RCRA FACILITY ASSESSMENT EVALUATION

PRELIMINARY REVIEW AND VISUAL SITE INSPECTION

Region VI, Technical Compliance Section

FACILITY'S NAME(S): Dow Chemical Company - Freeport

EPA ID NUMBER: TXD008092931

ADDRESS: Information not available

LOCATION: Along and adjacent to the intersection of State Highways 288, 332, and State FM 529 north of Freeport

PREPARED BY: TWC Wayne R. Harry DATE PREPARED: December 29, 1986

REVIEWED BY: R. Kennedy DATE REVIEWED: _____

ANTICIPATED DRAFT PERMIT DATE: 3rd quarter, 1987

DATE OF INSPECTION: August 18-19, 1986

ANY ON-GOING STATE/FED 264, 265, or 270 CORRECTIVE ACTION OR CERCLA ACTION: Ongoing corrective action for A-41 and B-27 landfills. Corrective action for Surface Impoundment Harry's Pond, Surface Impoundment HP-1, Surface Impoundments (2) Recycle Pond.

DOES FACILITY HAVE A CERCLA FILE? YES X NO ____

CERCLA HAZSIT NUMBER: OCD #TX61091
Plant A #TX01066
Plant B #TX01074

Was a CERCLA PA/SI performed at this facility: Information not available

DOES FACILITY HAVE A UIC WELL? YES X NO ____

TYPE OF DRINKING WATER SUPPLY WITHIN A 3-MILE RADIUS: Useable aquifers include the Beaumont, Chicot and the Gulf Coast Sands.

TARGET POPULATION WITHIN A 3-MILE RADIUS: The nearest residential areas are approximately 1/2 mile from the southeast. No further details were given in RFA.

RECOMMENDATIONS: ____ S.V. X R.F.I. ____ I.M. ____ No Further Action under RFA

(Indicate only one unless I.M. is marked)

X 3004(u) ____ 3007

Possible Enforcement Actions: ____ 3008(a) ____ 3008(h)

924063

I. Preliminary Review of Prior or Continuing Releases of Solid Waste Management Units (SWMU)

A. Evaluation of Information

1. The main purpose is to determine whether there has been or may have been a release(s) of hazardous waste hazardous constituents from any SWMUs which will require corrective action measures under Section 3004(u) of the RCRA Hazardous and Solid Waste Amendments (HSWA) of 1984. The SWMUs units of concern are:

a) SWMUs not regulated under RCRA; and

b) SWMUs regulated under RCRA regardless of whether they are subject to ground water monitoring requirements.

2. The purpose of this review is to:

a) Identify all SWMU;

b) Identify if there have been prior or continuing releases of hazardous wastes or hazardous constituents from such units to any media (air, surface water, ground water, soil & sub-surface gas);

c) Determine if such releases caused environmental contamination that would require corrective action; and

d) Determine what additional information or investigation is needed to clarify whether there has been a release or if a potential for a release exists.

II. Visual Site Inspection

A. Purpose

* Verify PR Information

* Identify additional releases

* Assess Condition of Solid Waste Management Units (SWMU)

* Determine Sampling Locations for a Sampling Visit when applicable

B. NUMBER OF SWMU INVESTIGATED DURING THE PR/VSI: 172

	LIST OF SWMU	REGULATED BY RCRA*	STATUS**	SUBJECT TO GWM*** SUBPART F
(1)	Landfill, Site B-1	?	A	?
(2)	Landfill, Site B-3	?	A	?
(3)	Incinerator, ID#-ECP 1100	Y	A	N
(4-9)	Surface Impoundments (6) Site B-2	N*	I	N

