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FOR OFFICIAL USE ONLY COMMENTS COMMENTS INSTALLATION'S EPA I.D. NUMBER APPROVED (yr., mo., & day) PLANTING Information requested herein is required by la (Section 3010 of the Resource Conservation at Recovery Act).
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I. NAME OF INSTALLATION
II. INSTALLATION MAILING ADDRESS
STREET OR P.O. BOX
367410 Crosswinds Dr. N. SuiteD 1
CITY OR TOWN ST. ZIP CODE
III. LOCATION OF INSTALLATION STREET OR ROUTE NUMBER
5 B A R T O W M U N I C I P A L A I R P O R T
CITY OR TOWN ST. ZIP CODE
6 B a r t o w
IV. INSTALLATION CONTACT NAME AND TITLE (last, first, & job title) PHONE NO. (area code & no.)
2 Mark A. Worley 813-384-6740
V. OWNERSHIP
A NAME OF INSTALLATION'S LEGAL OWNER
B. TYPE OF OWNERSHIP (enter the appropriate letter into box) VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es)) A. GENERATION B. TYPE OF OWNERSHIP box (es) O (enter the appropriate letter into box) B. TRANSPORTATION (complete Item VII)
F = FEDERAL M = NON-FEDERAL M = NON-FEDERAL M
NOW TENENTS IN THE STORE DISPOSE D. UNDERGROUND INJECTION
VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es))
C. TREAT/STORE/DISPOSE D. UNDERGROUND INJECTION
VII. MODE OF TRANSPORTATION (transporters only – enter "X" in the appropriate box(es)) A. AIR B. RAIL C. HIGHWAY D. WATER S. OTHER (specify): VIII. FIRST OR SUBSEQUENT NOTIFICATION
VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es)) Later the second of the se
VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es)) \[\begin{align*} \begin{align*} \text{off} \text{D. WATER} & \text{off} \text{c. OTHER (specify):} \\ \text{VIII. FIRST OR SUBSEQUENT NOTIFICATION} \end{align*} Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification.

Please go to the reverse of this form and provide the requested information.

If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

C. INSTALLATION'S EPA I.D. I:

C. INSTALLATION'S EPA I.D. I:

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form E700-12 (8-80)

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IX. DESCRIPTION OF HAZARD	OUS WASTES (contin	ued from front)		The second second second	CANADA MARKET	
A. HAZARDOUS WASTES FROM NO waste from non-specific sources yo	N-SPECIFIC SOURCES ur installation handles.	. Enter the four—di se additional sheets	git number from 40 C if necessary.	FR Part 261.31 for ea	ch listed hazardous	
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B. HAZARDOUS WASTES FROM SPE specific industrial sources your insta	ECIFIC SOURCES. Enter llation handles. Use additional management of the second	the four—digit num tional sheets if neces	nber from 40 CFR Par ssary.	t 261.32 for each liste	d hazardous waste fr	om >
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stance your installation handles white						
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D. LISTED INFECTIOUS WASTES. E hospitals, medical and research labor	inter the four—digit numbratories your installation	er from 40 CFR Pa handles. Use additio	rt 261.34 for each list onal sheets if necessary	ed hazardous waste fr	om hospitals, veterin	ary
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E. CHARACTERISTICS OF NON-LIS hazardous wastes your installation h				ling to the characteris	tics of non-listed	·
1. IGNITABLE (D001)	2. CORRC (D002)	SIVE	3. REACTIVE		14. тохіс 100)	
X. CERTIFICATION			AND MANAGEMENT	Abrilland	"""""""""""	-
I certify under penalty of law is attached documents, and that be I believe that the submitted infomitting false information, including	ased on my inquiry of ormation is true, accur	f those individual ate, and complet	s immediately resp e. I am aware that	onsible for obtaini	ng the informatio.	n. n
SIGNATURE	N.	AME & OFFICIAL	TITLE (type or print)		DATE SIGNED	
		Sidney A. L	ewis, Preside	ent	1/13/83	

I.D. -- FOR OFFICIAL USE ONLY

EPA Form 8700-12 (6-80) REVERSE

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IX. DESCRIPTION OF H						
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E. CHARACTERISTICS OF N hazardous wastes your insta	ON-LISTED HAZAF	RDOUS WASTES. Mark 40 CFR Parts 261.21 — 2	"X" in the boxes corres 261.24.)	ponding to the charact	eristics of non-listed	
1. IGNITABLI]2. CORROSIVE	1003)	TIVE	4. TOXIC (D000)	
X. CERTIFICATION						→
I certify under penalty c attached documents, and I believe that the submits mitting false information,	that based on my led information is t	inquiry of those indi true, accurate, and co	ividuals îmmediately omplete. I am aware	responsible for obta	aining the information ficant penalties for su	n, n
BIGNATURE		NAME & OFF	ICIAL TITLE (type or p	rint)	DATE SIGNED	
/ /	//	Sidney	A lawie Proc	ident	June 28, 19	82

EPA Form 8700-12 (6-80) REVERSE

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FOENERAL WEFA	Consolidated Permits I sed the "General Instructions	Program - All Carlos Andrews	F F L D 9 8 0 7	29610
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T. EPA LO. NUMBER			If a preprinted label has a it in the designated apace.	Review the Inform-
HIL PACILITY HAME			ation carefully; If any of a through it and enter the appropriate fill—in area be	correct data in the
ACILITY			the preprinted data is absorbed to the label space in	nt (the area to the
MAILING ADDRESS PLEA	SE PLĄCĘ LĄBEL IŅ	THIS SPACE	that should appear), place proper fill—in area(s) beig	provide it in the
			complete and correct, you items I, III, V, and VI	need not complete
FACILITY			must be completed regard items if no label has been	Hass). Complete all
LOCATION			the instructions for determines and for the legal a	iled item descrip-
			which this data is collected.	
II. POLLUTANT CHARACTERISTICS		SERVICE BOOK SERVICE		在一个大量大学。
INSTRUCTIONS: Complete A through J to det				
questions, you must submit this form and the su If the supplemental form is attached. If you answ	pplementel form listed in the ver "no" to each question, v	e parenthesis following the que you need not submit any of the	rtion, Mark "X" in the box in e forms. You may answer "no	the third column ? " If your activity
is excluded from permit requirements; see Section	C of the instructions. See als	o, Section D of the instructions	for definitions of bold—faced	tems.
SPECIPIC QUESTIONS	MARK 'X' YES NO ATTACHED	SPECIFIC Q	UESTIONS	WARK X
A. Is this facility a publicly owned treatmen	t iworks	B. Does or will this facility	leither existing or proposed)	
which results in a discharge to waters of the (FORM 2A)	16 U.S.?	aquatic animal productio	n facility which results in a	X
C. is this a facility which currently results in di	scherges 10 17 10	D. Is this a proposed facility		89 -80 -AXE1 -
to waters of the U.S. other than those desc A or B above? (FORM 2C)	ribed in X	in A or B above) which waters of the U.S.? (FOR)	will result in a discharge to M 2D)	X 20 20 27
E. Does or will this facility treat, store, or di	spose of	F. Do you or will you inject municipal affluent below	t at this facility industrial or the lowermost stratum con-	
hazardous wastes? (FORM 3)	X		rter mile of the well bore,	X
G. Do you or will you inject at this facility any p water or other fluids which are brought to the			at this facility fluids for spe-	31 82 33
in connection with conventional oil or natural duction, inject fluids used for enhanced reco	ges pro-		ning of sulfur by the Frasch of minerals, in situ combus-	1
oil or natural gas, or inject fluids for storage	of liquid X	tion of fossil fuel, or rec (FORM 4)	overy of geothermal energy?	X
hydrocarbons? (FORM 4) 1. Is this facility a proposed stationary source		J. Is this facility a propose		97 24 39
one of the 28 industrial categories listed in structions and which will potentially emit 1	00 tons	instructions and which w	strial categories listed in the ill potentially emit 250 tons	1
per year of any air pollutant regulated un Clean Air Act and may affect or be locate		Air Act and may effect o	int regulated under the Clean r be located in an attainment	X
atteinment area? (FORM 5) III. NAME OF FACILITY	40 41 42	area? (FORM 5)	Supplement of the Control of the Con	43 44 45
INTERNATIONAL	SOLVENT	RECOVERY	~	
IV. FACILITY CONTACT	Manager Committee of the Committee of th		A THE PERSON OF THE PARTY.	65
	E (last, first, & title)	B.	PHONE (area code & no.)	
WORLEY MARK A	/ P OPERAT	IONS 81	3 3 8 4 6 7 4 (
V. FACILITY MAILING ADDRESS		41 44	4) 49 - 51 62 - 51	
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VI. FACILITY LOCATION A. STREET, ROUTE NO. OR C	THER SPECIFIC INCHASE	F.P.		
B B A R T O W MUNICIPA	A L A I R P O R			
TEDARIOW MUNICIPA	· AIRPUR	41		
B. COUNTY NAME		Harris Land		
POLK	-			
C. CITY OR TOW	N 12 2	D.STATE E. CIP COD	F. COUNTY CODE	
BARTOW		F L 3 3 8 3	0	

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			appropriate fill—in area be the preprinted data is abse	nt fahe area to the
WAILING ADDRESS	EASE PLACE LABEL IN	THIS SPACE	left of the label space in that should appear), pleas proper fill—in area(s) belo	e provide it in the
111111111111			complete and correct, you terms I, III, V, and VI (need not complete
PACILITY			must be completed regard items if no label has been	flass). Complete all provided, Refer to
TOCALION			the instructions for tiets tions and for the tags! as which this data is collected.	
H. POLLUTANT CHARACTERISTICS				
MINSTRUCTIONS: Complete A through J to	determine whether you need to	submit any permit applicati	on forms to the EPA. If you are	war "yes" to any
questions, you must submit this form and the the supplemental form is attached. If you	enswer "no" to sech guestion, y	rou need not submit any of th	ese forms. You may answer "no	" If your activity
as excluded from permit requirements; see Sec	L MARK SI	I		MARK 'X'
SPECIFIC QUESTIONS	TES MP ATTACHES		QUESTIONS (Seither existing or proposed)	YES WO ATTACHE
which results in a discharge to waters of FORM 2A)	of the U.S.?	finclude a soncentrated	animal feeding operation or ion facility which results in a	X
C. is this a facility which currently results in	discharges		ty lother than those described	79 20 AT
A or B shove? (FORM 2C)	described in X	waters of the U.S.? (FO		A 3 37
E. Does or will this facility treat, store, or hazardous wastes? (FORM 3)	X	municipal affluent belo	on at this facility industrial or withe lowermost stratum con- senter mile of the well bore, drinking water? (FORM 4)	X 32 33
S. Do you or will you inject at this facility an water or other fluids which are brought to	the surface	H. Do you or will you inje	ct at this facility fluids for spe- nining of suffur by the Frasch	
in connection with conventional pill or nati	recovery of Y	process, solution minin	g of minerals, in situ combus- scovery of geothermal energy?	X
 əil or natural gas, or inject fluids for stora hydrocarbons? (FORM 4) is this facility a proposed stationary sour 	781 1983 1278 127	(FORM 4) Listhis facility a propor	ed stationary source which is	27 24 29
one of the 28 industrial categories listed as a structions and which will potentially am	d in the in-	NOT one of the 28 Inc. instructions and which	Justrial categories listed in the will potentially emit 250 tons	x
per year of any air pollutant regulated Clean Air Act and may effect or be to	cated in an	Air Act and may affect gree? (FORM 5)	tant regulated under the Clean or be located in an attainment	45 44 45
STUDING STATE OF FACILITY	# 1 T	CAP (FORM 5)		
INTERNATION	AL SOLVENT	RECOVERY	<u>'</u>	, i
EV. FACILITY CONTACT				
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7 2 8 9 9 Chemical (Recycling) Prepara	38 14 - 39	(specify)	·
E. THIRD	<u></u>	(specify)	
7	7	(spectly)	
VIII. OPERATOR INFORMATION		Control of the Control of the Asia	
	NAME		B. is the name listed in Item VIII-A also the
BINTERNATIONAL SOLVE	NT RECOVE	. , , , , , , , , , , , , , , , , , , ,	owner?
35 16	N I K L C O V L		YES DNO
C. STATUS OF OPERATOR (Enter the appropriate letter in	to the answer box; if "Other"	specify.)	NE farea code & no.)
F = FEDERAL M = PUBLIC (other than federal or state) S = STATE O = OTHER (specify) P = PRIVATE	p (specify)	8 1 3	3 8 4 6 7 4 0
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X. EXISTING ENVIRONMENTAL PERMITS			
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B. UIC (Underground Injection of Fluids)	E. OTHER (specify)	ter Length Conservation	
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15 16 17 18 - 80 19 16 17 18 C. RCRA (Hazardous Wastes)	E. OTHER (specify)	80	
9 R 9		(specify)	
13 35 17 18 20 12 16 17 18		30	
XI. MAP			
Attach to this application a topographic map of the area of the outline of the facility, the location of each of its exi- treatment, storage, or disposal facilities, and each well w water bodies in the map area. See instructions for precise r	sting and proposed intake here it injects fluids under	and discharge structures, each	of its hazardous waste 🧠 🦼
XII. NATURE OF BUSINESS (provide a brief description)			
International Solvent Recovery is in	the business of re	cycling hazardous was	stes from
industrial sources. Liquid wastes wi	ll be recycled thr	ough either a steam	injection
(DCI) unit, a thin film evaporator, a	nd/or fractionatio	n columns. Waste ma	terial to be
recycled will be stored in 55 gallon	drums and 6,000 ga	llon above ground st	eel tanks.
Reclaimed materials will be sold back	to generators or	to other industries.	
XIII. CERTIFICATION (see Instructions)			
I certify under penalty of law that I have personally examattachments and that, based on my inquiry of those personal policetion, I believe that the information is true, accurately a finemation, including the possibility of fine and improve the possibility of the second control of the	ersons immediately <mark>res</mark> pon ite and complete. I am aw	sible for obtaining the inform	etion contained in the 🦈
A. NAME & OFFICIAL TITLE (Type or print)	B. SIGNATURE		C. DATE SIGNED
Sidney A Lewis President	1/////		December 13, 1982
Sidney A. Lewis, President COMMENTS FOR OFFICIAL USE ONLY			
			· · · · · · · · · · · · · · · · · · ·
<u>C</u>			

