Risk Management Plan

Section 1. Registration Information

1.1 Source Identification	
1.1.a. Facility Name	Escanaba Paper Company
1.1.b. Parent Company #1 Name	Verso Corporation
1.1.c. Parent Company #2 Name	
1.2 EPA Facility Identifier	100000144453
1.3 Other EPA Systems Facility Identifier	49829MDPBLCOUNT
1.4 Dun and Bradstreet Numbers (DUNS)	
1.4.a. Facility DUNS	030179782
1.4.b. Parent Company #1 DUNS	197533446
1.4.c. Parent Company #2 DUNS	
1.5 Facility Location	
1.5.a. Street - Line 1	7100 County Road 426
1.5.b. Street - Line 2	
1.5.c. City	Escanaba
1.5.d. State	MI
1.5.e. Zip Code - Zip +4 Code	49829
1.5.f. County	DELTA
1.5.g. Facility Latitude (in decimal degrees)	45.804889
1.5.h. Facility Longitude (in decimal degrees)	-087.094361
1.5.i. Method for determining Lat/Long	Interpolation - Map
1.5.j. Description of location identified by Lat/Long	Plant Entrance (General)
1.5.k. Horizontal Accuracy Measure (meters)	25
1.5.l. Horizontal Reference Datum Code	North American Datum of 1927
1.5.m. Source Map Scale Number	24000
1.6 Owner or Operator	
1.6.a. Name	Escanaba Paper Company
1.6.b. Phone	(906) 786-1660
1.6.c. Street - Line 1	7100 County Road 426
1.6.d. Street - Line 2	
1.6.e. City	Escanaba
1.6.f. State	MI
1.6.g. Zip Code - Zip +4 Code	49829
Foreign Country	
Foreign State/Province	
Foreign Zip/Postal Code	
1.7 Name, title and email address of person or position responsible for RMP (part 68) implementation	
1.7.a. Name of person	Todd Downey
1.7.b. Title of person or position	Mill Manager
1.7.c. Email address of person or position	Todd.Downey@versoco.com

Section 1. Registration Information

1.8 Emergency Contact	
1.8.a. Name	Loss Prevention Officer
1.8.b. Title of person or position	LPO
1.8.c. Phone	(906) 786-1660
1.8.d. 24-Hour Phone	(906) 786-1660
1.8.e. 24-Hour Phone Extension/PIN #	
1.8.f. Email address for emergency contact	William.Cobb@versoco.com
1.9 Other Points of Contact	
1.9.a. Facility or Parent Company E-mail Address	
1.9.b. Facility Public Contact Phone Number	(906) 786-1660
1.9.c. Facility or Parent Company WWW Homepage Address	www.versoco.com
1.10 Local Emergency Planning Committee (LEPC)	Delta County LEPC
1.11 Number of fulltime equivalent (FTEs) employees on site	950
1.12 Covered by	
1.12.a. OSHA PSM	Y
1.12.b. EPCRA section 302	Y
1.12.c. CAA Title V Air Operating Permit Program	Y
1.12.d. Air Operating Permit ID #	199600346
1.13 OSHA Star or Merit Ranking	
1.14 Last Safety Inspection (by an External Agency) Date	09/14/2015
1.15 Last Safety Inspection Performed by an External Agency	State occupational safety agency
1.16 Will this RMP involve Predictive Filing?	
1.18 RMP Preparer Information	
1.18.a. Name	Bill Cobb
1.18.b. Phone	(906) 233-2942
1.18.c. Street - Line 1	7100 Couty Road 426
1.18.d. Street - Line 2	
1.18.e. City	Escanaba
1.18.f. State	MI
1.18.g. Zip	49829
Foreign Country	
Foreign State/Province	
Foreign Zip Code	

Section 1. Registration Information

Section 1.17 Process Specific Information

Process 1

Process ID #	1000069552		
Process Description	ClO2 Storage Tanks		
1.17.a. Program Level	3		
1.17.b. NAICS Code(s)			
32212 (Paper Mills)			
1.17.c. Chemical(s)			
	Chemical Name	CAS Number	Quantity
	Chlorine dioxide [Chlorine oxide (ClO2)]	10049-04-4	19935

Section 1. Registration Information

Section 1.17 Process Specific Information

Process 2

Process ID #	1000069553		
Process Description	Water Treatment NH3 Tank		
1.17.a. Program Level	3		
1.17.b. NAICS Code(s)			
22132 (Sewage Treatment Facilities)			
1.17.c. Chemical(s)			
	Chemical Name	CAS Number	Quantity
	Ammonia (anhydrous)	7664-41-7	54591

