F. HCC:TECH:17:AKK: 28

April 25, 2014

Through Courier

The Unit Head (Surat)
Gujarat Pollution Control Board
Paryavaran Bhavan
Sector – 10A
Gandhinagar – 382 010

Sub : **Environmental Audit Statement for the Financial Year ended on 31st March, 2014.**

Dear Sir,

As per Notification dated 13th March, 1992 of Govt. of India, Ministry of Environment & Forests, New Delhi, we are enclosing herewith our Environmental Audit Statement for the financial year ended on 31st March, 2014 for your perusal.

We hope, you will find the same in order.

Thanking you,

Yours faithfully,
for Hindusthan Chemicals Company

R.P. Sharma
General Manager (Plant)

encl : a/a

- By Regd. A/D

c. c. : 1.The Regional Officer
Gujarat Pollution Control Board
338, Belgium Square, Typical Ist floor
Silver Plaza Complex
Near Linear Bus Stand
Ring Road, Surat – 395 003

2.The Director (Environment)
Ministry of Environment & Forests
Regional Office (Western Region)
Link Road No. 3, E-5, Arera Colony
Bhopal - 462 016 (M.P.)

FORM – V

(See Rule 14)

ENVIRONMENTAL AUDIT REPORT FOR THE FINANCIAL YEAR ENDED ON 31ST MARCH, 2014.

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. Production capacity unit : As per enclosed Annexure - 1.

2. Date of the last environmental audit report submitted. : 10 05 2013

PART – B

WATER AND RAW MATERIAL CONSUMPTION

1. Water Consumption M^3/day

(A) Domestic : 8.50 M^3/day

(B) Industrial:

i)	Process	: 23.80 M^3/day
ii)	Cooling	: 186.00 M^3/day
iii)	Boiler	: 53.00 M^3/day
iv)	Washing/Agriculture	: 7.20 M^3/day
	Total	: 278.50 M^3/day

Name of the Products	Water Consumption per unit of Products	
	During the previous Financial Year (2012-2013)	During the current Financial Year (2013-2014)
1. Hydrocyanic Acid	6.92M^3/MT	7.90M^3/MT
2. Sodium Cyanide	8.83 M^3/MT	9.90M^3/MT
3. Potassium Cyanide	5.55 M^3/MT	8.90M^3/MT
4. Ammonium Sulphate	2.85 M^3/MT	2.40M^3/MT
5. Sodium Ferrocyanide	7.80 M^3/MT	8.80M^3/MT
6. Diphenyl Guanidine	6.72 M^3/MT	8.90M^3/MT
7. Heat Treatment Salt	Nil	Nil
8. Potassium Ferrocyanide	Nil	Nil
9. Mandelonitrile	Nil	Nil
10. Sodium Dicyanamide	Nil	Nil
11. Cyanohydrines	Nil	Nil
12. Nitriles	Nil	Nil
13. Cyanide Based Products	Nil	Nil

Contd...2

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 - 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 (2012 – 2013)	During the Current Financial Year (2013 –2014)
a) From Process } b) From Pollution control facilities }	104072.00	313380.00

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 2012-2013)	During the Current Fin. Year (2013-2014)
a) From Process b) From Pollution Control Facility c) Quantity Recycled or re-utilized	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.	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.

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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	7.0%
		Water	58.0%
		Oxidized Polymer of DPG (Loss on ignition at 500° C.)	35.0%
ii)	Ferri Ferrocyanide	- Ferri Ferrocyanide	34.1%
		Water	65.9%
iii)	Ferric Hydroxide	- Ferric Hydroxide	30.0%
		Water	69.55%
		Sodium Ferrocyanide	0.45%

Solid Waste:

i)	Contaminated Salt	Sodium Chloride	96%
ii)	ETP sludge	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. 78.40Lacs 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 M/s Nandesari Env.Control Ltd., Nandesari & M/s Bharuch Enviro Infrastructure Ltd, Ankleshwar, for incineration, treatment and disposal. An amount of Rs.87.92lacs was spent annually.

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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. 22,176 MT/year steam was generated in Incinerator, otherwise to generate 22,176 MT steam we would have burnt 1848 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.

We have demolished sludge pits of ETP-I and spent acid neutralization pits of ETP-II and in its place installed on-line filteration system for betterment.

About 500 additional trees were planted within our battery limit.

RPSharma

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

Annexure -1

PRODUCTION DETAILS

Sl No	Name of product	Consent Capacity MT/Annum	Actual production MT/Annum
1	Hydrocyanic Acid	5100	3503.800
2	Sodium Cyanide	6372	5333.933
3	Potassium Cyanide	2000	120.750
4	Sodium/Potassium Ferrocyanide	1000	182.250 / 2.250
5	Diphenyl Guanidine	1260	285.927
6	Sodium Dicyanamide	300	5.000
7	Mandelonitrile	2500	1777.580
8	Heat Treatment Salt	720	Nil
9	Cyanohydrines	5000	59.510
10	Nitriles	3000	Nil
11	Cyanide Based Products	3500	Nil
12	Ammonium Sulphate (By-product)	2649	2416.000

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 particulate 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.	