

STACK EMISSION MONITORING & ANALYSIS DATA BASE
(April'16- September'16)
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:

- 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.
- 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.
- Incinerator emission is through Boiler stack ie Boiler & Incinerator stack is common in the existing plant.
- Boiler not running during normal operation. It is operated only during start up & shut down of the Plant.
- 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 -April'16

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)	138.0	stop**	stop*	0.09	Not venting	Not venting	28	Standby	-
2	CO (%, v/v)	<0.2						<0.2		-
3	SO ₂ (mg/Nm ³)	456.5						305.6		-
4	NO ₂ (mg/NM ³)	150.7						111.6		-

S No.	Parameter	Existing Plant			Expansion Plant	
		Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	NMHC (ppm)	<1.0	stop**	stop	<1.0	stop

ANALYSIS RESULTS

Month -May'16

Existing Plant								Expansion Plant		
S No.	Parameter	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)	126.0	stop**	stop*		Not venting	Not venting	37	Standby	-
2	CO (%, v/v)	<0.2			0.09			-		
3	SO ₂ (mg/Nm3)	780.6			355.7			-		
4	NO ₂ (mg/Nm3)	169.7			121.5			-		

WBPCB SAMPLING:

Existing Plant				Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	12.23	stop**	stop	1.04	standby

ANALYSIS RESULTS

Month -June'16

Existing Plant								Expansion Plant		
S No.	Parameter	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)	Not Done	stop**	stop*		Not venting	Not venting	131.0	standby	-
2	CO (%, v/v)				0.09			-		
3	SO ₂ (mg/Nm3)				340.4			-		
4	NO ₂ (mg/Nm3)				131			-		

ANALYSIS RESULTS

Month - July'16

Existing Plant								Expansion Plant		
S No.	Parameter	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)	71.00	stop**	stop*		Not venting	Not venting	80.0	standby	-
2	CO (%, v/v)	<0.2			0.07			-		
3	SO ₂ (mg/Nm3)	708.2			552.0			-		
4	NO ₂ (mg/Nm3)	162.3			121.0			-		

Existing Plant				Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	NMHC (ppm)	<1.0	stop**	-	<1.0	standby

ANALYSIS RESULTS

Month -August'16

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)	87.0	stop**	stop*	0.1	Not venting	Not venting	77	standby	-
2	CO (%, v/v)	<0.2						<0.2		-
3	SO ₂ (mg/Nm3)	651						445.4		-
4	NO ₂ (mg/Nm3)	102.1						115.9		-

WBPCB SAMPLING:

S No.	Parameter	Existing Plant			Expansion Plant	
		Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	1.54	stop**	stop*	1.69	standby

ANALYSIS RESULTS

Month -September'16

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)	96.0	stop**	stop*	-	Not venting	Not venting	89.0	standby	-
2	CO (%, v/v)	<0.2						<0.2		-
3	SO ₂ (mg/Nm3)	570.3						409.2		-
4	NO ₂ (mg/Nm3)	122.2								
5	VOC (μ/m3)	< 5.0						< 5.0		-

* Co processing activity is on process with M/S Ambuja Cement Ltd.(ACL) as per CPCB approval
3rd party Laboratory Vendor's NABL / MOEFCC approval copies as Annexure-1a

** April'2015 onwards we are using Grid power