.04	ug/L	B404047	
Phenanthrene	---	U L	5.10	ug/L	B404047	
1,2,4-Trichlorobenzene	---	U J	5.10	ug/L	B404047	
2,4,6-Trichlorophenol	---	U L	5.10	ug/L	B404047	
2,4-Dichlorophenol	---	U L	5.10	ug/L	B404047	
2,4-Dimethylphenol	---	U J	5.10	ug/L	B404047	
2,4-Dinitrotoluene	---	U L	5.10	ug/L	B404047	
2,6-Dinitrotoluene	---	U L	5.10	ug/L	B404047	
2,4-Dinitrophenol	---	U	5.10	ug/L	B404047	
2-Chloronaphthalene	---	U J	5.10	ug/L	B404047	
2-Chlorophenol	---	U L	5.10	ug/L	B404047	
2-Nitrophenol	---	U J	5.10	ug/L	B404047	
3,3'- Dichlorobenzidine	---	U L	5.10	ug/L	B404047	
4,6-Dinitro-2-Methylphenol	---	U	5.10	ug/L	B404047	
4-Bromophenyl-Phenylether	---	U L	5.10	ug/L	B404047	
4-Chloro-3-Methylphenol	---	U L	5.10	ug/L	B404047	
4-Chlorophenyl-Phenylether	---	U L	5.10	ug/L	B404047	
4-Nitrophenol	---	U	5.10	ug/L	B404047	
Bis(-2-Chloroethoxy)Methane	---	U	5.10	ug/L	B404047	
Bis(2-Chloroethyl)Ether	---	U J	5.10	ug/L	B404047	
Bis(2-Chloroisopropyl)Ether	---	U J	5.10	ug/L	B404047	
Bis(2-Ethylhexyl)Phthalate	---	U L	5.10	ug/L	B404047	
Butylbenzylphthalate	---	U L	5.10	ug/L	B404047	
Azobenzene	---	U	5.10	ug/L	B404047	
Diethylphthalate	28.3	L	5.10	ug/L	B404047	
Dimethyl Phthalate	24.8	L	2.04	ug/L	B404047	
Di-N-Butyl Phthalate	6.66	L	5.10	ug/L	B404047	
Di-N-Octyl Phthalate	---	U L	5.10	ug/L	B404047	
Hexachlorobenzene	---	U L	5.10	ug/L	B404047	

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
Field ID: Pretreated Discharge - G-C (4Xs)				**Sample ID: 2404017-02**		
NVOA GCMS						
Hexachlorobutadiene	---	U J	2.04	ug/L	B404047	
Hexachlorocyclopentadiene	---	U L	5.10	ug/L	B404047	
Hexachloroethane	---	U J	2.04	ug/L	B404047	
Isophorone	---	U	5.10	ug/L	B404047	
Nitrobenzene	---	U J	5.10	ug/L	B404047	
N-Nitrosodimethylamine	---	U J	5.10	ug/L	B404047	
N-Nitroso-Di-N-Propylamine	---	U	5.10	ug/L	B404047	
N-Nitrosodiphenylamine	---	U J	5.10	ug/L	B404047	
Pentachlorophenol	---	U	5.10	ug/L	B404047	
Phenol	87.3	L	2.04	ug/L	B404047	
Pyrene	---	U L	5.10	ug/L	B404047	
Sanitary						
Cyanide, Total	---	U L	10.0	ug/L	B404041	
Phenolics, Total	464		20.0	ug/L	B404074	
Field ID: Pretreated Discharge - Grab				**Sample ID: 2404017-03**		
GC						
Petroleum Hydrocarbons, Tot.	---	U	6.02	mg/L	B404080	

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
Blank (B404047-BLK1)									
Acenaphthene	--- U	5.00	ug/L						
Acenaphthylene	--- U	5.00	ug/L						
Anthracene	--- U	5.00	ug/L						
Benzo(A)Anthracene	--- U	5.00	ug/L						
Benzo(A)Pyrene	--- U	5.00	ug/L						
Benzo(B)Fluoranthene	--- U	5.00	ug/L						
Benzo(G,H,I)Perylene	--- U	5.00	ug/L						
Benzo(K)Fluoranthene	--- U	5.00	ug/L						
Chrysene	--- U	5.00	ug/L						
Dibenzo(A,H)Anthracene	--- U	5.00	ug/L						
Fluoranthene	--- U	5.00	ug/L						
Fluorene	--- U	5.00	ug/L						
Indeno(1,2,3-Cd)Pyrene	--- U	5.00	ug/L						
Naphthalene	--- U	2.00	ug/L						
Phenanthrene	--- U	5.00	ug/L						
1,2,4-Trichlorobenzene	--- U	5.00	ug/L						
2,4,6-Trichlorophenol	--- U	5.00	ug/L						
2,4-Dichlorophenol	--- U	5.00	ug/L						
2,4-Dimethylphenol	--- U	5.00	ug/L						
2,4-Dinitrotoluene	--- U	5.00	ug/L						
2,6-Dinitrotoluene	--- U	5.00	ug/L						
2,4-Dinitrophenol	--- U	5.00	ug/L						
2-Chloronaphthalene	--- U	5.00	ug/L						
2-Chlorophenol	--- U	5.00	ug/L						
2-Nitrophenol	--- U	5.00	ug/L						
3,3'- Dichlorobenzidine	--- U	5.00	ug/L						
4,6-Dinitro-2-Methylphenol	--- U	5.00	ug/L						
4-Bromophenyl-Phenylether	--- U	5.00	ug/L						
4-Chloro-3-Methylphenol	--- U	5.00	ug/L						
4-Chlorophenyl-Phenylether	--- U	5.00	ug/L						
4-Nitrophenol	--- U	5.00	ug/L						
Bis(-2-Chloroethoxy)Methane	--- U	5.00	ug/L						
Bis(2-Chloroethyl)Ether	--- U	5.00	ug/L						
Bis(2-Chloroisopropyl)Ether	--- U	5.00	ug/L						

