64856

WESTON
MANAGERS DESIGNERS/CONSULTANTS

ORIGINAL

SHEET ____ of ____

CLIENT/SUBJECT _____ W.O. NO. _____

TASK DESCRIPTION _____ TASK NO. _____

PREPARED BY _____ DEPT _____ DATE _____

MATH CHECK BY _____ DEPT _____ DATE _____

METHOD REV. BY _____ DEPT _____ DATE _____

APPROVED BY _____

DEPT _____ DATE _____

8/87

Data Summary

Liquid Sample from Trolli

AR100273

RFW 10-05-003/A-5/85

SAMPLING DATE	SAMPLE #	SAMPLE LOCATION	CADMIUM PPb	CHROMIUM PPb	COPPER PPb	LEAD PPb	NICKEL PPb	ZINC PPb	Ag	ARSENIC	SOLIDS %
8/31/87	S-18	Creek, 150 ft upstream from facility			12	4.9		18			
	S-18F	" Filtered.			10	2.7		14			
	S20	Lagoon trench outfall	34		89	7500	17	210			
	S-20F	" Filtered	33		65	5260	14	205			
	S-22	DISCHARGE FROM NEW CULVERT	128		109	7560	48	508			
	S-22F	" Filtered	127		88	6920	45	504			
	S-24	Swim Hole	1.7		28	3.7		15			
	S-24F	" Filtered	3.2		19	244		23			
	S-27	Stream next to swim hole	4.5		18	336		75			
	S-27F	" Filtered	5		17	506		~~5~~ 65			
	S21	Lagoon trench outfall	1.1	7.9	32	3940	5.9	39	23	19	61.9

AR100274

SAMPLING DATE	SAMPLE #	SAMPLE LOCATION	CADMIUM PPb	CHROMIUM PPb	COPPER PPb	LEAD PPb	NICKEL PPb	ZINC PPb	ARSENIC PPb
8/7/87	S-14	Tank bottom leaking valve	30			2380		11000	15
	S-15	2' column from top of tank	1180	370	3440	1080	810	2600	1620
	S-17	Valve to lagoon	7500	2550	11000	3820	5500	3000	250
	TSL#2	Lagoon - unfiltered	605	138	1050	2910			704
	TSL#1	Lagoon - filtered	603	137	1060	2890			622
	TSC#1	Creek	1.3			102			
		Creek - filtered	11.1			29.2			

