

Paper mill calculations

40 CFR 430.122 (tissue)	AM ELG, lb/1000 lb	DM ELG, lb/1000 lb	AML, lb/d	DML, lb/d	
BOD ₅	6.25		11.4	8025	14637.6
TSS	5		10.25	6420	13161
Production, tpd	642				
production, lb/1000 lb	1284				

**Ingevity Calculations
rosin based derivatives**

414, Subpart F					
	AM ELG, lb/1000 lb	DM ELG, lb/1000 lb	AML, lb/d	DML, lb/d	
BOD ₅	0.748		1.41	112.20	211.50
TSS	0.015		0.045	2.25	6.75
Production, tpd	75				
production, lb/1000 lb	150				

tall oil fractionation

414, Subpart D					
	AM ELG, lb/1000 lb	DM ELG, lb/1000 lb	AML, lb/d	DML, lb/d	
BOD ₅	0.529		0.995	111.09	208.95
TSS	0.243		0.705	51.03	148.05
Production, tpd	105				
production, lb/1000 lb	210				

sizing agents

414, Subpart H					
	AM ELG, mg/l	DM ELG, mg/l	AML, lb/d	DML, lb/d	
BOD ₅	45		120	15.01	40.03
TSS	57		183	19.02	61.05
flow, MGD	0.04				

derivatives

454, Subpart F					
	AM ELG, lb/1000 lb	DM ELG, lb/1000 lb	AML, lb/d	DML, lb/d	
BOD ₅	0.748		1.41	40.39	76.14
TSS	0.015		0.045	0.81	2.43
Production, tpd	27				
production, lb/1000 lb	54				

Bakelite

All processes at this facility are subject to 40 CFR Part 454, Subpart E.
The ELGs in this subpart are concentration based, not production based.

	AM ELG, mg/l	DM ELG, mg/l	AML, lb/d	DML, lb/d	
BOD ₅	61		163	101.75	271.88
TSS	67		216	111.76	360.29

Waste Stream Flows

Monthly Average, MGD	
Mill Process WW	6.8
City	1
Mill Sanitary Sewer	0.1
Ingevity	0.4
Bakelite	0.2
Stormwater	1.4
Total Flow	9.9

Concentrations

	AML BOD ₅ , mg/l	DML BOD ₅ , mg/l	AML TSS, mg/l	DML TSS, mg/l	
City	30		45	30	45
Mill Sanitary Sewer	30		45	30	45
Stormwater	0		0	35	52.5

Mass Limits

	AML BOD ₅ , lb/day	DML BOD ₅ , lb/day	AML TSS, lb/day	DML TSS, lb/day	
City	250.20		375.30	250.20	375.30
Mill Sanitary Sewer	25.02		37.53	25.02	37.53
Stormwater	0		0	408.66	612.99

	AML BOD ₅ , lb/day	DML BOD ₅ , lb/day	AML TSS, lb/day	DML TSS, lb/day	
Total Mass	8680.66	15858.94	7288.74	14765.39	
Concentrations	105	192	88.3	178.8	