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
Blank (B404047-BLK1)									
Bis(2-Ethylhexyl)Phthalate	--- U	5.00	ug/L						
Butylbenzylphthalate	--- U	5.00	ug/L						
Azobenzene	--- U	5.00	ug/L						
Diethylphthalate	--- U	5.00	ug/L						
Dimethyl Phthalate	--- U	2.00	ug/L						
Di-N-Butyl Phthalate	--- U	5.00	ug/L						
Di-N-Octyl Phthalate	--- U	5.00	ug/L						
Hexachlorobenzene	--- U	5.00	ug/L						
Hexachlorobutadiene	--- U	2.00	ug/L						
Hexachlorocyclopentadiene	--- U	5.00	ug/L						
Hexachloroethane	--- U	2.00	ug/L						
Isophorone	--- U	5.00	ug/L						
Nitrobenzene	--- U	5.00	ug/L						
N-Nitrosodimethylamine	--- U	5.00	ug/L						
N-Nitroso-Di-N-Propylamine	--- U	5.00	ug/L						
N-Nitrosodiphenylamine	--- U	5.00	ug/L						
Pentachlorophenol	--- U	5.00	ug/L						
Phenol	--- U	2.00	ug/L						
Pyrene	--- U	5.00	ug/L						
Surrogate: 2-Fluoroaniline	*32.3*		ug/L	*50.00*		*64.6*	*60-140*		
Surrogate: Phenol-D6	*ND*		ug/L	*50.00*		*33.2*	*60-140*		
Surrogate: Naphthalene-D8	*39.4*		ug/L	*50.00*		*78.7*	*60-140*		
Surrogate: 1-Fluoronaphthalene	*39.0*		ug/L	*50.00*		*78.0*	*60-140*		
Surrogate: 2,4-Dibromophenol	*38.2*		ug/L	*50.00*		*76.3*	*60-140*		
Surrogate: Anthracene-D10	*35.3*		ug/L	*50.00*		*70.7*	*60-140*		
Surrogate: Chrysene-D12	*44.5*		ug/L	*50.00*		*88.9*	*60-140*		
LCS (B404047-BS1)									
Acenaphthene	46.8	5.00	ug/L	50.00		93.7	47-145		
Acenaphthylene	45.2	5.00	ug/L	50.00		90.4	33-145		
Anthracene	45.9	5.00	ug/L	50.00		91.7	27-133		
Benzo(A)Anthracene	38.7	5.00	ug/L	50.00		77.4	33-143		
Benzo(A)Pyrene	42.5	5.00	ug/L	50.00		84.9	17-163		
Benzo(B)Fluoranthene	42.3	5.00	ug/L	50.00		84.5	24-159		
Benzo(G,H,I)Perylene	43.1	5.00	ug/L	50.00		86.3	35-219		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
LCS (B404047-BS1)									
Benzo(K)Fluoranthene	40.6	5.00	ug/L	50.00		81.1	11-162		
Chrysene	38.1	5.00	ug/L	50.00		76.2	17-168		
Dibenzo(A,H)Anthracene	43.5	5.00	ug/L	50.00		86.9	33-227		
Fluoranthene	47.3	5.00	ug/L	50.00		94.5	26-137		
Fluorene	44.0	5.00	ug/L	50.00		87.9	59-121		
Indeno(1,2,3-Cd)Pyrene	44.9	5.00	ug/L	50.00		89.8	39-171		
Naphthalene	37.6	2.00	ug/L	50.00		75.1	21-133		
Phenanthrene	47.1	5.00	ug/L	50.00		94.1	54-120		
1,2,4-Trichlorobenzene	34.5	5.00	ug/L	50.00		69.0	44-142		
2,4,6-Trichlorophenol	47.9	5.00	ug/L	50.00		95.9	37-144		
2,4-Dichlorophenol	44.8	5.00	ug/L	50.00		89.5	39-135		
2,4-Dimethylphenol	24.6	5.00	ug/L	50.00		49.3	32-120		
2,4-Dinitrotoluene	52.8	5.00	ug/L	50.00		106	39-139		
2,6-Dinitrotoluene	53.7	5.00	ug/L	50.00		107	50-158		
2,4-Dinitrophenol	39.6	5.00	ug/L	50.00		79.2	21-191		
2-Chloronaphthalene	42.2	5.00	ug/L	50.00		84.4	60-120		
2-Chlorophenol	39.9	5.00	ug/L	50.00		79.8	23-134		
2-Nitrophenol	49.0	5.00	ug/L	50.00		98.0	29-182		
3,3'- Dichlorobenzidine	41.9	5.00	ug/L	50.00		83.8	38-262		
4,6-Dinitro-2-Methylphenol	54.6	5.00	ug/L	50.00		109	17-181		