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A. PIDET		1		ECOND	1
2 8 9 9 Chemical (Recycling) Preparations	7	ecify)		
* THIRD			B. V	POURTH	
11 - 10			ecty))		
MH. OPERATOR INFORMATION					
	A. NAME	, , , , , , , , , , , , , , , , , , , 		-1-1-1-1-	B. to the name listed I term VIII-A also to
3 INTERNATIONAL S	OLVENT F	ECOVER	Y		PYES WHO
C. STATUS OF OPERATOR (Enter the appre		r box; if "Other", ape	ictfy.)	D. PHONE (61	es code & no.)
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LEXISTING ENVIRONMENTAL PERMITS					
A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions	From Proposed Source	23 /		
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C. MCRA (Hazardous Wastes)	E. OTHER	(specify)			
8 R	9	, , , , , , , , , , , , , , , , , , ,	(specify)		
XI, MAF					
Attach to this application a topographic map the outline of the facility, the location of ea					
sreatment, storage, or disposal facilities, and water bodies in the map area. See instructions	each well where it inject	ts fluids undergrou			
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					remain (1994) er mit grafte (1995) fil 19
International Solvent Recovery	is in the busine	ss of recycl	ing hazardo	us wastes f	rom
industrial sources. Liquid was	tes will be recy	cled through	either a s	team inject	ion
(DCI) unit, a thin film evapora	itor, and/or frac	tionation co	lumns. Was	te material	to be
recycled will be stored in 55 g	gallon drums and	5,000 to 10,0	000 gallon	above groun	d tanks.
Reclaimed materials will be so	d back to genera	tors or to o	ther indust	ries.	
MEL BERTIFICATION Into Appropriated					
gentily with penalty of any that I have per	conally examined and a	n fernilier with the	Information su	bonitoed to this a	plication and all
entechning and that being on my inquiry application. I believe that the information is believe that the information is being the possibility of	arve, accurate and com-	dete. I am enere	that there are a	grificent penalti	n for automitting
A. NAME & OFFICIAL TITLE (Type or print)	B. SIGNATE			C. DA	TE SIGNED
Sidney A. Lewis, President				Jun	e 28, 1982
States At Senis, Frestation					(1) (1) 数据的主义化
				K. C. C.	

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ince	an '	"X	" ir	the appropriate box tion. If this is your fiber in Item I above.	in A pi	B bel	ow (ma and y	rk o	ne bi	ox o	17/y/ 10 W	to You	ind r fa	icate cility	whe	the PA	r th	his is the first in Number, or	pplicat If this is	ion you	are ed a	submi pplicat	tting ion, i	for y	Your	tacili r faci	ty Di lity'	3
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Π.	PR	OCESSES.	(continued)

C. BPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "TU4"). FOR EACH PROCESS ENTERED HERE
- INCLUDE DESIGN CAPACITY.

- IV. DESCRIPTION OF HAZARDOUS WASTES

 A EPA HAZARDOUS WASTE NUMBER Enter the four—digit number from 40 CFR, Subpert D for each listed hazardous waste you will handle. If you handle hazardous westes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes,
- 8. ESTIMATED ANNUAL QUANTITY For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste/s/ that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE CODE CODE METRIC UNIT OF MEASURE

If facility records use any other unit of measure for quentity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code/s/ from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: {1} Enter the first three as described above; {2} Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code/s/.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

MOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER -- Hazardous Wastes that can be described by more than one EPA Hiszardous Waste Number shall be described on the form as follows:

- 1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- -. . 2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the weste. In column D(2) on that line enter "included with above" and make no other entries on that line.
 - 3. Report step 2 for each other EPA Hazardous Weste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds ser year of chrome shavings from leather tenning and finishing operation, in addition, the facility will treat and dispose of three non-listed westes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each weste. The other waste is corrosive and ignitable and there will be an estimated 880 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a tandfill.

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PA Form 3510-3 (6-80)

PAGE 2 OF 5

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NOTE: Photocopy this page before completing if you have more than 26 wastes to list. FOR OFFICIAL USE ONLY EPA I.D. NUMBER (enter from page 1) · W W DUP 10 DUP IV. DESCRIPTION OF HAZARDOUS WASTES (continued) A. EPA HAZARD. WASTENO C. UNIT OF MEA-SURE (enter D. PROCESSES B. ESTIMATED ANNUAL QUANTITY OF WASTE 1. PROCESS CODES (enter) 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) (enter code) code 36 20 87 89 A7 .-80 82 F|0|0|1 P 0 1 | 5 0 2 1 1,093,529 2 P F | 0 | 0 | 2 0 1 | S 0 2 1,951,560 3 F 0 0 3 P 1,040,832 0 1 | S 0 2 F 0 0 5 442,354 P S 0 1 S 0 2 5 K|0|8|6 P 0 1 14,387 S 6 U|0|0|2 P S 0 1 S 0 2 11,394 7 U|0|1|9 P S 0 1 11,394 8 U 2 1 P 22,850 S 0 1 9 P U|0|4|4 S 0 1 15,220 10 U|0|5|6 P 11,182 S 0 1 11 U 0 5 7 P S 0 1 13,639 12 U 0 7 18,128 P S 0 1 8 13 1 1 2 12,948 P S 0 1 14 5 9 P S 0 2 1 11,596 S 0 1 15 1 6 1 11,538 P S 0 1 16 2 1 0 P U 23,335 S 0 1 S 0 2 17 2 2 P 0 12,517 S 0 1 18 U 2 2 6 Р S 0 2 18,933 S 0 1 19 Ul 21 2 7 P 18,933 S 0 1 20 2 2 P S 0 2 8 21,033 S 0 1 21 2 P 1 S 0 1 S 0 2 1 23,436 22 p 2 3 9 S 0 1 S 0 2 12,488 23 Ol p S 0 2 S 0 1 884,707 24 P 585,000 S 0 1 25 26 20 27 EPA Form 3510-3 (6-80) **CONTINUE ON REVERSE** Continued from page 2. NOTE: Photocopy this page before completing if you have more than 26 westes to list. Form Approved OMB No. 158-S80004 POR OFFICIAL USE ONLY EPA I.D. NUMBER (enter from page 1) W W DUP DUP IV. DESCRIPTION OF HAZARDOUS WASTES (continued) C. UNIT D. PROCESSES A. EPA HAZARD B. ESTIMATED ANNUAL QUANTITY OF WASTE SURE (enter code) NON NO WASTENO 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) 1. PROCESS CODES (enter) (enter code) 1 F 0 0 1 P 1,093,529 0 1 5 0 2 2 F|0|0|2 1,951,560 P S 0 1 S 0 2 3 F 10 10 1 P 3 1,040,832 S 0 1 | S 0 2 4 F 0 0 5 P 442,354 S 0 1 S 0 2 5 K 0 8 6 P 14,387 S 0 1 6 U 10 10 12 11, 394 P S 0 1 S 0 2 .7 U 0 1 9 P 11, 394 S 0 1 8 U 2 P 1 1 22,850 S 0 1 9 0 4 P 4 15,220 S 0 1 10 U 0 5 6 11,182 P S 0 1 11 U 0 5 7 P 13,639 S 0 1 12 ulol 7 8 P 18,128 S 0 1 13 2 1 1 12,948 P S 0 1 14 5 9 1 P 11,596 S 0 1 S 0 2 15 1 6 1 P 11,538 S 0 1 16 2 0 P 1 23,335 S 0 1 S 0 2 17 U 2 2 0 P 12,517 S 0 1 18 U 2 2 6 18,933 P 0 1 | 5 0 2 19 U 2 2 P 7 18,933 S 0 1 20 2 2 8 P 21,033 S 0 1 S 0 2 21 U 1 2 1 23,436 Р 501502 22 U|2|3| 9 P 12,488 S 0 1 | S 0 2 23 D|0|0|1 P 884,707 501|502 24 piololo P 585,000 S 0 1 25 26

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All existing facilities must include in the space provided on p	page 5 a scale drawing of the facility (see instructions f	or more detail).
VI. PHOTOGRAPHS		Province of the second of the
All existing facilities must include photographs (aeria	al or ground-level) that clearly delineate all exis	sting structures; existing storage,
treatment and disposal areas; and sites of future store	age, treatment or disposal areas (see instructions	
VII. FACILITY GEOGRAPHIC LOCATION		
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VIII. FACILITY OWNER	文·罗德教、李智慧整理的第三人称形式,用《诗·本·新·文》	。其他自然可以为 是 的问题。 [1] (1] (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
A. If the facility owner is also the facility operator as Ii skip to Section IX below.	sted in Section VIII on Form 1, "General Information	", place an "X" in the box to the left and
B. If the facility owner is not the facility operator as li	sted in Section VIII on Form 1, complete the following	ng items:
1. NAME OF FACIL	ITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)
# 1/4/		
		55 56 - 58 59 - 61 62 - 65
3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST. 6. ZIP CODE
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IX. OWNER CERTIFICATION		建筑是自身。 在2016年度,
I certify under penalty of law that I have personally of		
documents, and that based on my inquiry of those in submitted information is true, accurate, and complet		
including the possibility of fine and imprisonment.	e. I am aware that there are significant penalties	S TO SUDMILLING TAISE INTO MALLON,
A. NAME (print or type) BARTOW MUNICIPAL.	B. SIGNATUTE	C. DATE SIGNED
		1 72212221 10 1002
AIRPORT DEVELOPMENT AUTHORITY	Alymonico H	January 18, 1983
AIRPORT DEVELOPMENT AUTHORITY B.L. DURRANCE, JR. Exec. Dir.	Milmany H	January 18, 1983
AIRPORT DEVELOPMENT AUTHORITY B.L. DURRANCE, JR. Exec. Dir. X. OPERATOR CERTIFICATION		
AIRPORT DEVELOPMENT AUTHORITY B.L. DURRANCE, JR. Exec. Dir. X. OPERATOR CERTIFICATION I certify under penalty of law that I have personally of law that I	examined and am familiar with the information	submitted in this and all attached
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All existing facilities must include photographs (aeri	ial or ground—level) that clearly deli	neate all existing structures; existing storage,	
treatment and disposal areas; and sites of future stor	rage, treatment or disposal areas <i>(see</i>	instructions for more detail).	
VII. FACILITY GEOGRAPHIC LOCATION LATITUDE (degrees, minutes, & seconds		LONGITUDE (degrees, minutes, & seconds)	
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Mark A. Worley

Mas a. Worley

June 28, 1982

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ISR will handle a wide variety of industrial wastes generated by industry in Florida and surrounding states. Estimates of quantities to be handled at this point are practically impossible to ascertain. Our equipment is expected to be able to process (SIC Code 2899) 300-500 gallons of solvent an hour. If you assume an 8 hour shift with only 2 hours down time for the transfer and stabilization of our equipment then the following estimates are developed:

Based on 52 working weeks/yr.

-in production- 1,560% hrs.
process rate 400 gal./hr.

Total solvents processed 6.24 x 10⁵ gallons

Of this, approximately 20% is expected to be sludges which are classified as a hazardous waste. This results in:

124,800 gallons of sludge to be disposed of in a manner approved by the EPA/DER.

This equates to 2270 fifty-five gallon drums of wastes to be properly shipped for disposal annually. The sludges will be generated from the reclamation of the solvents listed on Table 1.1. A breakdown of the estimated quantities of wastes to be accepted by ISR was not attempted due to the lack of information regarding the quantities and types of wastes which will become available to us for recycling. However, Table 1.1 lists the wastes which we have notified the EPA that we will be generating. Table 1.2 lists the wastes which ISR will generate from our production process.

