, Please print or tyr	pe in the unshaded area		PA I.D		(copy fro 617296		of Form 1)	Form Ap	proved: OMB No. 2040-	
,			· · · · · · · · · · · · · · · · · · ·			+	NTAL PROTE	CTION AGENCY	Approval expire	\$ 3-31-92
Form				APPLIC			IIT TO DISC	CHARGE WASTEWATER		
2C E	EPA	EXISTING	ΜΔΝΠ	FACTUR		MMERC		NG AND SILVICULTUR		
NPDES							ited Permits P		AL OFERATION	13
						CONSONDA		lograni		
		le and longitu	ide of it	s location	to the nea	erest 15 se	econds and	the name of the receiving	water	
A. OUTFA								are name of the receiving	water	
NUMBE	R B.	LATITUDE		C.	LONGITU	JDE				
(list)	1. DEG.	2. MIN. 3	SEC.	1. DEG.	2. MIN.	3. SEC.	1.	D. RECEIVING W/	ATER (name)	
0100, 20200	0, 44	47	0	92	53	30	Mississipp	i River		
20	0300						Combined	discharges enter at Mile P	oint 817 in Section	35,
pproximatio	on from USGS-St.	Paul Park					Township	27 North, Range 21 West,	City of Cottage Gro	ove,
uadrangie, N	Minn. 7.5 min. seri	ies (topograpi	nic)				Washingto	n County		
	SOURCES OF									
								ke water, operations contri		
								in Item B. Construct a wat		
								alls. If a water balance car		l
		ivities), provid	le a pic	torial desc	ription of	the nature	and amou	nt of any sources of water a	and any collection	
	ent measures.	de e evintion e	6 (A) A							
								e effluent, including proces uted by each operation; and		
	by the wastewater						IOW CONTIDU	ned by each operation; and	(3) The treatment	
I. OUT-		RATION(S)				isary.	<u> </u>	3. TREATM	ENT	
ALL NO					ERAGE F		l	3. IIILAIN	b. LIST COD	
(list)	a. OPERA	TION (list)			clude uni			a. DESCRIPTION		
0100	a. OF EIVA					(5)	Screening	a. DESCRIPTION	1	E 2C-1
						·	Grit Remova	i	1	M
Adl	hesives, resins and c	hemicals					Neutralizatio		2	ĸ
Pol	lymeric films and extr	rusions			1915 gpm		Chemical Pr	ecipitation	2	c
	Hollow glass bubbles (Phase 1) Abrasive materials Ceramic materials					Coagulation		2	D	
	Abrasive materials Ceramic materials					Flocculation		1	G	
						Sedimentatio		1	U	
Fie							(sodium hypochloride) Surface Water	2	H	
						-	Gravity Thick	****		
							Belt Filtration		5	C
							Screening	····	1	т
· ·							Neutralizatio	n	2	к
	nitary wastewater				300 gpm		Activated Slu		3	A
Adr	hesives, resins and c	hemicals			(Phase 2)		Sedimentatio		1	U
				·····				(sodium hypochloride) surface water	2	<u>н</u> А
							Aerobic Dige		- 4	A
					· · · · · ·		Gravity Thick		5	L
							Belt Filtration	1	5	с
							Chemical pre	ecipitation	2	С
							Screening		1	Т
la -i	inerator scrubber was	towator		·····	900		Neutralization         2         K           Coagulation         2         D			
	inclator scrubber Was	SIGMALEI			800 gpm (Phase 3)		Coagulation         2         D           Flocculation         1         G			
}							Flocculation         1         G           Sedimentation         1         U			
							Sedimentation         1         U           Discharge to surface water         5         C			
							Gravity Thick		5	L
000							Belt Filtration		5	Ċ
	ncontact cooling wate	er			2675 gpm		Discharge to	surface water	5	С
	mbination of 20100 a	nd 20200			5600		Dischart			
					5690 gpm		Discharge to	surface water	5	C
	ONLY (effluent guid	latinas sub cot	anorian	·····						
	erren fernaent guit		-901165	,			,		_	
A F	10.00 10.00				_					1
A FUIII 99	510-2C (8-90)				Р	age 1 of 4	÷	Exhibit 1823	Continued o	n page 2

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State of Minnesota v. 3M Co., Court File No. 27-CV-10-28862

3MA00110772

CONTINUED	FROM PAGE 1									
	r storm runoff, leak			discharges de				sonal		
	YES (complete the	following tabl	e)		X No (go	to Section II	1)			
	······································		3. FRE	QUENCY			4. FLOW			
			a DAYS	b. MONTHS	a. FLO	WRATE		L VOLUME		Γ
1. OUTFALL	2. OPERAT	ION(S)	PER WEEK	PER YEAR	(in r	ngd)		with units)		C. DURATION
NUMBER	CONTRIBUTIN	NG FLOW	(SPECIFY	(SPECIFY	1. LONG TERM	2. MAXIMUM	1. LONG TERM	2. MAXIM	ŪM	(in days)
(list)	(list)		AVERAGE)	AVERAGE)	AVERAGE	DAILY	AVERAGE	AVERAC	SΕ	
N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A		N/A
					ł					
III. PROD	UCTION									
A. Does an	y effluent guideline	limitation pror	nulgated by	EPA under S	Section 304 of t	the Clean Wate	er Act apply to	vour facility	17	
	YES (complete Iter				ومتعصفاهي	Section IV)	*	,		
B. Are the	limitations in the ap	plicable efflue	nt guideline	expressed in	terms of produ	uction (or other	measure of or	eration)?		· · · · · · · · · · · · · · · · · · ·
	YES (complete Iter	m III-C)			NO (go to	o Section IV)				
						-				
-	swered "yes" to ite		· ·	•			you level of pr	oduction, e	xpres	sed
in the ter	rms and units used	in the applicat	ble effluent	guideline, and	the affected o	utfalls.				
		1	. AVERAGE	DAILY PRO	DUCTION				2.	AFFECTED
a. QUAN	TITY PER DAY	b. UNITS OF	MEASURE		c. OPERATION,	PRODUCT, MA	TERIAL, ETC.			OUTFALLS
						(specify)			(list o	outfall numbers)
N/A		N/A				N/A			· · · ·	N/A
10/2						19/5				NO
										:
IV. IMPROVEMENTS										
A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading										
A. Are you now required by any rederal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges										
described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement										
described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.										
YES (complete the following table) (go to Section IV-B)										
								4. F		OMPLIANCE
	TION OF CONDITION,	2. AFFECTED			3. BRIEF	DESCRIPTION	OF PROJECT			ATE
AGRE	EMENT, ETC.	a. NO.	b. SOURCE	OF DISCHARGE				a. REQ	UIRED	b. PROJECTED
N/A		N/A	N/A			N/A		N/A		N/A
			1							
		1								
		1.								
		I								
b. optional:	You may attach ad	ditional sheets	s describing	any addition:	al water pollutio	on programs (o	r other environ	mental pro	jects v	which
may affe	ct your discharges)	you now have	e underway	or which you	plan. Indicate	whether each	program is nov	v underway	1	
or planne	ed, and indicate you	ur actual or pla	nned sched	ules for cons	truction					
	MARK "X" IF DES	-				S IS ATTACH	-D			
			ADDITION							-

\* Information addressing the potential applicability of effluent guidelines has been submitted to MPCA in correspondence dated November 27, 2000 and January 14, 2002.

