D/e

HONDA

Honda Cars India Limited
SPL-1, Tapukara Industrial Area
Khushkhera, Distt. - ALWAR
RAJASTHAN 301707
E-mail : corporate@hondacarindia.com
Tel. : 01493-522000, Fax : 01493-522006
Mobile : 9116630293 , 9116630289

Date: 20-Sep-19

To,

Sr. Environmental Engineer (MUID)
Rajasthan State Pollution Control Board
4, Institutional Area, Jhalana Doongri
Jaipur (Rajasthan)

Sub: Submission of Environment Statement Report for the FY 2018-19

Ref: CTO license no. for the all existing consents issued to HCIL - TKR

For Press, Phase I and PT step II	: 2014 – 2015/ MUID/ 2753
For Car Assembly line (2L project)	: 2014 – 2015/ MUID/ 2917
For Diesel Project Plant	: 2013 - 2014/ MUID/ 2578
For Spin Die Casting	: 2014 – 2015/ MUID/ 2792
For Press Expansion Plant	: 2015 – 2016/ CPM/ 3369
For Car Assembly line (2L project) –PT	: 2017 – 2018/ CPM/ 4940
For Mission Expansion Project	: 2017 – 2018/ CPM/ 4979

Dear Sir,

We are submitting you the Environment Statement for the FY 2018-19 in Form-V based on all the existing consents as mentioned above.

This is for your kind information & records.

Thanking You,
Yours faithfully,

For **Honda Cars India Ltd**

(Pravin Chaudhari)
Head - EHS

Cc: The Regional Officer, Rajasthan Pollution Control Board, 8/43-44, N.E.B.,
Housing Board Alwar, Dist.-Alwar (Rajasthan)

Enclosures: Environment Statement Form V

FORM -V

ENVIRONMENT STATEMENT REPORT

From:

1-Apr-18 to 31-Mar-19

---- Submitted By ----

M/s Honda Cars India Ltd.

SPL-1, Tapukara Industrial Area, Khuskhera,

Dist. - Alwar (Rajasthan)

ENVIRONMENT STATEMENT
FORM –V
(See Rule 14)
Environment Statement for the financial year ending the 31st March 2018

PART –A

(i)	Name and address of the owner/ Occupier of the industry operation or process.	:	Mr. Praveen Paranjape Honda Cars India Ltd SPL-1, Tapukara Industrial Area Khushkhera, Dist. –Alwar (Raj.)
(ii)	Industry category	:	Red (Large)
(iii)	Production Capacity	:	

S. No.	Plant	Product	Quantity (Car Sets / Annum)
1	Press and Phase-I and PT Step-II	Clutch Case	136,000
		Engine Block	163,000
		Engine Head	163,000
		Mission Case	136,000
		Power Train Facilities (Crank Shaft & Con Rod Facility)	272,000
		Press Shop (Body Parts Sheet Metal Components)	170,000
2	Diesel	Clutch Case	136,000
		Engine Assembly	239,360
		Engine Block	163,200
		Engine Head	163,200
		Mission Assembly	272,000
		Mission Case	136,000
3	Car Assembly line (2L project)	Assembled Passenger Car	180,000
		Con Rod Grinding	272,000
		Crank Shaft Forging	1,130,160
		Crank Shaft Grinding	272,000
		Front Bumper	180,000
		Rear Bumper	180,000
4	Spin Die Casting	Cylinder sleeve	5,50,256
5	Press Expansion	Press shop (Body Parts sheet metal components)	220,000
6	Car Assembly Line & powertrain-expansion (FE III)	Con Rod (Finished)	2,72,000
		Crank Shaft (Finished)	2,72,000
7	MT Mission Expansion in Casting, Machining & Assembly Project	Clutch Case	2,72,000
		Mission Case	2,72,000

(i) Year of establishment:

S. No.	Shop details	Date of Commissioning
1	Press Shop	Sept – 2008
2	Powertrain Facilities	May - 2009
3	PT Step -2 – Die casting	Aug - 2011
4	Machining & Assembly	Aug - 2011
5	Diesel Project	Mar – 2013
6	Car Assembly Line	Feb - 2014
7	SPC Project	Sept – 2014
8	Press Shop Expansion Project	Jan – 2014
9	Car Assembly Line (2L Project)	Dec - 2016
10	Mission Expansion Project	Sept – 2017