Section 1. Registration Information

Section 1.17 Process Specific Information

Process 3

Process ID #	1000069554		
Process Description	Bay Chlorine 1-ton cyl		
1.17.a. Program Level	3		
1.17.b. NAICS Code(s)			
32212 (Paper Mills)			
1.17.c. Chemical(s)			
	Chemical Name	CAS Number	Quantity
	Chlorine	7782-50-5	8000

Section 2. Toxics: Worst Case

Scenario 1

Process Name	Bay Chlorine 1-ton cyl
2.1 Chemical	
2.1.a. Name	Chlorine
2.1.b. Percent Weight of Chemical	100
2.2 Physical State	Gas liquified by pressure
2.3 Model Used	EPA's RMP*Comp(TM)
2.4 Scenario	Gas Release
2.5 Quantity Released (lbs)	2000
2.6 Release Rate (lbs/min)	110
2.7 Release Duration (mins)	10
2.8 Wind Speed (meters/sec)	1.5
2.9 Atmospheric stability class	F
2.10 Topography	Urban
2.11 Distance to endpoint (miles)	0.9
2.12 Estimated residential population within distance to endpoint (numbers)	572
2.13 Public receptors within distance to endpoint	
2.13.a. Schools	
2.13.b. Residences	Y
2.13.c. Hospitals	
2.13.d. Prison/Correctional Facilities	
2.13.e. Recreational Areas	
2.13.f. Major commercial, office or industrial areas	Y
2.13.g. Other	
2.14 Environmental receptors within distance to endpoint	
2.14.a. National or State Parks, Forests or Monuments	
2.14.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
2.14.c. Federal Wilderness Area	
2.14.d. Other	
2.15 Passive mitigation considered	
2.15.a. Dikes	
2.15.b. Enclosures	Y
2.15.c. Berms	
2.15.d. Drains	
2.15.e. Sumps	
2.15.f. Other	
2.16 Graphic file	

Section 2. Toxics: Worst Case

Scenario 2

Process Name	Water Treatment NH3 Tank
2.1 Chemical	
2.1.a. Name	Ammonia (anhydrous)
2.1.b. Percent Weight of Chemical	100
2.2 Physical State	Gas liquified by pressure
2.3 Model Used	EPA's RMP*Comp(TM)
2.4 Scenario	Gas Release
2.5 Quantity Released (lbs)	54591
2.6 Release Rate (lbs/min)	5460
2.7 Release Duration (mins)	10
2.8 Wind Speed (meters/sec)	1.5
2.9 Atmospheric stability class	F
2.10 Topography	Rural
2.11 Distance to endpoint (miles)	4
2.12 Estimated residential population within distance to endpoint (numbers)	11381
2.13 Public receptors within distance to endpoint	
2.13.a. Schools	Y
2.13.b. Residences	Y
2.13.c. Hospitals	
2.13.d. Prison/Correctional Facilities	
2.13.e. Recreational Areas	Y
2.13.f. Major commercial, office or industrial areas	Y
2.13.g. Other	
2.14 Environmental receptors within distance to endpoint	
2.14.a. National or State Parks, Forests or Monuments	Y
2.14.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
2.14.c. Federal Wilderness Area	
2.14.d. Other	
2.15 Passive mitigation considered	
2.15.a. Dikes	
2.15.b. Enclosures	
2.15.c. Berms	
2.15.d. Drains	
2.15.e. Sumps	
2.15.f. Other	
2.16 Graphic file	