EPA Form 3510-2C (8-90)

Page 2 of 4

Continued on page 3

CONTINUED FROM PAGE 2	EPA I.D. N	UMBER (copy from MND0061729				
V. INTAKE AND EFFLUEN			505			•
A, B, & C: See instruction befor	the second s		for each outfall (			
NOTE: Tables V-A, V-E					uniber in the space pro	ovided.
D. Use the space below to list					la raasan ta baliawa	
is discharged or may be disc						
present and report any analy			nt you list, brieny (	describe the reasons	you believe it to be	
1. POLLUTANT	2. SOUR		1. POLLUTAN	T	2. SOURCE	
	2.0001.0		1.1 0220174		2. 300RCE	
I See Attachment A	for list of compounds ir	I Table 2C-3 that co	uld possibly be fo	l und in Discharge 201	00	
					00	
				1		
		1. State 1.				
			•			
			•			
VI. POTENTIAL DISCHAR	GES NOT COVEREI	D BY ANALYSIS				
	and the second		Ince which you cu	rrently use or manufa	cture as an intermedia	te
VI. POTENTIAL DISCHARG	and the second		ince which you cu	rrently use or manufa	icture as an intermedia	te
Is any pollutant listed in item V- or final product or byproduct?	and the second	mponent of a substa	ince which you cu	rrently use or manufa		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	nce which you cu	_		ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
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Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		te
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite
Is any pollutant listed in item V- or final product or byproduct?	C a substance or a cor	mponent of a substa	ince which you cu	_		Ite

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VII. DIOLOGIOAL TOXIOI	TY TESTING DATA		
	or reason to believe that any biological test	for acute or chronic toxicity	has been made on any of your
discharges or on a receiving	water in relation to your discharge within th YES (identify the test(s) and describe their purpo	oses below)	NO (go to Section VII)
See "Effluent To	oxicity Identification/Reduction Evaluation (	TIE/TRE) for 3M Company's	3
	ottage Grove Facility's "Outfall 20100" Plan		
•		• •	
	•		
1			
VIII. CONTRACT ANALYS	IS INFORMATION		
Were any of the analyses re	ported in item V performed by a contract lab	ooratory or consulting firm ?	
l l	YES (list the name, address, and telephone nur		NO (go to Section IX)
<b>Ľ_</b>	analyzed by, each such laboratory or firm	1 below)	
	B. ADDRESS	C. TELEPHONE	D. POLLUTANT ANALYZED
A. NAME	B. ADDRESS	(AREA CODE & NO.)	(LIST)
Pace Analytical	1700 Elm St. Suite 200	(612) 607-1700	Priority Pollutants
-	Mpls., Mn. 55414		(and backup for all others)
Services, Inc.	Wipis., Witt. 55414		
IX. CERTIFICATION			
I certify under penalty of law	that this document and all attachments we		
I certify under penalty of law system designed to assure t	hat qualified personnel properly gather and	evaluate the information su	bmitted. Based on my inquiry of the
I certify under penalty of law system designed to assure t person or persons who man	nat qualified personnel properly gather and age the system or those persons directly re	evaluate the information su sponsible for gathering the i	bmitted. Based on my inquiry of the information, the information submitted
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled	nat qualified personnel properly gather and age the system or those persons directly re ge and belief, true, accurate, and complete.	evaluate the information su sponsible for gathering the i I am aware that there are	bmitted. Based on my inquiry of the information, the information submitted
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled	nat qualified personnel properly gather and age the system or those persons directly re	evaluate the information su sponsible for gathering the i I am aware that there are nowing violations.	bmitted. Based on my inquiry of the information, the information submitted significant penalties for submitting
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled	hat qualified personnel properly gather and age the system or those persons directly re ge and belief, true, accurate, and complete. The possibility of fine and imprisonment for k	evaluate the information su sponsible for gathering the i I am aware that there are nowing violations.	bmitted. Based on my inquiry of the information, the information submitted
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled false information, including t A. NAME & OFFICIAL TITLE	hat qualified personnel properly gather and age the system or those persons directly re ge and belief, true, accurate, and complete. he possibility of fine and imprisonment for k (type or print)	evaluate the information su sponsible for gathering the i I am aware that there are nowing violations.	bmitted. Based on my inquiry of the information, the information submitted significant penalties for submitting NO. (area code & no.)
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled false information, including t A. NAME & OFFICIAL TITLE K. E. Reed. Staff Vice Preside	hat qualified personnel properly gather and age the system or those persons directly re ge and belief, true, accurate, and complete. he possibility of fine and imprisonment for k (type or print)	evaluate the information su sponsible for gathering the i 1 am aware that there are nowing violations. B. PHONE (651) 778-4	bmitted. Based on my inquiry of the information, the information submitted significant penalties for submitting NO. (area code & no.)
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled false information, including t A. NAME & OFFICIAL TITLE K. E. Reed, Staff Vice Preside C. SIGNATURE	hat qualified personnel properly gather and age the system or those persons directly re ge and belief, true, accurate, and complete. the possibility of fine and imprisonment for k (type or print)	evaluate the information su sponsible for gathering the i 1 am aware that there are nowing violations. B. PHONE	bmitted. Based on my inquiry of the information, the information submitted significant penalties for submitting NO. (area code & no.) IGNED
I certify under penalty of law system designed to assure t person or persons who man- is to the best of my knowled false information, including t A. NAME & OFFICIAL TITLE K. E. Reed, Staff Vice Preside C. SIGNATURE	hat qualified personnel properly gather and age the system or those persons directly re ge and belief, true, accurate, and complete. he possibility of fine and imprisonment for k (type or print)	evaluate the information su sponsible for gathering the i 1 am aware that there are nowing violations. B. PHONE (651) 778-4	bmitted. Based on my inquiry of the information, the information submitted significant penalties for submitting NO. (area code & no.)