1.2 STORAGE OF WASTES

All incoming wastes from generators and sludges produced from the processing of the solvents will be stored in either the drum storage building or the dirty solvent tank farm. The capacities of these areas are:

Dirty Solvent Tank Farm -(10 tanks) 60,000 gallons
Drum Storage Building -(2,016 drums) 110,000 gallons
Total Capacity for the storage of 170,000 gallons
Hazardous Wastes



IX DESCRIPTION OF MAZARDOUS WARTES (CONTOURS ASSESSMENT)								
IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front) A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous								
wests from non-specific sources your installation handles. Use additional sheets if necessary.								
FOOT	F 0 0 2	F003	F 0 0 4	F 0 0 5				
B. HAZARDOUS WASTES FR specific industrial sources yo	OM SPECIFIC SOUP or installation handle	ICES. Enter the four-c s. Use additional sheets	Sigit number from 40 CF if necessary.	R Part 261.32 for each	listed hazardous waste from			
K 0 8 6	26 26 26 26 26 27 28	18 20 · 30 21 23 · 30 27	16 28 28 20 20 20 20 20	17 10 · M 23 11 · M 23 · M 20 · M	118 30 30 30			
C. COMMERCIAL CHEMICAL stance your installation hand					3 for each chemical sub-			
31 U O O 2 37 U 1 1 2 34 U 2 2 0	U 0 1 9 U 1 2 2 44 U 2 2 6	U 2 1 1 U 0 4 5 U 2 2 7	U 0 4 4 U 1 5 9 U 1 2 2 8	U 0 5 6 U 1 6 1 U 1 2 1	U 0 5 7 2 1 0 2 1 0 2 3 9			
D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous wests from hospitals, veterinary								
	hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.							
				\$3 E - E				
E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)								
D1. ISNITABLE]2. CORROSIVE 92)	1 2. REAC (Dees)		A. YOXIC (D000)			

Table 1.1 - List of Hazardous Wastes Handled by ISR.



3. SECURITY

ISR's facility will be surrounded by a 6ft. chain link fence topped with barbed wire. Three gates will be installed (Figure The main entrance (16ft. double gate) will be locked at all times when the facility is not in operation. During normal business hours (8:00am-5:00pm), the gate will be left open. All vehicles or persons passing through the gate will have to pass by the office located at the entrance gate. Adjacent to the office will be a remote controlled Access Barrier Control Arm. vehicle attempting to enter active portion of the facility will be stopped by this barrier. The secretary in the office will be able to see the vehicles stopped by the barrier and will not allow the vehicle to enter until it has been authorized to do so. Upon receiving authorization to enter the facility, the secretary will activate the barrier control arm allowing the vehicle to enter the facility. In addition, workers who will constantly be monitoring equipment and performing assorted tasks in the active portion of the facility are instructed to report the presence of any unauthorized personnel walking or driving about the facility.

A second loft. double gate entrance will be installed to provide another entrance for emergency vehicles in case the main entrance should be blocked. The location of this gate is shown on Figure 3.1. This entrance will always be locked.

In addition to the 2 large entrance gates, a small 3ft. gate is located at the rear of the facility (Figure 3.1). This gate is placed there to allow for an emergency exit in case a situation arises in which personnel could be trapped at the rear of the facility and not be able to use the front gate. This gate will be locked at all times with a key to the gate hidden in close proximity to the locked gate so that during an emergency an escape route would be provided. The plant manager, production manager, and emergency coordinator will carry a key to this gate at all times. Similarly a key will be hidden for the second emergency 16ft. gate.

During non-working periods or second and third shift operations, the front gate will be securely locked. The only means to gain access to the facility after hours will be with a key to the gate. Seven "Danger-Unauthorized Personnel Keep Out" signs, which are legible at 25 feet, will be placed on the fence surrounding the facility. Figure 3.2 illustrates the locations of these signs.



4. GENERAL WASTE ANALYSIS PLAN

Since ISR is constructing a new facility, no data is presented concerning the description and analyses of wastes handled. At this point, no wastes are generated or exist at our facility. With regard to the similar processes, over 40 facilities are recognized by the National Association of Solvent Recyclers, of which we are a member. Several of these facilities have been inspected by our officers and the design and procedures set forth in this application reflect practices commonly used by many recyclers throughout the country. Table 4.1 lists the membership of the NASR.

A representative sample* of all wastes streams from generators who will ship wastes to ISR will also be analyzed by our in-house laboratory using a gas chromatagraph and IR spectrometer. In all cases, ISR will require the generator to have an analysis completed by an independent laboratory. When necessary, an independent lab will be used by ISR for all work requiring atomic absorption analysis. This will not be frequently conducted by our facility because the heavy metals detectable by this method will be captured in our still bottoms and they will have to be analyzed at that point for proper disposal or for delisting as set forth in 40 CFR 260.21-260.22. In addition, the heavy metal contaminants do not present a problem in addressing our spill control methods or storage requirements. This is not to discount the environmental hazard presented by heavy metals, but in handling the hazardous wastes which we plan to recycle, the metals will not present a severe hazard due to physical contact.

Once the initial "fingerprint" has been established using our GC and IR, we will be able to spot check incoming wastes to ensure accuracy with the initial analysis. The frequency of these checks will be kept to a minimum because impurities or changes in the waste streams will be reflected in the performance of the reclaiming equipment. Additionally, all products to be sold or returned to industry will go through a rigid quality control program to assure the chemicals meet the manufacturing specifications required by the generators. Our contractual agreement with the accounts we handle reflects our strong

*The Sampling Methods used by ISR are established in Appendix I of 40 CFR 261. See Appendix E for specific method.

(Rev. 1/17/83)

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position with regard to accepting only the wastes reflected in the profile analysis. If other chemicals or waste streams are added without notification to ISR, the generator will be held liable for any damages to our equipment or personal injury resulting from variations from the original profile analysis. We will allow modifications in waste streams, but such changes will have to be brought to our attention so the appropriate laboratory work can be conducted to determine the proper storage requirements, and more importantly the reclamation strategy necessary to efficiently seperate the chemical components.

A general waste analysis will be required by ISR to be conducted by an independent laboratory contracted by the generator and will include the following parameters:

Total Metals
pH
Flash Point (closed-cup)
Cyanides
Sulfides
Reactivity
Organics
Specific Gravity

The in-house laboratory will examine the following parameters:

pH - EPA 600/4-79-020-Test Method 5.2
Flash Point-(closed-cup) - ASTM Standard D-93-79
Cyanides - Standard Methods-413-A, 413-B
Sulfides - Standard Methods-428-D

Organics - GC & IR ananlysis (FID, HSD)
Specific Gravity - Standard Methods - 210

Reactivity - A: In water - Observation for temperature

change and gas generation.

B: In a closed container over the temperatures likely to be encountered during storage 70-110 F°

Representative samples will be analyzed for each waste stream prior to the initiation of any shipment to ISR's facility. All tests will be conducted in accordance to ASTM standard methods or EPA test methods. Representative samples will be provided by the generators to ISR. Random samples will be conducted on incoming shipments of hazardous wastes from each generator at least once a year and, if necessary, more frequently if problems arise in the



production of the solvents from a particular source.* This frequency of inspection is designed to analyze one out of every 4 shipments from a specific generator. (Based on a 90 day shipping schedule.) For small quantity generators, samples will be taken for every third shipment. The time frame for this sampling may extend over several years, depending upon the small quantity generators generation rate.

The tests required by ISR are designed to provide the basic information necessary to one, safely store the wastes and secondly determine the proper recylcing strategy. With regard to the storage, our major concerns are chemical attack on the containment structures, failure of the containment structure due to physical factors (ex. specific gravity) and human health hazards from the handling of the wastes.

ISR does not plan to handle any reactive wastes. Nor will any incompatible wastes be stored on-site. All of the chemicals handled by ISR are compatable with each other (Table 4.2). However, because of the possibility of having such wastes delivered to our facility our tests will examine the wastes for cyanides, sulfides, and reactions with water. The initial screening of potential waste streams will indicate if we are considering handling a reactive waste. If discovered, the wastes will not be handled. However, if a waste is delivered to ISR and discovered in our random sampling procedures to be reactive, it will be handled as follows:

- 1. Contact the generators to inform him that the wastes from his facility are reactive and not described in our contract.
- 2. Offer to return the wastes to his facility or bill him for our costs of having the wastes properly disposed of at an EPA approved disposal facility.

The test for pH is used to determine if we are handling any corrosive wastes which may damage our containment structures. Again, we do not plan to handle these types of wastes (D002) and will return or have disposed any corrosive wastes discovered on our facility in a manner consistant with 40 CFR 260-265.

The flash point and specific gravity tests are used to determine what type of tank the wastes may be placed into. Basically two types of tanks will be used. Those for flammable solvents and those for solvents with a specific gravity greater than 1. For the flammable solvents venting and fire control are a concern, while with the "heavy" solvents tank failure is the concern.

*We plan to develop a close working relationship with all of our accounts and therefore we will have a handle on all chemicals sent to facility. Hopefully, the spot checks will not need to be conducted frequently.

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- 2. Offer to return the wastes to his facility or bill him for our costs of having the wastes properly disposed of at an EPA approved disposal facility.

*We plan to develop a close working relationship with all of our accounts and therefore we will have a handle on all chemicals sent to facility. Hopefully, the spot checks will not need to be conducted frequently.

Table

•																		1	_1_	1				_
CARGO GROODS	1. NON-OXIDIZING MINERAL ACIDS	2. SULFURIC ACID	1 NITRIC ACID	4. ORGANIC ACIOS	5. CAUSTICS	6. AMMONIA	7. ALIPHATIC AMINES	8. ALKANOLAMINES	9. AROMATIC AMINES	10. AMIDES	11. ORGANIC ANHYDRIDES	12. ISOCYANATES	13. VINYL ACETATE	14. ACRYLATES	15. SUBSTITUTED ALLYLS	16. ALKYLENE OXIDES	17. EPICHLOROHYDRIN	18. KETONES	19. ALDEHYDES	20. ALCOHOLS, GLYCOLS	21. PHENOLS, CRESOLS	22. CAPROLACTAM SOLUTION		
1. NON-OXIDIZING MINERAL ACIDS	 	×	·····		×	×	X	×	×	×	×	X	×		-	X	X	-	A	E	-	-		
2. SULFURIC ACID	×		×	×	×	×	×	×	×	×	×	X	×	х	×	X	×	×	X		×	ائي-ا	 	
3. NITRIC ACID	 ^	×			×	×	×	×	×	×	×	×	×	·^	×	×	_ <u>^</u> _	x	X	X		×		-2
4. ORGANIC ACIDS	 	×			x	X	×	X	c	 ^-	 ^- -	×	<u> </u>		-^-	X	<u> </u>	-	-	F	×	 		3
5. CAUSTICS	×	×	×	×	 ^- -		<u> </u> -^-	 ^- -	-		×	×							×	×	×	 	 	-1
6. AMMONIA	^	x	×	×	 					 _ _		-	×			X	X	 		<u> </u>	-	×	 	5
7. ALIPHATIC AMINES	×	×	×	×	 					×	×	×				X		ا ۔	×			 _ 	\vdash	6
8. ALKANOLAMINES			_								X	X	X	×	×	<u> </u>	X	×	×	×	X	×	 	
9. AROMATIC AMINES	X	X	×	X		ļi				 	×	X	. Х	×	×	_X	×	8	X	<u> </u>				8
10. AMIDES	×	×		С		 -		ļ			×	X						 	X			┝╼┩	 	9
11. ORGANIC ANHYDRIDES	×	X	×		بن	X	اليا	<u> </u>	<u> </u>	ļ		X			-						×			10
12. ISOCYANATES	×	X	×	×	X	X	×	X	X	 					-			 			ļ			111
13. VINYL ACETATE	×	×	×	_^_	<u> </u>	_^X	×	X	_^_	×	-				D			 	-	×		×	 	12
14. ACRYLATES	 ^	×	^X				x	x			-				ļI					ļ		├	 	13
15. SUBSTITUTED ALLYLS	-	×	×			<u> </u>	×	×				D		<u> </u>	-			├			-	┝╌┦	 	14
16. ALKYLENE OXIDES	×	×	÷	×	×	×	×	X	-			<u> </u>	-		-							┝╾┵	 	15
17. EPICHLOROHYDRIN	1 x	X.	X	×	X	X	X	X			 		-			_		├	-	-	\vdash	╂━╌┦	 	16
18. KETONES	 ^ -	×	×	^	 ^-	<u> </u>	×	8				-								 		┝──		17
19. ALDEHYDES	 		×		 	×			 		 							-		 -		╁┷┙	ļl	18
20. ALCOHOLS, GLYCOLS	E	X	×	F	X	 ^- -	X	×	×	-	 	×							├	-	-	╆┷┙	\vdash \dashv	19
21. PHENOLS, CRESOLS	-	 	×		x	 		 	 	-	 -	 ^ -	-									╆╾╜		20
22. CAPROLACTAM SOLUTION	╂━┉─	 ^	 ^- -		×	 	X	 	-	X	 	-						├			 	├ ──	 	21
22. CAPHOLACIAM SOLUTION	┼	 ^ -	 		 ^- -		-	 		 	 -	X	-					├				╂━━┛	 	22
30. OLEFINS	 	×	×		 -		-	 					-	 	├──	-		 	├			╁┈┈┙	 	
31. PARAFFINS	┿	 ^-	 ^-		├	-		 -			 				 			├	├	 		 -		30
32. AROMATIC HYDROCARBONS	┼	├		 	├				├	├—	 	 			├	-		├	├ ──		├	├ ──	├ ──	31
33. MISCELLANEOUS HYDROCARBON MIXTURES	+	├	X	 			├	├		├	ļ			ļ	-			╄	 -		 	 	 	32
34. ESTERS	 	×	×	 	 		├	 		 	 			├	├			 	├		├	} -	 	33
36. VINYL HALIDES	+	 ^ 	×		 	 		 	 -		 							├	 		}	 	┝╼┤	34
38. HALOGENATED HYDROCARBONS	 	G	 ^-		H		 	 		 	 	 		 	├ ──		├	├	-	! -		×	 -	35
37. NITRILES	+	×	 -		 " -		- -	├	├	 	┼	 			 		-	├	-	├	-	 '	├ ─	36
38, CARBON DISULFIDE	 	 ^- -			├		×	×	├	 	 	├	├	 	├		<u> </u>	 	-	├	├	 	├ ──	37
39. SULFOLANE	 	-			 		 ^-	 ^- -	├	 		 			├		├	├	├	├	├ ─	 '	┝─┤	38
40. GLYCOL ETHERS	 	×	 		 					 	 	×						├	┼	├	 	 -	 	39
41, ETHERS	╂╾	×	×	 	 	 			 	 	 	 ^-	-	 	 	ļ	 		 	 	 	╁╼╾┦		40
42. NITROCOMPOUNDS	+	 ^	 ^-	 	×	×	×	×	×	 	 	├	 	-	 			 	 		 	╁╌┙	 	41
43. MISCELLANEOUS WATER SOLUTIONS	†	×		 	 ^	 ^-	├^	 ^	 ^-	 	 	×		-	 			 	 -	 	 	 	\vdash	42
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	1.	1-	_	1	T	<u> </u>	 -	1	<u> </u>	1	1	-	-	-	1	45	-		1	-	-	 		╨
(Letters refer to notes on following page)	<u></u>	2	3	4	5	6	7	8	9	10	111	12	13	14	15	16	17	18	18	20	21	22		l

