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Sent: 5/6/2005 11:02 AM

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Cc: Pickett, James

Bcc:

Attachments: TCSIncidents1993to2005.xls;

Subject: Texas City Serious Process Safety Incidents 1993-YTD

Attached is a listing of the Texas City serious process safety incidents from 1993 - 2005 YTD. A serious process safety incident is one that did or could have resulted in a catastrophic release of a highly hazardous chemical.

TEXAS CITY SERIOUS PROCESS SAFETY INCIDENTS 1993 - 1Q2005

PSM/HSE	1910.119	Level	ID	Date	Unit	Impact
PSM	Yes			30 May 1993	ULC	Eqpt damage
PSM	Yes			15 October 1993	UU3	Fire/explosion
PSM	Yes			13 December 1993	DDU & ULC	Fire/explosion
PSM	Yes			13 June 1994	UU3	Fire/explosion
PSM	Yes			01 September 1994	UU3	Fire/explosion
PSM	Yes			03 November 1994	ULC	Eqpt damage
PSM	No			08 January 1995	Pipestill 3B	Eqpt damage
PSM	Yes			09 January 1995	UU3	HC Release
PSM	Yes			10 January 1995	RHU	Eqpt damage
PSM	No			02 March 1995	RHU	HC Release
PSM	No			09 May 1995	FCCU 3	near miss
PSM	Yes			18 June 1995	RHU	HC release & Fire
PSM	Yes			29 June 1995	FCCU 2	catalyst release
PSM	Yes			24 July 1995	FCCU 3	HC release & Fire
PSM	No			11 November 1995	RDU	Fire/explosion
PSM	Yes			18 December 1995	SRU	HC Release
PSM	Yes			19 December 1995	ISOM	HC Release
PSM	No	2		23 February 1996	AU2	Fire/explosion
PSM	Yes	3		27 February 1996	Piping	near miss
PSM	No	3		09 May 1996	FCCU 1	HC Release
PSM	No	3		25 June 1996	Tank farm	Fire/explosion
PSM	No	3		14 August 1996	SRU	Process Upset
PSM	Yes	3		14 August 1996	Pipestill 3A	HC Release
PSM	Yes	3		24 August 1996	FCCU 1	HC Release
PSM	No	3		31 October 1996	ULC	Fire/explosion
PSM	Yes	3		19 November 1996	UU4	Fire/explosion
				10 January 1997	ULC	Process Upset
PSM	No	3		12 February 1997	SRU	Eqpt damage

TEXAS CITY SERIOUS PROCESS SAFETY INCIDENTS 1993 - 1Q2005

Brief Details	REPAIR	BUSINESS	ENVIR	TOTAL
Failure of compressor 100 JD fourth stage				
8" hydrogen line failure and fire				
Fire on E101 stripper tower of DDU & 2 liquid carryovers to ULC flare				
Seal fire on 333J1 ultraformate splitter reflux pump				
Seal fire on 333J1 ultraformate splitter reflux pump				
2nd stage cylinder failed on compressor 100JD				
401JB crude tower charge pump/motor assembly failure				
Naphtha leak on bottom head of 309L naphtha centrifix: 3 injured				
1st stage compressor rod failed				
Flange leak on Low pressure amine absorber 508E				
Unit was shutdown because of high vibration levels on 401J Air blower gearbox				
595F medium hole separator liquid outlet line failure				
Crack on reactor side of spent catalyst U-bend				
Oil release from tube side inlet line of exchanger 428C2C and ignition 16 min later				
Stack fire at 601B hot oil heater				
Lighning strike near Sour Water stripper I/O building tripped sulfur trains and leak on outlet of catalytic reactor on SRU train B				
Leak during flange breaking on feed filter L200A				
Liquid toluene feed backed to two furnaces causing stack fires				
Waste bin truck hit West 6th street piperack (including natural gas lines)				
During a unit upset, hydrocarbon release occurred through the blowdown stack				
Lightning strike cause full surface tank fire on tank 1043				
4 lightning strikes (2 on 13th and 2 on 14th) near CRP I & II flare stacks				
Naphtha leak when piping failed on RV line from exchanger 212CA				
Crack and leak observed on reactor overhead line				
Tube failure in convective section of furnace 101B caused internal fire				
Fire on MOV444				
Liquid hydrocarbon was pressured out of Torch 1 flare stack, causing ground fires				
C incinerator overpressured during startup after TAR				