4-Bromophenyl-Phenylether	47.7	5.00	ug/L	50.00		95.4	53-127		
4-Chloro-3-Methylphenol	44.7	5.00	ug/L	50.00		89.5	22-147		
4-Chlorophenyl-Phenylether	45.0	5.00	ug/L	50.00		89.9	25-158		
4-Nitrophenol	23.4	5.00	ug/L	50.00		46.9	9-132		
Bis(-2-Chloroethoxy)Methane	41.6	5.00	ug/L	50.00		83.3	33-184		
Bis(2-Chloroethyl)Ether	40.4	5.00	ug/L	50.00		80.9	12-158		
Bis(2-Chloroisopropyl)Ether	37.6	5.00	ug/L	50.00		75.2	36-166		
Bis(2-Ethylhexyl)Phthalate	45.1	5.00	ug/L	50.00		90.1	8-158		
Butylbenzylphthalate	52.0	5.00	ug/L	50.00		104	38-152		
Azobenzene	44.6	5.00	ug/L	50.00		89.2	60-115		
Diethylphthalate	45.3	5.00	ug/L	50.00		90.7	31-114		
Dimethyl Phthalate	41.6	2.00	ug/L	50.00		83.1	28-120		
Di-N-Butyl Phthalate	49.5	5.00	ug/L	50.00		99.0	1-120		
Di-N-Octyl Phthalate	46.1	5.00	ug/L	50.00		92.2	4-146		
Hexachlorobenzene	46.9	5.00	ug/L	50.00		93.8	35-152		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
LCS (B404047-BS1)									
Hexachlorobutadiene	32.5	2.00	ug/L	50.00		65.0	24-120		
Hexachlorocyclopentadiene	46.2	5.00	ug/L	50.00		92.4	15-76		
Hexachloroethane	31.3	2.00	ug/L	50.00		62.5	40-120		
Isophorone	45.9	5.00	ug/L	50.00		91.9	21-196		
Nitrobenzene	43.1	5.00	ug/L	50.00		86.2	35-180		
N-Nitrosodimethylamine	27.1	5.00	ug/L	50.00		54.2	17-127		
N-Nitroso-Di-N-Propylamine	42.2	5.00	ug/L	50.00		84.5	43-230		
N-Nitrosodiphenylamine	66.9	5.00	ug/L	50.00		134	79-139		
Pentachlorophenol	45.5	5.00	ug/L	50.00		91.0	14-176		
Phenol	17.6	2.00	ug/L	50.00		35.1	5-120		
Pyrene	49.1	5.00	ug/L	50.00		98.3	52-120		
Surrogate: 2-Fluoroaniline	*29.8*		ug/L	*50.00*		*59.5*	*60-140*		
Surrogate: Phenol-D6	*13.5*		ug/L	*50.00*		*27.0*	*60-140*		
Surrogate: Naphthalene-D8	*33.7*		ug/L	*50.00*		*67.5*	*60-140*		
Surrogate: 1-Fluoronaphthalene	*33.7*		ug/L	*50.00*		*67.5*	*60-140*		
Surrogate: 2,4-Dibromophenol	*36.6*		ug/L	*50.00*		*73.3*	*60-140*		
Surrogate: Anthracene-D10	*31.2*		ug/L	*50.00*		*62.5*	*60-140*		
Surrogate: Chrysene-D12	*34.0*		ug/L	*50.00*		*67.9*	*60-140*		
LCS Dup (B404047-BSD1)									
Acenaphthene	43.1	5.00	ug/L	50.00		86.1	47-145	8.41	30
Acenaphthylene	42.1	5.00	ug/L	50.00		84.2	33-145	7.17	30
Anthracene	46.6	5.00	ug/L	50.00		93.2	27-133	1.58	30
Benzo(A)Anthracene	39.2	5.00	ug/L	50.00		78.3	33-143	1.26	30
Benzo(A)Pyrene	42.6	5.00	ug/L	50.00		85.3	17-163	0.446	30
Benzo(B)Fluoranthene	42.1	5.00	ug/L	50.00		84.2	24-159	0.379	30
Benzo(G,H,I)Perylene	44.0	5.00	ug/L	50.00		88.0	35-219	2.00	30
Benzo(K)Fluoranthene	41.1	5.00	ug/L	50.00		82.2	11-162	1.37	30
Chrysene	38.3	5.00	ug/L	50.00		76.5	17-168	0.445	30
Dibenzo(A,H)Anthracene	44.0	5.00	ug/L	50.00		88.0	33-227	1.21	30
Fluoranthene	48.3	5.00	ug/L	50.00		96.6	26-137	2.20	30
Fluorene	46.0	5.00	ug/L	50.00		92.1	59-121	4.67	30
Indeno(1,2,3-Cd)Pyrene	47.9	5.00	ug/L	50.00		95.9	39-171	6.57	30
Naphthalene	37.0	2.00	ug/L	50.00		73.9	21-133	1.66	30
Phenanthrene	47.7	5.00	ug/L	50.00		95.4	54-120	1.35	30