(ii) Date of the last environmental statement submitted: **25-Sep-2018**

PART - B

Water and Raw Material Consumption

(i) Water consumption m^3/day

Process	KLD	563
Cooling	KLD	316
Domestic	KLD	322
Total	**KLD**	**1201**

Name of product	Process water consumption per unit of product output	
	During the previous financial year (2017-18)	During the current financial year (2018-19)
Passenger Car	1934.41 litre/Car	1608.96 litre/Car

(ii) Raw Material Consumption

Name of raw materials	Name of products	UOM	Consumption of raw material per unit of output	
			During the previous financial year (2017 - 18)	During the current financial year (2018-19)
Sheet Metal Blanks	Passenger Car	Kg/Car Set	239.38	239.38
Iron Forging			18.25	18.25
Aluminum Ingot			115.15	115.15

Name of raw materials	Name of products	UOM	Consumption of raw material per unit of output	
			During the previous financial year (2017 - 18)	During the current financial year (2018-19)
Cylinder sleeve			3.2	3.2
Note: The consumption of raw material as per car is calculated based on production of 1,80,000 car sets in 272 working days as per our CTO.				

PART – C

Pollution discharged to environment / Unit of output

(Parameters as specified in the consent issued)

For WATER

(a) ETP Outlet Water

Month	**pH**	**TSS**	**COD**	**BOD**	**Oil & Grease**	**Copper**	**Total Cr**	**Iron**	**Ni**	**Dissolved Phosphate**	**Cr^{+6}**	**Zinc**
		mg/l	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***
RPCB Standard	**5.5 - 9.0**	**100**	**250**	**30**	**10**	**3**	**2**	**3**	**3**	**5**	**0.1**	**5**
Apr-18	7.8	28	126	22	1.82	0.08	0.34	0.50	N.T	0.80	0.06	N.T
May-18	7.8	24	118	20	1.42	0.06	0.31	0.48	N.T	0.90	0.08	0.35
Jun-18	7.8	28	124	21	1.68	0.08	0.33	0.51	N.T	0.85	0.06	0.37
Jul-18	7.62	53	232	28.60	8.20	0.15	N.T	0.64	0.25	0.09	N.T	0.09
Aug-18	7.21	38.00	202.4	25	4.80	N.T	N.T	0.10	N.T	0.08	N.T	0.30
Sep-18	7.52	43.00	184	26.70	4.70	N.T	N.T	0.69	N.T	0.39	N.T	0.41
Oct-18	7.49	58.00	110	15.20	4.80	N.T	N.T	0.32	0.19	1.50	N.T	0.48
Nov-18	6.98	74.00	119	18.30	6.40	N.T	N.T	1.40	N.T	1.10	N.T	0.24
Dec-18	7.41	82.00	125	22.30	7.00	0.08	N.T	1.80	0.12	1.10	N.T	1.70
Jan-19	7.34	74.00	116	14.70	6.20	0.32	N.T	1.30	0.17	2.30	N.T	0.47
Feb-19	7.11	65.00	176	22.70	5.70	0.41	N.T	1.70	0.19	2.60	N.T	0.38
Mar-19	7.73	71.00	184	24.30	6.50	0.38	N.T	1.42	0.22	3.10	N.T	0.44

(b) WWTP & STP Outlet Water

Month	pH	TSS	COD	BOD	O&G	Cu	Total Cr	Fe	Ni	Dissolved Phosphate	Zn	Cr^{+6}	Total Residual Cr	N	NO_3
		mg/l	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*	*mg/l*
RPCB Std.	**5.5-9.0**	**100**	**250**	**30**	**10**	**3**	**2**	**3**	**3**	**5**	**0.1**	**5**	**1**	**50**	**50**
Apr-18	8.0	17	91	24	0.73	N.T	0.05	0.31	0.08	0.67	0.05	0.32	0.5	12.4	12.62
May-18	8.1	20	88	23	0.75	N.T	0.07	0.33	0.06	0.63	0.07	0.34	0.52	15.3	11.87
Jun-18	8.1	18	89.1	25.8	0.8	N.T	0.09	0.34	0.09	0.66	0.06	0.32	0.54	13.8	10.5
Jul-18	7.8	34	51.0	12.3	3.2	N.T	N.T	0.2	0.04	2.8	N.T	0.1	N.T	6.9	1.8
Aug-18	7.0	11	18.4	3.2	2.6	N.T	N.T	N.T	0.30	0.04	N.T	N.T	N.T	6.8	1.6
Sep-18	6.52	18	18	4.40	2.70	N.T	N.T	N.T	0.27	0.30	N.T	N.T	N.T	7.6	4.6
Oct-18	6.25	16	10	2.30	2.40	N.T	N.T	0.92	0.21	0.42	N.T	N.T	N.T	2.1	1.1
Nov-18	6.98	14	10	1.3	2.2	N.T	N.T	0.82	N.T	N.T	N.T	N.T	N.T	9.8	1.1
Dec-18	6.79	19	80	18.2	2.8	N.T	N.T	N.T	N.T	N.T	N.T	N.T	N.T	8.6	1.4
Jan-19	7.74	7	8	2.20	2.40	N.T	N.T	N.T	N.T	1.60	N.T	N.T	N.T	12.4	2.1
Feb-19	7.7	11	16	3.8	3.2	N.T	N.T	N.T	N.T	1.50	N.T	N.T	N.T	14.9	2.7
Mar-19	7.34	52	44	10.30	4.20	N.T	N.T	N.T	N.T	2.10	N.T	N.T	N.T	14.7	2.5