TEXAS CITY SERIOUS PROCESS SAFETY INCIDENTS 1993 - 1Q2005

PSM	Yes	3		12 February 1997	Alky 3	Toxic release
PSM	No	3		18 February 1997	UU4	Potential Vessel Rupture
PSM	No	2		28 February 1997	Alky 3	Toxic release
PSM	No	3		19 March 1997	ULC	Fire/explosion
PSM	No	3		08 October 1997	SRU	Process Upset
PSM	Yes	3		04 May 1998	Alky 2	HC Release
PSM	Yes	3		09 January 1999	Piping	HC Release
PSM	Yes	2		10 March 1999	AU2	near miss
PSM	EPA 40CFR68	3		19 April 1999	ISOM	Fire/explosion
PSM	No	3		16 August 1999	FCCU 3	Fire/explosion
PSM	Yes	3		18 June 2000	Coker B	HC release & Fire
PSM			FAT	08 August 2001	DDU	injuries
PSM			MIA	13 September 2001	RHU	HC Release
PSM	Yes	3	Hipo	08 March 2001	FCCU 3	HC Release
PSM	Yes	3		07 June 2001	Pipestill 3B	HC Release
PSM	No	3		08 October 2001	Alky 2	near miss
PSM	No	3	HiPo	06 November 2001	Cokers A & C	HC Release/Process Upset
PSM	No	2		05 December 2001	Alky 3	Process Upset
PSM	Yes	3		05 March 2002	ULC	HC Release
PSM	Yes	?	Hipo	28 May 2002	Alky 2	Potential Vessel Rupture
PSM			AIR	21 July 2002	HDT	HC Release
PSM	No	2	HiPo	10 November 2002	ISOM	Potential Vessel Rupture
PSM	yes	2		11 November 2002	FCCU 3	HC Release

TEXAS CITY SERIOUS PROCESS SAFETY INCIDENTS 1993 - 1Q2005

HF acid pump failed releasing 13,195 lbs of HF: 9 injured				
High external wall temperature on D404 reactor				
HF acid was released when relief valve from unloading truck lifted				
Seal fire on 133J lean oil pump				
Upset caused trains A&B to trip and C&D to go off ratio, causing a visible plume from stack				
Release of 3720 lbs of butane/alkylate when 1/2" block valve nipple failed				
Rupture of 691 line between Pipestill 3B diesel to Cat 3				
B621B furnace shut down because of flame-out				
A fire occurred during removal of RV of F301: a pipefitter suffered 2nd degree burns				
Explosion and fire at the south oil water separator				
Coker B feed system (resid charge line)naphthenic acid corrosion	\$ 2,500,000	\$ 3,500,000		\$ 6,000,000
A contractor fell and died in a reactor that was under nitrogen purge.				
Leak on Ebulating Pump Catalyst Withdrawal Pipepork on RHU 300 train. Third leak in 3 months on RHU complex due to Chloride Stress Corrosion Cracking. RHU shutdown to replace stainless steel pipework.	\$31,000,000	\$116,000,000	\$0	\$147,000,000
Release of absorber off-gas occurred due to a failure of the FCCU absorber off-gas line: 10 injured	\$1,200,000	\$8,000,000		\$9,200,000
Leak of diesel when crane boom hit bleeder of exchanger 464C				
Nipple broke during de-inventory phase				
Foam over events on Coker A and Coker C which caused coke drum relief valves to relieve and vent to atmosphere, resulting in community impact and overpressure of Coker C drum.	\$600,000	\$945,000	\$15,000	\$1,560,000
High pressure in settler vessel resulted in venting to flare				
Thermocouple blowout during routine check released Hydrogen at 1800 psig				
Severe corrosion under insulation of C101 Butane Splitter Column				
Operations personnel noted oil seepage from the insulation around the line leaving the high temperature/low pressure separator on the Cat Feed Hydrotreating unit.	\$0	\$500,000	\$0	\$500,000
A high MTBE result for ISOM unit PENEX reactor feed prompted Operations to bypass the reactor and reduce system pressure. A leaking by-pass valve cause a temperature excursion to 1120F.	\$0	\$60,000	\$0	\$60,000
3/4" nipple failure on fractionator side of heat exchanger				