These units contained hazardous constituents

	LIST OF SWMU	REGULATED BY RCRA*	STATUS**	SUBJECT TO GWM*** SUBPART F
(10)	Landfill, Site B-51	Y	A	Y
#(11)	Landfill, Site B-4900	?	A	?
(12)	Incinerator, B-4 Block	?	I	N
<(13)	Above-grade Storage Tank, ID #ND-116	Y	A	N
(14)	Above-grade Storage Tank ID #T-20	Y	I	N
(15)	Above-grade Storage Tank, #V-7	Y	A	N
(16)	Above-grade Storage Tank, ID #T-17 Tank	Y	A	N
(17)	Above-grade Storage Tank ID #D-218	Y	I	N
(18)	Above-grade Storage Tank ID #T-100	Y	I	N
(19)	Above grade Storage Tank, ID #VF-1000	Y	A	N
(20)	Above-grade Storage Tank, ID #VF-1001	?	A	N
(21-25)	Above-grade Storage Tanks, ID #s HT-7A, HT-7B, HT-12A, HT-12B, PT-9A	Y	A	N
(26-27)	Above-grade Storage Tanks, D-1, D-2	Y	I	N
(28)	Above-grade Storage Tank, ID #V-1A			
(29-30)	Above-grade Storage Tanks, ID #s V-1208	Y	Cl	N
	and 1209	Y	A	N
(31)	Above-grade Storage Tank, ID #D-284	Y	A	N
(32)	B-1038 Container Storage Area	Y	Cl	N
(33)	Above-grade Storage Tank, ID #T-5	Y	A	N
(34)	Above-grade Storage Tank, ID #T-1	?	I	N
(35)	Halogen Acid Furnace	Y	A	N
(36)	Above-grade Storage Tank, ID #V-1	?	A	N
(37)	Above-grade Storage Tank, ID #V-2	?	A	N
(38)	HIRT liquids Incinerator	Y	A	N
(39-43)	Above-grade Chlorinated Hydrocarbon Separators (5) Tanks ID#s S-100A, S-100B, VF-101, VF-102, VF-110	Y	A	N

* Y - Yes
N - NO
? - unknown

** Active or Inactive (A or I)
*** GWM-Ground Water Monitoring
Cl-Closed

No information available which indicates that subsurface monitoring has been performed.

* A tentative closure plan was submitted July 15, 1985. Closure is proposed to commence during the third quarter of 1988.

< Less than 90-day storage

LIST OF SWMU	REGULATED BY RCRA*	STATUS**	SUBJECT TO GWM*** SUBPART F
(44) Below-grade Steel Tank, ID #S-50	Y	A	N
(45) Synthetic Rubber Bag ID #GH-113	?	A	N
(46) Chlorinated Hydrocarbon Steam Stripper Column, ID #T-100	Y	A	N
(47-50) Above-grade Storage Tanks (4) ID #s S-250A, S-200A, S-200B VF-210	Y	A	N
(51) Below-grade Storage Tank, ID #S-250B	Y	A	N
(52-56) Incinerator - Feed Tanks (5)	Y	A	N
(57) Liquid Incinerator with Scrubber	Y	CI	N
(58) Liquid Incinerator	Y	A	N
(59-60) Incinerators (2), ID # ECP2500 SI-1 and SI-2	Y	A	N
(61-63) Below-grade mixing tanks (3) (Neutralization Boxes)	Y	A	N
(64) A-100 Disposal Landfill	Y	I	N
*(65) A-41 Disposal Landfill	Y	CI	N
(66) A-2 Disposal Landfill	Y	I	?
(67) B-47 Disposal Landfill (Pit Area)	Y	I	?
(68) A-27 Disposal Landfill	N	I	N
(69) Injection well, ID #WDW-71	Y	CI	N
(70) Injection well, ID #WDW-81	Y	CI	N
(71) Injection well, ID #WDW-59	Y	CI	N
(72) Above-grade Storage Tank, ID #208-D	?	CI	N
*(73-74) Surface Impoundments, ID #s WD-201-3, WD-202-4	Y	A	Y
*(75) Surface Impoundment, ID #WD-202-3	Y	I	Y
*(76) Surface Impoundment, ID #WD-201-4	Y	CI	Y
*(77) Surface Impoundment, ID #WD-201-5	Y	CI	Y
*(78-79) Surface Impoundments (2), ID #s WP-202-5, North Lake-6	Y	CI	Y
*(80-81) Surface Impoundments (2), ID #s South Lake-6, West Pond-6	Y	I	Y
**(82) Above-grade Storage Tank, ID #D-45	?	A	N

*This unit is part of a Compliance Agreement between Dow and the TWC (7/15/84)
**Less than 90 day Storage