COMPATIBILITY CHART

ble 4.2





Table 4.3 lists the specific gravities and flash points of solvents to be placed into tanks.

All drums and bulk shipments will be manifested if the wastes are listed wastes, or will have accompanying shipping papers if the wastes are hazardous due to characteristics. However, "characteristics" wastes will be required by ISR to have the hazardous waste label affixed to each drum, with at least the following information: (This also applies to small quantity generators.)

- 1. Proper DOT shipping name.
- 2. UN or NA#
- 3. Generator Name
- 4. Generator Address, City, State, Zip
- 5. EPA Waste #
- 6. Shipping Paper Document #

Each shipment of hazardous waste will be inspected at the unloading and staging area to ensure that:

- Each drum is properly labeled.
- The manifest or shipping paper accounts for all material in the shipment.
- 3. The manifest is properly filled out and signed by appropriate parties.
- 4. No drums are leaking or bulging.

Any discrepancies found during the unloading operation will be brought to the attention of the plant manager prior to the transportation vehicle leaving the site.

Once the receiving manager has satisfied the inspection requirements set forth in the operation manual, he will label each drum with a spray paint label and move the drum to the proper storage site. Since ISR will not be handling any reactive or incompatible wastes, it is not crucial as to where the drums are stored in the drum storage building. However, it should be noted that drums will be segregated by chemical type or group into seperate rows in the drum storage building. One row of single pallets is an optimal size to feed our production system. The rows will be labeled and color coordinated. That is, the color of the label on the drum will match the color of the label for the appropriate storage area. Sludges generated from the production processes will also be coded and stored in a specific area within the drum storage building.

The test for pH is used to determine if we are handling any corrosive wastes which may damage our containment structures. Again, we do not plan to handle these types of wastes (D002) and will return or have disposed any corrosive wastes discovered on our facility in a manner consistant with 40 CFR 260-265.

The flash point and specific gravity tests are used to determine what type of tank the wastes may be placed into. Basically two types of tanks will be used. Those for flammable solvents and those for solvents with a specific gravity greater than 1. For the flammable solvents venting and fire control are a concern, while with the "heavy" solvents tank failure is the concern.

Table 4.3 lists the specific gravities and flash points of solvents to be placed into tanks.

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- 5. EPA Waste #
- Shipping Paper Document #

Each shipment of hazardous waste will be inspected at the unloading and staging area to ensure that:

- Each drum is properly labeled.
- 2. The manifest or shipping paper accounts for all material in the shipment.
- 3. The manifest is properly filled out and signed by appropriate parties.
- 4. No drums are leaking or bulging.
- 5. Random samples of drums will be sampled (10% of the total number of drums or each tanker compartment) for color, odor and physical state.



Table 4.3

Specific Gravities and Flash Points of Wastes to be Placed Intö Tanks

	200/200	Flash Pt. F TCC
Acetône	.792	-4
n-Butyl Acetate	.882	72-81
Benzene	.882	12
Carbon Tetrachloride	1.596	-
Cyclohexanone	.948	116
Cyclohexane	.781	0
Ethyl Acetate	.902	24
Ethylene Dichloride	1.260	60
Freon	1.629	_
Hexane	.683	<0
Heptane	.695	<20
Isopropyl Acetate	.871	63
Isopropanol	.804	57
Methyl Ethyl Ketone	.806	20
Methyl Isobutyl Ketone	.802	60
Methyl Acetate	1.006	121
Methyl Chloride	1.328	-
Pentane	.629	<0
Perchloroethane	1.622	-
Propyl Acetate	.885	203-217
1,1,1,-Trichoroethane	1.316	-
Trichloroethylene	1.462	-
Toluene	.870	42
Xylene	.868	82

Table 4.3

Specific Gravities and Flash Points of Wastes to be Placed Into Tanks

	200/200	Flash Pt. OF TCC	EPA ID#	Hazard Code
Acetone	.792	-4	U002,F003	I
n-Butyl Acetate	.882	72-81	D001	I
Benzene	.882	12	U019	I,T
Carbon Tetrachloride	1.596	±	U211,F001	T
Cyclohexanone	.948	116	U057,F003	I
Cyclohexane	.781	0	U056	I
Ethyl Acetate	.902	24	Ull2,F003	I
Ethylene Dichloride	1.260	- 60	U077	T
Freon	1.629	-	F001	T
Hexane	.683	<0	D001	I
Heptane	.695	<20	D001	I
Isopropyl Acetate	.871	63	D001	I
Isopropanol	.804	57	D001	I
Methyl Ethyl Ketone	.806	0	F005,U159	I,T
Methyl Isobutyl Ketone	.802	60	U161	I
Methyl Acetate	1.006	21	D001	I
Methylene Chloride	1.328	<u>:</u>	F001	T
Pentane	.629	<0	D001	I
Perchloroethylene	1.622	-	F002,U210	T
1,1,1,-Trichoroethane	1.316	_	U226,F002	T
Trichloroethylene	1.462	· -	U228,F002	T
Toluene	.870	42	U220,F005	T
Xylene	.868	82 <i>.</i>	F003,U238	I



6. INSPECTIONS

ISR will conduct a variety of inspections on a daily, weekly and semi-annual basis. Tables 6.1-6.4 reflect the inspections to be conducted on a daily, weekly and semi-annual basis. inspection checklists will be maintained in a log book. inspection logs will be maintained in the company's files for a period of 3 years beyond the inspection date. The detailed inspections of the quantities of solvents in the bulk storage areas will be recorded in the operating record as well as in the inspection log. This detailed record keeping will allow us to accurately determine our production and recovery effeciencies. Table 6.5 is the form to be filled out in the case that a problem It provides space for a description of the problem. is detected. Once this form is completed, it is given to the Plant Manager (Emergency Coordinator) who decides what remedial action should The steps taken are recorded on this form. be taken. addition, incidents requiring implementation of the contingency plan and the actions taken are recorded on Table 6.5.

Table 6.1



INSPECTION CHECKLIST (WEEKLY)

✓-No Problems	Date	
-Leak Detected-Fill	Time	
out Incident Report Form		·
	Comments	
Drum Storage Area	Comments	Remedial Action
Leaks		
Corrosion of drums		
Bulging Drums- check for heat generation		
Fire Extinguishers		•
Emergency response equipment all in working order and placed on pallets		
Drainage valve for run-off (in closed position)		
Internal communication system		
Fence and locks		
Waste Solvent Tank Farm		
Leaks- observe tanks		
Diked and surrounding area		
Fire extinguishers		
Tank valves (closed position)		
Locks on piping		
Internal Communication System		
Mobile Tank (Leaks)		

Current Volume

Tank #	Type of Waste	(gallons)											
1	Acetone	6000											
2	Xylene	6000											
3	Freon-TF	6000											
4	Trichloroethane	6000											
5 .	Perchloroethylene	6000											
6	Mineral Spirits	6000											
7	мек	6000											
8	Trichloroethylene	6000											
9	Trichloroethylene	6000						·					
10	Methylene Chloride	6000											
	Inspected by												
	Date												
-	Time												



31

Table 6.3

DAILY INSPECTIONS

Date				
Time			, (
Drum Storage Area				-
Leaks	-			
Drainage valve for run-off- (must be in the closed position)				
Loading ramp and the surrounding areas				
Mobile Tank (Leaks)				
Dirty Solvent Tank Farm				
Containment area for transfer				
Valves (in closed position)				
Containment structure (leaks and physical damage)				
Level indicators on tanks (Do they correspond with the operating record)				
Inspected by				

^{✓ -}No Problems

^{♣ -}Problem detected- fill out Incident Report Form

Table 6.3

DAILY INSPECTIONS

							
Sete			,			ير ماخاره	and the second
<u> Ž</u> ime		·					
Drum Storage Area							
Leaks							
Drainage System (Check for accumulated liquids)							
Loading ramp and the surrounding areas							See and the second
Mobile Tank (Leaks)							
Dirty Solvent Tank Farm							V
Containment area for transfer							
Valves (in closed position)							
Containment structure (leaks and physical damage)							
Level indicators on tanks (Do they correspond with the operating record)	·				·		· · · · · · · · · · · · · · · · · · ·
Inspected by	•						

^{✓ -}No Problems

Problem detected- fill out Incident Report Form

SEMI ANNUAL TANK INSPECTION (Shell thickness test)

Tested by	
Test Date	
Type of Test	

Tank #	Minimum Shell Thickness		Mea	sured Thicknes	s (in.)	Comments		
		0	0	0	0			
	ļ -	00	90	180	270			
	Plate # 1							
	Plate # 2							
	Plate # 3							
	Plate # 4							
	Plate # 1							
	Plate # 2							
	Plate # 3	······································						
Plate # 4								
	Plate # 1							
	Plate # 1 Plate # 2							
	Plate # 3							
	Plate # 4							
	Plate # 1							
	Plate # 2							
	Plate # 3							
	Plate # 4							
	D1-4- # 1	<u>,, </u>						
	Plate # 1							
	Plate # 3							
	Plate # 4							
	Plate # 3							

^{*} Tests to be conducted by an independent testing laboratory. (See Appendix L)

Table 6.4

SEMI ANNUAL TANK INSPECTION (Shell thickness test)

Tested by
Test Date
Type of Test

Tank #	Minimum Shell Thickness		Mea	s (in.)	Comments		
		o 0	o 90	o 180	o 270		
	Plate # 1 Plate # 2				7		
	Plate # 2 Plate # 3 Plate # 4						
	Plate # 1 Plate # 2						
	Plate # 3 Plate # 4						
	Plate # 1					· · · · · · · · · · · · · · · · · · ·	
	Plate # 2 Plate # 3						
	Plate # 4						
	Plate # 1						
	Plate # 2 Plate # 3						
	Plate # 4						
	Plate # 1 Plate # 2						
	P1ate # 3						
	Plate # 4						

Table 6.5

INCIDENT REPORT FORM

Inspected by			
Time			
Date			
Chemicals Involved			
	····		
Amount			
Location			-
Description:			

Remedial Action:



rainwater. The tanks will be supported upon 3" pads to keep the tanks out of standing water. If the rate of evaporation is not sufficient to keep the tanks out of standing water, a portable pump will be employed to remove excess water. For details see section 12.4.

7.3 PERSONNEL SAFETY

All personnel will complete an extensive course in safety, emergency response, and operation of the plant. The personnel training program will describe the necessary safety equipment for each operation within the plant. As a general rule, the personnel will always wear safety glasses and chemical resistant gloves during the handling of any chemicals.

Due to the volatile flamable nature of many of the chemicals handled, smoking and the possession of matches and lighters will be prohibited at all times on the active portion of the plant.