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
LCS Dup (B404047-BSD1)									
1,2,4-Trichlorobenzene	34.5	5.00	ug/L	50.00		69.0	44-142	0.0290	30
2,4,6-Trichlorophenol	46.0	5.00	ug/L	50.00		92.1	37-144	4.04	30
2,4-Dichlorophenol	43.8	5.00	ug/L	50.00		87.6	39-135	2.17	30
2,4-Dimethylphenol	25.2	5.00	ug/L	50.00		50.3	32-120	2.05	30
2,4-Dinitrotoluene	56.2	5.00	ug/L	50.00		112	39-139	6.35	30
2,6-Dinitrotoluene	49.3	5.00	ug/L	50.00		98.7	50-158	8.50	30
2,4-Dinitrophenol	35.2	5.00	ug/L	50.00		70.5	21-191	11.6	30
2-Chloronaphthalene	40.1	5.00	ug/L	50.00		80.1	60-120	5.18	30
2-Chlorophenol	40.6	5.00	ug/L	50.00		81.1	23-134	1.62	30
2-Nitrophenol	49.2	5.00	ug/L	50.00		98.3	29-182	0.326	30
3,3'- Dichlorobenzidine	43.4	5.00	ug/L	50.00		86.7	38-262	3.38	30
4,6-Dinitro-2-Methylphenol	56.3	5.00	ug/L	50.00		113	17-181	3.05	30
4-Bromophenyl-Phenylether	49.4	5.00	ug/L	50.00		98.8	53-127	3.56	30
4-Chloro-3-Methylphenol	43.4	5.00	ug/L	50.00		86.7	22-147	3.16	30
4-Chlorophenyl-Phenylether	47.3	5.00	ug/L	50.00		94.6	25-158	5.09	30
4-Nitrophenol	21.1	5.00	ug/L	50.00		42.2	9-132	10.6	30
Bis(-2-Chloroethoxy)Methane	40.8	5.00	ug/L	50.00		81.6	33-184	2.04	30
Bis(2-Chloroethyl)Ether	41.6	5.00	ug/L	50.00		83.1	12-158	2.76	30
Bis(2-Chloroisopropyl)Ether	37.3	5.00	ug/L	50.00		74.5	36-166	0.935	30
Bis(2-Ethylhexyl)Phthalate	44.8	5.00	ug/L	50.00		89.6	8-158	0.579	30
Butylbenzylphthalate	52.1	5.00	ug/L	50.00		104	38-152	0.134	30
Azobenzene	46.3	5.00	ug/L	50.00		92.6	60-115	3.74	30
Diethylphthalate	46.9	5.00	ug/L	50.00		93.8	31-114	3.43	30
Dimethyl Phthalate	37.1	2.00	ug/L	50.00		74.1	28-120	11.4	30
Di-N-Butyl Phthalate	50.8	5.00	ug/L	50.00		102	1-120	2.45	30
Di-N-Octyl Phthalate	46.1	5.00	ug/L	50.00		92.2	4-146	0.0434	30
Hexachlorobenzene	48.9	5.00	ug/L	50.00		97.8	35-152	4.11	30
Hexachlorobutadiene	32.8	2.00	ug/L	50.00		65.6	24-120	0.888	30
Hexachlorocyclopentadiene	45.5	5.00	ug/L	50.00		91.1	15-76	1.40	30
Hexachloroethane	32.8	2.00	ug/L	50.00		65.6	40-120	4.78	30
Isophorone	45.4	5.00	ug/L	50.00		90.9	21-196	1.05	30
Nitrobenzene	42.4	5.00	ug/L	50.00		84.9	35-180	1.57	30
N-Nitrosodimethylamine	28.3	5.00	ug/L	50.00		56.7	17-127	4.47	30
N-Nitroso-Di-N-Propylamine	42.0	5.00	ug/L	50.00		84.0	43-230	0.499	30
N-Nitrosodiphenylamine	69.1	5.00	ug/L	50.00		138	79-139	3.21	30