TEXAS CITY SERIOUS PROCESS SAFETY INCIDENTS 1993 - 1Q2005

PSM	No	A		21 January 2003	Paraxylene 1	HC Release
PSM	Yes	3	HiPo	17 February 2003	Piping	Potential release
PSM			?	17 March 2003	HU2	HC Release
PSM	Yes	2	HiPo	26 March 2003	FCCU 2	HC Release
PSM	No	B		20 May 2003	FCCU 3	HC Release
PSM			Op. Report	17 August 2003	HU2	HC Release
PSM			Op. Report	01 August 2003	ARU	HC Release
PSM	Yes	B	HiPo	20 August 2003	VDU	HC Release
PSM			?	24 August 2003	HU1	HC Release
	Yes	A	HiPo	08 October 2003	UU4	HC Release
PSM				08 November 2003	HU1	HC Release
PSM	Yes	A	MIA	30 March 2004	UU4	HC release & Fire
PSM			Insp CoP	27 December 2004	UU3	HC release & Fire
PSM			FAT	23 March 2005	ISOM	Fire/explosion
PSM			Ops Rep	15 April 2005	FCCU 1	Fire/explosion

Yes: report stamped "1910 incident"

No: paper copy of report available

TEXAS CITY SERIOUS PROCESS SAFETY INCIDENTS 1993 - 1Q2005

Leak of xylenes on M206A second stage crystallizer				
A truck mounted TCB (exchanger bundle extractor) was traveling on a roadway within the Texas City refinery when the truck's vertical mast struck and damaged several critical gaseous process lines, a 115# steam line and an instrument air line.	\$170,000	\$0	\$0	\$170,000
HU2 D-101 Reformer Tube Leak	\$70,000	\$1,600,000	\$0	\$1,670,000
While clamping a leak in a hot oil (slurry) line, a leak in the line increased releasing 680 F slurry. The area was evacuated and feed was pulled from the Unit.	\$334,000	\$140,000	\$0	\$474,000
Leak on a 6" propane line downstream of 501E caustic treater				
HU2 D-101 Reformer Tube Leak	\$150,000	\$1,200,000	\$0	\$1,350,000
Aromatic recovery unit A-side benzene tower CUI	\$3,500,000	\$6,437,000	\$0	\$9,937,000
Piping was being lifted by a crane to the pipe rack above the Pipestill 3A Vacuum tower piping system as part of the clean streams environmental project. The load hit a vent valve and nipple on a 12" HVGO (Heavy Vacuum Gas Oil) pipe. This caused a crack.	\$80,000	\$300,000	\$0	\$380,000
HU1 Secondary Reformer Leak	\$1,200,000	\$0	\$0	\$1,200,000
10" line failed near 2 years old clamp				
HU1 101-B Primary Reformer Tube Leak	\$145,000	\$630,000	\$0	\$775,000
Explosion and fire after failure of 20" pipe on B406 furnace	\$32,600,000	\$115,000,000	\$0	\$147,600,000
flange-to-pipe weld failure at Ultraformer Unit 3				
15 fatalities in isom unit explosion during start-up				
Seal failure on a FCCU 1 pump, resulting in a fire: unit down for 7-10 days				