N.T. – Not Traceable

For AIR Quality

a) Ambient Air Monitoring (Monthly Average)

Stations/ Area	Month	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	O_3	Pb	NH_3	C_6H_6	Benzo Pyrene	As	Ni
		(µg/m3)											
Standard		**100**	**60**	**80**	**80**	**4**	**180**	**1**	**400**	**5**	**1**	**6**	**20**
Near QE Area	Apr-18	68	33	11	19	1	13	0	6	N.T	N.T	N.T	2
	May-18	65	30	11	19	1	13	0	6	N.T	N.T	N.T	2
	June-18	70.2	33.6	10.6	20.2	0.8	14.1	0.1	6.4	N.T	N.T	N.T	2.1
	July-18	71.7	34.5	7.1	13.2	0.4	12.1	0.1	5.8	N.T	N.T	N.T	0.3
	Aug-18	80.3	40.8	7.3	13.0	0.4	11.1	0.4	6.0	N.T	N.T	N.T	0.8
	Sep-18	82.5	44.7	7.3	13.1	0.4	11.4	0.2	6.1	N.T	N.T	N.T	0.9

Near QE Area	Oct-18	79.0	40.0	7.9	13.6	0.4	12.2	0.2	6.2	0.9	N.T	N.T	1.0
	Nov-18	80.8	40.7	8.1	14.6	0.5	12.5	1.1	6.4	1.0	N.T	N.T	1.0
	Dec-18	73.7	45.3	7.3	13.9	0.4	14.4	0.2	6.3	N.T	N.T	N.T	0.7
	Jan-19	79.7	42.4	7.8	14.4	0.5	13.2	0.3	7.6	N.T	N.T	N.T	0.7
	Feb-19	78.1	42.4	7.8	14.1	0.5	11.3	0.4	8.3	N.T	N.T	N.T	0.7
	Mar-19	81.3	43.1	8.1	15.3	0.4	10.4	0.3	8.6	N.T	N.T	N.T	0.6
	Avg.	75.9	39.2	8.4	15.3	0.6	12.4	0.3	6.6	1.0	N.T	N.T	1.1

*N.T - Not Traceable

Stations/ Area	Month	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	O_3	Pb	NH_3	C_6H_6	Benzo Pyrene	As	Ni
	(ug/m3)												
Standard		**100**	**60**	**80**	**80**	**4**	**180**	**1**	**400**	**5**	**1**	**6**	**20**
Near ETB	Apr-18	72	35	11	22	1	14	0	7	N.T	N.T	N.T	2
	May-18	69	32	11	20	1	14	0	6	N.T	N.T	N.T	2
	Jun-18	73	35	11	22	1	16	0	7	N.T	N.T	N.T	2
	Jul-18	71	34	7	12	0	12	0	6	N.T	N.T	N.T	1
	Aug-18	78	40	7	13	1	11	0	6	N.T	N.T	N.T	1
	Sep-18	75	40	7	12	1	11	0	6	N.T	N.T	N.T	1
	Oct-18	78	40	8	13	0	12	0	7	1	N.T	N.T	1
	Nov-18	80	41	8	14	0	12	0	7	5	N.T	N.T	1
	Dec-18	74	42	7	14	0	14	0	6	N.T	N.T	N.T	1
	Jan-19	80	44	8	14	0	12	0	8	N.T	N.T	N.T	1
	Feb-19	79	42	8	15	0	11	0	8	N.T	N.T	N.T	1
	Mar-19	83	45	9	16	0	10	0	8	N.T	N.T	N.T	1
	Avg.	76	39	8.5	16	0.42	12.42	0	6.8	3	N.T	N.T	1.5