AR100275

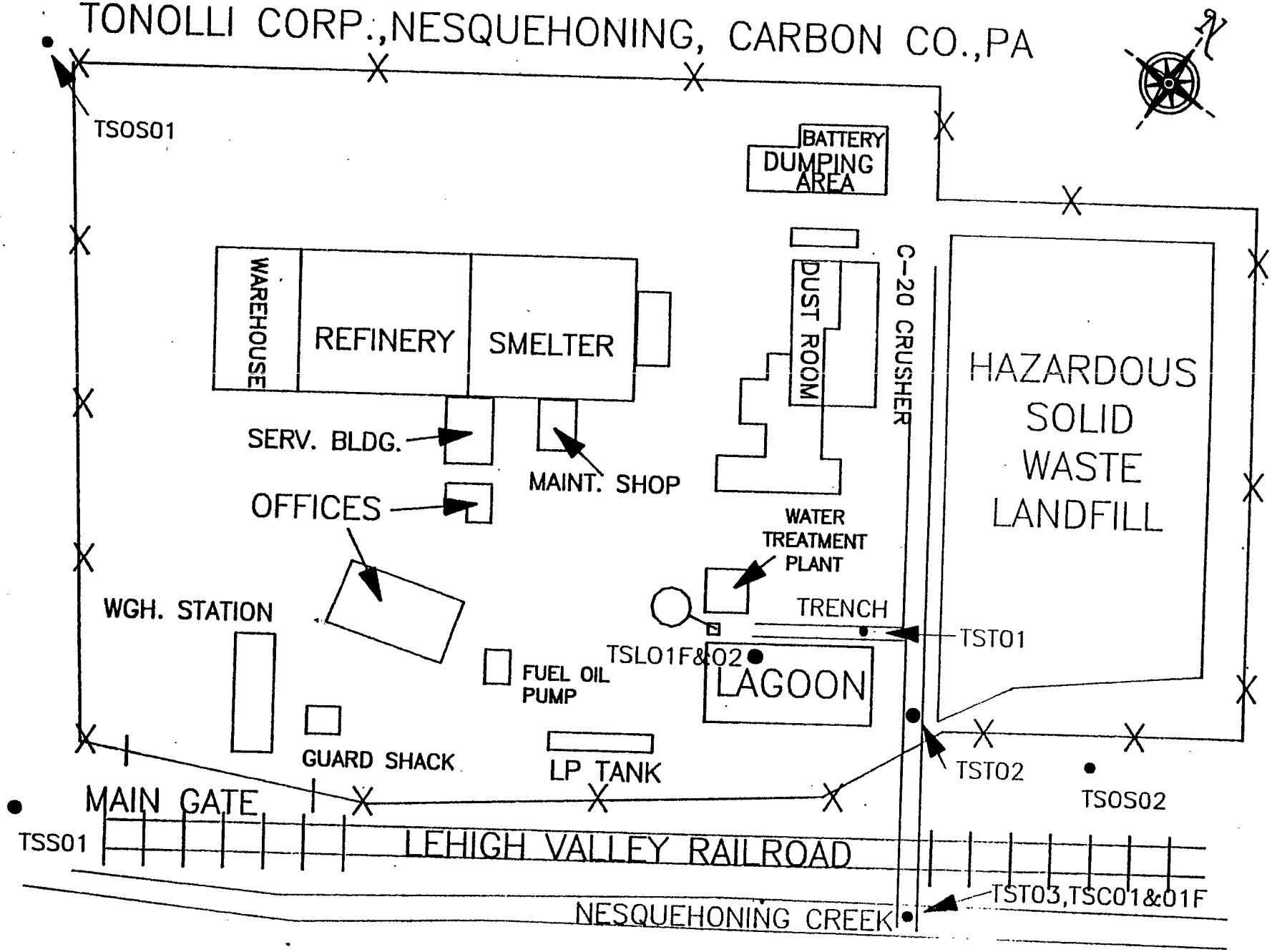
ANALYTICAL RESULTS

Sample#	Location	Arsenic ug/l	Cadmium ug/l	Chromium ug/l	Copper ug/l	Lead ug/l
TSL00	blank water					
TSC01	Creek		7.3			102
TSL01	Lagoon Liquid	622	603	137	1060	2890
TSL02	Lagoon Liquid	704	605	138	1050	2910
		m/kg	mg/kg	mg/kg	mg/kg	mg/kg
TSS01	Background (near gate)		8.6	32.8	115	3,990
TST01	Trench, soil	25.3	12.4	36.8	174	65,500
TST02	Trench, soil	54	3.5	11.7	35	6,860
TST03	Trench, soil (near creek)	71	5	7.1	22.4	2,030
TSOS01	Offsite, NW	15	2.5	9.7	11.5	425
TSOS02	Soil/landfill	14	3.6	11.2	18.5	261
TSOS03	Offsite, SE	14.4	1.6	11.3	30.5	62.8

RECOMMENDATIONS

Due to the increasing volume of wastewater collected in the lagoon and due to the direct connection of the spillway and the Nesquehoning Creek, immediate attention is warranted. The trench should be backfilled and compacted alleviating the direct flow of contaminants to the creek. This, however, would cause the lagoon to eventually fill to overflow. It is recommended that in conjunction with the backfilling of the trench, the wastewater should be pumped out of the lagoon, transported to a treatment facility and ultimately disposed.

TONOLLI CORP.,NESQUEHONING, CARBON CO.,PA



*PREDOMINANT WIND DIRECTION FROM NW

"NOT TO SCALE"

AR100277

Tonolli Corporation Site
August 12, 1987
Attachment #1

ANALYTICAL RESULTS FROM SAMPLES COLLECTED JUNE 3, 1987

Sample#	Location	Arsenic ug/l	Cadmium ug/l	Chromium ug/l	Copper ug/l	Lead ug/l
TSL00	Blank Water					
TSC01	Creek		7.3			102
TSL01	Lagoon Liquid	622	603	137	1060	2890
TSL02	Lagoon Liquid	704	605	138	1050	2910
		m/kg	mg/kg	mg/kg	mg/kg	mg/kg
TSS01	Background (near gate)		8.6	32.8	115	3,990
TST01	Trench, soil	25.3	12.4	36.8	174	65,500
TST02	Trench, soil	54	3.5	11.7	35	6,860
TST03	Trench, soil (near creek)	71	5	7.1	22.4	2,030
TSOS01	Off site, NW	15	2.5	9.7	11.5	425
TSOS02	Soil/landfill	14	3.6	11.2	18.5	261
TSOS03	Off site, SE	14.4	1.6	11.3	30.5	62.8

Tonolli Corporation Site
August 12, 1987
Attachment #2

ANALYTICAL RESULTS FROM SAMPLES COLLECTED AUGUST 6, 1987

Parameter	S15 mg/l soil below tank	S14 mg/l bottom valve on tank	S16 mg/l top of tank	S17 mg/l valve approx. 1/3 from bottom of tank
As	60.4	0.015	1.62	0.25
Be	0.42	ND	ND	0.02
Cu	179	ND	3.44	11
Cd	9.8	0.03	1.18	7.5
Cr	11	ND	0.37	2.55
Hg	ND	ND	ND	ND
Ni	19	0.1	0.81	5.5
Pb	9170	2.98	1.08	3.82
Ag	0.42	ND	ND	0.02
Th	2.1	ND	ND	ND
Zn	2020	11	2.6	3.0
Se	112	<0.005	0.097	<0.25
An	10.4	0.052	0.267	0.324

NEUTRALIZATION WITH LIME IS GENERALLY EFFECTIVE FOR THE FOLLOWING INORGANIC SPECIES:

As(V).....AT pH=10-10.8
Ba.....AT pH=9.5-10.8
Cd
Cr(III)...AT pH 10.5+
Pb
Ag

*IN GENERAL THE PROCESS IS EFFECTIVE IN REMOVING CATIONS AND FLURIDE. THE PROCESS DOES NOT EFFECTIVELY REMOVE Cr(IV), NITRATE, SELENIUM, OR MERCURY.

AR100280