Section 2. Toxics: Worst Case

Scenario 3

Process Name	ClO2 Storage Tanks
2.1 Chemical	
2.1.a. Name	Chlorine dioxide [Chlorine oxide (ClO2)]
2.1.b. Percent Weight of Chemical	1.2
2.2 Physical State	Liquid
2.3 Model Used	EPA's OCA Guidance Reference Tables or Equations
2.4 Scenario	Liquid spill and vaporization
2.5 Quantity Released (lbs)	8924
2.6 Release Rate (lbs/min)	165
2.7 Release Duration (mins)	55
2.8 Wind Speed (meters/sec)	1.5
2.9 Atmospheric stability class	F
2.10 Topography	Urban
2.11 Distance to endpoint (miles)	17
2.12 Estimated residential population within distance to endpoint (numbers)	37392
2.13 Public receptors within distance to endpoint	
2.13.a. Schools	Y
2.13.b. Residences	Y
2.13.c. Hospitals	Y
2.13.d. Prison/Correctional Facilities	
2.13.e. Recreational Areas	Y
2.13.f. Major commercial, office or industrial areas	Y
2.13.g. Other	
2.14 Environmental receptors within distance to endpoint	
2.14.a. National or State Parks, Forests or Monuments	Y
2.14.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
2.14.c. Federal Wilderness Area	
2.14.d. Other	
2.15 Passive mitigation considered	
2.15.a. Dikes	Y
2.15.b. Enclosures	
2.15.c. Berms	
2.15.d. Drains	Y
2.15.e. Sumps	
2.15.f. Other	
2.16 Graphic file	

Section 3. Toxics: Alternative Release

Scenario 1

Process Name	Water Treatment NH3 Tank
3.1 Chemical	
3.1.a. Name	Ammonia (anhydrous)
3.1.b. Percent Weight of Chemical	100
3.2 Physical State	Gas liquified by pressure
3.3 Model Used	Areal Locations of Hazardous Atmospheres [ALOHA(R)]
3.4 Scenario	1/2" break causing gaseous release
3.5 Quantity Released (lbs)	45
3.6 Release Rate (lbs/min)	1
3.7 Release Duration (mins)	45
3.8 Wind Speed (meters/sec)	3
3.9 Atmospheric stability class	D
3.10 Topography	Rural
3.11 Distance to endpoint (miles)	0.1
3.12 Estimated residential population within distance to endpoint (numbers)	0
3.13 Public receptors within distance to endpoint	
3.13.a. Schools	
3.13.b. Residences	
3.13.c. Hospitals	
3.13.d. Prison/Correctional Facilities	
3.13.e. Recreational Areas	
3.13.f. Major commercial, office or industrial areas	
3.13.g. Other	
3.14 Environmental receptors within distance to endpoint	
3.14.a. National or State Parks, Forests or Monuments	
3.14.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
3.14.c. Federal Wilderness Area	
3.14.d. Other	
3.15 Passive mitigation considered	
3.15.a. Dikes	
3.15.b. Enclosures	Y
3.15.c. Berms	
3.15.d. Drains	
3.15.e. Sumps	
3.15.f. Other	
3.16 Active mitigation considered	
3.16.a. Sprinkler systems	
3.16.b. Deluge systems	
3.16.c. Water curtain	
3.16.d. Neutralization	
3.16.e. Excess flow valve	Y

Section 3. Toxics: Alternative Release

3.16.f. Flares	
3.16.g. Scrubbers	
3.16.h. Emergency shutdown systems	Y
3.16.i. Other	
3.17 Graphic file	

Section 3. Toxics: Alternative Release

Scenario 2

Process Name	ClO2 Storage Tanks
3.1 Chemical	
3.1.a. Name	Chlorine dioxide [Chlorine oxide (ClO2)]
3.1.b. Percent Weight of Chemical	1.2
3.2 Physical State	Liquid
3.3 Model Used	EPA's RMP*Comp(TM)
3.4 Scenario	Pipe leak
3.5 Quantity Released (lbs)	240
3.6 Release Rate (lbs/min)	8
3.7 Release Duration (mins)	30
3.8 Wind Speed (meters/sec)	3
3.9 Atmospheric stability class	D
3.10 Topography	Urban
3.11 Distance to endpoint (miles)	0.1
3.12 Estimated residential population within distance to endpoint (numbers)	0
3.13 Public receptors within distance to endpoint	
3.13.a. Schools	
3.13.b. Residences	
3.13.c. Hospitals	
3.13.d. Prison/Correctional Facilities	
3.13.e. Recreational Areas	
3.13.f. Major commercial, office or industrial areas	
3.13.g. Other	
3.14 Environmental receptors within distance to endpoint	
3.14.a. National or State Parks, Forests or Monuments	
3.14.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
3.14.c. Federal Wilderness Area	
3.14.d. Other	
3.15 Passive mitigation considered	
3.15.a. Dikes	Y
3.15.b. Enclosures	Y
3.15.c. Berms	
3.15.d. Drains	Y
3.15.e. Sumps	
3.15.f. Other	
3.16 Active mitigation considered	
3.16.a. Sprinkler systems	
3.16.b. Deluge systems	
3.16.c. Water curtain	
3.16.d. Neutralization	Y
3.16.e. Excess flow valve	

