

## Shapoorji Pallonji - Engineering & Construction

Site: \_\_\_\_\_\_ Environmental Monitoring Report for Apr-Jun / Jul-Sep / Oct-Dec / Jan-Mar, 2013-14

Sr. No.	Type of Monitoring	Parameters, Unit	Quantity / Value	Period, Allowable Limits	Method of Measurement, Remarks
	Ambient Air Quality	PM2.5 (ug/m3)		Annual- 40 (ug/m3) Daily- 60 (ug/m3)	* Gravimetric * TOEM * Beta Attenuation
		PM10 (ug/m3)		Annual- 60 (ug/m3) Daily- 100 (ug/m3)	* Gravimetric * TOEM * Beta Attenuation
		SOX (ug/m3)		Annual- 50 (ug/m3) Daily- 80 (ug/m3)	* Improved west & Gaeke * Ultravoilet Fluorescence
		NOX (ug/m3)		Annual- 40 (ug/m3) Daily- 80 (ug/m3)	* Modified Jacob & Hoccheiser * Chemiluminescence
2	DG Stack Monitoring (For DG sets upto 800KW)	NOx (g/KW-hr)		Upto 19KW- 9.2 19 KW-176KW- 9.2 176-800 KW- 9.2	* Chemiluminescence, Non Dispersive infra Red,  * Non Dispersive Ultra-violet (for continuous measurement),  * Phenol disulphonic method
		Hydrocarbon (HC) (g/KW-hr)		Upto 19KW- 1.3 19 KW-176KW- 1.3 176-800 KW- 1.3	Gas Chromatograph – Flame Ionisation Detector
		PM (g/KW-hr)		Upto 19KW- 0.3 19 KW-176KW- 0.3 176-800 KW- 0.3	Gravimetric
		CO (g/KW-hr)		Upto 19KW- 3.5 19 KW-176KW- 3.5 176-800 KW- 3.5	Non Dispersive Infra Red
3	Ambient Noise Monitoring [Day Time & Night Time]	Industrial area dB		Day time- 75 Night Time- 70	The instrument system, shall meet the requirements for a class 1 instrument specified in IEC 61672-1
		Commercial area, dB		Day time- 65 Night Time- 55	(2002) Class 1 Noise monitoring station shall consist of a weatherproof microphone, a data storage and analysis device and an information transmission
		Residential area, dB		Day time- 55 Night Time- 45	system such as a land line phone / GSM (Global System for Mobile Communications).
		Silence Zone, dB		Day time- 50 Night Time- 40	
4	DG Noise Monitoring [Day Time & Night Time]	dB		Noise limit viz. 75 dB(A) at 1 m	-do-



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Sr. No.	Type of Monitoring	Parameters, Unit	Quantity / Value	Period, Allowable Limits	Method of Measurement, Remarks
5	Lux Monitoring for level of illumination	Lux		*50 Lux- Office *100 Lux- walkways, workshops, stairs	To be monitored for human confort in office area, public areas, stairs, walk ways and workshops etc.
6	Hazardous Waste Disposal	Waste Oil / Black Oil (Liters) & Oil / grease soaked material (Kg.) Old used Batteries, No. Others (e.g. chemicals etc.) if any, Kg		Should be disposed every 6 months	Waste oil, oil soaked material and chemicals etc. to recyclers authorized by CPCB/SPCB and batteries in exchange to the vendor while purhasing the new one.
7	E Waste Disposal	Keyboard, monitors, printers etc., Kg		-do-	Through Authorized CPCB/SPCB vendor
8	that sewage is disposed to	Fresh water consumed at labor camp, canteen & office (other than curing & construction activities), liters		Daily, optimum quantity without compromising with the purpose	Keep a track through water meter or through capacity of tanker / tank
9	Water sprayed for dust supresssion	In batching plant bins and on roads, Liters		-do-	-do-

Note: These selected key parameters are to be monitored QUARTERLY at all the sites except Sr. No. 8 and 9 which shall be monitored on a daily basis. Provisions for monitoring of these parameters shall be made in the budget / estimate. Sites shall fill up Column No. 4, Quantity / Value.

- 2 This report shall be prepared by the site HSE officer and forwarded to Regional HSE Coordinator in the month of July (Qtr 1), October (Qtr 2), January (Qtr 3) and April (Qtr 4) covering the previous quarters. Concerned departments like Stores, Administration, PMV and Procurement shall furnish the figures related to Sr. No. 6,7,8 and 9. However, Project Manager has the ultimate responsibility for the preparation and sending of this report.
- 3 Details of the environmental monitoring are available at our internal website SPARK. Links for which are given below :-

List of environmental monitoring parameters required by CPCB along with the cost of sampling

http://192.168.1.4/searchfiles/SafetyPolicy/Govt.%20Notified Charges%20for%20sampling%20and%20testing%20of%20air,%20water%20etc..pdf

List of Approved laboratories http://192.168.1.4/searchfiles/SafetyPolicy/ENVIRONMENTAL%20LABORATORIES%20DETAILS%20-%20STATEWISE.pdf

List of Air Quality parameters <a href="http://192.168.1.4/searchfiles/SafetyPolicy/Guidelines%20for%20Air%20Quality%20Monitoring.pdf">http://192.168.1.4/searchfiles/SafetyPolicy/Guidelines%20for%20Air%20Quality%20Monitoring.pdf</a>

List of Approved Hazardous waste recyclers <a href="http://192.168.1.4/searchfiles/SafetyPolicy/Registered%20waste%20oil%20recyclers.pdf">http://192.168.1.4/searchfiles/SafetyPolicy/Registered%20waste%20oil%20recyclers.pdf</a>

(Signature of Site HSE Officer)	(Signature of Project Manager)