F O R M – V

(See Rule 14)

ENVIRONMENTAL AUDIT REPORT FOR THE FINANCIAL YEAR ENDED ON 31ST MARCH, 2013.

PART - A

1. Name and address of the Owner/ Occupier of the industry operation or process : Hindusthan Chemicals Company
   Prop: Hindusthan Engineering & Industries Ltd
   GIDC Industrial Estate
   P.O. Olpad – 394 540, Dist. Surat. (Gujarat)

2. Date of the last environmental audit report submitted. : 18 05 2012

PART – B

WATER AND RAW MATERIAL CONSUMPTION

1. Water Consumption M^3/day

(A) Domestic : 8.50 M^3/day

(B) Industrial:

i)	Process	: 20.70 M^3/day
ii)	Cooling	: 178.00 M^3/day
iii)	Boiler	: 50.00 M^3/day
iv)	Washing/Agriculture	: 6.00 M^3/day
	Total	: 263.20 M^3/day

Name of the Products	Water Consumption per unit of Products	
	During the previous Financial Year (2011-2012)	During the current Financial Year (2012-2013)
1. Hydrocyanic Acid	6.84 M^3/MT	6.92 M^3/MT
2. Sodium Cyanide	8.43 M^3/MT	8.83 M^3/MT
3. Potassium Cyanide	9.12 M^3/MT	5.55 M^3/MT
4. Ammonium Sulphate	2.90 M^3/MT	2.85 M^3/MT
5. Sodium Ferrocyanide	8.19 M^3/MT	7.80 M^3/MT
6. Diphenyl Guanidine	9.12 M^3/MT	6.72 M^3/MT
7. Heat Treatment Salt	Nil	Nil
8. Potassium Ferrocyanide	Nil	Nil
9. Mandelonitrile	Nil	Nil
10. Sodium Dicyanamide	Nil	Nil

PART – C
POLLUTION GENERATED
(Parameters as specified in the Consent Issued)

(i) Pollutants	Quantity of pollution generated.	Percentage of variation from prescribed standards with reasons.
a) Water } b) Air }	As per enclosed Annexure No. 2.	

PART – D
HAZARDOUS WASTE
(As specified under Hazardous Waste Management and Handling Rules, 1989)

Hazardous Wastes	Total Quantity (Kgs.)	
	During the Previous Financial Year (2011 – 2012)	During the Current Financial Year (2012 –2013)
a) From Process } b) From Pollution control facilities }	82916.00	104072.00

Above whole quantity was dried in impervious solid waste collection pan and then sent to M/s Nandesari Environment Control Ltd., Nandesari & M/s Bharuch Enviro Infrastructure Ltd, Ankleshwar for incineration, treatment and disposal.

PART – E
SOLID WASTES

	Total Quanty	
	During the Previous Fin. Year 2011-2012)	During the Current Fin, Year (2012-2013)
a) From Process	Whole quantity of solid waste was dried and then sent to M/s Nandesari Environment Control Ltd. for incineration, treatment and disposal.	Whole quantity of solid waste was dried and then sent to M/s Nandesari Environment Control Ltd & M/s Bharuch Enviro Infrastructure Ltd. for incineration, treatment and disposal.
b) From Pollution Control Facility		
c) Quantity Recycled or re-utilized		

PART – F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous Waste:

i)	Activated Carbon	- Semi solid	
		Activated Carbon	4.0%
		Water	58.0%
		Oxidized Polymer of DPG (Loss on ignition at 500° C.)	35.0%
ii)	Ferri Ferrocyanide	- Ferri Ferrocyanide	30.5%
		Water	65.9%
iii)	Ferric Hydroxide	- Ferric Hydroxide	30.0%
		Water	71.0%
		Sodium Ferrocyanide	0.45%

Solid Waste:

i)	Cyanide content	- Traces.

PART – G

Impact of the Pollution Control Measures on conservation of natural resources and consequently on the cost of production.

Impact on conservation of natural resources	Impact of cost of production
1.Water Pollution	
Since the effluent discharged by us conforms to the norms described by the Pollution Control Board, it does not have any impact on conservation of natural resources.	An amount of Rs. 80.82 Lacs is spent annually in Effluent Treatment Plants.
2. Hazardous Wate:	
Hazardous waste get completely dried in impervious pan by solar evaporation.	Constituents present in hazardous waste was sent to Nandesari Env. Control Ltd., Nandesari & Bharuch Enviro Infrastructure Ltd, Ankleshwar for incineration,treatment and disposal. An amount of Rs. 21.40 lacs was spent annually.

3.Air Pollution:

The toxic gases are completely burnt in Incinerator resulting into generation of inert gases, i.e. CO_2/N_2 and simultaneously generation of steam which is effectively used in plants. Therefore, there is no impact of conservation of natural resources.	Approx. 23,316 MT/year steam was generated in Incinerator, otherwise to generate 23,316 MT steam we would have burnt 1943 K.L. of furnace oil.

PART – H

Additional investment proposal for environmental protection including abatement of pollution.

1. We are already fully equipped to handle hazardous waste, liquid effluents and air pollutants and detoxicate the same conforming to the norms specified by Pollution Control Board.

PART – I

Miscellaneous

Any other particulars in respect of environment protection and abatement of pollution.

About 500 additional trees were planted within our battery limit.

(R. P. Sharma)
General Manager (Plant)

Annexure – 2

POLLUTION GENERATED

Sr. No	Pollutants	Quantity of Pollution	Parameters	As specified in the consent issued	Percentage of variation from prescribed standard with reason
a)	Water	126^3/day	pH	6.5 - 8.5	Nil
			BOD mg/l	30 max.	
			COD mg/l	100 max.	
			Ammonical Nitrogen mg/l	50 max.	
			Cyanide content mg/l.	0.2 max.	
b)	Air		Suspended particu-late matter (SPM) in mg/NM^3)	150 max.	Nil
	Boiler	2000 M^3/hr			
	Incinerator	7000 M^3/hr	Sox (PPM)	100 max.	
			Nox (PPM)	50 max.	
			Cyanide as HCN (NMg/M^3)	30 max.	
			HCl (NMg/M^3)	20 max.	