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PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or this information on separate sheets (use the same format) instead of completing these pag SEE INSTRUCTIONS	E IN THE UNSHAC ite sheets (use the	DED AREAS ONL' same formal) inst	Y. You may report lead of completing th	some or all of hese pages.			EPA I.D. NUMB	EPA i.D. NUMBER (copy from item 1 of form 1)	n 1 of form 1)				
								MND006172969					
V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-c)	ENT CHARACTERI	STICS (continue	d from page 3 of F	orm 2-c)							OUTFALL NO.	20100	
PART A	You must provic	te the results of a	You must provide the results of at least one analysis for even		pollutant in this table. Complete one table for each outfall.	olete one table for	each outfall. Se	See instruction for additional defails.	ditional defails.				
				2. EFFLUENT				3. UNITS	TS	4.1	4. INTAKE (optional		
1. POLLUTANT	a. MAXIMUM DAILY VALUE	Y VALUE	b. MAXIMUM 30 DAY VALUE	Y VALUE	C. LONG TERM AVG. VALUE	ALUE	d. NO. OF	(SPECIFY IF BLANK)	BLANK	8. LONG TERM AVG. VALUE	AVG. VALUE	B. NO. OF	
-	(1) CONCENTRATION	ION (2) MASS	1) CONCENTRATION	A (2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCENTRATION	b. MASS	1. CONCENTRATION	2. MASS	ANALYSES	
a. biocnemical Oxygen Demand (BOD)	19.0	456.0	11.9	349.0	10.0	295.0	102	Ngm	lbs/day				
b. Chemical Oxygen Demand (COD)	340.0	11285.0	137.0	4536.0	108.4	3187.0	362	Jom	lbs/dav				
c. Total Organic Carbon (TOC)	8.3	199.2	NA	NA	7.3	215.4	4.0	V <sup>6</sup> m	lbs/day				
benc	14.0	460.0	10.6	352.0	5.4	160.0	52	Į/ĝ	lbs/day				
e. Ammonia (as N)	14.9	150.0	2.4	76.0	1.6	47.0	365	l/6m	lbs/day				
f. Flow	VALUE	4.7	VALUE	4.1	VALUE	3.5	365	MGD	MGD	VALUE			
g. Temperature (winter)	VALUE	25.5	VALUE	21.3	VALUE	18.3	182.0	Deal		vatule			
h. Temperature (summer)		40.5	VALUE	33.9	VALUE	28.8	183.0	Deg. C	0	VALUE			
l, pH	MINIMUM 6.7	MAXIMUM 9	WININIM	MAXIMUM			365	STANDARD UNITS	) UNITS				
PART B	Mark "X" in colu which is limited column 2-a, you	imn 2-a for each p either directly, or must provide qua	pollutant you know o indirectly but expres antitative data or an	X have reason to ssly, in an effuent explanation of th	Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2-a, you must provide quantitative data or an explanation of their presence in your discharde. Complete one table for each outfall. See the instruction for additional denies and revuirements	Aark "X" in columr , you must provid discharge, Comr	a 2-b for each pol ie the results of a blete one table for	lutant you believe to t least one analysis r each outfait. See t	be absent. If y for that pollutan	ou mark column 2- t. For other polluta r additional detaits	a for any pollutant its for which you	mark	
1. POLLUTANT	2. MARK "X"				3. EFFLUENT				A. C	4. UNITS	2.1	5. INTAKE (optional)	
AND CAS NO.	_		DAIL	<b>b. MAXIMUM 30 DAY VALUE</b>	4 30 DAY VALUE	c. LONG TERM AVRG. VALUE	AVRG. VALUE	d. NO. OF	(SPECIF)	믭	a. LONG TERM AVG. VALUE	AVG. VALUE	B. NO. OF
a. Bromide (24959-67-9)			sent in chemicals us	(1) concentration	inconcentration (2) mass inconcentrating (2) mass in concentration (2) mass a AvaIITSES CONCENTRATION b. MASS Browning is present in chemicals used at the facility. Thus, the presence of Bronning April in the wastewater is conservate have not have an environment	(1) CONCENTRATION	(2) MASS ine kon' in the w	ANALYSES .	CONCENTRATION	b. MASS	CONCENTRATION	2. MASS	ANALYSES
b. Chlorine, Total residual	×	QN		0.22		0.16		248	l/gm				
c. Color		The color of the	The color of the wastewater discharge has	irge has not been	not been quantified.								
d. Fecal Coliform	×	76	•	13	•	2.3	,	4	#/100 ml				
e. Fluoride (16984-48-8)	×	42				26.4		•	l/am				
f. Nitrate- Nitrite (as N)	×	321				14.8		60	ad Mar				
					PAGE V-1							CONTINUED ON PAGE V-2	AGE V-2

3MA00110776

								EPA I.D. NUMBE	EPA I.D. NUMBER (copy from item 1 of form 1)	m 1 of form 1)		OUTFALL NUMBER	
CONTINUED FROM PAGE V-1	5												20100
4 BOLL UTANT	D MA	"YADK "Y"				9 EEEI LIENT		-	MNNDUUG 12965			1	
AND CAS NO.	a Relieve	a Relieve h Rejeve		a MAXIMIN DAILY VALUE		A MAXIMIM 10 DAY VALUE	C LONG TERM AVEC VALUE	AVEC VALUE		4. 4		9. INLARE (optional)	
(IF AVAILABLE)	present	absent	(1) CO		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	AVRG. VALUE	ANALYSES	CONCENTRATION	SPECIFY IF BLANK) TRATION 1 MASS	CONCENTRATION 2 MASS	B. NO. OF SAMALYSES
g. Nitrogen, Total Organic (as N)	×		Small amounts of organic nitrog levels have not been quantified	1 ธิ	enter the Phase 2	biological treatmen	ıt system. It is ex	pected that most	is converted to inc	rganic nitrogen, I	resulting in very for	Ë	in the discharge; these
h Oil and Grease	×		G		3		,		5				
I. Phosphorus (as P) (7723-14-0)	×		0.61	26.6	0.36	15.5	0.16		51	l'am	ibs/dav		
j. Radioactivity										0	(mana a		
(1) Alpha, Total		×											
(2) Beta, Total		×											
(3) Radium, Total	•	×											
(4) Radium 226, Totał		×		· ·							-		
k. Sulfate (as SO4) (14808-79-8)	×		1290				975		4	ļδw			
I. Sulfide (as S)	×		Suttur is present i	in chemicals used	at the facility. Th	Suffur is present in chemicals used at the facility. Thus, the presence of Sufficie (sufficie (sufficiency) in the wastewater is possible, but has not been quantified	Sulfide (sulfur ior	() in the wastewat	er is possible, but	has not been ou	antified		
m. Sulfite (as SO3) (14265-45-3)	×		Suffites are prese	Suffices are present in chemicats used at the	ed at the facility.	facility. Thus, the presence of Sulfite ion in the wastewater is possible, but has not been quantified.	of Sulfite ion in t	he wastewater is	possible, but has (	not b <del>co</del> n quantific	5d.		
n. Surfactants	×		Surfactants are u	sed at the facility.	Thus, their prese	Surfactants are used at the facility. Thus, their presence in the wastewater is possible, but has not been quantified.	ter is possible, bu	t has not been du	iantified.				
o. Aluminum, Total (7429-90-5)	×		0.2				90.0		60	l/đm	ND	ND in 5 samples in Jan '01	
p. Barium, Total (7440-39-3)	×		Barium is present	t in chemicals used	d at the facility. T	Banium is present in chemicals used at the facility. Thus, its presence in the wastewater is possible, but has not been quantified.	the wastewater is	s possible, but ha	s not been quantif	· .			
q. Boron, Totat (7440-42-8)	×		Boron is present	in chemicals used	at the facility. Th	Boron is present in chemicals used at the facility. Thus, its presence in the wastewater is possible, but has not been quantified.	the wastewater is	possible, but has	not been quantifie	, j			
r. Cobalt, Total (7440-48-4)	×		Cobatt is present	in chemicals used	at the facility. TI	Cobalt is present in chemicals used at the facility. Thus, its presence in the wastewater is possible, but has not been quantified.	the wastewater is	possible, but has	t not been quantifi				
s. Iron, Total (7439-89-4)	×		2.7	116	0.81	36.6	0.39	15	105	ľ	lbs/dav		
t. Magnesium, Total (7439-95-4)	×		25.7	1624.2			23.6		80	ma/l		ND in 5 samples in Jan '01	
u. Molybdenum, Total (7439-98-7)	×		Molybdenum is pr	Molybdenum is present in chemicals used at		the facility. Thus, its presence in the wastewater is possible, but has not been quantified.	nce in the wastew	ater is possible, t	out has not been o	uantified.			
v. Manganese, Total (7439-96-5)	×		0.1				0.08		80	убш	ND	ND in 5 samples in Jan '01	
w. Tin, Total (7440-31-5)	×		Tin is present in c	Tin is present in chemicals used at the facility	I	Thus, its presence in the wastewater is possible, but has not been quantified.	wastewater is po	ssible, but has no	t been quantified.			•	
x. Titanium, Total (7440-32-6)	×		Titanium is prese	nt in chemicals use	ed at the facility.	Thus, its presence i	in the wastewater	is possible, but h	as not been quant	lified.			
						PAGE V-2						CONTINU	CONTINUED ON PAGE V-3