An estimated 60% of the volume of solvents handled by ISR will be flammable or combustible. Because of these properties, precautions must be taken to avoid accidental ignition of the wastes. "No Smoking" signs will be posted in all areas where wastes are stored or handled. Any maintenance requiring open flames or procedures which may result in sparks will be conducted when the plant is not in operation, unless it can be conducted in the maintenance building. If maintenance which may create sparks, is to be conducted on a vessel which contains a flammable liquid, the vessel will be emptied, opened, and cleaned if necessary prior to the repairs or modifications commencing. (See section 9.10)

7.4 TRAFFIC PATTERNS

The effect ISR's operation will have on traffic patterns will be negligible. During the initial phases of the operation, approximately 3 or 4 trucks of loaded wastes will arrive a week and an equal number will leave carrying reclaimed chemicals. Currently, a new access road is being constructed and should be completed prior to our operation beginning. Figure 7.1 and the enclosed blueprint (Bartow Airport Layout-Proposal) depicts the proposed changes. The red shaded area on Figure 7.1 illustrates the traffic pattern to gain access to our facility. Currently, Route 17 is a two lane highway. However, the county plans to expand the highway to create a 4 lane divided highway. This expansion will only be along a 2 mile stretch fronting the airport. Once expanded, a light will be added and turning lanes will be provided.



State Highway 17 and the Bartow Industrial Complex roads are constructed of Type II asphalt and have a minimum structural number of 2.17. This number is determined by the thickness of the road surfaces and the layer coefficient. A typical road for commercial and industrial traffic is constructed of:

12" stabilized subbase (coefficient 0.06)
8" limerock (coefficient 0.15)
1 1/2" ACSC type II asphalt (coefficient 0.2)

 $(12 \times 0.06) + (8 \times 0.15) + (1 1/2 \times 0.2) = 2.22$

Figure 7.2 depicts the controlled entrances onto our facility.

7.5 FIRE CODES

Once this permit has the approval of the DER and EPA, ISR will apply for local building permits. The applicable fire regulations are determined by the local authorities through the adoption of one or more of several fire codes. ISR will comply with all the codes applicable in the Bartow area. The approval of building permits will involve the review and approval of the local fire marshall.

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solvents and the solvents are all compatible, it is not necessary to even clean this equipment until closure.

9.15 EMERGENCY COORDINATOR DUTIES

Upon hearing the alarm, the emergency coordinator (E.C.) or alternate in authority at the time of the fire shall immediately proceed to the scene of the fire and assess the seriousness of the incident. Already the fire department has been notified through the alarm system. If the emergency coordinator feels that the fire presents an imminent hazard or is an actual emergency then he will notify:

1. The Department of Environmental Regulation (Florida) (813) 985-7402.

If the situation requires the evacuation of local areas, which is unlikely in the case of ISR because of the isolated location and types of chemicals handled, then the E. C. shall notify the:

- 1. The Polk County Sherriff's Department (813) 533-0444.
- 2. The National Response Center 1-800-424-8802.

When notifying the National Response Center the E. C. must provide the following:

- 1. His name and telephone number.
- 2. The name and location of the facility. (ISR located on the Bartow Municipal Airport Industrial Complex.)
- 3. Time of the accident and the type of emergency.
- 4. Chemicals involved and quantity if known.
- 5. The extent of injuries.
- The possible hazard created by the incident.

The emergency coordinator must then take all appropriate steps to reduce the possibility of the situation becoming worse or being aggravated by the systems operation. At the time of the alarm, the production system was shut down. The E. C. must supervise the shutdown beyond the initial emergency shutdown sequence.

After the situation is under control the E. C. will begin a clean-up of the event. If necessary, Enviropact will be contacted to perform the clean-up operation (305-885-1869). Otherwise, the on-site workers will contain and recover the hazardous wastes released during the emergency. These wastes will be properly disposed of in an EPA approved landfill, or will be reclaimed if possible.

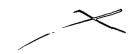


Table 9.1 LIST OF EMERGENCY EQUIPMENT

# TYPE		LOCATION	
		MAINT.	DRUM STORAGE
		BLDG.	BLDG.
13	Hard Hats	11	11
13		77	**
13			**
100	Surgical Gloves	17	11
13		11	**
13	Booties-Butyl Rubber	**	11
13	Coveralls-Chemical Resistant	19	**
13	Respirators With Appropriate Cartridges	Ħ	11
5	Chemical Aprons	11	11
13 5 2	Shovels	Ħ	11
	Solvent Pump	91	99
10	55 Gallon Drums	77	11
AI	riple F Fire Fighting System 2 inductors 065 gal./min. 200 gallons of foam will provide 65 minufighting capability 2 fire hydrants 2 hand carts with 2 1/2" rubber hose	See Figu ites öf f	
Q P	ortable Fire Extinguishers	See Figu	re 9.2
6 D 1 F 1 M	rums of Absorbent Drum Storage Bldg orklift Mobi obile Storage Tank-5,000 gallon Mobi	Mainte ile ile	enance Bldg.
1 M	emote Fire Alarms and Internal Communication Faster Fire Alarm (Office) utside Telephone Lines: 1. Office 2. Maintenance Build	ice	Figure 10.1
	55 First Aid Kit - O.S.H.A. Approval will service 25 men)	_	aböratöry
	ortable Steam Cleaning Unit.		enance Bldg.



Table 9.2 SOLVENTS STORED IN SPECIFIC TANKS

TANK#	SPECIFIC GRAVITY DESIGN (MAX)	SOLVENT STORED IN TANK
1 2 3 4 5 6 7 8 9	1.0 1.0 2.0 2.0 2.0 1.0 1.0 2.0 2.0	Acetone Xylene Freon-TF Methyl Chloroform Perchoroethylene Mineral Spirits MEK Trichloroethylene Trichloroethylene Methylene Chloride
11 12 13 14 15 16 17 18 19 20	1.0 1.0 2.0 2.0 2.0 1.0 1.0 2.0 2.0	Acetone Xylene Freon-TF Methyl Chloroform Perchloroethylene Mineral Spirits MEK Trichloroethylene Trichloroethylene Methylene Chloride



10.2 DECONTAMINATION EQUIPMENT

The decontamination equipment and locations of the equipment are addressed in the contingency plan. (Table 9.1).

10.3 AISLE SPACE

Sufficient aisle space for the unobstructed movement of personnel, fire fighting equipment, spill control equipment, and decontamination equipment will be maintained at all times in the drum storage area. For specific details of spacing see Section 11.2.

10.4 ARRANGEMENTS WITH LOCAL AUTHORITIES

The City of Bartow's fire marshall will routinely inspect our facility. We will provide his people with:

- 1. A diagram of the facility including entrances, roads, and evacuation routes.
- 2. Description of the operation.
- 3. A copy of our contingency plan.

In the event of an emergency, the fire department and the police departmenthave well established coordination arrangements between themselves. We have provided both groups a copy of our contingency plan. In addition, the local hospital has been given chemical data for the chemicals handled at our facility. During the initial steps of the emergency our personnel will be involved in containing the spill or fire. However, once the fire department arrives, the control of the incident will be surrendered to their people. The emergency coordinator will remain with their people to assist with any technical information which may be required.

In the event of a clean-up which cannot be conducted by ISR's employees, Enviropact, Inc., will be contracted to complete the restoration. They have a copy of our contingency plan, however, the use of this plan will be limited since they will address clean-ups after the emergency.

Appendix I - contains the letters of receipt of our contingency plan.

10.5 POWER OUTAGES

All the containment systems are manually operated. Any power outage will only affect the lighting and electrical pumps. If a containment area requires the removal of liquids with no power available, the mobile tank could be used, using the pump on the tractor. For information on the type of pump see section 12.1.



11. CONTAINERS AND CONTAINMENT STRUCTURES FOR THE STORAGE OF HAZARDOUS WASTE

The drum storage building will consist of a graded reinforced concrete slab with a dike beginning flush with the highest point of the slab and extending around the perimeter of the building maintaining the same elevation as the highest point of the slab. The reinforced concrete foundation will be covered by a steel support structure and a metal roof. The building will not be totally enclosed, but will have partial sides which will reduce the amount of rainfall which can blow into the building. The building will be open from the ground to a height of 7ft. Above this point the structure will be enclosed. In addition to providing shelter from the rain, these sides will add structural support. The roof will be equipped with several vents. The open air nature of this storage area was viewed to be the safest design in that it provides:

- 1. Shelter from the sun, which could potentially cause problems with confined flammable liquids.
- 2. Shelter from rain, which can cause deterioration of the drums.
- 3. Will not allow a potentially explosive vapor buildup in the building in the case of a spill.
- 4. Allows access from all sides of the building, to control fires.

The expected life of this building is viewed to be 20 years. This is the depreciation schedule used on the building. However, a new building of this nature, if properly maintained, could be expected to be structurally sound well beyond the depreciation period.

11.1 DESIGN OF AISLE SPACE DRUM CAPACITY AND CONTAINMENT VOLUME

The drum storage building will be used to store 55 gallon containers. The containers will be stored on pallets (42"x42") with 4 drums placed on each pallet. The pallets containing the drums will be stacked 3 high, thus for each 42" square, 12 drums can be stored.

The pallets used for this operation are specially designed to hold the weight of 12 drums. The maximum weight to be supported would be 9,500 lbs. The pallet constructed for this purpose is



11. CONTAINERS AND CONTAINMENT STRUCTURES FOR THE STORAGE OF HAZARDOUS WASTE

The drum storage building will consist of a graded 6" reinforced concrete slab with a dike beginning flush with the highest point of the slab and extending around the perimeter of the building maintaining the same elevation as the highest point of the slab. The reinforced concrete foundation will be covered by a steel support structure and a metal roof. The 6" reinforced concrete slab will provide an effective impermeable base due to the rapid removal of any standing liquids (see 11.2). The building will not be totally enclosed, but will have partial sides which will reduce the amount of rainfall which can blow into the building. The building will be open from the ground to a height of 7ft. Above this point the structure will be enclosed. In addition to providing shelter from the rain, these sides will add structural support. The roof will be equipped with several vents. The open air nature of this storage area was viewed to be the safest design in that it provides:

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The pallets used for this operation are specially designed to hold the weight of 12 drums. The maximum weight to be supported would be 9,500 lbs. The pallet constructed for this purpose is



manufactured from oak. It consists of a 1" nominal solid deck of either oak or plywood, (3) 2"x4"s of solid oak and (9) oak 1"x4" cross supports.

Figure 11.1 illustrates the arrangements of the pallets in the building. Each square represents a potential of 12 drums of storage space. Figure 11.2 and 11.3 illustrates the potential containment area of this building. As seen in Figures 11.1 and 11.2 a spacing of 10 ft. will be used between each row of pallets. A larger aisle (15 ft. across) runs perpendicular to the rows of pallets. The configuration allows 672 drums to be stored on the ground level. When stacked 3 high, the drum storage building has a maximum capacity to store 2,016 drums.

- Maximum Inventory of Wastes in the drum storage building - 2,016 drums.

2,016-55 gallon drum= 110,880 gallons

The drum storage building must be designed to contain the volume of the largest container or 10% of the total volume. Since our largest container in this area is 55 gallons, the 10% figure was used. Therefore, the containment volume must exceed:

11.088 gallons = 1.483 ft.3

The building has a slope of 1/8"/ft. to allow for the drainage of any spills or rainwater. Since the liquids handled have viscosities very similar to water and no highly viscous wastes will be handled the 1/8"/foot slope was considered to be adequate. Increasing this slope would create a hazardous working area because of the height the drums are being stacked. The slope of 1/8"/ft. is commonly used in the design of sewer systems and is felt will provide a rapid collection of any spills. This results in a 7 1/2" drop across the building. In addition, the drums will be resting on pallets so they will not rest in standing liquids even if the removal system were not in place. The sloped floor was added to allow for a simple procedure to remove standing liquids.

Figure 11.2 labels each area which we considered to be part of the potential containment volume. This calculation is very conservative because the pallets will allow liquids to collect within the volume they occupy. Figure 11.3 illustrates the potential containment volume. The red areas represent the potential storage capacity of the building in the event of a spill.

The pallets used for this operation are specially designed to hold the weight of 12 drums. The maximum weight to be supported would be 9,500 lbs. The pallet constructed for this purpose is manufactured from oak. They consist of a 1" nominal solid deck of either oak or plywood, (4) 2"x4"s of solid oak and (4) oak 1"x4" cross supports.

Figure 11.1 illustrates the arrangements of the pallets in the building. Each square represents a potential of 12 drums of storage space. Figure 11.2 and the engineering drawings illustrate the potential containment area of this building. As seen in Figures 11.1 and 11.2 a spacing of 11 ft. 8 inches will be used between each row of pallets. A larger aisle (15 ft. across) runs perpendicular to the rows of pallets. The configuration allows 528 drums to be stored on the ground level. When stacked 3 high, the drum storage building has a maximum capacity to store 1,584 drums.

- Maximum Inventory of Wastes in the drum storage building - 1,584 drums.