Section 3. Toxics: Alternative Release

3.16.f. Flares	
3.16.g. Scrubbers	
3.16.h. Emergency shutdown systems	Y
3.16.i. Other	
3.17 Graphic file	

Section 3. Toxics: Alternative Release

Scenario 3

Process Name	Bay Chlorine 1-ton cyl
3.1 Chemical	
3.1.a. Name	Chlorine
3.1.b. Percent Weight of Chemical	100
3.2 Physical State	Gas liquified by pressure
3.3 Model Used	EPA's RMP*Comp(TM)
3.4 Scenario	Failure of fusible plug-1/4" hole
3.5 Quantity Released (lbs)	675
3.6 Release Rate (lbs/min)	34.3
3.7 Release Duration (mins)	60
3.8 Wind Speed (meters/sec)	3
3.9 Atmospheric stability class	D
3.10 Topography	Urban
3.11 Distance to endpoint (miles)	0.1
3.12 Estimated residential population within distance to endpoint (numbers)	0
3.13 Public receptors within distance to endpoint	
3.13.a. Schools	
3.13.b. Residences	
3.13.c. Hospitals	
3.13.d. Prison/Correctional Facilities	
3.13.e. Recreational Areas	
3.13.f. Major commercial, office or industrial areas	Y
3.13.g. Other	
3.14 Environmental receptors within distance to endpoint	
3.14.a. National or State Parks, Forests or Monuments	
3.14.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
3.14.c. Federal Wilderness Area	
3.14.d. Other	
3.15 Passive mitigation considered	
3.15.a. Dikes	
3.15.b. Enclosures	Y
3.15.c. Berms	
3.15.d. Drains	
3.15.e. Sumps	
3.15.f. Other	
3.16 Active mitigation considered	
3.16.a. Sprinkler systems	
3.16.b. Deluge systems	
3.16.c. Water curtain	
3.16.d. Neutralization	
3.16.e. Excess flow valve	Y

Section 3. Toxics: Alternative Release

3.16.f. Flares	
3.16.g. Scrubbers	
3.16.h. Emergency shutdown systems	Y
3.16.i. Other	
3.17 Graphic file	

Section 7. Prevention Program: Program Level 3

Program 1

Prevention Program Description:	
7.1 NAICS Code for process	
7.1.a. Process Name	1000069552 (ClO2 Storage Tanks)
7.1.b. NAICS	32212 (Paper Mills)
7.2 Chemicals	
Chlorine dioxide [Chlorine oxide (ClO2)]	
7.3 Date on which the safety information was last reviewed or revised	12/11/2015
7.4 Process Hazard Analysis (PHA)	
7.4.a. Date of last PHA or PHA update	09/30/2015
7.4.b. Technique used	
7.4.b.1. What if	
7.4.b.2. Checklist	
7.4.b.3. What if/Checklist Combined	
7.4.b.4. HAZOP	Y
7.4.b.5. Failure mode & effects analysis	
7.4.b.6. Fault tree analysis	
7.4.b.7. Other	
7.4.c. Expected or actual date of completion of all changes resulting from last PHA or PHA update	03/31/2016
7.4.d. Major hazards identified	
7.4.d.1. Toxic release	Y
7.4.d.2. Fire	Y
7.4.d.3. Explosion	Y
7.4.d.4. Runaway reaction	
7.4.d.5. Polymerization	
7.4.d.6. Overpressurization	Y
7.4.d.7. Corrosion	Y
7.4.d.8. Overfilling	Y
7.4.d.9. Contamination	Y
7.4.d.10. Equipment failure	Y
7.4.d.11. Loss of cooling, heating, electricity, instrument air	Y
7.4.d.12. Earthquake	
7.4.d.13. Floods	
7.4.d.14. Tornado	
7.4.d.15. Hurricanes	
7.4.d.16. Other	
7.4.e. Process controls in use	
7.4.e.1. Vents	Y
7.4.e.2. Relief valves	Y
7.4.e.3. Check valves	Y
7.4.e.4. Scrubbers	Y
7.4.e.5. Flares	