		,							EPA I.D. NUMB	EPA I.D. NUMBER (copy from item 1 of form 1)	m 1 of form 1)		OUTFALL NUMBER	BER	
CONTINUED FROM PAGE V-2	PAGE V-	9								MND006172969	6			20100	
PART C-		If you a	re a prima	ary industry and to	this outfall contains	Drocess wastewat	If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the institucions to determine which of the GCMS fractions you must have for Max m <sup>22</sup> th column	>-7 in the instruction	ons to determine	which of the GCM	IS fractions vol. m	wist tast for Mark	"Y" to cohima		
		2-a for $\epsilon$	all such G	C/MS fractions th	2-a for all such GC/MS fractions that apply to your industry and	dustry and for ALL	A ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess	des, and total phe	enols. If you are i	not required to mai	rk column 2-a (sev	condary industries,	, nonprocess		
		believe	ater outra is absent.	ills, and nonrequi . If you mark colt 2 mothed 4 o ding	tred GC/MS fraction turnn 2a for any poll	ns), mark "X" in col lutant, you must pr	wastewater outrails, and nonrequired GC/MS fractions), mark X* in column 2-b for each pollutant you know or have reason to believe is present. Mark X* in column 2-c for each pollutant you there is absent. If you mark column 2s for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for accoler), accylonitrile, 2,4	ollutant you know at least one analy	/ or have reason ( ysis for that pollul	to believe is preser tant. If you mark o	it. Mark "X" in col olumn 2b for acro	lumn 2-c for each r lein, acrylonitrile, 2	pollutant you		
		concent be disch	tration of harged. N	z-memyr-4,9 um 100ppb or greate fore that there are	irropnenoi, you mus ar Otherwise, for p e 7 pages to this pe	at provide the result offutants for which art: please review e	unicopriend, or zmenty-s,gummoprend, you must provide the results of a feast one analysis for each of these policiants which you know or have reason to believe that you discharge in concretation of 100 pbb or greater. Otherwise, for policiants for which you must each or the states one analysis or briefly describe the reasons the policiant is expected to descharged. Note that there are 7 poes to this part: please review each carefuly. Complete one table (all 7 meass for each outfall. See instruction for additional detais each curviewnew	Talysis for each of 2b, you must eithe molete one table (	r these pollutants r submit at least all 7 nages) for ev	: which you know o one analysis or bri ach outfall. See in	r have reason to t effy describe the r struction for additi	believe that you dis reasons the polluta ional details and re-	scharge in unt is expected to soments		
1. POLLUTANT	L	2. MA	2. MARK "X"				3. EFFLUENT				4. U	4. UNITS		5. INTAKE (optional	
AND CAS NO.	a. Testi		s c. Believe		DAIL	b. MAXIMUM	b. MAXIMUM 30 DAY VALUE	c. LONG TERM	C. LONG TERM AVRG. VALUE	d. NO. OF	(SPECIFY	IF BI	a. LONG TERA	a. LONG TERM AVG. VALUE	
METALS, CYANIDE, AND TOTAL PHENOLS	E. AND 7	TOTAL P	PHENOLS	(1) CONCENTRATION	(Z) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	. CONCENTRATION	I b. MASS	. CONCENTRATION	U 2. MASS	ANALYSES
1M. Antimony, Total	Ļ														
(7440-36-0)	×	×		436	14.18	Ą	AN	125.3	4.7	19	1/6n	lbs/day	NA	٩N	AN
2M. Arsenic, Total (7440-38-2)	×	×		9	0.17	AN	NA	0.26	0:007	23	1/bn	lbs/day	Below DL in	Below DL in 22 samples from 1996-2001	1996-2001
3M. Beryllium, Total (7440-41-7)	×		×		Below detectable level (<5		uo/l) in 1 sample in 1996								
4M. Cadmium, Total	>	,		32 1	91.0										
5M. Chromium,		< ;		6	e :	2	ΨN :	11.7	80.0	77	Vôn	lbs/day	Below DL In	Below DL in 18 samples from 1996-2001	1996-2001
6M. Copper, Total 7140-50 BY	<	<		8 %	0.00 0	AN 1	AN 1	551 1	60	22	y6n	lbs/day	AN :	YN :	<b>A</b> N
7M. Lead, Total (7439-92-1)	< ×	< ×	<u> </u>	3 %	3.15	A A	AN AN	17.11	920	3 8		ios/day Ibe/day	AN N	¥ Ž	
8M. Mercury, Total (7438-97-6)	×	×		0.3	0.01	ž	AN N	0.02	0	23	l/bn	lbs/dav	Below Dt in	Below D1 in 21 samples from 1996-2001	1996-2001
9M. Nickel, Total (7440-02-0)	×	×		230	8.6	NA	NA	49.5	2.11	23	ν <sup>6η</sup>	veb/sdl	ΥN	ž	٩Z
10M. Selenium, Total (7782-49-2)	×	×		88.4	2.88	Ą	AN	6.81	0.22	23	/bn	lbs/day	AN AN	<b>V</b> N	AN
11M. Silver, Total (7440-22-4)	×	×		8	0.76	A	NA	2.52	0.11	22	, la	lbs/dav	AN NA	A Z	AN N
12M. Thallium, Total (7440-28-0)	×		×		Below detectable level (<5		ug/l) in 1 sample in 1996								
13M. Zinc, Total (7440-66-6)	×	×		<u>5</u>	8	380	14.4	200	80 1-1	-	na/l	veb/sdt	¥N.	٩Z	<b>₫</b> Z
14M. Cyanide, Total (57-12-5)	×	×		70		NA	NA	41.6		45	, lýbn	ibs/day	Below DL in	Below DL in 43 samples from 1996-2001	1996-2001
15M. Phenots, Total	×	×		435	14.84	92.2	3	35.99	1.23	114	Vôn	ibs/day	¥	¥	₹Z
DIOXIN															
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin		:													
(9-11-90/1)		¥					PAGE V3								