1,584-55 gallon drum= 87,120 gallons

The drum storage building must be designed to contain the volume of the largest container or 10% of the total volume. Since our largest container in this area is 55 gallons, the 10% figure was used. Therefore, the containment volume must exceed:

87,120 gallons = 1,165 ft.3

The building has an aproximate slope of 1/8"/ft. to allow for the drainage of any spills or rainwater. Since the liquids handled have viscosities very similar to water and no highly viscous wastes will be handled the 1/8"/foot slope was considered to be adequate. Increasing this slope would create a hazardous working area because of the height the drums are being stacked. The slope of 1/8"/ft. is commonly used in the design of sewer systems and is felt will provide a rapid collection of any spills. This results in an 8" drop across the building. In addition, the drums will be resting on pallets so they will not rest in standing liquids even if the removal system were not in place. The sloped floor was added to allow for a simple procedure to remove standing liquids.

Figure 11.2 labels each area which we considered to be part of the potential containment volume. This figure shows the actual containment area within the building, accounting for curbs and columns. The calculation of the design containment is very conservative because the pallets will allow liquids to collect within the volume they occupy. The volumes calculated were determined by the open area on the building floor, the allowable height of acummulated liquids prior to contacting the drums (5" at the drum locations), and the containment volume of the drainage ditch and the slope of the floor.

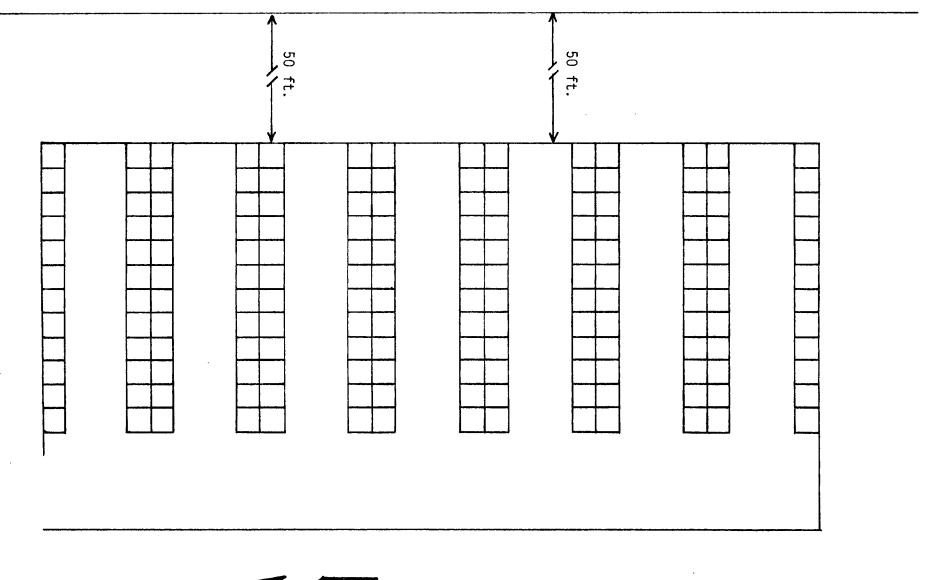


Figure 11.1 Arrangement of Drums Within the Drum Storage Building

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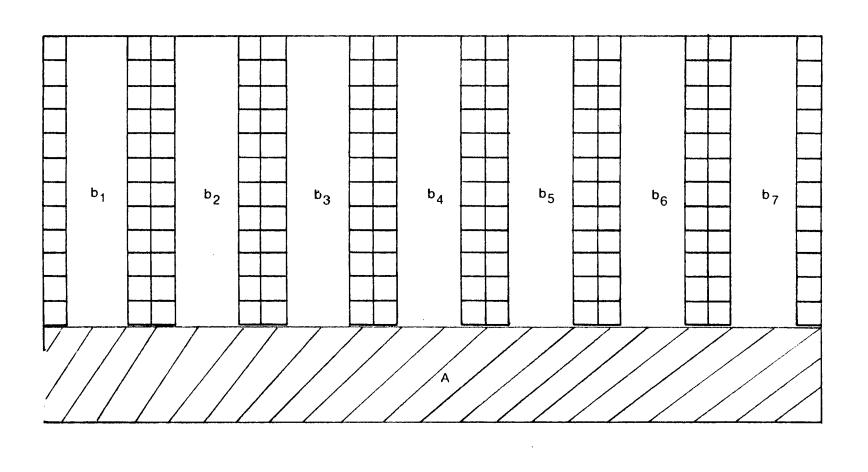


Figure 11.2 Identification of Containment Areas in the Drum Storage Building

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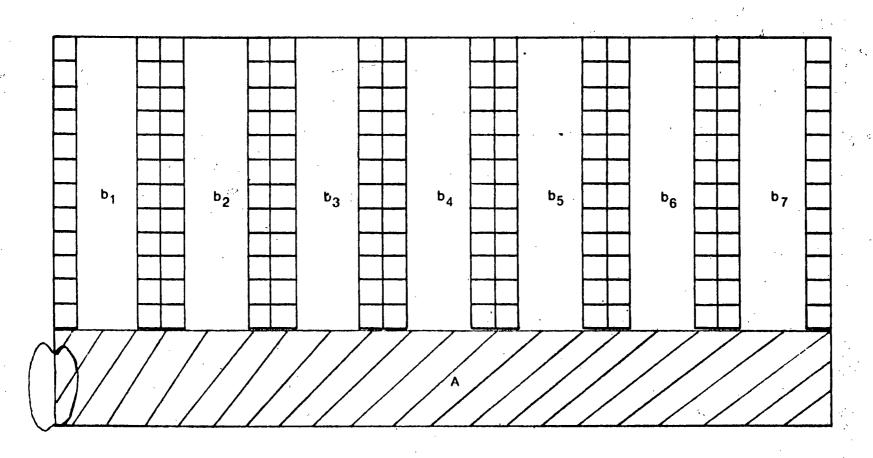




Figure 11.2 Identification of Containment Areas in the Drum Storage Building

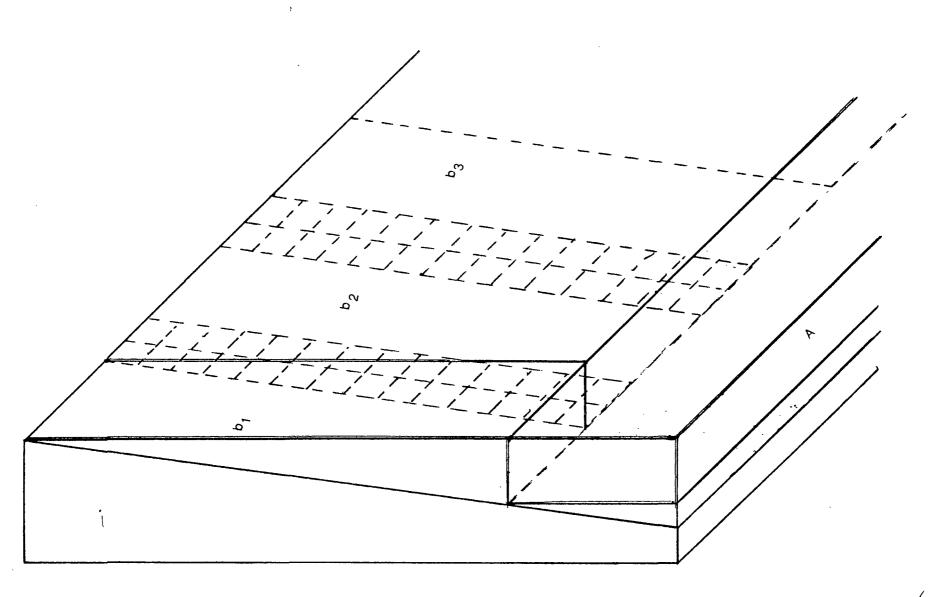


Figure 11.3 Illustration of the Containment Area Showing the Base Slope



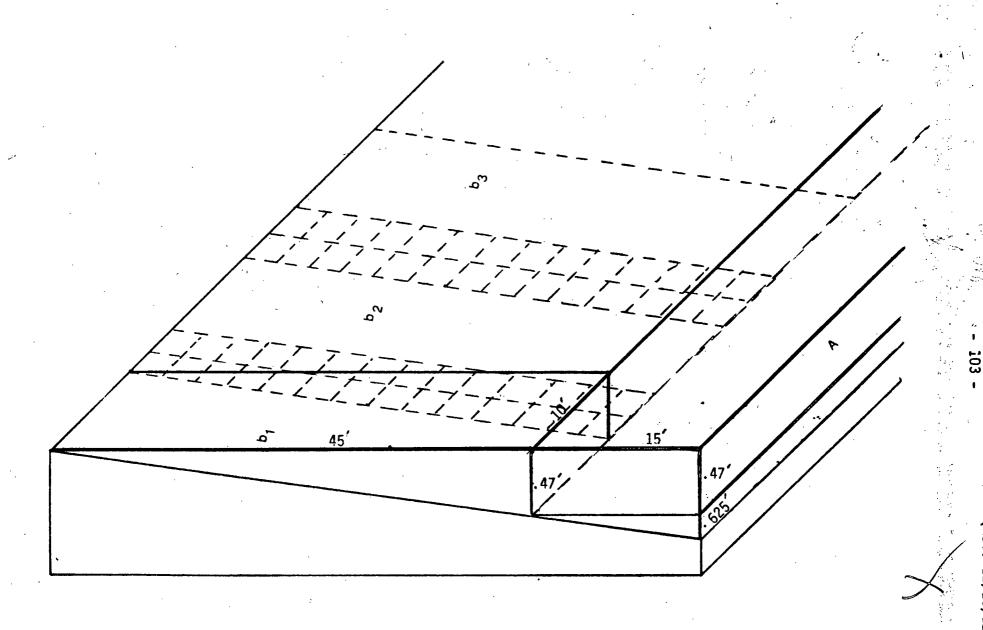


Figure 11.3 Illustration of the Containment Area Showing the Base Slope



Containment Volume (Figure 11.2 & 11.3)

Area b ₁ Area b ₂ Area b ₃ Area b ₄ Area b ₅ Area b ₆ Area b ₇	105 105 105 105
Total	105 1717

11.2 CONTAINMENT SYSTEM RUN-ON

The containment system (building concrete pad) will be constructed 4 inches above the surrounding ground. Therefore, run-on into the building will be non-existant. Some rainwater will however be trapped in the system because of winds. This amount would be minimal, and as seen by the containment volume which is a very conservative figure, any rain blown into the building would be easily contained in addition to the 10% of the total volume of wastes.

Design Containment Volume 1717 ft³ 10% of drums capacity* 1483 ft³

Additional containment for run-on: 238 ft3

 $355 \text{ ft}^3 = 1,750 \text{ gallons}$

Spilled or leaked wastes and accumulated precipitation will be removed the same day in which they are detected. Since the system is designed to drain the liquids away from the drums it is not critical that the liquids be removed immediately. Figure 11.4 depicts the drainage pattern in the building however, a quick response to the situation will help to avoid potential contamination problems. That is, if rainwater is left in the drainage area, which could normally be discharged without treatment, and a drum leaks, thus contaminating the rainwater, our

* This number will actually be less because sludge which contains no liquids will be stored in this building.

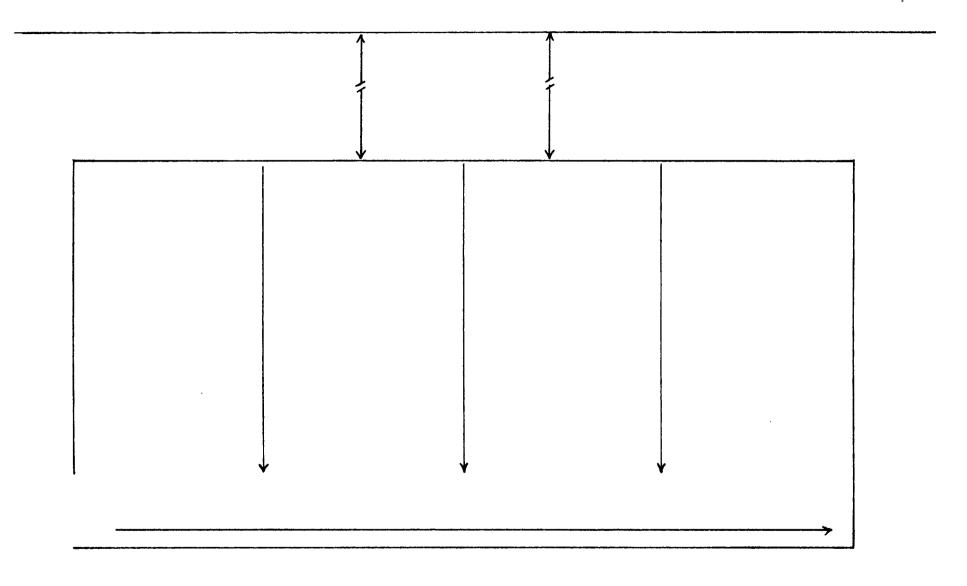


Figure 11.4 Drainage Pattern in the Drum Storage Building

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problem of disposal is compounded. All liquids collected in the drainage ditch will be pumped into 55 gallon drums for analysis in our laboratory. The laboratory analysis will define the handling procedures.