LIST OF SWMU	REGULATED BY RCRA*	STATUS**	SUBJECT TO GWM*** SUBPART F
(83) B-5107 Container Storage Area	Y	A	N
(84) B-5110 Miscellaneous Storage Area	Y	A	N
(85) Above-grade Storage Tank, ID #V-1	Y	A	N
(86) Surface Impoundment, ID - CCF Pond	?	I	?
(87-90) Incinerators (4) ID - Units 1-3 Division	?	I	N
(91) Unit 3 Surface Impoundment	?	A	N
(92) Above-grade Storage Tank, ID #T-64	Y	A	N
(93) Above-grade Storage Tank, ID #D-400	Y	A	N
(94) Above-grade Storage Tank, ID #D-1	Y	A	N
(95) Above-grade Storage Tank, ID #VF-120	Y	A	N
(96) Above-grade Storage Tank, ID #D-504	Y	A	N
(97-98) Surface Impoundments (2) ID: Recycle Ponds, Unit 1	Y	I	Y
(99) OCD Site 2 Landfill	Y	Cl	?
(100) OCD Site 4 Landfill	Y	Cl	?
(101-102) Above-grade tanks (2) FL-101, FL-102, Storage and processing	Y	A	N
(103) Injection Well, #WDW-76 or OCD Well #1	Y	Cl	N
(104-105) Surface Impoundments (2) ID #B-2000 Latex Ponds 1 & 2	?	A	?
(106) Above-grade Storage Tanks, V-2, V-6	Y	A	N
*(107-108) Above-grade Storage Tanks (2) ID #s D-4, D-5	Y	A	N
(109) Above-grade Storage Tank, ID #V-4	Y	A	N
(110) Above-grade Storage Tank, ID #V-5	Y	A	N
(111-112) Above-grade Storage Tanks (2) ID #S-28, D-2C	Y	Cl	N
(113) Storage and Processing Sump for Truck Wash	?	A	N
(114) Drum Washing Facility	?	A	N
*(115-139) Container Storage Area(s)(25)	Y	A	N
(140) Above-grade Storage Tank, ID #D-700	Y	A	N
(141-144) Above-grade Storage Tanks (4) ID #s 1254, 1255A, 1257A and 1257 B	Y	A	N

*Less than 90-day Storage.

	LIST OF SWMU	REGULATED BY RCRA*	STATUS**	SUBJECT TO GWM*** SUBPART F
(145)	Open Trench Burner	N	A	N
(146)	Landfill, ID #75-1	Y	Cl	N
(147-148)	Surface Impoundments (2) B-2000 Latex Ponds 3 and 4	?	I	?
(149)	Landfill, ID #75-2	Y	Cl	Y
(150)	Landfill, ID #75-3	Y	Cl	Y
(151)	Site 3 Landfill	Y	Cl	Y
(152)	Unit 1 Incinerator	Y	A	N
(153)	80-4 Landfill	Y	Cl	Y
(154)	Unit 4 Surface Impoundment ID-Solids Lagoon	?	Cl	Y
**(155-156)	Surface Impoundments (2) ID-Holding Pond and Hypo Pond	Y	A	Y
(157-158)	Surface Impoundments (2) Harry's Pond, HP-1 A&B	Y	A	Y
(159)	Above-grade Storage Tank, ID#V-84	Y	A	N
(160)	Above-grade Storage Tank, ID #V-31	Y	Cl	
(161-164)	Above-grade Storage Tanks (4) ID #s R-140, D-36A, D-36B, and D-36	Y	A	N
(165)	Miscellaneous Storage Containers	Y	I	N
(166)	Research Container Storage Area	Y	Cl	N
(167)	Central Container Storage Area	Y	A	N
**(168)	Surface Impoundment, ID-Ph Adjustment Ditch	Y	A	N
(169)	Above-grade Tank, Elementary Neutralization Tank	Y	A	N
(170)	Unit III Boiler	Y	A	N
(171)	Above Grade-Storage Tank; ID-Oily Sludge Treater COPP Unit IV	Y	I	N
**(172)	Surface Impoundment, ID-Brine Sludge Pond	N	A	N

*Closure Plans have been submitted to TWC for review.

C. NUMBER OF SWMU IDENTIFIED DURING THE VSI (NOT IDENTIFIED IN THE PR): 0

D. NUMBER OF SWMU, AT WHICH RELEASES HAVE BEEN IDENTIFIED: 0

E. NUMBER OF SWMU, (REGULATED) AT WHICH RELEASES HAVE BEEN IDENTIFIED: 14

LIST OF SWMU	RELEASE TO	NOTED DOCUMENTATION OF RELEASE
**(1) A-41 Disposal Landfill	GW	-GW contaminated with chlorinated organics, Reported 1/28/83
**(2) B-41 Disposal Landfill (Pit Area)	GW	-GW contaminated with chlorinated organics; June, 1983
(3-4) Surface Impoundments (2) Hypo Pond, Holding Pond	GW	-Statistical failures for ground-water monitoring parameters of pH, conductivity and TOH were reported March 22, 1985
**(5-6) Surface Impoundments (2) Harry's Pond, HP-1 A&B	GW	-Statistical failure of conductivity were reported to TWC March 22, 1985
**(7-8) Surface Impoundments (2), ID, Recycle Ponds, Unit 1	GW/Soil	-GW and soil contaminated by chlorinat organics: Vol 21 of Part B Applicati
(9-14) Surface Impoundments (6), Site B-2	Soil	-Soil borings indicate the presence of tar near perimeter.