NOTE: The results recorded in this report relate only to the samples as received on the date and at the time noted

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
LCS Dup (B404047-BSD1)									
Pentachlorophenol	46.2	5.00	ug/L	50.00		92.5	14-176	1.64	30
Phenol	18.2	2.00	ug/L	50.00		36.3	5-120	3.25	30
Pyrene	49.0	5.00	ug/L	50.00		97.9	52-120	0.326	30
Surrogate: 2-Fluoroaniline	*32.8*		ug/L	*50.00*		*65.6*	*60-140*		
Surrogate: Phenol-D6	*14.6*		ug/L	*50.00*		*29.1*	*60-140*		
Surrogate: Naphthalene-D8	*34.1*		ug/L	*50.00*		*68.2*	*60-140*		
Surrogate: 1-Fluoronaphthalene	*34.0*		ug/L	*50.00*		*68.0*	*60-140*		
Surrogate: 2,4-Dibromophenol	*36.8*		ug/L	*50.00*		*73.7*	*60-140*		
Surrogate: Anthracene-D10	*33.0*		ug/L	*50.00*		*66.1*	*60-140*		
Surrogate: Chrysene-D12	*35.6*		ug/L	*50.00*		*71.2*	*60-140*		
Matrix Spike (B404047-MS1)	**Source: 2404017-02**								
Acenaphthene	25.7	5.05	ug/L	50.51	ND	51.0	47-145		
Acenaphthylene	27.3	5.05	ug/L	50.51	ND	54.0	33-145		
Anthracene	28.2	5.05	ug/L	50.51	ND	55.7	27-133		
Benzo(A)Anthracene	24.5	5.05	ug/L	50.51	ND	48.4	33-143		
Benzo(A)Pyrene	26.4	5.05	ug/L	50.51	ND	52.3	17-163		
Benzo(B)Fluoranthene	25.7	5.05	ug/L	50.51	ND	50.8	24-159		
Benzo(G,H,I)Perylene	22.9	5.05	ug/L	50.51	ND	45.4	35-219		
Benzo(K)Fluoranthene	24.9	5.05	ug/L	50.51	ND	49.3	11-162		
Chrysene	24.7	5.05	ug/L	50.51	ND	48.9	17-168		
Dibenzo(A,H)Anthracene	23.8	5.05	ug/L	50.51	ND	47.1	33-227		
Fluoranthene	27.2	5.05	ug/L	50.51	ND	53.9	26-137		
Fluorene	28.6	5.05	ug/L	50.51	ND	56.7	59-121		
Indeno(1,2,3-Cd)Pyrene	24.3	5.05	ug/L	50.51	ND	48.0	39-171		
Naphthalene	23.0	2.02	ug/L	50.51	ND	45.6	21-133		
Phenanthrene	28.3	5.05	ug/L	50.51	ND	56.1	54-120		
1,2,4-Trichlorobenzene	21.8	5.05	ug/L	50.51	ND	43.2	44-142		
2,4,6-Trichlorophenol	22.4	5.05	ug/L	50.51	ND	44.3	37-144		
2,4-Dichlorophenol	20.5	5.05	ug/L	50.51	ND	40.7	39-135		
2,4-Dimethylphenol	26.7	5.05	ug/L	50.51	ND	53.0	32-120		
2,4-Dinitrotoluene	35.6	5.05	ug/L	50.51	ND	70.4	39-139		
2,6-Dinitrotoluene	31.3	5.05	ug/L	50.51	ND	61.9	50-158		
2,4-Dinitrophenol	25.8	5.05	ug/L	50.51	ND	51.1	21-191		
2-Chloronaphthalene	24.3	5.05	ug/L	50.51	ND	48.2	60-120		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
Matrix Spike (B404047-MS1)	**Source: 2404017-02**								
2-Chlorophenol	16.9	5.05	ug/L	50.51	ND	33.4	23-134		
2-Nitrophenol	23.6	5.05	ug/L	50.51	ND	46.8	29-182		
3,3'- Dichlorobenzidine	--- U	5.05	ug/L	50.51	ND		38-262		
4,6-Dinitro-2-Methylphenol	23.9	5.05	ug/L	50.51	ND	47.3	17-181		
4-Bromophenyl-Phenylether	29.8	5.05	ug/L	50.51	ND	59.0	53-127		
4-Chloro-3-Methylphenol	23.2	5.05	ug/L	50.51	ND	45.9	22-147		
4-Chlorophenyl-Phenylether	28.3	5.05	ug/L	50.51	ND	55.9	25-158		
4-Nitrophenol	18.9	5.05	ug/L	50.51	ND	37.5	9-132		
Bis(-2-Chloroethoxy)Methane	26.7	5.05	ug/L	50.51	ND	52.8	33-184		
Bis(2-Chloroethyl)Ether	24.3	5.05	ug/L	50.51	ND	48.1	12-158		
Bis(2-Chloroisopropyl)Ether	22.9	5.05	ug/L	50.51	ND	45.4	36-166		
Bis(2-Ethylhexyl)Phthalate	36.6	5.05	ug/L	50.51	ND	72.4	8-158		
Butylbenzylphthalate	32.1	5.05	ug/L	50.51	ND	63.6	38-152		
Azobenzene	59.1	5.05	ug/L	50.51	ND	117	61-106		
Diethylphthalate	53.6	5.05	ug/L	50.51	28.3	50.0	31-114		
Dimethyl Phthalate	46.2	2.02	ug/L	50.51	24.8	42.4	28-120		
Di-N-Butyl Phthalate	36.9	5.05	ug/L	50.51	6.66	59.8	1-120		