Section 7. Prevention Program: Program Level 3

7.4.e.6. Manual shutoffs	Y
7.4.e.7. Automatic shutoffs	Y
7.4.e.8. Interlocks	Y
7.4.e.9. Alarms and procedures	Y
7.4.e.10. Keyed bypass	
7.4.e.11. Emergency air supply	Y
7.4.e.12. Emergency power	Y
7.4.e.13. Backup pump	Y
7.4.e.14. Grounding equipment	Y
7.4.e.15. Inhibitor additions	
7.4.e.16. Rupture disks	Y
7.4.e.17. Excess flow device	Y
7.4.e.18. Quench system	
7.4.e.19. Purge system	
7.4.e.20. None	
7.4.e.21. Other	
7.4.f. Mitigation systems in use	
7.4.f.1. Sprinkler system	
7.4.f.2. Dikes	Y
7.4.f.3. Fire walls	
7.4.f.4. Blast walls	
7.4.f.5. Deluge system	
7.4.f.6. Water curtain	
7.4.f.7. Enclosure	
7.4.f.8. Neutralization	Y
7.4.f.9. None	
7.4.f.10. Other	
7.4.g. Monitoring/detection systems in use	
7.4.g.1. Process area detectors	Y
7.4.g.2. Perimeter monitors	
7.4.g.3. None	
7.4.g.4. Other	
7.4.h. Changes since last PHA update	
7.4.h.1. Reduction in chemical inventory	
7.4.h.2. Increase in chemical inventory	
7.4.h.3. Change in process parameters	
7.4.h.4. Installation of process controls	Y
7.4.h.5. Installation of process detection systems	
7.4.h.6. Installation of perimeter monitoring systems	
7.4.h.7. Installation of mitigation systems	
7.4.h.8. None recommended	
7.4.h.9. None	
7.4.h.10. Other	
7.5 Date of most recent review or revision of operating procedures	09/21/2015

Section 7. Prevention Program: Program Level 3

7.6 Training	
7.6.a. Date of most recent review or revision of training programs	11/30/2015
7.6.b. Type of training provided	
7.6.b.1. Classroom	Y
7.6.b.2. On the job	Y
7.6.b.3. Other	CBT
7.6.c. Type of competency testing used	
7.6.c.1. Written test	Y
7.6.c.2. Oral test	
7.6.c.3. Demonstration	Y
7.6.c.4. Observation	
7.6.c.5. Other	
7.7 Maintenance	
7.7.a. Date of most recent review or revision of maintenance procedures	06/02/2015
7.7.b. Date of most recent equipment inspection or test	06/04/2015
7.7.c. Equipment most recently inspected or tested (equipment list)	Inspect barometric condenser
7.8 Management of change	
7.8.a. Date of most recent changes that triggered management of change procedures	12/16/2015
7.8.b. Date of most recent review or revision of management of change procedures	08/01/2015
7.9 Date of most recent pre-startup review	12/17/2015
7.10 Compliance audits	
7.10.a. Date of most recent compliance audits	06/20/2013
7.10.b. Expected or actual date of completion of all changes resulting from the most recent compliance audits	01/28/2014
7.11 Incident investigation	
7.11.a. Date of most recent incident investigation	07/31/2006
7.11.b. Expected or actual date of completion of all changes resulting from the incident investigation	11/15/2006
7.12 Date of most recent review or revision of employee participation plans	11/01/2013
7.13 Date of most recent review or revision of hot work permit procedures	11/05/2015
7.14 Date of most recent review or revision of contractor safety procedures	06/02/2015
7.15 Date of most recent evaluation of contractor safety performance	02/01/2016

Section 7. Prevention Program: Program Level 3

Program 2

Prevention Program Description:	
7.1 NAICS Code for process	
7.1.a. Process Name	1000069553 (Water Treatment NH3 Tank)
7.1.b. NAICS	22132 (Sewage Treatment Facilities)
7.2 Chemicals	
Ammonia (anhydrous)	
7.3 Date on which the safety information was last reviewed or revised	12/11/2015
7.4 Process Hazard Analysis (PHA)	
7.4.a. Date of last PHA or PHA update	11/22/2011
7.4.b. Technique used	
7.4.b.1. What if	
7.4.b.2. Checklist	
7.4.b.3. What if/Checklist Combined	Y
7.4.b.4. HAZOP	
7.4.b.5. Failure mode & effects analysis	
7.4.b.6. Fault tree analysis	
7.4.b.7. Other	
7.4.c. Expected or actual date of completion of all changes resulting from last PHA or PHA update	10/17/2012
7.4.d. Major hazards identified	
7.4.d.1. Toxic release	Y
7.4.d.2. Fire	Y
7.4.d.3. Explosion	Y
7.4.d.4. Runaway reaction	
7.4.d.5. Polymerization	
7.4.d.6. Overpressurization	Y
7.4.d.7. Corrosion	Y
7.4.d.8. Overfilling	Y
7.4.d.9. Contamination	Y
7.4.d.10. Equipment failure	Y
7.4.d.11. Loss of cooling, heating, electricity, instrument air	Y
7.4.d.12. Earthquake	
7.4.d.13. Floods	
7.4.d.14. Tornado	
7.4.d.15. Hurricanes	
7.4.d.16. Other	
7.4.e. Process controls in use	
7.4.e.1. Vents	Y
7.4.e.2. Relief valves	Y
7.4.e.3. Check valves	Y
7.4.e.4. Scrubbers	
7.4.e.5. Flares	