**TWC recommends corrective action

F. NUMBER OF SWMU AT WHICH A RELEASE IS HIGHLY POSSIBLE: 8

LIST OF SWMU	REGULATED BY RCRA	RATIONALE
1) Below grade Storage Tank, ID #S-250B	Y	Oily stains were observed, during the VSI, around the surrounding concrete slab.
(2-4) Below grade Mixing Tanks (Neutralization Boxes	Y	Unlined Earthen Ditches.
5) A-100 Disposal Landfill	Y	Sparsely vegetated soil contained hazardous constituents.
6) Open Trench Burner	N	Earthen bottom.
7) Unit 3, Surface Impoundment	N	Earthen bottom.
8) A-2 Disposal Landfill	N	Bare spots on vegetive cover. Contained hazardous constituents.

G. NUMBER OF SWMU WHERE A DETERMINATION OF RELEASE CAN NOT BE MADE DUE TO LACK OF INFORMATION: 19

LIST OF SWMU	RATIONALE
1) Landfill Site B-4900	Past information does not indicate whether site specific monitoring has been performed to determine whether a release has occurred.
2) Landfill Site B-1	

LIST OF SWMU	RATIONALE
(3) Below grade Steel Tank ID #S-50	Past information does not indicate whether site specific subsurface monitoring has been performed to determine whether a release has occurred.
(4) A-2 Disposal Landfill	" " "
(5) A-27 Disposal Landfill	" " "
(6) Storage and Processing sump for truck wash	" " "
(8) Landfill, ID #75-2	" " "
(9) Surface Impoundment, ID-CCF Pond	" " "
(10) Landfill, ID #75-3	
(11) Site 3, Landfill	" " "
(12) OCD Site 2, Landfill	" " "
(13) OCD Site 4, Landfill	" " "
(14-17) Surface Impoundments (4), ID #B-2000 Latex ponds	" " "
(18) Surface Impoundment, ID Brine Sludge Pond	" " "
(19) Landfill Site B-3	" " "

H. NUMBER OF SWMU WITH NO INDICATED RELEASES: 132
(Documentation is necessary for a SWMU to be included in this category.)

LIST OF SWMU

(1) Incinerator, ID #ECB 1100
(2) Landfill, Site B-51
(3) Incinerator, B-4 Block
(4) Above-grade Storage Tank, ID #HD-116
(5) Above-grade Storage Tank, ID #T-20
(6) Above-grade Storage Tank, ID #V-7
(7) Above-grade Storage Tank, ID #T-17 Tank
(8) Above-grade Storage Tank, ID #D-218
(9) Above-grade Storage Tank, ID #T-100
(10) Above-grade Storage Tank, ID #VF-1000
(11) Above-grade Storage Tank, ID #VF-1001
(12-16) Above-grade Storage Tanks, ID #S HT-7A, HT-7B, HT-12A, HT-12B, PT-19A
(17-18) Above-grade Storage Tanks, ID #S D-1, D-2
(19) Above-grade Storage Tank, ID #V-1A
(20-21) Above-grade Storage Tanks, ID #S V-1208 and V-1209
(22) Above-grade Storage Tank, ID #D-284
(23) Container Storage Area , ID #B-1038
(24) Above-grade Storage Tank, ID #T-5
(25) Above-grade Storage Tank, ID #T-1
(26) Halogen Acid Furnace
(27) Above-grade Storage Tank, ID #V-1
(28) Above-grade Storage Tank, ID #V-2
(29) HIRT liquids incinerator