Stations/ Area	Month	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	O_3	Pb	NH_3	C_6H_6	Benzo Pyrene	As	Ni
	(ug/m3)												
Standard		**100**	**60**	**80**	**80**	**4**	**180**	**1**	**400**	**5**	**1**	**6**	**20**
Near Admin Building	Apr-18	68	33	11	19	1	13	0	6	N.T	N.T	N.T	2
	May-18	65	30	11	19	1	13	0	6	N.T	N.T	N.T	2
	Jun-18	70.2	33.6	10.6	20.2	0.8	14.1	0.1	6.4	N.T	N.T	N.T	2.1
	Jul-18	71.7	34.5	7.1	13.2	0.4	12.1	0.1	5.8	N.T	N.T	N.T	0.3
	Aug-18	80.3	40.8	7.3	13.0	0.4	11.1	0.4	6.0	N.T	N.T	N.T	0.8

Near Admin Building	Sep-18	82.5	44.7	7.3	13.1	0.4	11.4	0.2	6.1	N.T	N.T	N.T	0.9
	Oct-18	79.0	40.0	7.9	13.6	0.4	12.2	0.2	6.2	0.9	N.T	N.T	1.0
	Nov-18	80.8	40.7	8.1	14.6	0.5	12.5	1.1	6.4	1.0	N.T	N.T	1.0
	Dec-18	73.7	45.3	7.3	13.9	0.4	14.4	0.2	6.3	N.T	N.T	N.T	0.7
	Jan-19	79.7	42.4	7.8	14.4	0.5	13.2	0.3	7.6	N.T	N.T	N.T	0.7
	Feb-19	78.1	42.4	7.8	14.1	0.5	11.3	0.4	8.3	N.T	N.T	N.T	0.7
	Mar-19	81.3	43.1	8.1	15.3	0.4	10.4	0.3	8.6	N.T	N.T	N.T	0.6
	Avg.	75.86	39.21	8.44	15.28	0.56	12.39	0.28	6.64	N.T	N.T	N.T	1.07

Note: All the values mentioned above are the average values of each month.

Stations/ Area	Month	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	O_3	Pb	NH_3	C_6H_6	Benzo Pyrene	As	Ni
		(ug/m3)											
Standard		100	60	80	80	4	180	1	400	5	1	6	20
Near Forging Building	Apr-18	64.2	33.2	8.3	18.3	0.7	12.2	0.1	8.6	N.T	N.T	N.T	1.9
	May-18	61.6	30.4	7.9	17.0	0.6	11.1	0.1	7.7	N.T	N.T	N.T	1.6
	Jun-18	66.0	33.7	8.7	18.7	0.7	11.7	0.1	8.5	N.T	N.T	N.T	1.8
	Jul-18	69.3	33.8	7.5	13.4	0.4	12.3	0.1	6.2	N.T	N.T	N.T	1.9
	Aug-18	81.4	39.8	7.6	13.5	0.4	11.4	0.3	6.3	N.T	N.T	N.T	1.6
	Sep-18	71.8	38.4	7.0	12.6	0.4	11.1	0.2	5.9	N.T	N.T	N.T	1.1
	Oct-18	79.3	39.9	7.7	13.4	0.4	11.9	0.2	6.4	N.T	N.T	N.T	1.0
	Nov-18	81.1	41.7	7.9	14.2	0.4	12.2	0.2	6.6	N.T	N.T	N.T	1.1
	Dec-18	75.1	41.8	8.5	15.0	0.6	13.5	0.3	6.6	N.T	N.T	N.T	0.8
	Jan-19	79.8	42.6	8.5	15.0	0.5	13.2	0.4	8.2	N.T	N.T	N.T	0.8
	Feb-19	81.3	42.9	8.1	14.6	0.6	12.8	0.4	8.3	N.T	N.T	N.T	0.8
	Mar-19	82.9	44.3	9.4	15.7	0.5	10.0	0.3	7.8	N.T	N.T	N.T	0.6
	Avg.	74.48	38.54	8.09	15.12	0.52	11.95	0.23	7.26	N.T	N.T	N.T	1.25