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1. POLLUTANT		2. MARK "X"	:K "X"				3. EFFLUENT				4. U	4. UNITS	5.1	5. INTAKE (optional)	
AND CAS NO.	a. Testing	a. Testing b. Believe c. Believe	c. Beleve	-13	A. MAXIMUM DAILY VALUE	b. MAXIMUM		C. LONG TERM AVRG. VALUE	AVRG. VALUE	d NO OF	(SPECIFY	19	LONG TERM AVG. VALUE	AVG. VALUE	B. NO. OF
		FILE CON		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATIO	b. MASS	. CONCENTRATION	2. MASS	ANALYSES
1V. Acrolein (107-02-8)	×		×		v detectable level	(15 ug/l) in 36 sar	Below detectable level (15 ug/l) in 36 samples from 1996-2001	10							
2V. Acrylonitrile (107-13-1)	×		×	Belo	Below detectable level (1 ug/l) in	l (1 ug/l) in 42 sam	2 samples from 1996-2001	5							;
3V. Benzene (107-43-2)	×	×		1.2	0.1		Ą	0	0	43	na/	bs/dav	AN N	đ	AN AN
4V. Bis(chloro- methyl) ether (542-88-1)	×		×		Compound not observed		in 1 sample in 1995				, ,	,			5
5V. Bromoform (75-25-2)	×	×		4			¥	•	0	4	na/		Below DL in 4	Below DL in 43 semples from 1996-2001	996-2001
6V. Carbon Tetrachloride (56-23-5)	×		×	Belo	w detectable level	(1 vo/) in 44 sam	Below detectable level (1 uo/) in 44 samples from 1996-2001								
7V. Chlorobenzene (108-90-7)	×		×	Belo	Bełow detectable level (1 ug/l) in	(1 ug/l) in 44 sarr	4 samples from 1996-2001								
BV. Chlorodi- bromomethane (124-48-1)	×		×3	1.9	0.06		NA	0	0	44	Į/бл	lbs/day	Below DL in 4	Below DL in 40 samples from 1996-2001	1996-2001
9V. Chloroethane (75-00-3)	×		ײ	1.6		VN	ŶŊ	0	•	1	l/on	łbs/đav	Below DL in 4	Below DL in 43 samples from 1996-2001	1996-2001
10V. 2-Chloro- ethylvinyl Ether (110-75-8)	×		×	Below	Below detectable level (10 ug/l) in		42 samples from 1996-2001	5			>				
11V. Chloroform (67-66-3)	×	×		5.4	0.15		ΥN	0.81	0.02	4	μαμ	lbs/dav			
12V. Dichloro - bromomethane (75-27-4)	×		×	Belo	w detectable level	(1 ug/) in 44 san	Bełow detectable level (1 ug/l) in 44 samples from 1996-2001	2						***	
13V. Dichloro- difluoromethane (75-71-8)	×		×	Belov	Below detectable level (10 ug/l) in		42 samples from 1996-2001	10							
14V. 1, 1-Dichloro- ethane (75-34-3)	×		×2	2.3			¥z	0	0	44	yon	lhs/dav	Relow Di in 2	Below Di in 43 samalas finm 1996-2001	1996-2001
15V. 1,2-Dichloro- ethane (107-06-2)	×	×		200	6,51	AN N	٩N	43.93	4	43	l) CI	the/dav	Rahw DI in '	Below DI in 35 samples from 1006-2001	006 2001
16V. 1 1-Dichloro- ethylene (75-35-4)	×		×	Belo	w detectable level	(1 ug/) in 44 san	Below detectable level (1 uo//) in 44 samples from 1996-2001					Interes			1007-000
17V. 1,2-Dichloro- propane (78-87-5)	×		×	8	Below detectable level (1 ug/l)	evel (1 ug/l) in 8 s	samples from 1995								
18V. 1,3 Dichloro- propytene (542-75-6)	×		×	60	Below detectable level (1 ug/l)		in 8 samples from 1995								
19V. Ethylbenzene (100-41-4)		×		5.8	0.21		AN	0.41	0.02	43	na/	lbs/dav	Below D1 in 3	Below Dt in 37 samples from 1996-2001	1996-2001
20V. Methyl Bromide (74-83-9)	×	×		72	1.98	AN	NA	2.54	0.07	4	na/	tbs/dav	Below DL in 2	Below DL in 40 samples from 1996-2001	1996-2001
21V. Methyl Chloride (74-87-3)	×	×		1.1	0.04	NA	NA	0.02	0	44	l/gu	tbs/day	Below DL in 4	Below DL in 43 samples from 1996-2001	1996-2001
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1 POLITITANT		2 M A	"Y" NADK "Y"				1 CECHICAT								
AND CAS NO.	. Testing	a. Believe	a. Believe b. Believe		<b>a. MAXIMUM DAILY VALUE</b>	b. MAXIMUM	AXMUM 30 DAY VALUE	C LONG TERM AVRG VALUE	AVRG VALUE	A NO OF		4. UNI 13	5. INIAKE (OP	5. IN LAKE (optional)	
(IF AVAILABLE)	required	t present	absent	(I) CONCENTRATION	(2) MASS		(2) MASS	(1) CONCENTRATION	(7) MASS	ANALYSES	CONCENTRATIO	HACE		1440C	
GC/MS FRACTION . VOLATILE COMPOUNDS (continued)	-VOLA	TILE CO	MPOUND	)S (continued)					ann an fai						VINE 13E3
22V. Methylene Chloride (75-09-2)	×	×		140	5.97	¥	¥	15.59	0.66	64	na/l	lbs/dav	Below DL in 2	Below DL in 25 samples from 1996-2001	1996-2001
23V. 1,1,2,2-Tetra- chloroethane (79-34-5)	×		×	Ber	Below detectable level (1 uo/l)	(1 uo/) in 44 sam	in 44 samples from 1996-2001								
24V. Tetrachloro- ethylene (127-18-4)	<b> </b>		×	Bar	Relow detertable level (1 un/1)	mes 14 in Man 11	in 44 samples from 1006-2001								
25V. Toluene (108-88-3)		×		37	1.37		AN	4	60	14	ų	therdau	- United	Balow Dt in 26 complex from 1006 2001	1000 2001
26V. 1,2-Trans- Dichloroethylene	>		,		Man C) louid aldebadab sucha						- 2	(pppp)			
27V. 1.1.1-Tri-	-						1007-0001 111011 50141102 07 111								
chloroethane (71-55-6)	×		×	Bek	Below detectable level (1 ug/l)		in 44 samples from 1996-2001	1							
28V. 1,1,2-Tri- Chloroethane (79-00-5)	×		×	Bek	Below detectable level (1 ug/l)		in 44 samples from 1996-2001	=							
29V. Trichloro- ethylene (79-01-6)	×	×		12			٩	0.42		4	you	the/dav	Retrue OI in 2	Balow NI in 40 samulas from 1008-2001	1006_2001
30V. Trichloro- fluoromethane								!				(an an		Hou saidure of	1007-0661
(75-69-4)	×		ײ	6.9		NA	NA	0.16		43	l/ôn	lbs/day	Below DL in 4	Below DL in 42 samples from 1996-2001	1996-2001
31V. Vinyl Chloride (75-01-4)	×		×	Bek	Below detectable level (1 ug/l)		in 44 samples from 1996-2001	11							
GC/MS FRACTION - ACID COMPOUNDS	ACID	COMPO	SOND												
1A. 2-chlarophenol (95-57-8)	×		×	· Bek	Below detectable level (5 ug/l)		in 22 samples from 1996-2001	1							
2A. 2,4-Dichyhloro- phenoi (120-83-2)	×		×	Bek	Below detectable level (5 ug/l)		in 22 samples from 1996-2001	ц	,						
3A. 2,4-Dimethyl- phenol (105-67-9)	×		×	Beic	Beiow detectable level (5 ug/l)		in 22 samples from 1996-2001	1							
4A. 4,6-Dinitro-O- Cresol (534-52-1)	×		×	3	leiow detectable le	wel (20 ug/l) in 4 s	Below detectable level (20 ug/l) in 4 samples from 1995								
5A. 2,4-Dinitro- phenol (51-28-5)	×		×	Belo	Below detectable level (20 ug/l)	(20 ug/l) in 22 san	in 22 samples from 1996-2001	5							
6A. 2-Nitrophenol (88-75-5)	×		×	Belc	Below detectable level (5 ug/l)	l (5 ug/l) in 22 sam	in 22 samples from 1996-2001	=							
7A. 4-Nitrophenol (100-02-7)	×		×	Belo	w detectable level	(20 ug/l) in 22 san	Below detectable level (20 ug/t) in 22 samples from 1996-2001	01							
8A. P-Chloro-M- Cresol (59-50-7)	×		×	Belc	Below detectable level (5 ug/l)		in 20 samples from 1996-2001	н							
9A. Pentachloro- phenol (87-86-5)	×		×	Belc	Below detectable level (2 ug/l)	l (2 ug/l) in 22 sam	in 22 samples from 1996-2001	5							
10A. Phenol (108-95-2)	×		×	Bek	Below detectable tevel (5 ug/l)		in 20 samples from 1996-2001	2							
11A. 2,4,6-Tri- chlorophenol (88-06-2)	×		×	Beic	Below detectable level (5 ug/t)	(5 ug/l) in 22 sam	in 22 samples from 1996-2001	5							
							PAGE V5								