Di-N-Octyl Phthalate	33.8	5.05	ug/L	50.51	ND	66.9	4-146		
Hexachlorobenzene	29.2	5.05	ug/L	50.51	ND	57.8	35-152		
Hexachlorobutadiene	22.3	2.02	ug/L	50.51	ND	44.1	24-120		
Hexachlorocyclopentadiene	22.6	5.05	ug/L	50.51	ND	44.7	15-76		
Hexachloroethane	20.1	2.02	ug/L	50.51	ND	39.8	40-120		
Isophorone	31.0	5.05	ug/L	50.51	ND	61.4	21-196		
Nitrobenzene	27.6	5.05	ug/L	50.51	ND	54.6	35-180		
N-Nitrosodimethylamine	14.1	5.05	ug/L	50.51	ND	27.9	17-127		
N-Nitroso-Di-N-Propylamine	29.0	5.05	ug/L	50.51	ND	57.4	43-230		
N-Nitrosodiphenylamine	36.1	5.05	ug/L	50.51	ND	71.5	79-139		
Pentachlorophenol	26.3	5.05	ug/L	50.51	ND	52.0	14-176		
Phenol	76.1	2.02	ug/L	50.51	87.3	NR	5-120		
Pyrene	26.7	5.05	ug/L	50.51	ND	52.8	52-120		
Surrogate: 2-Fluoroaniline	*13.7*		ug/L	*50.51*		*27.1*	*60-140*		
Surrogate: Phenol-D6	*9.62*		ug/L	*50.51*		*19.0*	*60-140*		
Surrogate: Naphthalene-D8	*20.9*		ug/L	*50.51*		*41.4*	*60-140*		
Surrogate: 1-Fluoronaphthalene	*19.7*		ug/L	*50.51*		*39.0*	*60-140*		
Surrogate: 2,4-Dibromophenol	*18.2*		ug/L	*50.51*		*36.1*	*60-140*		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
Matrix Spike (B404047-MS1)		**Source: 2404017-02**							
Surrogate: Anthracene-D10	*20.9*		ug/L	*50.51*		*41.3*	*60-140*		
Surrogate: Chrysene-D12	*21.9*		ug/L	*50.51*		*43.4*	*60-140*		
Matrix Spike Dup (B404047-MSD1)		**Source: 2404017-02**							
Acenaphthene	32.4	5.38	ug/L	53.76	ND	60.3	47-145	23.0	24
Acenaphthylene	34.9	5.38	ug/L	53.76	ND	64.9	33-145	24.6	24
Anthracene	34.4	5.38	ug/L	53.76	ND	64.0	27-133	19.9	24
Benzo(A)Anthracene	30.4	5.38	ug/L	53.76	ND	56.5	33-143	21.6	24
Benzo(A)Pyrene	32.7	5.38	ug/L	53.76	ND	60.9	17-163	21.4	24
Benzo(B)Fluoranthene	31.8	5.38	ug/L	53.76	ND	59.2	24-159	21.5	24
Benzo(G,H,I)Perylene	28.5	5.38	ug/L	53.76	ND	53.1	35-219	21.9	24
Benzo(K)Fluoranthene	31.1	5.38	ug/L	53.76	ND	57.8	11-162	22.1	24
Chrysene	30.8	5.38	ug/L	53.76	ND	57.4	17-168	22.2	24
Dibenzo(A,H)Anthracene	29.8	5.38	ug/L	53.76	ND	55.4	33-227	22.5	24
Fluoranthene	33.4	5.38	ug/L	53.76	ND	62.1	26-137	20.2	24
Fluorene	35.9	5.38	ug/L	53.76	ND	66.8	59-121	22.5	24
Indeno(1,2,3-Cd)Pyrene	31.5	5.38	ug/L	53.76	ND	58.5	39-171	25.8	24
Naphthalene	30.4	2.15	ug/L	53.76	ND	56.5	21-133	27.6	24
Phenanthrene	35.0	5.38	ug/L	53.76	ND	65.1	54-120	21.1	24
1,2,4-Trichlorobenzene	29.3	5.38	ug/L	53.76	ND	54.5	44-142	29.3	24
2,4,6-Trichlorophenol	27.0	5.38	ug/L	53.76	ND	50.3	37-144	18.9	24
2,4-Dichlorophenol	25.4	5.38	ug/L	53.76	ND	47.2	39-135	21.1	24
2,4-Dimethylphenol	34.3	5.38	ug/L	53.76	ND	63.8	32-120	24.7	24
2,4-Dinitrotoluene	44.5	5.38	ug/L	53.76	ND	82.8	39-139	22.3	24
2,6-Dinitrotoluene	39.4	5.38	ug/L	53.76	ND	73.4	50-158	23.1	24
2,4-Dinitrophenol	32.6	5.38	ug/L	53.76	ND	60.6	21-191	23.3	24
2-Chloronaphthalene	31.1	5.38	ug/L	53.76	ND	57.9	60-120	24.5	24
2-Chlorophenol	21.2	5.38	ug/L	53.76	ND	39.4	23-134	22.7	24
2-Nitrophenol	30.5	5.38	ug/L	53.76	ND	56.7	29-182	25.4	24
3,3'- Dichlorobenzidine	--- U	5.38	ug/L	53.76	ND		38-262		24
4,6-Dinitro-2-Methylphenol	29.4	5.38	ug/L	53.76	ND	54.6	17-181	20.5	24
4-Bromophenyl-Phenylether	37.6	5.38	ug/L	53.76	ND	69.9	53-127	23.2	24
4-Chloro-3-Methylphenol	28.5	5.38	ug/L	53.76	ND	53.0	22-147	20.6	24
4-Chlorophenyl-Phenylether	35.8	5.38	ug/L	53.76	ND	66.7	25-158	23.7	24
4-Nitrophenol	21.0	5.38	ug/L	53.76	ND	39.1	9-132	10.5	24