For Process Stack Monitoring

(a) Stack attached to Painting Process

Month	Stack number	SO2	NOx	CO	SPM	VOC
		µg/nm3	µg/nm3	% by Vol	µg/nm3	µg/nm3
RPCB Standards		—	—	—		
Apr-18	E-Coat Oven	3.8	9.1	0.0011	26.8	0.54
	Sealer Oven	N.T	8.1	0.0012	34.1	N.T

Apr-18	Top Coat Oven	N.T	3.1	0.0045	41.8	0.69
	Primer Oven	Not in Use				
	Touch up Oven	3.3	10.1	0.0015	26.8	0.5
	RTO Exhaust	3.2	16.2	0.0002	38.4	N.T
	POPA Oven Exhaust	0.9	4.1	0.003	36.8	0.05
	Propane/CNG Fired Hot Water Generator	2.4	7.2	0.0002	20.1	N.T
May-18	E-Coat Oven	3.6	8.94	0.001	23.4	0.52
	Sealer Oven	N.T	7.92	0.0011	30.8	N.T
	Top Coat Oven	N.T	2.9	0.0042	37.7	0.65
	Primer Oven	Not in Use				
	Touch up Oven	3.1	9.5	0.0014	22.9	0.48
	RTO Exhaust	3	14.5	0.0003	34.5	N.T
	POPA Oven Exhaust	0.86	3.8	0.002	32.1	0.04
	Propane/CNG Fired Hot Water Generator	2.1	6.8	0.0003	17.6	N.T
Jun-18	E-Coat Oven	3.7	9.8	0.0012	19.2	0.54
	Sealer Oven	N.T	8.2	0.001	21.4	N.T
	Top Coat Oven	N.T	3.5	0.004	25.10	0.62
	Primer Oven	Not in Use				
	Touch up Oven	3.6	12.5	0.0016	18.1	0.50
	RTO Exhaust	3.3	17.2	0.0004	27.4	N.T
	POPA Oven Exhaust	0.82	4.1	0.004	21.4	0.03
	Propane/CNG Fired Hot Water Generator	2.8	7.6	0.0004	10.1	N.T
Jul-18	E-Coat Oven	N.T	7.6	0.0016	8.1	2.6
	Sealer Oven	N.T	9.8	0.0023	12	1.8
	Top Coat Oven	N.T	35.5	0.0058	13	4.5
	Primer Oven	Not in Use				
	Touch up Oven	N.T	16.1	0.004	11.5	2.5
	RTO Exhaust	N.T	40	0.0042	14.2	3.2
	POPA Oven Exhaust	N.T	16.3	0.002	7.8	N.T
	Propane/CNG Fired Hot Water Generator	22.4	495.7	0.438	28	4.8

Aug-18	E-Coat Oven	BDL	6.8	0.0014	7.5	2.4
	Sealer Oven	BDL	5.2	0.0018	8.6	1.2
	Top Coat Oven	BDL	22.8	0.0041	10.5	3.8
	Primer Oven	Not in Use				
	Touch up Oven	BDL	12.6	0.0045	10.2	2.1
	RTO Exhaust	BDL	56.8	0.0245	18.6	3.5
	POPA Oven Exhaust	BDL	11.6	0.004	5.4	BDL
	Propane/CNG Fired Hot Water Generator	19.6	482.4	0.0005	23	4.3
Sep-18	E-Coat Oven	BDL	5.9	0.0018	6.2	2.1
	Sealer Oven	BDL	4.9	0.0021	8.1	1.9
	Top Coat Oven	BDL	19.6	0.0062	9.6	3.6
	Primer Oven	Not in Use				
	Touch up Oven	BDL	10.2	0.0046	9.2	2.3
	RTO Exhaust	BDL	54.7	0.0248	19.2	2.9
	POPA Oven Exhaust	BDL	9.6	0.0032	5.1	BDL
	Propane/CNG Fired Hot Water Generator	15.8	390.7	0.37	21.2	3.8
Oct-18	E-Coat Oven	N.T	4.2	0.0016	5.9	2.8
	Sealer Oven	N.T	5.2	0.0025	9.5	2.1
	Top Coat Oven	N.T	18.4	0.0058	8.1	2.9
	Primer Oven	Not in Use				
	Touch up Oven	N.T	12.4	0.0043	8.5	2.6
	RTO Exhaust	N.T	54.7	0.0248	19.2	2.9
	POPA Oven Exhaust	N.T	10.1	0.0033	7	N.T
	Propane/CNG Fired Hot Water Generator	21.8	396.5	0.381	28.2	3.9
Nov-18	E-Coat Oven	N.T	3.9	0.0014	6.8	2.2
	Sealer Oven	N.T	4.6	0.0019	8.2	2.2
	Top Coat Oven	N.T	14.6	0.0046	7.6	2.5
	Primer Oven	Not in Use				
	Touch up Oven	N.T	9.8	0.0036	7.2	2.2
	RTO Exhaust	N.T	44.4	0.0228	13.6	2.7
	POPA Oven Exhaust	N.T	9.6	0.0027	6.4	BDL