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1. POLLUTANT AND CAS NO.	a. Testing	2. MARK "X" a. Beleve b. Bellev	ZK "X" b. Befeve	8. MAXIMUM DALY VALUE	3. EFFLUENT 8. MAXIMUM 30 DAY VALUE	C. LONG TERM AVRG. VALUE		d. NO. OF	4. UNITS (SPECIFY IF BLANK)	S	5. INTAKE (OP a. LONG TERM AVG. VALUE	5. INTAKE (optional) ERM AVG. VALUE	B. NO. OF
(IF AVAILABLE)	required	present		required present absent (1) CONCENTRATION (2) MASS	Π	(1) CONCENTRATION (2)		ANALYSES	CONCENTRATION	b. MASS	CONCENTRATION	2. MASS	ANALYSES
GC/MS FRACTION - 18. Acenaphthene /83_32.9)	- BASE/		× COMPC	OUNDS									
2B.Acenaphtylene (208-96-8)	( ×		( ×	Below detectable level (5 ug/l) in	a (5 ug/l) in 22 samples from 1996-2001								
3B. Anthracine (120-12-7)	×		×	Below detectable level (5 ug/l) in	et (5 ug/l) in 22 samples from 1996-2001	-							
4B. Benzidine (92-87-5)	×		×	Below detectable level (50 ug/l) in	l (50 ug/l) in 21 samples from 1996-2001	1							
5B. Benzo (a) Anthracene (56-55-3)	×		×	Below detectable level (5 ug/l) in	el (5 ug/l) in 22 samples from 1996-2001								
6B. Benzo (a) Pyrene (50-32-8)	×		×	Below detectable level (5 ug/l) in	at (5 ug/l) in 22 samples from 1996-2001								
7B. 3,4-Benzo- fluoranthene (205-99-2)	×		×	Below detectable level (5 ug/l) in	el (5 ug/l) in 22 samples from 1996-2001	-							
8B. Benzo (ghi) Perykene (191-24-2)	×		×	Below detectable level (5 ua/) in	el (5 ua/) in 22 samples from 1996-2001								
9B. Benzo (k) Fluoranthene (207-08-9)	×		×	Below detectable level (5 ug/l) in	al (5 ug/l) in 22 samples from 1996-2001				-				
10B. Bis (2 Chloro- ethaxy) Methane ((111-91-1)	. ×		×	Below detectable level (5 ug/l) in		2							
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)	×		×	Below detectable level (5 ug/l) in									
12B. Bis (2-Chloroiso- propyl) Ether (102-60- 1)	×		×	Below detectable level (5 ug/l) in									
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)	×		×	Below detectable level (5 ug/l) in									
148. 4-Bromo- phenyl Phenyl Ether (101- 55-3)	×		×	Below detectable level (5 ug/l) in	el (5 ug/l) in 22 samples from 1996-2001								
15B. Butyl Benzyl Phthalate (85-68-7)	×		×	Below detectable level (5 ug/l) in	əi (5 ug/l) in 22 samples from 1996-2001								
16B. 2- Chloronaphthalene (91-58-7)	×		×	Below detectable <del>le</del> vel (5 ug/l) in	el (5 ug/l) in 22 samples from 1996-2001	5							
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	×		×	Below detectable level (5 ug/l) in	el (5 ug/l) in 22 samples from 1996-2001	1							
18B. Chrysene (218-01-9)	×		×	Below detectable level (5 ug/l) in	ei (5 ug/i) in 21 samples from 1996-2001	5							
19B. Dibenzo (a,h) Anthracene (53-70-3)	×		×	Bebow detectable levef (5 ug/l) in									
20B. 1,2-Dichloro- benzene (95-50-1)	×		×	Below detectable level (5 ug/l) in	el (5 ug/l) in 22 samples from 1996-2001								
21B. 1,3-Dichloro- benzene (541-73-1)	×		×	Below detectable level (5 ug/l) in	el (5 ug/l) in 21 samples from 1996-2001	1							
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AND CAS NO.	. Testind a	a. Befeve b. Believe		. MAXIMUM DAILY VALUE		MAXIMIN 20 DAV VALUE	A LONG TERM AVOG VALUE		A NO OF	4. UNITS		9. E	5. INTAKE (optional)	
(IF AVAILABLE)	required	Dresent	bsent (1) CONCENTRATIO	ON (2) MASS	(1) CONCENTRATION	T	CIT CONCENTER TON	AVING. VALUE	ANALYSES	CONCENTERTON - MA	9	a. LONG TERM AVG. VALUE	AVG. VALUE	B. NO. OF
GCIMS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)	BASE/N	EUTRAL (	COMPOUNDS (cont					(r)	24711.054		<u>.</u>	CONCENTRALION	2. MASS	ANALTSES
22B. 1,4-Dichloro- benzene (106-46-7)	×		X	Below detectable level (5 ug/l)		in 22 samples from 1996-2001	=							
23B. 3,3'-Dichloro- Benzidine (91-94-1)	×		H X	Below detectable level (5 ug/l)		in 22 samples from 1996-2001	=							
24B. Diethyl Phthalate (84-66-2)	×		X <sup>2</sup> 23			A Z	0.82		2	ļ		Balow DI //5 in/01 in 10 camples from 1006.2001	l in 10 samulas (s	m 1006 2001
25B. Dimethyl Phthalate (131-11-3)	×		×	Below detectable level (5 µa/l)		in 22 samoles from 1996-2001	i i				1			
26B. Di-N-Butyl Phthalate (84-74-2)	×			Below detectable level (5 uod))	el (5 uo/l) in 22 sam	in 22 samples from 1996-2001								
27B. 2,4-Dinitro- toluene (121-14-2)	×	$\left  \right $		Betow detectable level (5 ug/l)	el (5 ug/l) in 22 sam	in 22 samples from 1996-2001	5							
28B. 2,6-Dinitro- toluene (121-14-3)	×		×	Below detectable level (5 ug/l)	el (5 ug/l) in 22 sam	in 22 samples from 1996-2001								
29B. Di-N-Octyl Phthalate (117-84-0)	×		B	Below detectable level (5 ug/l)	el (5 ug/l) in 22 sam	in 22 samples from 1996-2001	F							
30B. 1,2-Diphenyl- hydrazine (as Axo- benzene) (122-66-7)	×		B	Below detectable level (5 ug/l)	el (5 ug/l) in 19 sam,	in 19 samples from 1996-2001	5							
31B. Fluoranthene (206-44-0)	×		X B	Below detectable level (5 ug/l)	el (5 ug/l) in 22 sam,	in 22 samples from 1996-2001								
32B. Fluorene (86-73-7)	×		a ×	Below detectable level (5 ug/l)	al (5 4g/l) in 22 sam	in 22 samples from 1996-2001	5							
33B. Hexachlorbenzene (118-74-1)	×		×	Below detectable level (5 ug/l)		in 22 samples from 1996-2001	F				-			
34B. Hexachloro- butadiene (87-68-3)	×		×	Below detectable level (5 ug/l)	el (5 ug/l) in 18 sam	in 18 samples from 1996-2001	5							
35B. Hexachlorocyclo- pentadiene (77-47-4)	×		8 X	Below detectable level (5 ug/l)	əl (5 ug/l) in 21 sam	in 21 samples from 1996-2001								
36B. Hexachloro- ethane (67-72-1)	×		X	Below detectable tevel (5 ug/l)	el (5 ug/l) in 22 sam	in 22 samples from 1996-2001	Ŧ							
37B. Indeno (1,2,3-cd) Pyrene (193-39- 5)	×		B	Below detectable level (5 ug/l)	si (5 ug/l) in 22 sam)	in 22 samples from 1996-2001								
38B. Isophorone (78-59-1)	×		X B	Below detectable level (5 ug/)		in 20 samples from 1996-2001	E							
39B. Naphthalene (91-20-3)	×		B ×	Below detectable level (5 ug/l)	al (5 ug/l) in 22 sam	in 22 samples from 1996-2001								
40B. Nitrobenzene (98-95-3)	×		8 ×	Below detectable level (5 ug/l)	el (5 ug/l) in 22 sam	in 22 samples from 1996-2001								
415. N-Nitro- sodimethylamine (62- 75-9)	×		B	Below detectable level (10 ug/l)		in 13 samples from 1996-2001	E							
42B. N-Nitrosodi- N- Propytamine (621-64-7)	×		×	Below detectable level (5 ug/l)	al (5 ug/l) in 21 sam)	ples from 1996-200	<b></b>							-
						PAGE V7					1			

