

## APPENDIX II.

### **Sasolburg Pollution Incidents in 2001-2002, as reported by Natref & Sasol.**

1 February 2001	Leak from the combustion chamber in the sulphur recovery unit resulting in abnormally high releases of SO <sub>2</sub> for a period of 2 days.
6 June 2001	A fire in the crude oil distillation unit at Natref killed two contract workers and injured another. The fire lasted eight hours and resulted in the closure of the entire refinery.
24 June 2001	Complaints of bad odours followed Natref's dumping of unneutralised spent caustic in the Solar Pond. This was done because the facilities normally used to neutralise the caustic were out of commission because of the shut down following the fire earlier in the month.
6–8 November 2001	Natref recorded SO <sub>2</sub> emissions of 233 tons, 273 tons and 248 tons respectively on these three days due to the shutdown of the sulphur recovery unit following a hydrocarbon liquid carry-over.
10-12 December 2001	Natref recorded SO <sub>2</sub> emissions of 67 tons, 86 tons and 120 tons respectively on these three days due to the shutdown of the sulphur recovery unit following a leak on the Fuel Gas line.
18 December 2001	A Sulphur dust explosion at the Sasol One site (at the Sasol Ammonia sulphur milling plant) resulted in injuries to eight employees.
31 December 2001	The entire plant was shut down due to a "bursting disk failure" resulting in estimated SO <sub>2</sub> emissions in the range of 280 tons a day for five days.
14 - 16 January 2002	Natref recorded SO <sub>2</sub> emissions of 129 tons, 228 tons and 152 tons respectively on these three days due to the shutdown of the entire plant following another "bursting disk failure".
18 – 20 April 2002	Natref recorded SO <sub>2</sub> emissions of 59 tons, 152 tons and 145 tons respectively on these three days due to the shutdown of the sulphur recovery unit to repair the combustion chamber temperature controller.
16 May 2002	Natref recorded SO <sub>2</sub> emissions of 91 tons on this day due to the shutdown of the sulphur recovery unit for 8 hours because of hydrocarbon carry over to the reactor. This meant that acid gas was diverted to the flare for 8 hours.

- 8 June 2002 Natref again recorded above limit emissions of SO<sub>2</sub> because the sulphur recovery unit had to be shut down for 14 hours due to a blockage.
- 23 June 2002 Flaring and black smoke caused by the shutdown of the refinery to allow for expansion operations.

**South Durban Pollution Incidents in 2001-2002, as recorded by SDCEA.**

- 9 January 2001 Fire in the bitumen blending area. On the same day 6000 litres of solvent spilled from a faulty valve on a road tanker.
- Jan 2001 Engen refinery spills 1000l oil into Badulla canal - claiming rain reason.
- 11 January 2001 Kynochem releases SO<sub>2</sub> gas into the air resulted in 16 hospitalised.
- 23 January 2001 Fire at Shell/BP refinery in Crude Distillation Unit number 2. Also on this day 1000 litres of bunker fuel spilled into Durban Bay.
- 21 March 2001 Sapref tetra ethyl lead (TEL) tank failure on 22 March 2001, resulting in 25 tons of TEL leaking out of tank. Incident continued for 4 days.
- 4 April 2001 Child at the Settlers Primary School in Merebank, was hospitalised with severe respiratory problems after H<sub>2</sub>S odourous emissions.
- 4 May 2001 2-ethyl-hexanol leak at Island View chemical storage area 50 tons.
- 16 May 2001 Island View Storage styrene leak - unknown quantity spilled.
- 28 May 2001 ENGEN worker T van der Schiff killed and another, E. Mlaba, seriously injured by hydrofluoric acid. No action taken against refinery
- 19 June 2001 SAPREF H<sub>2</sub>S emission onto the community. Flare 'failure' at Sapref results in the release of unburnt gases which included a substantial amount of H<sub>2</sub>S.
- 7 July 2001 SAPREF Pipeline petrol leak (1 million litres) discovered and reported by residents
- 14 July 2001 Sapref CD3 gasoil circulation pump fails releasing volatile cloud (due to operator negligence).
- July 2001 Second leak on Sapref pipeline discovered. Residents demand pipeline be immediately inspected.