Nov-18	Propane/CNG Fired Hot Water Generator	19.4	340.8	0.41	26.8	3.6
Dec-18	E-Coat Oven	N.T	5.3	0.0017	7.6	2
	Sealer Oven	N.T	4.9	0.0022	8.7	2.4
	Top Coat Oven	N.T	16.3	0.0054	7.1	2.3
	Primer Oven	Not in Use				
	Touch up Oven	N.T	11.2	0.0048	8.2	2.2
	RTO Exhaust	N.T	49.2	0.0236	16.7	3.1
	POPA Oven Exhaust	N.T	10.9	0.004	7.8	N.T
	Propane/CNG Fired Hot Water Generator	21.3	329.1	0.488	23.8	4
Jan-19	E-Coat Oven	N.T	7.3	0.0028	8.5	2.9
	Sealer Oven	6.9	5.2	0.0019	6.9	2.3
	Top Coat Oven	7.9	19.4	0.0043	7.9	2.7
	Primer Oven	Not in Use				
	Touch up Oven	N.T	9.3	0.0056	8.7	2
	RTO Exhaust	N.T	44.7	0.0262	18.3	3.8
	POPA Oven Exhaust	N.T	13.6	0.0033	8.2	N.T
	Propane/CNG Fired Hot Water Generator	18.6	298.2	0.432	26.1	3.4
Feb-19	E-Coat Oven	BDL	7.2	0.0023	7.9	3.1
	Sealer Oven	BDL	6.3	0.0026	8	2
	Top Coat Oven	BDL	13.4	0.0038	9.2	2.4
	Primer Oven	Not in use				
	Touch up Oven	BDL	14.6	0.0051	8.6	2.8
	RTO Exhaust	BDL	40.2	0.0248	22.8	3.1
	POPA Oven Exhaust	BDL	11.3	0.0029	7.3	BDL
	Propane/CNG Fired Hot Water Generator	19.8	286.5	0.478	27.2	4.2
Mar'19	E-Coat Oven	BDL	8.3	0.0026	10.2	2.8
	Sealer Oven	BDL	8.9	0.0021	7.1	2.5
	Top Coat Oven	BDL	11.2	0.0048	8.9	3.2
	Primer Oven	Not in Use				
	Touch up Oven	BDL	16.5	0.0042	7.4	2.1

	RTO Exhaust	BDL	33.3	0.0281	18.6	4.3
	POPA Oven Exhaust	BDL	14.6	0.0029	9.8	BDL
	Propane/CNG Fired Hot Water Generator	16.1	277.6	0.506	29.6	3.9