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

NVOA GCMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404047									
Matrix Spike Dup (B404047-MSD1)	**Source: 2404017-02**								
Bis(-2-Chloroethoxy)Methane	33.7	5.38	ug/L	53.76	ND	62.6	33-184	23.2	24
Bis(2-Chloroethyl)Ether	31.9	5.38	ug/L	53.76	ND	59.3	12-158	27.0	24
Bis(2-Chloroisopropyl)Ether	29.4	5.38	ug/L	53.76	ND	54.7	36-166	24.8	24
Bis(2-Ethylhexyl)Phthalate	45.8	5.38	ug/L	53.76	ND	85.1	8-158	22.4	24
Butylbenzylphthalate	39.8	5.38	ug/L	53.76	ND	74.1	38-152	21.4	24
Azobenzene	72.8	5.38	ug/L	53.76	ND	135	61-106	20.8	24
Diethylphthalate	65.9	5.38	ug/L	53.76	28.3	69.8	31-114	20.6	24
Dimethyl Phthalate	56.2	2.15	ug/L	53.76	24.8	58.4	28-120	19.5	24
Di-N-Butyl Phthalate	45.2	5.38	ug/L	53.76	6.66	71.7	1-120	20.3	24
Di-N-Octyl Phthalate	42.3	5.38	ug/L	53.76	ND	78.8	4-146	22.5	24
Hexachlorobenzene	36.8	5.38	ug/L	53.76	ND	68.4	35-152	23.0	24
Hexachlorobutadiene	29.6	2.15	ug/L	53.76	ND	55.1	24-120	28.4	24
Hexachlorocyclopentadiene	28.0	5.38	ug/L	53.76	ND	52.0	15-76	21.3	24
Hexachloroethane	27.5	2.15	ug/L	53.76	ND	51.2	40-120	31.1	24
Isophorone	38.3	5.38	ug/L	53.76	ND	71.3	21-196	21.1	24
Nitrobenzene	35.5	5.38	ug/L	53.76	ND	66.1	35-180	25.1	24
N-Nitrosodimethylamine	18.9	5.38	ug/L	53.76	ND	35.2	17-127	29.1	24
N-Nitroso-Di-N-Propylamine	36.2	5.38	ug/L	53.76	ND	67.3	43-230	22.2	24
N-Nitrosodiphenylamine	45.2	5.38	ug/L	53.76	ND	84.0	79-139	22.3	24
Pentachlorophenol	33.0	5.38	ug/L	53.76	ND	61.4	14-176	22.8	24
Phenol	90.6	2.15	ug/L	53.76	87.3	6.15	5-120	17.4	24
Pyrene	32.7	5.38	ug/L	53.76	ND	60.8	52-120	20.2	24
Surrogate: 2-Fluoroaniline	*16.1*		ug/L	*53.76*		*29.9*	*60-140*		
Surrogate: Phenol-D6	*11.8*		ug/L	*53.76*		*21.9*	*60-140*		
Surrogate: Naphthalene-D8	*27.5*		ug/L	*53.76*		*51.1*	*60-140*		
Surrogate: 1-Fluoronaphthalene	*26.2*		ug/L	*53.76*		*48.7*	*60-140*		
Surrogate: 2,4-Dibromophenol	*21.8*		ug/L	*53.76*		*40.5*	*60-140*		
Surrogate: Anthracene-D10	*24.0*		ug/L	*53.76*		*44.7*	*60-140*		
Surrogate: Chrysene-D12	*24.6*		ug/L	*53.76*		*45.8*	*60-140*		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

GC - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404080									
Blank (B404080-BLK1)									
Petroleum Hydrocarbons, Tot.	--- U	5.00	mg/L						
LCS (B404080-BS1)									
Petroleum Hydrocarbons, Tot.	30.6	10.0	mg/L	40.00		76	64-132		
LCS Dup (B404080-BSD1)									
Petroleum Hydrocarbons, Tot.	33.2	10.0	mg/L	40.00		83	64-132	8	20
Matrix Spike (B404080-MS1)	**Source: 2404017-03**								
Petroleum Hydrocarbons, Tot.	25.6	12.2	mg/L	48.78	0.300	52	64-132		
Matrix Spike (B404080-MS2)	**Source: 2404021-01**								
Petroleum Hydrocarbons, Tot.	--- U	7.25	mg/L	57.97	ND		64-132		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Metals ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404067									
Blank (B404067-BLK1)									
Arsenic	--- U	8.00	ug/L						
Cadmium	--- U	3.00	ug/L						
Chromium	--- U	5.00	ug/L						
Copper	--- U	10.0	ug/L						
Lead	--- U	8.00	ug/L						
Nickel	--- U	20.0	ug/L						
Silver	--- U	5.00	ug/L						
Zinc	--- U	20.0	ug/L						
LCS (B404067-BS1)									
Arsenic	210	8.00	ug/L	200.0		105	85-115		
Cadmium	210	3.00	ug/L	200.0		105	85-115		
Chromium	209	5.00	ug/L	200.0		105	85-115		
Copper	206	10.0	ug/L	200.0		103	85-115		
Lead	214	8.00	ug/L	200.0		107	85-115		
Nickel	211	20.0	ug/L	200.0		106	85-115		
Silver	210	5.00	ug/L	200.0		105	85-115		
Zinc	216	20.0	ug/L	200.0		108	85-115		
LCS Dup (B404067-BSD1)									
Arsenic	208	8.00	ug/L	200.0		104	85-115	0.617	20
Cadmium	208	3.00	ug/L	200.0		104	85-115	0.794	20
Chromium	208	5.00	ug/L	200.0		104	85-115	0.503	20
Copper	205	10.0	ug/L	200.0		103	85-115	0.282	20
Lead	212	8.00	ug/L	200.0		106	85-115	0.747	20
Nickel	210	20.0	ug/L	200.0		105	85-115	0.798	20
Silver	209	5.00	ug/L	200.0		105	85-115	0.581	20
Zinc	214	20.0	ug/L	200.0		107	85-115	1.22	20