Section 7. Prevention Program: Program Level 3

7.4.e.6. Manual shutoffs	Y
7.4.e.7. Automatic shutoffs	Y
7.4.e.8. Interlocks	Y
7.4.e.9. Alarms and procedures	Y
7.4.e.10. Keyed bypass	
7.4.e.11. Emergency air supply	Y
7.4.e.12. Emergency power	Y
7.4.e.13. Backup pump	Y
7.4.e.14. Grounding equipment	Y
7.4.e.15. Inhibitor additions	
7.4.e.16. Rupture disks	
7.4.e.17. Excess flow device	Y
7.4.e.18. Quench system	
7.4.e.19. Purge system	
7.4.e.20. None	
7.4.e.21. Other	
7.4.f. Mitigation systems in use	
7.4.f.1. Sprinkler system	
7.4.f.2. Dikes	
7.4.f.3. Fire walls	
7.4.f.4. Blast walls	
7.4.f.5. Deluge system	
7.4.f.6. Water curtain	
7.4.f.7. Enclosure	
7.4.f.8. Neutralization	
7.4.f.9. None	Y
7.4.f.10. Other	
7.4.g. Monitoring/detection systems in use	
7.4.g.1. Process area detectors	Y
7.4.g.2. Perimeter monitors	
7.4.g.3. None	
7.4.g.4. Other	
7.4.h. Changes since last PHA update	
7.4.h.1. Reduction in chemical inventory	
7.4.h.2. Increase in chemical inventory	
7.4.h.3. Change in process parameters	
7.4.h.4. Installation of process controls	
7.4.h.5. Installation of process detection systems	
7.4.h.6. Installation of perimeter monitoring systems	
7.4.h.7. Installation of mitigation systems	
7.4.h.8. None recommended	
7.4.h.9. None	Y
7.4.h.10. Other	
7.5 Date of most recent review or revision of operating procedures	12/21/2015

Section 7. Prevention Program: Program Level 3

7.6 Training	
7.6.a. Date of most recent review or revision of training programs	12/21/2015
7.6.b. Type of training provided	
7.6.b.1. Classroom	Y
7.6.b.2. On the job	Y
7.6.b.3. Other	CBT
7.6.c. Type of competency testing used	
7.6.c.1. Written test	Y
7.6.c.2. Oral test	
7.6.c.3. Demonstration	Y
7.6.c.4. Observation	Y
7.6.c.5. Other	
7.7 Maintenance	
7.7.a. Date of most recent review or revision of maintenance procedures	01/12/2015
7.7.b. Date of most recent equipment inspection or test	01/12/2015
7.7.c. Equipment most recently inspected or tested (equipment list)	Annual ammonia safety valve inspection
7.8 Management of change	
7.8.a. Date of most recent changes that triggered management of change procedures	04/23/2006
7.8.b. Date of most recent review or revision of management of change procedures	08/01/2015
7.9 Date of most recent pre-startup review	04/25/2006
7.10 Compliance audits	
7.10.a. Date of most recent compliance audits	06/20/2013
7.10.b. Expected or actual date of completion of all changes resulting from the most recent compliance audits	01/28/2014
7.11 Incident investigation	
7.11.a. Date of most recent incident investigation	
7.11.b. Expected or actual date of completion of all changes resulting from the incident investigation	
7.12 Date of most recent review or revision of employee participation plans	11/01/2013
7.13 Date of most recent review or revision of hot work permit procedures	11/05/2015
7.14 Date of most recent review or revision of contractor safety procedures	
7.15 Date of most recent evaluation of contractor safety performance	02/01/2016

