## BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

O A NO. 30 OF 2013 (THC)

**IN THE MATTER OF:** 

KARNAIL SINGH & ORS.

...APPLICANTS

**VERSUS** 

CENTRAL POLLUTION CONTROL BOARD & ORS.

NDOH - 25/ 10/18

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GURNAM SINGH ADDITIONAL DIRECTOR CENTRAL POLLUTION CONTROL BOARD PARIVESH BHAWAN, EAST ARJUN NAGAR

PLACE: - DELHI DATED: - 2**1**.10.2018

## Status of Heavy Metal Concentrations in Ground Water at Dera Bassi in the matter of OA No. 30/2013 and 33/2013

In the matter of Karnail Singh Vs CPCB & Ors. and Jai Singh & Ors. Vs U.O.I. & Ors. Hon'ble National Green Tribunal passed an order dated August 28, 2018 to conduct inspections of industries in Derabassi, Punjab. In pursuant to the above order, CPCB conducted inspections in 87 industries located in Focal Point, Dera bassi and additional 14 industries of Dera bassi located outside of the Focal Point, which are mentioned in original application also included in the purview of inspections. The inspection reports and compliance status was submitted to the Hon'ble NGT by September 28, 2018. At the time of report submission, analysis reports for heavy metals in ground water was awaited from CPCB laboratory. Now the results for heavy metals in ground water samples have been received and status is as following:

A ground water sample was taken from the village Haripur Hinduan at Radha Soami Satsang Beas premises and analysis results shows the ground water sample from village Haripur Hinduan is within the drinking water acceptable limits of BIS except for Total dissolved solids TDS (746 mg/l against limit of 500 mg/l). The analysis results of ground water from village are given in Table-1.

The ground water samples were collected from the borewells located within the premises of 29 industrial units. The average depth of bore wells is around 200-300 feet. The analysis results are compared with acceptable limits for drinking water, BIS 10500:2012 standards for drinking water and compliance status is given at Table-2. The analysis results of ground water samples taken from 19 out of 87 industries at Focal point, Derabassi is given at table-3 and analysis result of ground water samples taken from 10 out of additional 14 industries located at Derabassi is given at Table-4.

The analysis result of ground water from the 29 industries shows exceedance in 9 samples viz. 5 numbers of exceedance w.r.t. Manganese (Mn), 3 number of exceedance w.r.t. Iron (Fe) and 1 exceedance w.r.t Total chromium. As such the industrial process of these industrial Units does not include any use of the Mn in the process and its generation. Hence, therefore the possible reason may be geogenic.

Table -1: Analysis results of Ground Water w.r.t. Samples collected from Village Haripur Hinduan

Location		General Parameters in ground water (mg/l except for pH)									
	рН		TDS	CO	D	Cl <sup>-</sup>	F	1.	NO <sub>3</sub>		
Tube well located at Radha Soami Satsang Beas, Village Haripur Hinduan, Derabassi	8.1		746	BDI		27	(	).4	5.7		
BIS acceptable limit for drinking water	6.5-8	.5	500	-		250	1	1.0	45		
		Con	centrati	on of H	leavy n	netals i	n groui	nd wate	r (mg/l)		
	As	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Zn	Hg	
	BDL	BDL	0.02	0.02	0.10	0.03	BDL	BDL	0.04		
BIS acceptable limit for drinking water	0.01	0.003	0.05	0.05	0.3	0.1	0.02	0.01	5	0.001	