10 August 2001	4 km Traffic jam at Umbilo Road/Francois Road, Durban closed after toxic spill from a road tanker - chemical not identified.
15 August 2001	SAPREF (Shell/BP) Bitumen plant failure that which released smoke, soot and hydrocarbons.
August 2001	SAPREF second pipe leak reported
27 August 2001	SAPREF pipeline leak reported Marine Fuel Oil (Lighthouse Road, Bluff)
14 September 2001	SAPREF flare failure
15 September 2001	Gas Leak Umbogintwini – 27 children hospitalized. confirmed that 3 children treated with gas inhalation by ambulance.
22 September 2001	Chemical warehouse in Mobeni burnt to the ground smouldered for two days.
27 September 2001	Shell/BP refinery third pipe leak reported (Lighthouse road - marine fuel oil)
14 October 2001	Island View - SAPREF spill of +/- 2 tons of Bunker fuel oil into Harbour Basin
25 October 2001	ENGEN reports underground pipe leak resulting in 25,000 litres of diesel being lost
22 November 2001	Engen flare problem results in massive flaring twice in one day
23 November 2001	Engen 1000 litres of Oil spilled into the Badulla Canal.
2 December 2001	Total tank storage leak 14000l fuel floods Isipingo residents garden
24 December 2001	Tongaat Petronet pipeline explosion. Leakage of benzene.
30 December 2001	Sapref spilled 15 000 litres of marine fuel oil into Durban harbour.
24 January 2002	Engen refinery fire
17 February 2002	Engen Spill Umlaas Canal
21 February 2002	Engen - Safor Fire, Propane line rupture at Safor unit Engen refinery
21 February 2002	IOP Explosion -New boiler exploded having problems since commissioned three weeks ago one worker in critical condition and another minor injury.

22 February 2002	Engen refinery spills 3000 litres oil into Badulla canal and is fined R500. Claims caused by rain.
10 March 2002	Excessive flaring Engen combo stacks
12 March 2002	Engen oil spill on Duranta Rd and Badulla Drive. Apparently the spill was covered with sand.
April 2002	Sapref discovers hole in pipeline - claims no product was lost.
29 April 2002	Power failure causes damage crude unit distillation tower, most of refinery shut down.
5 May 2002	Settlers School students taken ill after toxic emissions. Reference to Engen excessive flaring (Sunday Tribune Herald)
12 May 2002	Merebank community complaints of suffocating plume gases from Engen refinery as pilot flare fails on start up of refinery releasing raw VOCs.
9 July 2002	Sapref diesel pipeline leak, Tara and Bibeford Roads. 40 minute leak into ground.....
1 September 2002	Sapref- storage tank – sulphur pressure vessel exploded.
19 September 2002	Total – Grease reactor explosion
02 October 2002	Ijuba Breweries – Fire – Fumes from the stack – the centre and south stack of the three small stacks at the Ijuba Breweries in Congella were smoking at 06h47.
02 October 2002	Engen – Lube Refinery stack was smoking at 06h30
02 October 2002	Engen – Gas leak – community member called to say that everyone at the Merebank Shopping Centre were complaining about the strong smell.
09 October 2002	Bressman Bitumen And Paraffin Factory – Chemicals were being processed when explosion took place.
17 October 2002	Bressman Bitumen Factory – One worker dead, 7 injured – fuel storage tank exploded.
23 October 2002	Sapref – Power failure – Black smoke settled over communities- burning eyes, throat irritation etc.
24 October 2002	Engen – Gas – firefighters were sent to Durban Harbour. High security zone – leak discovered on an Engen Fuel storage tank.

15 November 2002 Michelle Footwear – 60 workers were overcovered – Gas leak reported – coming from a truck – SAP Metro Police, fire dept, contacted by SDCEA – reported by Tony Carnie

20 November 2002 Refinery – Industrial Oil Process – Toxic cloud let into the Air.

24 November 2002 Benzene Pipeline – Tongaat

24 November 2002 Engen Refinery – Fire – Benzene related.

29 November 2002 Sapref – Gas – Pipeline – one person injured

10 December 2002 Unknown tanker – spilled chemicals on Tara Road, Merebank

17 December 2002 IOP – Explosion on sit – engineer injured – crude oil

24 December 2002 Engen – 20 000lt of crude oil – spilled into the canal and moved into the Harbour.