Section 7. Prevention Program: Program Level 3

Program 3

Prevention Program Description:	
7.1 NAICS Code for process	
7.1.a. Process Name	1000069554 (Bay Chlorine 1-ton cyl)
7.1.b. NAICS	32212 (Paper Mills)
7.2 Chemicals	
Chlorine	
7.3 Date on which the safety information was last reviewed or revised	12/11/2015
7.4 Process Hazard Analysis (PHA)	
7.4.a. Date of last PHA or PHA update	05/09/2012
7.4.b. Technique used	
7.4.b.1. What if	
7.4.b.2. Checklist	
7.4.b.3. What if/Checklist Combined	Y
7.4.b.4. HAZOP	
7.4.b.5. Failure mode & effects analysis	
7.4.b.6. Fault tree analysis	
7.4.b.7. Other	
7.4.c. Expected or actual date of completion of all changes resulting from last PHA or PHA update	11/01/2012
7.4.d. Major hazards identified	
7.4.d.1. Toxic release	Y
7.4.d.2. Fire	Y
7.4.d.3. Explosion	Y
7.4.d.4. Runaway reaction	
7.4.d.5. Polymerization	
7.4.d.6. Overpressurization	Y
7.4.d.7. Corrosion	Y
7.4.d.8. Overfilling	Y
7.4.d.9. Contamination	Y
7.4.d.10. Equipment failure	Y
7.4.d.11. Loss of cooling, heating, electricity, instrument air	Y
7.4.d.12. Earthquake	
7.4.d.13. Floods	
7.4.d.14. Tornado	
7.4.d.15. Hurricanes	
7.4.d.16. Other	
7.4.e. Process controls in use	
7.4.e.1. Vents	Y
7.4.e.2. Relief valves	Y
7.4.e.3. Check valves	Y
7.4.e.4. Scrubbers	
7.4.e.5. Flares	

Section 7. Prevention Program: Program Level 3

7.4.e.6. Manual shutoffs	Y
7.4.e.7. Automatic shutoffs	Y
7.4.e.8. Interlocks	Y
7.4.e.9. Alarms and procedures	Y
7.4.e.10. Keyed bypass	
7.4.e.11. Emergency air supply	
7.4.e.12. Emergency power	Y
7.4.e.13. Backup pump	Y
7.4.e.14. Grounding equipment	Y
7.4.e.15. Inhibitor additions	
7.4.e.16. Rupture disks	
7.4.e.17. Excess flow device	Y
7.4.e.18. Quench system	
7.4.e.19. Purge system	
7.4.e.20. None	
7.4.e.21. Other	
7.4.f. Mitigation systems in use	
7.4.f.1. Sprinkler system	
7.4.f.2. Dikes	
7.4.f.3. Fire walls	
7.4.f.4. Blast walls	
7.4.f.5. Deluge system	
7.4.f.6. Water curtain	
7.4.f.7. Enclosure	Y
7.4.f.8. Neutralization	
7.4.f.9. None	
7.4.f.10. Other	
7.4.g. Monitoring/detection systems in use	
7.4.g.1. Process area detectors	Y
7.4.g.2. Perimeter monitors	
7.4.g.3. None	
7.4.g.4. Other	
7.4.h. Changes since last PHA update	
7.4.h.1. Reduction in chemical inventory	
7.4.h.2. Increase in chemical inventory	
7.4.h.3. Change in process parameters	
7.4.h.4. Installation of process controls	
7.4.h.5. Installation of process detection systems	
7.4.h.6. Installation of perimeter monitoring systems	
7.4.h.7. Installation of mitigation systems	
7.4.h.8. None recommended	Y
7.4.h.9. None	
7.4.h.10. Other	
7.5 Date of most recent review or revision of operating procedures	12/21/2015