## BDL= Below detection limit

Table -2:
Status w.r.t. Ground water results from 29 industries

S. No.	Name of Industry	Status w.r.t Ground water results
1.	M/s AAR PEE Enterprise, E-24,Focal Point, DerraBassi, Punjab	Within BIS 10500:2012 standards
2.	M/s Integra Insulations, E-10, Focal Point, DeraBassi, Punjab	Within BIS 10500:2012 standards
3.	M/s Axis Industries, D-41, Focal Point DerraBassi, Punjab	Within BIS 10500:2012 standards
4.	M/s Abrostat Overseas E-62 Focal Point Industrial Area Derabassi Punjab	Within BIS 10500:2012 standards
5.	M/s Mohindroo Ice Factory D-36A	Exceeding BIS 10500:2012 standards for Mn
	Focal Point Industrial Area Derabassi Punjab	(0.47 against standard of 0.1 mg/l)
6.	M/s Goindi Machines Private Limited	Exceeding BIS 10500:2012 standards for Fe
	(C-12 Focal Point Industrial Area Derabassi Punjab	(0.52 against standard of 0.3 mg/l)
7.	M/s Onkar Concrete Blocks (in place	Exceeding BIS 10500:2012 standards for Mn
	of M/s Harsor Engineering Works), C- 11, Focal Point, DeraBassi	(0.11 against standard of 0.1 mg/l)
8.	M/s. Taksa Life Science, (in place of	Exceeding BIS 10500:2012 standards for Mn
	Katyani Plastic Industries), F-47, Industrial Focal Point, DerabassiSas Nagar, Punjab-140507	(0.13 against standard of 0.1 mg/l)
9.	M/s. Jayen Electrolinks (P) Ltd., F-2, Focal Point, DeraBassi, Punjab	Within BIS 10500:2012 standards
10.	M/s Poonam Drums Containers, (P) Ltd., Focal Point Industrial Area Derabassi Punjab	Within BIS 10500:2012 standards
11.	M/s Ticoma Pharmacia, Focal Point Industrial Area Derabassi Punjab	Within BIS 10500:2012 standards
12.	M/s Ally Chem Laboratories, (P) Ltd., Focal Point Industrial Area Derabassi Punjab	Within BIS 10500:2012 standards
13.	M/s Essix biosciences Ltd., B-4-5, Focal Point, DeraBassi	Exceeding BIS 10500:2012 standards for Fe (0.91 mg/l > 0.3 mg/l)
14.	M/s Power ChemPlast Pvt. Ltd., C-25, Industrial Focal Point, DeraBassi	Within BIS 10500:2012 standards
15.	M/s Kamal Hitech Engineers Ltd., B- 11, Industrial Focal Point, DeraBassi	Within BIS 10500:2012 standards
16.	M/s A.R. Fasteners, E-71, Industrial Focal Point, DeraBassi	Within BIS 10500:2012 standards

S. No.	Name of Industry	Status w.r.t Ground water results
17.	M/s Nibber Castings, Village SaidoMajra, P.O. Mubarikpur, Derabassi, Dist. Mohali, Punjab- 140507	Within BIS 10500:2012 standards
18.	M/s World wide Herb Pvt. Ltd., (Now M/s Chereso Life Science Pvt. Ltd.), B-9, Industrial Focal Point, Derabassi, Dist. Mohali, Punjab- 140507	Within BIS 10500:2012 standards
19.	M/s Bindlish Industries, D-46, Industrial Focal Point, Derabassi, Dist. Mohali, Punjab- 140507	Within BIS 10500:2012 standards
20.	M/s Punjab chemical & Crop Protection Ltd., Vill. Bhankarpur, Derabassi, Punjab	Within BIS 10500:2012 standards
21	M/s Budiraja Polymers (P) Ltd., Barwala Road, Sidapur Opp Power Grid Station, Derabassi, Punjab	Exceeding BIS 10500:2012 standards for Fe (0.63 mg/l > 0.3 mg/l) and Mn (0.17 mg/l > 0.1 mg/l)
22.	M/s Ashoka Chemicals, Village Saidapur, Derabassi, Punjab	Within BIS 10500:2012 standards
23.	M/s Cepham Milk Specialities,6th KM Dera Bassi Barwala road,Bhagwas, Dera Bassi	Exceeding BIS 10500:2012 standards for Cr (0.11 mg/l > 0.05 mg/l)
24.	M/s Federal Agro Industries P Ltd (Previously known as M/s PML Industries Ltd.) Village Behra, Barwala Road, Derabassi, Dist: SAS Nagar, punjab	Within BIS 10500:2012 standards
25.	M/s. Nectar Lifescience Ltd. (unit-2) vill- Saidpura, Derabassi, Dist. Mohali, Punjab	Exceeding BIS 10500:2012 standards for Mn (0.12 mg/l > 0.1 mg/l)
26.	M/s. Molson Coors India (P) Ltd. (formerly mount shivalik breweries Ltd.), Vill-Bhankarpur, Derabassi, Dist. Mohali, Punjab	Within BIS 10500:2012 standards
27.	M/s ASTER Drug and Pharmaceutical Ltd, Saidapur, Barwal Road, Derabassi, Punjab	Within BIS 10500:2012 standards
28.	M/s Kudos Chemie Ltd Kuranwala, Barwala Road, Derabassi- 140507	Within BIS 10500:2012 standards
29.	M/s. Rajasthan Liquor Ltd. vill- Haripur hinduan, Disst- Mohali Punjab	Within BIS 10500:2012 standards