At this point, there is no sump designed into this system. It was felt since there is no immediate need to remove the liquids collected, it would be prudent to wait and collect data on the amount of water commonly collected. Once this data has been collected, the sump pump design and holding capacities could be cost effectively designed.

11.3 CONTAINER MANAGEMENT PRACTICES

All 55 gallon drums, and other portable containers will be kept closed during storage, except when the contents of the containers are being transferred. The drums will be banded together and stored on wooden pallets. The pallets measuring 42" x 42" will hold 4 drums. Each pallet will be moved using a 5000 lb. diesel powered fork lift. In addition, the fork lift will be equipped with a device which will attach to the lift and will enable the driver to handle drums without pallets. Hand carts for moving 55 gallon drums will also be available.

problem of disposal is compounded. All liquids collected in the drainage ditch will be pumped into 55 gallon drums, using the pump attached to the tractor trailer, for analysis in our laboratory (see Chapter 12 for pump specifications). The laboratory analysis will define the handling procedures. An 8" drainage ditch, slightly recessed into the west wall, with a 1/12" per foot slope will drain any liquids to the southwest corner of the building. See engineering drawings for specific details on the drainage ditch construction.

At this point, there is no sump designed into this system. It was felt since there is no immediate need to remove the liquids collected, it would be prudent to wait and collect data on the amount of water commonly collected. Once this data has been collected, the sump pump design and holding capacities could be cost effectively designed.

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All 55 gallon drums, and other portable containers will be kept closed during storage, except when the contents of the containers are being transferred. The drums will be banded together and stored on wooden pallets. The pallets measuring 42" x 42" will hold 4 drums. Each pallet will be moved using a 5000 lb. diesel powered fork lift. In addition, the fork lift will be equipped with a device which will attach to the lift and will enable the driver to handle drums without pallets. Hand carts for moving 55 gallon drums will also be available.

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our problem of disposal is compounded. All liquids collected in the drainage ditch will be pumped into 55 gallon drums, using the pump attached to the tractor trailer, for analysis in our laboratory (see Chapter 12 for pump specifications). The laboratory analysis will define the handling procedures. If determined to be non-hazardous and exceptable for discharge into the sewer system, the water will then be discharges into the P.O.T.W.

A 21 inch drainage ditch is located along the east face of the drum storage building. It is sloped 1/8"/foot toward the south corner of the building. See engineering drawings for specific details on construction. This ditch will deliver any contained liquids to the southeast corner of the drum storage building. No outlet from this system is provided. Any liquids collected will have to be manually pumped from the system. Collected liquids will be removed from the system the same day they are detected.

At this point, there is no sump designed into this system. It was felt since there is no immediate need to remove the liquids collected, it would be prudent to wait and collect data on the amount of water commonly collected. Once this data has been collected, the sump pump design and holding capacities could be cost effectively designed.

It should be noted that since the building can be entered from all sides, that during a major spill forklifts and mechanical equipment will not be driven through the spill. Access to remove the liquids can be accomplished without entering the building with any mechanical equipment. Pumps, lifts, etc., can be driven around the building to points close to the spill and men wearing protective clothing can enter the building with the necessary cleanup equipment.

11.3 CONTAINER MANAGEMENT PRACTICES

All 55 gallon drums, and other portable containers will be kept closed during storage, except when the contents of the containers are being transferred. The drums will be banded together and stored on wooden pallets. The pallets measuring 42" x 42" will hold 4 drums. Each pallet will be moved using a 3,500 lb. electric powered fork lift. In addition, the fork lift will be equipped with a device which will attach to the lift and will enable the driver to handle drums without pallets. Hand carts for moving 55 gallon drums will also be available.

All 55 gallon drums used by ISR for the storage and hazardous wastes will be the specific containers specified by D.O.T. The manufacturing specifications set forth by D.O.T. are enclosed in Appendix K. See Table 11.1 for the specific container to be used for each solvent.

Table 11.1 A

List Of Hazardous Wastes Stored In Containers

	EPA ID#	Hazard Code	DOT Container
Acetone	U002,F003	I J	17E
n-Butyl Acetate	D001	I	17E or 17H
Benzene	U019	I,T	17E
Carbon Tetrachloride	U211,F001	T	17E or 17H
Cyclohexanone	U057,F003	I	17E
Cyclohexane	U056	I I T T	17E or 17H
Ethyl Acetate	U112,F003	I	17E or 17H
Ethylene Dichloride	U077	T	17E or 17H
Freon	F001	T	17E or 17H
Hexane	D001	I I I	17E
Heptane	D001	I	17E
Isopropyl Acetate	D001	I	17E or 17H
Isopropanol	D001	I	17E or 17H
Methyl Ethyl Ketone	F005,U159	I,T	17E
Methyl Isobutyl Ketone	U161	I	17E or 17H
Methyl Acetate	D001	I	17E
Methylene Chloride	F001	T I	17E or 17H
Pentane	D001	I	17E
Perchloroethylene	F002,U210	T	17E or 17H
1,1,1,-Trichoroethane	U226,F002	T·	17E or 17H
Trichloroethylene	U228,F002	T	17E or 17H
Toluene	U220,F005	\mathbf{T}^{+}	17E or 17H
Xylene	F003,U238	I	17E or 17H

(Rev. 1/17/83)

Table 11.1 A

List Of Hazardous Wastes Stored In Containers

	EPA ID#	Hazard C o de	DOT Container*
Acetone	U002,F003	I	17E
n-Butyl Acetate	D001	I	17E or 17H
Benzene	U019	I,T	17E
Carbon Tetrachloride	U211,F001		17E or 17H
Cyclohexanone	U057,F003	I	17E
Cyclohexane	U056	I	17E or 17H
Ethyl Acetate	U112,F003	T I I T	17E or 17H
Ethylene Dichloride	U077		17E or 17H
Freon	F001	T I I I I	17E or 17H
Hexane	D001	I	17E
Heptane	D001	I	17E
Isopropyl Acetate	D001	I	17E or 17H
Isopropanol	D001		17E or 17H
Methyl Ethyl Ketone	F005,U159	I,T	17E
Methyl Isobutyl Ketone	U161	I	17E or 17H
Methyl Acetate	D001	I	17E
Methylene Chloride	F001	I I T I	17E or 17H
Pentane	D001	I	17E
Perchloroethylene	F002,U210	T	17E or 17H
l,l,l,-Trichoroethane	U226,F002	T	17E or 17H
Trichloroethylene	U228,F002	T	17E or 17H
Täluene	U220,F005	T	17E or 17H
Xylene	F003,U238	I	17E or 17H

^{*} Container specifications are enclosed in Appendix K.



12. TANK DESIGN

ISR will use two types of tanks in both the production and storage areas. The tanks to be used in the dirty solvent tank farm will be constructed of carbon steel. The tanks used for reclaimed solvent will be constructed of stainless steel. dirty solvent tanks are designed for two types of solvents. Four tanks numbers 1,2,6 & 7 are designed for flammable solvents with a specific gravity less than or equal to 1. The remaining six tanks, 3,4,5,8,9 & 10 are designed for solvents with a maximum specific gravity of 2.0. See figure 12.1 for tank numbering. Table 12.1 lists the specific gravities and flash points for the solvents to be handled by ISR. Most of the "heavy" solvents -(chlorinated solvents) are not flammable. However, it was felt that flammable solvents may be placed into the tanks designed for Therefore, the safety devices for flammable these solvents. solvents are present on all tanks. Table 12.2 identifies the specific solvent to be stored in each tank. Table 12.3 depicts the required venting for our tanks and the actual specifications The tank drawings on pages 124 and 125 show the remaining design specifications for the tanks. The tank shown on page 124 was designed for a maximum specific gravity of 1 and the tank on page 125 for a maximum specific gravity of 2.

All tanks in the dirty solvent tank farm will be equipped with flame arrestors.

12.1 MOBILE STORAGE TANK

Specifications on the mobile storage tank are included. We plan to use a 3-compartment 316 SS tank. Precautions to ensure the proper grounding of all tanks and drums will be taken. The standard set forth in the NFPA 77-1977 will be followed for these operations.

12.2 CORROSION AND EROSION OF TANKS

The tanks used by ISR are designed to meet the U. L. specifications and all tanks will display the U. L. seal. These tanks are over designed with regard to shell thickness. A 40% over design is present in the tanks used by our facility. The tanks will be inspected semi-annually using ultrasonic thickness gauges. The frequency and number of tanks are discussed in Chapter 6. If a discrepancy of 25% is detected using this test, the tank will be opened and visually inspected. (Procedures for opening and entering tanks are discussed in Section 9.) The necessary repairs will then be conducted or if not repairable the tank will be replaced.

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Specifications on the mobile storage tank are included. We plan to use a 3-compartment 316 SS tank. Precautions to ensure the proper grounding of all tanks and drums will be taken. The standard set forth in the NFPA 77-1977 will be followed for these operations. This tank will be used to move solvents from one portion of the facility to another. No containment structure for this tank has been designed because the tank will not be used to store materials. It is used in place of piping. Rather than running pipes from all our tanks in storage to production, we will use a tanker to move the wastes. This will avoid excessive plumbing expenses and potential contamination problems. The mobile tank may not even need to be included in this permit, since it is part of our production process and not a storage vessel.

12.2 CORROSION AND EROSION OF TANKS

The tanks used by ISR are designed to meet the U. L. specifications and all tanks will display the U. L. seal. These tanks are over designed with regard to shell thickness. A 40% over design is present in the tanks used by our facility. The tanks will be inspected semi-annually using ultrasonic thickness gauges. The frequency and number of tanks are discussed in Chapter 6. If a discrepancy of 25% is detected using this test, the tank will be opened and visually inspected. (Procedures for opening and entering tanks are discussed in Section 9.) The necessary repairs will then be conducted or if not repairable the tank will be replaced.

Specific Gravities and Flash Points of Wastes to be Placed Into Tanks

Table 12.1

	200/200	Flash Pt.	F TCC
Acetone	.792		-4
n-Butyl Acetate	.882		72-81
Benzene	.882		12
Carbon Tetrachloride	1.596		-
Cyclohexanone	.948		116
Cyclohexane	.781		0
Ethyl Acetate	.902		24
Ethylene Dichloride	1.260		60
Freen	1.629		-
Hexane	.683		<0 <20
Heptane	.695		<20
Isopropyl Acetate	.871		63
Isopropanol	.804		57 20
Methyl Ethyl Ketone	.806		60
Methyl Isobutyl Ketone	.802		
Methyl Acetate	1.006		121
Methyl Chloride	1.328		<0
Pentane	.629		ζ0
Perchloroethane	1.622		202 217
Propyl Acetate	.885		203-217
1,1,1,-Trichoroethane	1.316		-
Trichloroethylene	1.462		- 42
Toluene	.870		
Xylene	.868		82

Table 12.2 SOLVENTS STORED IN SPECIFIC TANKS

TANK#	SPECIFIC GRAVITY DESIGN (MAX)	SOLVENT STORED IN TANK
1	1.0	Acetone
2	1.0	Xylene
3	2.0	Freon-TF
4	2.0	Methyl Chloroform
5	2.0	Perchoroethylene
6	1.0	Mineral Spirits
7	1.0	MEK
8	2.0	Trichloroethylene
9	2.0	Trichloroethylene
10	2.0	Methylene Chloride



Corrosion is not felt to present a problem because of the compatibility of the carbon steel with all of the solvents to be stored. In addition erosion should be minimal due to the low flow rates (250 gallons/minute) and the lack of abrasive materials in the solvents.

12.3 DESIGN OF TANK FARM CONTAINMENT STRUCTURE

All structures used to store hazardous waste on our site are designed with a 50 ft. buffer zone between the storage area and our property line. Ten 6,000 gallon carbon steel tanks willbe placed on 3 inch concrete pads (8x8) on a 12 inch reinforced concrete pad. The pad measures 61'4" x 25'4". The tanks meet the National Fire Code spacing requirements for Class I and Class II liquids. The minimum shell to shell spacing set forth in this code is 1/6 of the adjacent tank diameters but not less than 3 Our design uses a 4 foot separation. Figure 12.1 diagrams the tank arrangements, numbering and piping. The enclosed blueprint depicts the construction materials, spacing of pads and engineering design of the pad. The containment area for the tank farm must contain 10% of the total design volume of the tanks or the volume of the largest tank. In this case the two volumes are equal - 6,000 gallons.

The containment volume for this pad is calculated below:

Total volume within the pad - 2,020 ft³

Tank pad volume -(3" pad-8'x8') 16 ft³

Tank volume within diked area -(8! diameter-13") 55ft³

Tank volume within diked area -(8' diameter-13") 55ft³

Tank and pad displacement volume -

 $71 \text{ ft}^3/\text{tank}$

Containment Volume = $2,020 \text{ ft}^3 - 711 \text{ ft}^3 = 1,309 \text{ ft}^3$

The containment structure must hold 6,000 gal = 802 ft^3

The containment structure will hold the required 10% of the total capacity of liquids with an additional 507 $\rm ft^3$ = 3,792 gallons.