Section 7. Prevention Program: Program Level 3

7.6 Training	
7.6.a. Date of most recent review or revision of training programs	12/21/2015
7.6.b. Type of training provided	
7.6.b.1. Classroom	Y
7.6.b.2. On the job	Y
7.6.b.3. Other	CBT
7.6.c. Type of competency testing used	
7.6.c.1. Written test	Y
7.6.c.2. Oral test	
7.6.c.3. Demonstration	Y
7.6.c.4. Observation	
7.6.c.5. Other	
7.7 Maintenance	
7.7.a. Date of most recent review or revision of maintenance procedures	02/02/2015
7.7.b. Date of most recent equipment inspection or test	02/06/2015
7.7.c. Equipment most recently inspected or tested (equipment list)	chlorine vacuum regulator, station 3
7.8 Management of change	
7.8.a. Date of most recent changes that triggered management of change procedures	07/21/2014
7.8.b. Date of most recent review or revision of management of change procedures	08/01/2015
7.9 Date of most recent pre-startup review	07/21/2014
7.10 Compliance audits	
7.10.a. Date of most recent compliance audits	06/20/2013
7.10.b. Expected or actual date of completion of all changes resulting from the most recent compliance audits	01/28/2014
7.11 Incident investigation	
7.11.a. Date of most recent incident investigation	
7.11.b. Expected or actual date of completion of all changes resulting from the incident investigation	
7.12 Date of most recent review or revision of employee participation plans	11/01/2013
7.13 Date of most recent review or revision of hot work permit procedures	11/05/2015
7.14 Date of most recent review or revision of contractor safety procedures	02/04/2016
7.15 Date of most recent evaluation of contractor safety performance	02/01/2016

Section 9. Emergency Response

9.1 Written emergency response (ER) plan	
9.1.a. Is your facility included in the written community emergency response plan?	Y
9.1.b. Does your facility have its own written emergency response plan?	Y
9.2 Does your facility's ER plan include specific actions to be taken in response to accidental releases of regulated substances?	Y
9.3 Does your facility's ER plan include procedures for informing the public and local agencies responding to accidental releases?	Y
9.4 Does your facility's ER plan include information on emergency health care?	Y
9.5 Date of most recent review or update of your facility's ER plan	12/14/2015
9.6 Date of most recent ER training for your facility's employees	10/23/2015
9.7 Local agency with which your facility's ER plan or response activities are coordinated	
9.7.a. Name of agency	Delta County LEPC
9.7.b. Phone number	(906) 786-5911
9.8 Subject to	
9.8.a. OSHA Regulations at 29 CFR 1910.38	Y
9.8.b. OSHA Regulations at 29 CFR 1910.120	Y
9.8.c. Clean Water Act Regulations at 40 CFR 112	Y
9.8.d. RCRA Regulations at 40 CFR 264, 265, 279.52	Y
9.8.e. OPA-90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, 30 CFR 254	Y
9.8.f. State EPCRA Rules of Laws	Y
9.8.g. Other	

Executive Summary

Escanaba Paper Company

1. EXECUTIVE SUMMARY

The Escanaba Paper Company (EPC) is committed to operating in a manner that is safe for employees, the public, and the environment. As part of this commitment, EPC has established a system to help ensure safe operation of the processes at this facility. Two components of this system are a Process Safety Management (PSM) program that helps manage the risk and that complies with the requirements of the Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals; and a risk management program (RMP) that complies with the requirements of the Environmental Protection Agency (EPA) regulation 40 CFR part 68, Accidental Release Prevention Requirements: Risk Management Programs (the RMP rule). One of the requirements of the RMP rule is to submit a risk management plan (RMPlan) describing the risk management program at EPC. This document is intended to satisfy the RMP requirements of the rule and to provide the public with a description of our risk management program.

The process safety and risk management program at EPC consists of three elements:

A hazard assessment to help understand (a) the potential off-site consequences of hypothetical accidental releases and (b) accidents that have occurred during the last five years associated with the use of substances regulated by the RMP rule (regulated substances) - see topics 1.3 and 1.5

A prevention program to help maintain and safely operate the processes containing more than a threshold quantity of a regulated substance (covered processes) - see topic 1.4

An emergency response program to help respond to accidental releases of regulated substances from covered processes - see topic 1.6

Information further describing these elements is provided in this RMPlan.

Although the risk management program at EPC helps provide assurance that the facility is maintained and operated in a safe manner, it is only one component of the safety program at EPC. In fact, EPC has a comprehensive safety program in place establishing many levels of safeguard against release of a hazardous substance and resultant injuries or damage from such a release.

EPC limits the use of hazardous substances. Prior to using a hazardous substance, less hazardous alternatives are considered. When a hazardous substance is used at EPC, consideration is given to the potential for this substance to adversely affect employees, the public, as well as the environment.

Continuous Monitoring System Quality Assurance Plan

VERSO ESCANABA LLC

Continuous Monitoring System Quality Assurance Plan

3/26/2020