(a) Stack attached to DG sets

Source of sample : **DG Set (3085 KVA) 1 nos Stack no. 1** **DG Sets (1500 KVA) 2 nos Stack no. 2 & 3** **DG Set (2000 KVA) 2 nos Stack no. 4 & 5** **DG Sets (1500 KVA) 1 nos Stack no. 6**				**Frequency : Once in a Month**		
Month	**Stack number**	**Sulphur Content**	**NOx**	**NMHC**	**CO**	**Particulate Matter**
		%	**ppmv**	**mg/nm^3**	**mg/nm^3**	**mg/nm^3**
RPCB Standards ⟶		**<2**	**710**	**100**	**150**	**75**
April-18	Stack no.1	0.002	165.7	17.6	40.8	44.5
	Stack no.2	0.003	212.8	18.7	32.4	48.6
	Stack no.3	0.002	160.8	13.9	20.7	46.8
	Stack no.4	0.002	298	21.8	37.6	50.8
	Stack no.5	0.002	324	14.1	44.7	42.8
	Stack no.6	0.002	267.1	20.2	52.5	37.8
May-18	Stack no.1	0.002	148.0	15.5	36.7	41.8
	Stack no.2	0.003	204.0	17.5	30.8	44.6
	Stack no.3	0.002	151.0	12.5	17.8	43.6
	Stack no.4	0.001	274.0	20.5	34.8	45.5
	Stack no.5	0.002	312.0	12.8	41.3	38.8
	Stack no.6	0.002	255.0	19.6	48.8	34.4
Jun-18	Stack no.1	0.0017	124.0	17.8	33.5	42.0
	Stack no.2	0.0024	180.2	19.4	29.7	41.8
	Stack no.3	0.0022	168.0	10.4	19.5	46.7
	Stack no.4	0.0017	286.0	23.1	30.7	42.8
	Stack no.5	0.0019	294.0	14.1	36.7	40.1
	Stack no.6	0.0018	231.0	15.4	45.1	37.5
Jul-18	Stack no.1	0.0042	160.7	38.5	34.7	63.4
	Stack no.2	0.0018	121.4	24.5	33.4	48.5
	Stack no.3	0.0016	111.6	23.2	32.8	45.4
	Stack no.4	0.0022	312.8	26.1	34.2	48.5
	Stack no.5	0.0024	283.4	27.4	31.9	47.8
	Stack no.6	0.0018	266.3	23.2	34.3	46.7
Aug-18	Stack no.1	0.0038	148.5	34.3	35.2	58.5
	Stack no.2	0.0020	127.6	22.6	33.9	44.6
	Stack no.3	0.0014	111.7	22.4	33.2	38.6

Aug-18	Stack no.4	0.0019	309.2	25.4	35.1	42.4
	Stack no.5	0.0021	287.1	26.6	32.3	43.4
	Stack no.6	0.0016	143.6	22.8	35.1	43.4
Sep-18	Stack no.1	0.0036	79.9	31.5	38.4	54.2
	Stack no.2	0.0022	141.2	19.4	37.1	39.6
	Stack no.3	0.0015	142.4	20.4	42.8	34.5
	Stack no.4	0.0022	591.0	23.4	36.7	39.5
	Stack no.5	0.0024	582.2	24.8	41.0	41.6
	Stack no.6	0.0018	316.1	21.2	39.2	39.7
Oct-18	Stack no.1	0.0032	114.1	33.1	43.2	58.1
	Stack no.2	0.0021	85.6	13.9	46.4	21.9
	Stack no.3	0.0014	78.4	19.1	42.3	32.8
	Stack no.4	0.0021	365.4	18.1	48.2	28.9
	Stack no.5	0.0022	388.4	19.9	42.8	35.2
	Stack no.6	0.0014	217.8	19.2	40.3	28.6
Nov-18	Stack no.1	0.0027	127.2	27.8	44.7	46.4
	Stack no.2	0.0019	92.4	14.8	47.2	23.4
	Stack no.3	0.0016	68.6	21.2	41.7	27.8
	Stack no.4	0.0019	340.6	16.8	55.3	24.5
	Stack no.5	0.0019	344.5	17.2	40.1	29.8
	Stack no.6	0.0012	190.6	17.4	57.1	22.4
Dec-18	Stack no.1	0.0021	134.1	29.3	98.6	43.2
	Stack no.2	0.0024	52.3	15.3	88.1	26.3
	Stack no.3	0.0013	61.2	19.6	74.0	25.8
	Stack no.4	0.0015	367.3	13.8	63.2	28.4
	Stack no.5	0.0017	387.2	16.4	71.3	27.5
	Stack no.6	0.0016	219.2	13.9	81.5	25.7
Jan-19	Stack no.1	0.0028	146.4	25.8	115.3	38.7
	Stack no.2	0.0019	78.6	18.5	79.8	29.1
	Stack no.3	0.0017	98.3	15.9	82.2	31.2
	Stack no.4	0.0021	121.3	21.3	73.4	24.9
	Stack no.5	0.0016	109.7	19.8	87.7	28.4
	Stack no.6	0.0023	137.5	16.2	94.3	33.2
Feb-19	Stack no.1	0.0029	138.1	28.6	108.3	39.5
	Stack no.2	0.0019	83.4	20.3	84.4	24.8
	Stack no.3	0.0023	88.7	18.7	77.8	27.2
	Stack no.4	0.0020	118.1	23.6	89.3	31.6
	Stack no.5	0.0025	106.5	17.5	82.7	29.2
	Stack no.6	0.0018	129.6	25.2	79.4	33.8
	Stack no.1	0.0033	129.2	26.3	101.2	35.2
	Stack no.2	0.0017	87.6	22.2	75.2	26.7
	Stack no.3	0.0020	92.4	16.8	82.3	29.4