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Metals ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404067									
Matrix Spike (B404067-MS1)	**Source: 2404017-01**								
Arsenic	183	8.00	ug/L	200.0	ND	91.3	80-120		
Cadmium	174	3.00	ug/L	200.0	ND	87.0	80-120		
Chromium	183	5.00	ug/L	200.0	5.69	88.7	80-120		
Copper	198	10.0	ug/L	200.0	14.6	91.8	80-120		
Lead	181	8.00	ug/L	200.0	5.34	88.0	80-120		
Nickel	180	20.0	ug/L	200.0	8.46	85.6	80-120		
Silver	185	5.00	ug/L	200.0	ND	92.4	80-120		
Zinc	317	20.0	ug/L	200.0	151	83.1	80-120		
Matrix Spike Dup (B404067-MSD1)	**Source: 2404017-01**								
Arsenic	166	40.0	ug/L	200.0	ND	83.2	80-120	9.22	10
Cadmium	172	15.0	ug/L	200.0	ND	86.0	80-120	1.21	10
Chromium	176	25.0	ug/L	200.0	ND	88.2	80-120	3.75	10
Copper	185	50.0	ug/L	200.0	14.6	85.2	80-120	6.91	10
Lead	175	40.0	ug/L	200.0	ND	87.4	80-120	3.72	10
Nickel	175	100	ug/L	200.0	ND	87.4	80-120	2.67	10
Silver	176	25.0	ug/L	200.0	ND	88.2	80-120	4.68	10
Zinc	310	100	ug/L	200.0	151	79.6	80-120	2.27	10

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Mercury CVAA - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404079									
Blank (B404079-BLK1)									
Mercury	--- U	0.050	ug/L						
LCS (B404079-BS1)									
Mercury	0.901	0.050	ug/L	1.000		90.1	85-115		
LCS Dup (B404079-BSD1)									
Mercury	0.868	0.050	ug/L	1.000		86.8	85-115	3.73	20
Matrix Spike (B404079-MS2)	**Source: 2404017-01**								
Mercury	0.979	0.050	ug/L	1.000	0.056	92.3	80-120		

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Sanitary - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404032									
Blank (B404032-BLK1)									
Biochemical Oxygen Demand	--- U	2.00	mg/L						
LCS (B404032-BS1)									
Biochemical Oxygen Demand	170		mg/L	198.0		85.7	84.6-115.4		
LCS (B404032-BS2)									
Biochemical Oxygen Demand	171		mg/L	198.0		86.4	84.6-115.4		
LCS (B404032-BS3)									
Biochemical Oxygen Demand	176		mg/L	198.0		88.7	84.6-115.4		
Batch B404038									
Blank (B404038-BLK1)									
Residue, Non-Filterable	--- U	10.0	mg/L						
Blank (B404038-BLK2)									
Residue, Non-Filterable	--- U	10.0	mg/L						
LCS (B404038-BS1)									
Residue, Non-Filterable	36.0	10.0	mg/L	37.10		97.0	85-115		
LCS Dup (B404038-BSD1)									
Residue, Non-Filterable	38.0	10.0	mg/L	37.10		102	85-115	5.41	20
Duplicate (B404038-DUP1)		**Source: 2404016-01**							
Residue, Non-Filterable	26.0	10.0	mg/L		25.0			3.92	20

Final Report

Project: Ox Specialty Papers, LLC - 2404017

Project Number: 2404017

Sanitary - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B404041									
Blank (B404041-BLK1)									
Cyanide, Total	--- U	10.0	ug/L						
LCS (B404041-BS1)									
Cyanide, Total	728	10.0	ug/L	726.0		100	90-110		
LCS Dup (B404041-BSD1)									
Cyanide, Total	724	10.0	ug/L	726.0		100	90-110	0.6	20
Matrix Spike (B404041-MS1)	**Source: 2404016-01**								
Cyanide, Total	481	10.0	ug/L	500.0	ND	96	90-110		
Matrix Spike (B404041-MS2)	**Source: 2404017-02**								
Cyanide, Total	401	10.0	ug/L	500.0	ND	80	90-110		
Batch B404074									
Blank (B404074-BLK1)									
Phenolics, Total	--- U	20.0	ug/L						
LCS (B404074-BS1)									
Phenolics, Total	1790	40.0	ug/L	1670		107	90-110		
LCS Dup (B404074-BSD1)									
Phenolics, Total	1810	40.0	ug/L	1670		108	90-110	1	20
Matrix Spike (B404074-MS1)	**Source: 2404017-02**								
Phenolics, Total	962	20.0	ug/L	500.0	464	100	90-110		

8.0 Photographs

Photo #1. Composite samples were collected before the Parshall Flume.

Photo #2. The collection tube to the facility's composite sampler was observed to be dirty.

Photo #3. River water is pumped into the water receiving chest before it is treated.

Photo #4. Shredded recycled paper and reclaimed water are used in the pulpers (blender).

Photo #5. Fine pulp is fed onto the cylinders of the dry paper making machine.

Photo #6. Moisture is driven away from the pulp through the paper making process.

Photo #7. The finished product is rolled onto a spool.