

STACK EMISSION MONITORING & ANALYSIS DATA BASE

(Oct'09-Mar'10)

Stack Physical Parameters

Existing Plant		
Stack connected to	Height from GL (m)	Internal dia at sampling point (m)
DEG	58	3.16
Hot oil Heater	69	1.9
Boiler/Incinerator	88	1.7
PX oxidation off gas (PX - Paraxylene)	21.85	2.2
Vent gas scrubber -I (Scrubbing of Process off) gas from	18.35	1.6
Vent gas scrubber -II (PTA Storage Scrubber)	15.15	2.1

Expansion Plant		
Stack connected to	Height from GL (m)	Internal dia at sampling point (m)
Hot oil Heater	30	1.4
DEG & Incinerator	70	2.2
Off Gas Combustion Unit	30	

- Note:** 1. Stack emissions are monitored wrt to PM, CO, SO₂, NO₂. However as per the Air & Water Consent to operate only PM & CO are to be monitored. Hydrocarbon monitoring done on quarterly basis in DEG & Hot oil heater stacks.
 2. As there is no P M, SO₂ & NO₂ from Process emission (PX off gas, Vent gas scrubber- I & II, off gas combustion unit) so these parameters are not measured from these stacks.
 3. Incinerator emission is through Boiler stack ie Boiler & Incinerator stack is common in the existing plant.
 4. Boiler not running during normal operation. It is operated only during start up & shut down of the Plant.
 5. Stack sampling from Hot Oil Heater, DEG, Incinerator in the Existing & Expansion Plant are conducted by third party, whereas for vent gas scrubber I,II, PX Off Gas stack, off gas combustion emission sampling is conducted in-house.

ANALYSIS RESULTS

Month - Oct'09

S No.	Parameter	Existing Plant						Expansion Plant		
		Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm ³)	223.0	105.0	-	-	-	-	-	-	-
2	CO (% v/v)	<0.02	<0.2	-	0.43	0.22	0.43	-	-	-
3	SO ₂ (mg/Nm ³)	713.0	1681	-	-	-	-	-	-	-
4	NO ₂ (mg/NM ³)	291.0	576	-	-	-	-	-	-	-

Note: Expansion plant was under test run
Incinerator was under mtc.

ANALYSIS RESULTS

Month - Nov'09

S No.	Parameter	Existing Plant						Expansion Plant		
		Hot oil heater	DEG	Incinerator #	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm ³)	95.0	90.0	-	-	-	-	-	-	-
2	CO (% v/v)	<0.2	<0.2	-	0.4	0.11	0.41	-	-	-
3	SO ₂ (mg/Nm ³)	805.0	2257.0	-	-	-	-	-	-	-
4	NO ₂ (mg/Nm ³)	268.0	447.0	-	-	-	-	-	-	-

Incinerator emission was through DEG due to Preventive mtc of Boiler

Note: Expansion plant was under test run

S No.	Parameter	Hot oil heater	DEG & Incinerator
1	NMHC (ug/m ³)	ND	ND

WBPCB SAMPLING:

S No.	Parameter	Hot oil heater	DEG & Incinerator
1	PM (mg/Nm ³)	581.72	38.91

ANALYSIS RESULTS

Month - Dec'09

S No.	Parameter	Existing Plant						Expansion Plant		
		Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm ³)	191	95.0	188.0	-	-	-	-	-	-
2	CO (% v/v)	<0.2	<0.2	<0.2	0.47	-	-	-	-	-
3	SO ₂ (mg/Nm ³)	2533	2260.0	2355	-	-	-	-	-	-
4	NO ₂ (mg/Nm ³)	403	641.0	-	-	-	-	-	-	-

Boiler was running & emission was combined with Incinerator

Note: Expansion plant was under test run

ANALYSIS RESULTS

Month - Jan'10

S No.	Parameter	Existing Plant						Expansion Plant		
		Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	-	-	-	-	-	-	-	-	-
2	CO (% v/v)	-	-	-	-	-	-	-	-	0.51
3	SO ₂ (mg/Nm3)	-	-	-	-	-	-	-	-	-
4	NO ₂ (mg/Nm3)	-	-	-	-	-	-	-	-	-

Note: Plant was under Annual Shut down mtc. in Jan'10

ANALYSIS RESULTS

Month - Feb'10

S No.	Parameter	Existing Plant						Expansion Plant		
		Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	127	62.0	98.0	-	-	-	-	120	-
2	CO (% v/v)	<0.2	<0.2	<0.2	0.4	0.17	0.4	-	<0.2	0.46
3	SO ₂ (mg/Nm3)	426	80.0	144.0	-	-	-	-	332	-
4	NO ₂ (mg/Nm3)	538	116.0	253	-	-	-	-	471	-

WBPCB SAMPLING:

S No.	Parameter	Hot oil heater	DEG	Incinerator
1	PM (mg/Nm3)	91.62	63.78	-

ANALYSIS RESULTS

Month - Mar'10

S No.	Parameter	Existing Plant						Expansion Plant		
		Hot oil heater	DEG	Incinerator#	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	101	87.0	148.0	-	-	-	-	96	-
2	CO (% v/v)	<0.2	<0.2	<0.2	0.44	0.16	0.44	-	<0.2	0.51
3	SO ₂ (mg/Nm3)	1409	1645.0	1722.0	-	-	-	-	921	-
4	NO ₂ (mg/Nm3)	254	384.0	312	-	-	-	-	202	-

#Boiler running & emission was combined with Incinerator

S No.	Parameter	Hot oil heater	DEG
1	NMHC (ug/m3)	ND	ND