**(%)** 

Table-3:
Heavy Metal Analysis results of Ground Water w.r.t. Samples collected from 19 industries out of 87 Industries located at Focal point Derabassi

S.	Name of Industry	Concentration of Heavy metals in ground water (mg/l)											
No.		As	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Zn	Hg		
	BIS acceptable limit for drinking water	0.01	0.003	0.05	0.05	0.3	0.1	0.02	0.01	5	0.001		
1.	M/s AAR PEE Enterprise, E- 24,Focal Point, DerraBassi, Punjab	BDL	BDL	BDL	BDL	0.10	0.06	BDL	BDL	0.01			
2.	M/s Integra Insulations, E-10, Focal Point, DeraBassi	BDL	BDL	BDL	BDL	0.04	0.03	BDL	BDL	0.03			
3.	M/s Axis Industries, D-41, Focal Point DerraBassi	BDL	BDL	BDL	BDL	0.05	0.03	BDL	BDL	BDL			
4.	M/s Abrostat Overseas E-62 Focal Point Industrial Area Derabassi	BDL	BDL	BDL	BDL	0.13	BDL	BDL	BDL	0.06	BDL		
5.	M/s Mohindroo Ice Factory D-36A Focal Point Industrial Area Derabassi	BDL	BDL	BDL	BDL	0.18	0.47	BDL	BDL.	0.04	BDL		
6.	M/s Goindi Machines Private Limited (C-12 Focal Point Industrial Area Derabassi	BDL	BDL	0.02	BDL	0.52	0.08	BDL	BDL	0.15	BDL		
7.	M/s Onkar Concrete Blocks (in place of M/s Harsor Engineering Works), C-11, Focal Point, DeraBassi	BDL	BDL	BDL	BDL	0.05	0.11	BDL	BDL	0.02	BDL		
8.	M/s. Taksa Life Science, (in place of Katyani Plastic Industries), F-47, Industrial Focal Point, Derabassi	BDL	BDL	0.01	BDL	0.10	0.13	BDL	BDL	BDL	BDL		

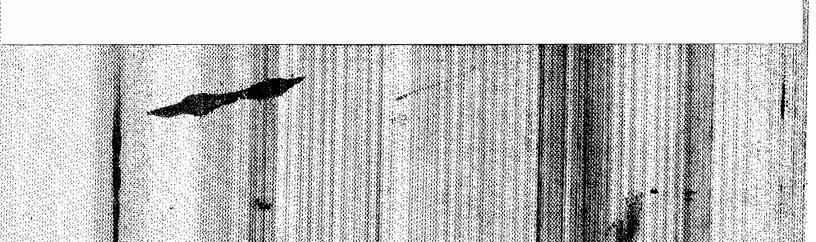
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S.	Name of Industry	try   Concentration of Heavy metals in ground water (mg/l)									
No.		As	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Zn	Hg
9.	M/s. Jayen Electrolinks (P) Ltd., F-2, Focal Point, DeraBassi,	BDL	BDL	BDL	BDL	0.05	0.05	BDL	BDL	0.04	BDL
10.	M/s Poonam Drums Containers, (P) Ltd., Focal Point Industrial Area Derabassi	BDL	BDL	BDL	BDL	0.07	0.04	BDL	BDL	BDL	BDL
11.	M/s Ticoma Pharmacia, Focal Point Industrial Area Derabassi	BDL	BDL	BDL	BDL	0.07	0.04	BDL	BDL	0.02	BDL
12.	M/s Ally Chem Laboratories, (P) Ltd., Focal Point Industrial Area Derabassi	BDL	BDL	BDL	BDL	0.02	0.09	BDL	BDL	BDL	BDL
13.	M/s Essix biosciences Ltd., B-4-5, Focal Point, DeraBassi	BDL	BDL	BDL		0.91		BDL	BDL	0.11	
14.	M/s Power ChemPlast Pvt. Ltd., C-25, Industrial Focal Point, DeraBassi	BDL	BDL	BDL	BDL	0.20		BDL	BDL	0.08	
15.	M/s Kamal Hitech Engineers Ltd., B- 11, Industrial Focal Point, DeraBassi	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL
16.	M/s A.R. Fasteners, E-71, Industrial Focal Point, DeraBassi	BDL	BDL	BDL	BDL	BDL		BDL	BDL	0.04	
17.	M/s Nibber Castings, Village SaidoMajra, P.O. Mubarikpur, Derabassi,	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
18.	M/s World wide Herb Pvt. Ltd., (Now M/s Chereso Life Science Pvt. Ltd.), B-9, Industrial Focal Point, Derabassi,	BDL	BDL	BDL	BDL	BDL	0.09	BDL	BDL	BDL	BDL
19.	M/s Bindlish Industries, D-46, Industrial Focal Point, Derabassi,	BDL	BDL	BDL	BDL	BDL	0.02	BDL	BDL	0.05	BDL