(30-34) Above-grade chlorinated hydrocarbon separators (5)
ID #s S-100A, S-100B, VF-101, VF-102, VF-110
(35) Synthetic Rubber Bag, ID #GH-113
(36) Chlorinated Hydrocarbon Steam Stripper, ID #T-100
(37-40) Above-grade Storage Tanks (4)
ID #s S-250A, S-200A, S-200B, VF-210
(41-45) Incinerator Feed Tanks (6)
(46) Liquid incinerator with scrubber
(47) Liquid incinerator
(48-49) Incinerators (2); ID #ECB 2500 SI-1 and SI-2
(50) Injection Well, ID # WDW-71
(51) Injection Well, ID #WDW-81
(52) Injection Well, ID#WDW-59
(53) Above-grade Storage Tank, ID #208-D
(54-55) Surface Impoundments, ID #WD-201-3, WD-202-4
**(56) Surface Impoundment, ID #WDW 202-3
(57) Surface Impoundment, ID #WD-201-4
(58-59) Surface Impoundments, ID #WP-202-5, # North Lake-6
(60-61) Surface Impoundments (2), ID #s South Lake-6, West Pond-6
(62) Above-grade Storage Tank, ID #D-45
(63) B-5107 Container Storage Area
(64) B-5110 Miscellaneous Storage Area
(65) Above-grade Storage Tank, ID #V-1
(66-67) Above-grade Storage Tanks (2), ID #V-2, V-6
(68-69) Above-grade Storage Tanks (2), ID #S D-4, D-5
(70) Above-grade Storage Tank, ID #V-4
(71) Above-grade Storage Tank, ID #V-5
(72-73) Above-grade Storage Tanks (2), ID #D-2B, D-2C
(74) Drum Washing Facility
(75-99) Container Storage Areas (25)
(100) Above-grade Storage Tank, ID #D-700
(101-104) Above-grade Storage Tanks (4), ID #s 1254, 1255A, 1257A and 1257B
(105) Unit 1 Incinerator
(106) BO-4 Landfill
(107) Unit 4 Surface Impoundment ID - Solids Lagoon
(108) Above-grade Storage Tank, ID #V-84
(109) Above-grade Storage Tank, ID #V-31
(110-113) Above-grade Storage Tanks (4), ID #s R-140, D-36A, D-36B, and D-36C
(114) Miscellaneous Storage Containers
(115) Research Container Storage Area
(116) Central Container Storage Area
(117) Surface Impoundment, ID pH Adjustment Ditch
(118) Above-grade Tank, Elementary Neutralization Tank
(119) Unit III Boiler
*(120) Above-grade Storage Tank, ID - Oily Sludge Treater COPP Unit V
(121-124) Incinerator (4), ID - Units 1-3 Division
(125) Above-grade Storage Tank, ID #T-64
(126) Above-grade Storage Tank, ID #D-400
(127) Above-grade Storage Tank, ID #D-1
(128) Above-grade Storage Tank, ID #VF-120
(129) Above-grade Storage Tank, ID #D-504
(130-131) Above-grade Tanks (2), FL-101
(132) FL-102 Well, ID #WDW-76 or OCD Well #1

*Dow has submitted closure (clean) plans for these units. Units are expected to close by July 1987 and October 1987, respectively.
**The unit is currently undergoing closure in accordance with a TWC-approved closure (clean) plan.
* Currently, this unit is inactive. If the unit is reactivated, Dow has agreed to install secondary containment prior to waste receipt.

1. NUMBER SWMU TO BE INCLUDED IN THE RFI: 23
(Except RCRA units subject to Subpart F)

LIST OF SWMU	RATIONALE
(1) Landfill-Site B-4900	Past information does not indicate whether site specific subsurface monitoring has been performed to determine whether a release has occurred.
(2) Landfill Site B-1	" " " "
(3) Landfill Site B-3	" " " "
(4) Below grade Steel Tank ID #5-50	" " " "
(5) Below-grade Storage Tank, ID #S-2508	" " " "
(6-8) Below-grade Mixing Tanks(Neutralization Boxes)	" " " "
(9) A-100 Disposal Landfill	" " " "
(10) A-2 Disposal Landfill	" " " "
(11) B-47 Disposal Landfill (Pit Area)	" " " "
(12) Storage and Processing sump for truck wash	" " " "
(13) Open Trench Burner	Earthen bottom
(14) Landfill, ID #75-1	Past information does not indicate whether site specific subsurface monitoring has been performed to determine whether a release has occurred.
(15) Surface Impoundment, ID-CCF Pond	" " "
(16) Landfill, ID #75-3	" " "
(17) Site 3, Landfill	" " "
(18) Unit.3, Surface Impoundment	Information does not indicate whether site specific subsurface monitoring has been performed to determine whether a release has occurred.
(19) OCD Site 2, Landfill	" " "
(20) OCD Site 4, Landfill	" " "

LIST OF SWMU	RATIONALE
(21-21) Surface Impoundments (2) ID #B-2000 Latex ponds	" " "
(23) Surface Impoundment, ID-Brine Sludge Pond	Subsurface conditions should be investigated using subsurface soil boring and groundwater monitoring.
(24-29) Site B-2, Surface Impoundments	Soil borining indicate the presence of tar outside the perimeter of the impoundments.

**TWC recommends corrective action

J. SUPPLEMENTAL INFORMATION ON RCRA REGULATED UNITS: 0

K. ARE FACILITY MAPS/PHOTOS INCLUDED WITH ORIGINAL VSI REPORT? YES X NO ___

II. RECOMMENDATIONS: (EPA, STATE and/or CONTRACTOR)

TWC recommends a RCRA Facility Investigation for several units (see Section I).

EPA agrees with TWC's recommendation.

CONCUR: _____ DATE _____