This allows for the containment of 4 inches of rain in addition to the 10% containment.

12.4 DRAINAGE AND DISPOSAL OF LIQUID RUNOFF IN THE DIRTY SOLVENT TANK FARM

The dirty solvent tank farm will be surrounded by a 16 inch dike. Rainwater will routinely be trapped in the enclosed area and in Florida will present a substantial problem. The rainwater will drain to the area in front of the 6" dike separating the transfer area from the tank containment area. Trapped water will be pumped from the area using a portable centrifugal pump and flexible hose or with the existing chemical pump in the transfer area. The water will be pumped into 55 gallon drums and analyzed to determine if solvents are present in levels above the acceptable limits for discharge to the sewer. If lab tests indicate that the water is not contaminated, it will be pumped directly to the sewer, otherwise it will be treated in our production system.

In the case where a tank ruptures or a tank is damaged, the spilled solvent will be transferred to an available storage tank in the solvent storage area. If none are available, the solvent may be transferred to a tank in the production area or simply pumped into our mobile storage tank which is normally used to transfer materials from the dirty solvent tank farm to the production tanks. At all times, the facility will keep sufficient unused storage capacity to accommodate the volume of the largest tank in the dirty solvent tank farm.

12.5 PUMPS AND TRANSFER OPERATION

An explosion proof 250 gallon/min. stainless steel centrifugal pump, with teflon seals throughout, will be installed in the transfer area of the dirty solvent tank farm. The mobile tankers will connect to this pump via a flexible 4" hose. A smaller flexible hose will then connect the pump to the appropriate tank line. Each tank is equipped with a level indicator which will activate an alarm when the tank is filled (5750 gallons). This 250 gallon margin will give the operator one minute to shut off the pump before the tank will overflow.

BETHLEHEM STEEL CORPORATION

BUFFALO TANK DIVISION

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(1) 4 WF (2) 6 T	AL: Hot R	PLAN VERTICAL colled Carbon	U/L LABEL Steel	STD COLG VENT -(1) 4" WF & D'-G" (1) 20" EMERICA VENT I	M H	WORKLINE DIMENSIONS	NORM GENC DERW REMO	IAL V Y VE RITEI VE O	VENT IN CON NTING MANH RS UL-142	ITTING MUS IJUNCTION V HOLE TO CO REQUIREM EXTRA - LON MANHOLE!	ITH T APLY ENTS.	ISED AS HE EME WITH U DO N
TEST PRE	Head 1/4" F G: All Se Shell: Top H Botton ESSURE:	eams Continuo Seams Tack V lead Outside n Welds In & 1.5 P. S. I. Ai	A" Type S D BOTTOM Four Lap Weld O Veld Inside 1" i Only 2 Out 11 or Minimum	in 12″ 🚺	o ferio	•		•	ELEVATION FOR TRUE ORIEN	UATION.		
PAINT:		hop Coat_R	ED OXIDE	= 0.5.0.			TANK MUST	T BE A	DEQUATELY VENT SSURE FAILURE R	TED TO PREVENT		
MARK	REOD.	· · · · · · · · · · · · · · · · · · ·		DESCRIFTION	····				WEIGHT	ACCT.		
	<u> </u>			1		•	1	<u> </u>			<u>ا</u> ٧.	
	SHIPPING (· · · · · · · · · · · · · · · · · · ·	WEIGHT		REFERENCE DRW	G. 	cox	T. NO.			1	
	TANK	<u> </u>	5,200 EA				_ NO.		無人配火	эн		DATE
		· · · · · · · · · · · · · · · · · · ·					- [



13. CLOSURE PLAN

The entire facility will remain in operation during the life of the facility. If at some point tanks need to be replaced during the normal operation of the plant, the tanks and associated equipment will be steam cleaned. The tanks will then be cut into sections and sold as scrap metal. The rinse water from the steam cleaning operation will be analyzed in our laboratory to see if it meets the pretreatment requirements for discharge to the POTW system. If acceptable, the rinse water will be discharged to the sewer. If unacceptable levels of solvents are in the rinse water, the rinse water will be run through our production system to flash off the solvents. The "clean" water will then be discharged to the sewer.

Other than the occasional replacement of tanks, plumbing and associated equipment, the entire facility will be operated until closure commences. At no time will the facility be partially closed. It is estimated that the maximum inventory of wastes in storage will be approximately 250 drums. These drums will consist of sludges from the distillation process, specification chemicals which we cannot sell, and useless solvent mixtures which are not economical to separate. This estimate is based on the projected volume of solvents to be handled and sludges to be disposed of. We plan to routinely ship sludges on a monthly basis. Since this estimate is based solely on projections and not actual volumes generated during operation, this estimate of maximum inventory may have to be modified as data from the operation is generated. This modification will be made as a minor permit modification, described in 40 CFR 122.17(e).

13.1 ESTIMATE OF THE LIFE OF THE FACILITY

Common to all business ventures is the hope that the operation will operate indefinitely. In actuality, this is often not the case. ISR has a 20 year lease on the property so we will assume that the operation will terminate at the end of the lease. If conditions in the reclamation field remain stable, it is likely that the lease will be extended and the expected life of the facility would be substantially longer than the figure expressed here. We will assume that closure will take place at the termination of the lease. Therefore, ISR will close the facility in the year 2003.



14. COST ESTIMATE AND FINANCIAL MECHANISM FOR CLOSURE

Since the facility will be equipped with an abundant supply of steam and cleaning solvents, the costs for closure are substantially lower than for a facility which would have to hire a firm to complete the closure. Closure will be completed using our own personnel and equipment. The cost estimate was based on the estimated time for the cleaning of tanks based on our estimates of employees salaries. The financial mechanism for assuring the proper closure of the facility will be a closure trust fund. The closure trust fund agreement will be worded as set forth in 40 CFR 264.151(a)(1)(Appendix F). Find enclosed a copy of the letter of intent from the bank with which we plan to deposit the initial payment in meeting the requirements of 40 CFR 264.145(Appendix G). An originally signed duplicate of the Trust Agreement will be sent (certified mail) to the Florida Department of Environmental Regulation and the Regional Administrator 60 days prior to the date on which hazardous wastes will be received.

COST FOR CLOSURE

Tanks-25 working days - 2 men - 5.50/hr=	2,200	
Drum Storage Area - 1 day - 1 man 5.50/hr=	44	labor
Production Equipment & Pipes-5days-2men-5.50hr=	440	
Lab Cleanup - 1 day - 1 man - 6.50/hr=	52	
Utilities, Electric & Natural Gas	1,000	
Misc.	1,000	
Engineer's Certification	500	
Shipment of the total waste capacity of		
the facility (\$.80/gal.)		
(2016 drums + 10-6000 gallon tanks)	136,704	
_	141,940	

1st payment for closure fund - $\frac{ACE-CV}{Y}$ =14,194

Y=10 years ACE=141,940 CV=0

On each anniversary of the date of issuance of this permit, the closure cost estimate will be adjusted using the inflation factor derived from the annual Implicit Price Deflator for Gross National Product published by the U. S. Department of Commerce in its "survey of current business". In addition, a new closure estimate will be prepared whenever a change in the closure plan affects the cost of such closure.

Dúρ.



January 18, 1983

Mr. W. M. Daughtry International Solvent Recovery 6740 Crosswind Drive, North St. Petersburg, Florida 33710

Dear Mr. Daughtry:

As per your request, I hereby certify that B. L. Durrance, Jr. is the Executive Director of the Bartow Municipal Airport Development Authority.

Very truly yours,

BARTOW MUNICIPAL AIRPORT DEVELOPMENT AUTHORITY

Cynthia L. Barrow

Assistant Secretary

Bartow Municipal Airport
—Development Authority



disposal. Since the mobile tank and hoses will be reused for all solvents and the solvents are all compatible, it is not necessary to even clean this equipment until closure.

1.15 EMERGENCY COORDINATOR DUTIES

Upon hearing the alarm, the emergency coordinator (E.C.) or alternate in authority at the time of the fire shall immediately proceed to the scene of the fire and assess the seriousness of the incident. Already the fire department has been notified through the alarm system. If the emergency coordinator feels that the fire presents an imminent hazard or is an actual emergency then he will notify:

1. The Department of Environmental Regulation (Florida) (813) 985-7402.

If the situation requires the evacuation of local areas, which is unlikely in the case of ISR because of the isolated location and types of chemicals handled, then the E. C. shall notify the:

- 1. The Polk County Sherriff's Department (813) 533-0444.
- 2. The National Response Center 1-800-424-8802.

When notifying the National Response Center the E. C. must provide the following:

- His name and telephone number.
- 2. The name and location of the facility. (ISR located on the Bartow Municipal Airport Industrial Complex.)
- 3. Time of the accident and the type of emergency.
- 4. Chemicals involved and quantity if known.
- 5. The extent of injuries.
- 6. The possible hazard created by the incident.

The emergency coordinator must then take all appropriate steps to reduce the possibility of the situation becoming worse or being aggravated by the systems operation. At the time of the alarm, the production system was shut down. The E. C. must supervise the shutdown beyond the initial emergency shutdown sequence.

After the situation is under control the E. C. will begin a clean-up of the event. If necessary, Enviropact will be contacted to perform the clean-up operation (305-885-1869). Otherwise, the on-site workers will contain and recover the hazardous wastes released during the emergency. These wastes will be properly disposed of in an EPA approved landfill, or will be reclaimed if possible.



Table 1.1 LIST OF EMERGENCY EQUIPMENT

#	TYPE	LOCATI	ON
		MAINT.	DRUM STORAGE
		BLDG.	BLDG.
13	Hard Hats	Ħ	**
	Safety Goggles	11	77
	Chemical Resistant Gloves-Butyl Rubber	ti	71
	Surgical Gloves	**	n
	Boots-Neoprene-Steel Toe and Shank	77	99
10	Doots-Reopiene-Steel foe and Shank	**	11
13	Cavanalla Chaminal Panishanh	79	77
15	Coverairs-unemical Resistant	 W	11
13	Respirators with Appropriate Cartridges		11
2	Booties-Butyl Rubber Coveralls-Chemical Resistant Respirators With Appropriate Cartridges Chemical Aprons Shovels		77
	Shovels	 11	
	Solvent Pump	11	" ,
10	55 Gallon Drums	••	.,
A T	riple F Fire Fighting System 2 inductors @65 gal./min.	See Figu	re 1.2
	200 gallons of foam will provide 65 mir fighting capability 2 fire hydrants	nutes of f	ire
	2 hand carts with 2 1/2" rubber hose		
	E hand out of wrom to the factor had to		
9 P	ortable Fire Extinguishers	See Figu	
	rums of Absorbent Drum Storage Bld orklift Mot	g Mainte Dile	nance Bldg.
1 M		oil e	
4 R	emote Fire Alarms and Internal Communication	Phones -	Figure 10.1
	laster Fire Alarm (Office) Off	fice	_
	outside Telephone Lines: 1. Office	_	
	2. Maintenance Build	ling	
1 2	55 First Aid Kit - O.S.H.A. Approval		
	will service 25 men)	1.a	boratory
	ortable Steam Cleaning Unit.		nance Bldg.
ı r	ALLED TEST CICSTILLS ONTO.		

Table 1.1 LIST OF EMERGENCY EQUIPMENT

Hard Hats
Safety Goggles
Chemical Resistant Gloves-Butyl Rubber
Surgical Gloves
Boots-Neoprene-Steel Toe and Shank
Booties-Butyl Rubber
Coveralls-Chemical Resistant
Respirators With Appropriate Cartridges
Chemical Aprons
Shovels
Solvent Pump
55 Gallon Drums

A Triple F Fire Fighting System
3 inductors @65 gal./min.
200 gallons of foam will provide 65 minutes of fire
fighting capability
2 fire hydrants
2 hand carts with 2 1/2" rubber hose

- 9 Portable Fire Extinguishers
- 6 Drums of Absorbent
- 1 Forklift
- 1 Mobile Storage Tank-5,000 gallon
- 4 Remote Fire Alarms and Internal Communication Phones
- 1 Master Fire Alarm (Office)
- 2 Outside Telephone Lines: 1. Office
 - 2. Maintenance Building

Table 1.2 SOLVENTS STORED IN SPECIFIC TANKS

TANK#	SPECIFIC GRAVITY DESIGN (MAX)	SOLVENT STORED IN TANK
1 2 3 4 5 6 7 8 9	1.0 1.0 2.0 2.0 2.0 1.0 1.0 2.0 2.0	Acetone Xylene Freon-TF Methyl Chloroform Perchoroethylene Mineral Spirits MEK Trichloroethylene Trichloroethylene Methylene Chloride
11 12 13 14 15 16 17 18 19 20	1.0 1.0 2.0 2.0 2.0 1.0 1.0 2.0 2.0	Acetone Xylene Freon-TF Methyl Chloroform Perchloroethylene Mineral Spirits MEK Trichloroethylene Trichloroethylene Methylene Chloride