Table -4:

Heavy Metal Analysis results of Ground Water w.r.t. Samples collected from 10 industries out of additional 14 Industries of Derabassi

S.	Name of Industry	Concentration of Heavy metals in ground water (mg/l)										
No.		As	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Zn	Hg	
	BIS acceptable limit for drinking water	0.01	0.003	0.05	0.05	0.3	0.1	0.02	0.01	5	0.001	
1.	M/s Punjab chemical & Crop Protection Ltd., Vill. Bhankarpur, Derabassi, Punjab	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL		
2.	M/s Budiraja Polymers (P) Ltd., Barwala Road, Sidapur Opp Power Grid Station, Derabassi, Punjab	BDL	BDL	0.06	BDL	0.63	0.17	BDL	BDL	0.09	BDL	
3.	M/s Ashoka Chemicals, Village Saidapur, Derabassi,	BDL	BDL	BDL	BDL	0.14	0.06	BDL	BDL	BDL	BDL	
4.	M/s Cepham Milk Specialities,6th KM Dera Bassi Barwala road,Bhagwas, Dera Bassi	BDL	BDL	0.11	BDL	0.13	0.02	BDL	BDL	0.21	BDL	
5.	M/s Federal Agro Industries P Ltd (Previously known as M/s PML Industries Ltd.) Vill. Behra, Derabassi,	BDL	BDL.	BDL	BDL	BDL	0.02	BDL	BDL	BDL		
6.	M/s. Nectar Life science Ltd. (unit-2) vill- Saidpura, Derabassi	BDL	BDL	0.01	0.02	0.03	0.12	BDL	BDL	0.01		
7.	M/s. Molson Coors India (P) Ltd. (formerly mount shivalik breweries Ltd.), Vill-Bhankarpur, Derabassi.	BDL	BDL	0.02	BDL	0.01	0.06	BDL	BDL	BDL		
8.	M/s ASTER Drug and Pharmaceutical Ltd, Saidapur, Barwal Road, Derabassi,	BDL	BDL	BDL	BDL	0.05	BDL	BDL	BDL	0.04	BDL	
9.	M/s Kudos Chemie Ltd Kuranwala, Barwala Road, Derabassi	BDL	BDL	BDL	BDL	0.14	0.05	BDL	BDL	BDL	BDL	
10.	M/s. Rajasthan Liquor Ltd. vill-Haripur hinduan, Derabassi	BDL	BDL	0.01	0.02	0.05	0.03	BDL	BDL	0.01		



	PROOF OF S  IN THE MAT  OA No. 30  Karnail Singh & O	TER OF: - §	2443 Legal Lady Legal Lady	beron Idedon
Applicant				7
Respondent No.1		1		

Respondent No.2

Respondent No.3

Respondent No.4

Respondent No.5

Respondent No.6

Respondent No.7

Respondent No.8

Respondent No.9

Respondent No.10

Respondent No.11

Respondent No.12