

STACK EMISSION MONITORING & ANALYSIS DATA BASE

(April'15-Sept'15)

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'15

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)	127.0	stop**	stop*		Not venting	Not venting	71	Standby	-
2	CO (% v/v)	<0.2			0.13			<0.2		
3	SO ₂ (mg/Nm ³)	442.9			398.9			-		
4	NO ₂ (mg/NM ³)	197.4			163.5			-		

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'15

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)	112.0	stop**	stop*		Not venting	Not venting	71	Standby	-
2	CO (%, v/v)	<0.2			0.17			-		
3	SO ₂ (mg/Nm3)	425.2			376.6			-		
4	NO ₂ (mg/Nm3)	171.4			168.5			-		

WBPCB SAMPLING:

Existing Plant				Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	86.11	stop**	stop	164.41	standby

ANALYSIS RESULTS

Month -June'15

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)	98.0	stop**	stop*		Not venting	Not venting	71.0	standby	-
2	CO (%, v/v)	<0.2			0.07			-		
3	SO ₂ (mg/Nm3)	394.9			376.6			-		
4	NO ₂ (mg/Nm3)	198.3			168.5			-		

ANALYSIS RESULTS

Month - July'15

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)	134	stop**	stop*		Not venting	Not venting	Not done	standby	-
2	CO (%, v/v)	<0.2			0.1					-
3	SO ₂ (mg/Nm3)	792.4			-					-
4	NO ₂ (mg/Nm3)	252.3			-					-

Existing Plant				Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	NMHC (ppm)	<1.0	stop**	-	not done	standby

ANALYSIS RESULTS

Month -Aug'15

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)	24.0	stop**	stop*	not done	Not venting	Not venting	19	standby	-
2	CO (%, v/v)	<0.2						<0.2		-
3	SO ₂ (mg/Nm3)	448.1						336.9		-
4	NO ₂ (mg/Nm3)	160.9						129.6		-

WBPCB SAMPLING:

S No.	Parameter	Existing Plant			Expansion Plant	
		Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	114.2	stop**	stop*	58.42	standby

ANALYSIS RESULTS

Month -September'15

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)	82.0	stop**	stop*	0.11	Not venting	Not venting	96.0	standby	-
2	CO (%, v/v)	<0.2						<0.2		-
3	SO ₂ (mg/Nm3)	617.5						453.8		-
4	NO ₂ (mg/Nm3)	264.6						145.2		-

* Co processing activity is on process with M/S Ambuja Cement Ltd.(ACL) as per CPCB approval

** April'15 onwards we are using Grid power