

STACK EMISSION MONITORING & ANALYSIS DATA BASE
(October'16- March'17)
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 -October'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)	34.0	stop**	stop*		Not venting	Not venting	28	Standby	-
2	CO (%, v/v)	<0.2			0.09			<0.2		-
3	SO ₂ (mg/Nm ³)	515.7			377.7			-		
4	NO ₂ (mg/NM ³)	113.2			99.2			-		

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 -November'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)	97.0	stop**	stop*		Not venting	Not venting	38	Standby	-
2	CO (%, v/v)	<0.2			0.09			<0.2		
3	SO ₂ (mg/Nm3)	485.3			406.3			-		
4	NO ₂ , (mg/Nm3)	138.7			113.1			-		

WBPCB SAMPLING:

S No.	Parameter	Existing Plant			Expansion Plant	
		Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	284.47	stop**	stop	195.42	standby

ANALYSIS RESULTS

Month -December'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)	PSDM	stop**	stop*		Not venting	Not venting	26.0	standby	-
2	CO (%, v/v)				0.09			<0.2		
3	SO ₂ (mg/Nm3)				307.2			-		
4	NO ₂ , (mg/Nm3)				91.9			-		

ANALYSIS RESULTS

Month - January'2017

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)	48.00	stop**	stop*		Not venting	Not venting	33.0	standby	-
2	CO (%, v/v)	<0.2			0.07			<0.2		
3	SO ₂ (mg/Nm3)	685.6			389.2			-		
4	NO ₂ , (mg/Nm3)	183.9			111.9			-		

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

ANALYSIS RESULTS

Month -February'2017

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)	40.0	stop**	stop*		Not venting	Not venting	37	standby	-
2	CO (%, v/v)	<0.2			0.1			-		
3	SO ₂ (mg/Nm3)	637			358.7			-		
4	NO ₂ , (mg/Nm3)	195			114			-		

WBPCB SAMPLING:

S No.	Parameter	Existing Plant			Expansion Plant	
		Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	60.40	stop**	stop*	8.68	standby

ANALYSIS RESULTS

Month -March'2017

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)	23.0	stop**	stop*		Not venting	Not venting	42.0	standby	-
2	CO (%, v/v)	<0.2			-			-		
3	SO ₂ (mg/Nm3)	487.4			531.2			-		
4	NO ₂ , (mg/Nm3)	172.6			198.5			-		

* 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