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1. POLLUTANT		2. MARK "X"	X.			3. EFFLUENT				4. U	4. UNITS	1 5.11	5. INTAKE (optional	
AND CAS NO.	. Testing a.	a. Believe b. Believe	_	DAIL	b. MAXIMUM 30 DAY VALUE	0 DAY VALUE	C. LONG TERM AVRG. VALUE	VRG. VALUE	d. NO. OF	(SPECIFY	(SPECIFY IF BLANK)	a LONG TERM AVG. VALUE	AVG. VALUE	B. NO. OF
(IF AVAILABLE)	required	present ab	absent [1) C	(1) CONCENTRATION (2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATION	b. MASS	. CONCENTRATION	2. MASS	ANALYSES
GCIMS FRACTION · BASEINEUTRAL COMPOUNDS (continued)	BASEN	EUTRAL C	COMPOU	NDS (continued)										
438. N-Nitro- sodiphenylamine	>			-1 Mars 2) faired of determined to the										
44B. Phenanthrene						1007-0001 IIIO I Saldilipe 17	_							
(85-01-8)	×		×	Below detectable level (5 ug/l) in		22 samples from 1996-2001	1						<b>.</b>	
45B. Pyrene (129-00-0)	×		×	Below detectable level (5 ug/l) in	H (5 ug/l) in 22 samp	22 samples from 1996-2001								
46B. 1,2,4-Tri-														
chiorobenzene (120-82-1)	×		×	Below detectable level (5 ug/l) in		22 samples from 1996-2001								
GC/MS FRACTION	_ PESTICIDES	IDES												
1P. Aldrin (309-00-2)	×		×	Below detectable lavel (1 ug/	tavel (1 ug/l) in 1 san	1) in 1 samples from 1996								
2P. a-BHC (319-84-6)	×		×	Below detectable I	Below detectable level (1 ug/l) in 1 samples from 1996	nples from 1996								
3P. b-BHC (319-84-7)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 sar	() in 1 samples from 1996								
4P. g-BHC (58-89-9)	×		×	Below detectable I	Below detectable level (1 ug/) in 1 samples from 1996	noles from 1996								
5P. d-BHC (319-86-8)	×		×	Below detectable I	Below detectable level (1 ug/l) in 1 samples from 1996	nples from 1996								
6P. Chlordane (57-74-9)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	1) in 1 samples from 1996								
7P. 4,4-DDT (50-29-3)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	() in 1 samples from 1996								
8P. 4,4'DDE (72-55-9)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	() in 1 samples from 1996								
9P. 4,4'-DDD (72-54-8)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	1) in 1 samples from 1996								
10P. Dieldrin (60-57-1)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	l) in 1 samples from 1996								
11P. a-Endosulfan (115-29-7)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	1) in 1 samples from 1996								
12P. b-Endosulfan (115-29-7)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	() in 1 samples from 1996								
13P. Endosulfan Sulfate (1031-07-8)	×		×	Below detectable level (1 ug/	level (1 ug/l) in 1 san	1) in 1 samples from 1996								
14P. Endrin (72-20-8)	×		×	Below detectable level (1 ug/		) in 1 samples from 1996		,						
15P. Endrin Aldehyde														
(/421-93-4) 16P. Heptachlor	×	╀	×	Below detectable level (1 ug/	level (1 ug/l) in 1 sar	I) in 1 samples from 1996								-
(76-44-8)	×	-		Below detectable level (1 ug/	level (1 ug/l) in 1 san	) in 1 samples from 1996								
						PAGE VB								

CONTINUED FROM PAGE V-8

	4. UNIS	I AVRG. VALUE	Т																					
3. EFFLUENT	h MAYINI IN 30 DAY MALIN	STATING SUDAT VALUE	(1) CONCENTRATION (2) MASS				Below detectable level (1 uo/) in 1 samples from 1996		vel (1 ua/l) in 1 samples from 1996		vel (1 vo/) in 1 samples from 1996		vel (1 ua/1) in 1 samples from 1996		Below detectable level (1 ug/l) in 1 samples from 1996		Below detectable level (1 ua/) in 1 samples from 1996		Below detectable level (1 ug/l) in 1 samples from 1996		Below detectable level (1 ug/l) in 1 samples from 1996		Below detectable level (1 ug/l) in 1 samples from 1996	
	a, MAXIMUM DAILY VALUE	T	(Z) MASS [(				Below detectable ler		Below detectable level (1 u		Below detectable level (1 u		Below detectable level (1 u		Below detectable lev		Below detectable lev		Below detectable lev		Below detectable lev		Below detectable lev	
	ľ		(1) CONCENTRATION	-																			_	
2. MARK "X"	b. Believe		BOSCIN	continued			×		×		×		×		×		×		×		×		×	
2. MA	Testing a. Believe b. Believe			ICIDES (c																				
	. Testin		naunha.	N - PEST			×		×		×		×		×		×		×		×		×	
1. POLLUTANT	AND CAS NO.	UF AVAILARI E)		GC/MS FRACTION - PESTICIDES (continued)	17P. Heptachlor	Epoxide	(1024-57-3)	18P. PCB-1242	(53469-21-9)	19P. PCB-1254	(11097-69-1)	20P. PCB-1221	(11104-28-2)	21P. PCB-1232	(11141-16-5)	22P. PCB-1248	(12672-29-6)	23P. PCB-1260	(11096-82-5)	24P. PCB-1016	(12674-11-2)	25P. Toxaphene	(8001-35-2)	

Footnotes to Form 2C, Table V

1 Tests have shown that on average, nitrites account for about half of this value. Given that about 80% of the cation distribution in the discharge is sodium, sodium nitrite is a component of the discharge.

2 Although detected in a small percentage of samples taken, knowledge of the chemicals and processes used at the facility support the belief that this chemical is not a normal constituent of the discharge.

#### Attachment A

### List Of Compounds From Table 2C-3 That Could Be Present In Discharge 20100

The following compounds are listed in table 2C3 and are used at the 3M Cottage Grove site. Therefore, they could possibly find their way into the plant's wastewater. And if not removed by the wastewater treatment facility, could be contained in the treated wastewater discharge.

Acetaldehyde Allyl alcohol Allyl chloride Amyl acetate Butyl acetate Cyclohexane Diethyl amine Dimethyl amine Epichlorohydrin Ethylene diamine Formaldehyde Methyl methacrylate Phosgene Propylene oxide Resorcinol Styrene Triethylamine Vanadium Vinvl Acetate Xylene

Of the compounds listed above, formaldehyde, vinyl acetate and xylene are routinely tested for either as a priority pollutant or as an additional compound. The results of that testing at outfall 20100 were as follows:

Compound	Total Number of Samples	Number of Samples Above Detection Limit	Maximum Concentration	Average Concentration
Formaldehyde	36	13	2100 ug/l	371 ug/l
Vinyl acetate	20	1	42 ug/l	NA
Xylene	39	15	81 ug/l	24.87 ug/l

All of the materials in the list above are substances or components of substances that are currently used at the 3M Cottage Grove Center.

#### Attachment B

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# Other Compounds Detected During Testing January 1996 – October 2001 Outfall 20100

Compound	Max Conc	Avg conc	# of	# of	Believed	Believed
	(ug/l) 85	(ug/l)	Samples	Detects	Present	Absent
1,2-dibromoethane	85	48	10	3	X	
Acetone	3000	753	21	19	Х	
Carbon disulfide	7.9	NA	20	1		X
Cobalt	47	23.6	20	5	X	· · · · · · · · · · · · · · · · · · ·
Ethanol	120	NA	1	1	X	
Formaldehyde	2100	371	36	13	Х	
Iodomethane	3.7	NA	10	1		X*
Methanol	3700	2358	44	10	X	
Methyl ethyl ketone	1400	313	20	6	Х	
Methyl isobutyl ketone	1.7	NA	19	1	X	
Perfluorooctanoic acid	267	216	3	3	X	
Perfluoroheptanoic acid	19	14	3	3	Х	
Perfluorohexanoic acid	32	29	3	3	X	
Perfluorobutyric acid	643	346	3	3	X	
Perfluorooctane sulfonate	384	262	3	3	X	
Perfluoroheptane sufonate	12	NA	3	1	Х	
Perfluorohexane sulfonate	12	11	3	3	X	
Perfluorobutane sulfonate	138	64	3	3	x	
Tetrahydrofuran	220	200	2	2	X ·	· · · · · · ·
Vinyl acetate	42	NA	20	1		X
Xylenes	81	24.87	39	15	X	

\* Although detected in a small percentage of samples taken, knowledge of the chemicals and processes used at the facility support the belief that this chemical is not a normal constituent of the discharge.

#### Attachment C

## Tentatively Identified Compounds (TIC) Outfall 20100 August 2000 – August 2001

	Approximate		# of	# of
TIC	Concentration (ug/l)	Sample Type	Samples	Detects
amine - type unknown	88	24-hr Composite	5	1
1-(2-butoxyethoxy) ethanol	61	24-hr Composite	5	1
1,4-dioxane	15	Grab	5	2
2,4,4-trimethyl-1-pentene	7	Grab	5	1
1,1,2-trichloro-1-propene	38	24-hr Composite	5	1
2-(2-butoxyethoxy) ethanol	1300	24-hr Composite	5	1
2-chloroethyl methyl ether	5	Grab	5	2
2-fluoro-6-nitrophenol	76	24-hr Composite	5	2
2-methyl-2-propanol	240	Grab	5	1
2-propanol, 2-methyl	50	Grab	5	5
alpha-methylstyrene	108	24-hr Composite	5	1
cycloalkene - type unknown	274	24-hr Composite	5	1
cyclopentane	75	24-hr Composite	5	1
diisopropyl ether	9	Grab	5	3
dimethyl ether (CAS#115-10-6)	4	Grab	5	1
1,1'-oxybis ethane	14	24-hr Composite	5	2
2-(2-butoxyethocy) ethanol *	1125	24-hr Composite	5	2
1-(2-butoxyethocy) ethanol *	319	24-hr Composite	5	1
ethanol CAS#112-34-5	56	24-hr Composite	5	1
ethanol CAS#124-17-4	925	24-hr Composite	5	1
ethanol CAS#2315-61-9	712	24-hr Composite	5	2
n-butanol	130	Grab	5	2
ketone - type unknown	143	24-hr Composite	5	1
1-chloro-octadecane	4	Grab	5	1
2-fluoro-4-nitro phenol	30	24-hr Composite	5	1
tetrahydro-1,1 thiophene	86	24-hr Composite	5	1

\* Other alkylphenol ethoxylates of varying molecular weights were detected at varying concentrations, but all less than 50 ug/l. These compounds were analyzed using HPLC/MS with methods that were developed by 3M and validated according to FDA Guidance for Industry Document-Bioanalytical Method Validation.