Mar-19	Stack no.4	0.0025	122.3	21.4	79.8	25.1
	Stack no.5	0.0029	118.2	18.6	76.9	28.0
	Stack no.6	0.0022	123.7	23.3	84.5	31.6

(b) Stack attached to Casting Process

Source of sample : GSN fume extractor, HPDC, LPDC & SPC stack				**Frequency : Once in a Month**	
Month	**Stack Detail**	SPM	**SO_2**	**NO_X**	**CO**
		Mg/NM^3	**Mg/NM^3**	**Mg/NM^3**	**Mg/NM^3**
RPCB Standards →		**150**	-	-	-
Apr-18	GSN Stack	56.8	N.T	30.4	0.003
	GSN Stack Continuous	50.1	N.T	28.6	0.004
	LPDC Stack	68.1	N.T	18.1	0.0014
	HPDC Stack-I	61	N.T	15.2	0.0012
	HPDC Stack-II	71.1	N.T	20.1	0.002
	SPC Stack	78.1	N.T	18.1	0.006
May-18	GSN Stack	52.8	N.T	27.7	0.002
	GSN Stack Continuous	46.9	N.T	25.5	0.003
	LPDC Stack	63.8	N.T	16.5	0.0012
	HPDC Stack-I	61	N.T	15.2	0.0012
	HPDC Stack-II	68.5	N.T	18.4	0.0019
	SPC Stack	73.9	N.T	16.4	0.005
Jun-17	GSN Stack Batch 1	35.2	N.T	29.4	0.0026
	GSN Stack Continuous	32.1	N.T	27.8	0.0005
	LPDC Stack	32.1	8.2	28.4	0.0021
	HPDC Stack-I	38.1	6.1	21.4	0.0023
	HPDC Stack-II	36.2	7.1	21.4	0.0017
	SPC Stack	48.1	6.2	18.1	0.003
Jul-18	GSN Stack Batch 1	18	3.6	19.6	0.0026
	GSN Stack Continuous	20	5.2	17.2	5.7
	LPDC Stack	59.3	N.T	8.8	0.0003
	HPDC Stack-I	68	N.T	11.4	0.001
	HPDC Stack-II	**55**	N.T	10.8	0.0007
	SPC Stack	68	N.T	9.8	N.T
Aug-18	GSN Stack Batch 1	16	2.8	15.9	0.0021
	GSN Stack Continuous	18.6	4.8	16.4	0.0033
	LPDC Stack	54.5	N.T	7.9	0.0004
	HPDC Stack-I	62	N.T	10.2	0.0015
	HPDC Stack-II	48	N.T	8.9	0.0009
	SPC Stack	62	N.T	8.2	N.T

Sep-18	GSN Stack	14.2	1.9	14.1	0.002
	GSN Stack Continuous	16.8	3.2	16.6	0.0032
	LPDC Stack	51.1	N.T	8	0.0003
	HPDC Stack-I	55.2	N.T	9.6	0.0013
	HPDC Stack-II	41.9	N.T	9.2	0.0011
	SPC Stack	52.2	N.T	7.1	N.T
Oct-18	GSN Stack	16.5	2.5	12.8	0.0022
	GSN Stack Continuous	17.2	3.8	15.8	0.0031
	LPDC Stack	53.8	N.T	9.6	0.024
	HPDC Stack-I	48.5	N.T	8.6	0.017
	HPDC Stack-II	43.8	N.T	10	0.015
	SPC Stack	54.2	N.T	6.1	0.002
Nov-18	GSN Stack	12.8	2.2	14.6	0.0018
	GSN Stack Continuous	15.2	4.1	17.6	0.0028
	LPDC Stack	8.2	N.T	N.T	N.T
	HPDC Stack-I	37.8	N.T	7.2	0.019
	HPDC Stack-II	36.2	N.T	8.9	0.017
	SPC Stack	44.3	N.T	7.2	0.019
Dec-18	GSN Stack	15.1	2.2	14	0.0027
	LPDC Stack	16.7	4.2	14.3	0.0042
	HPDC Stack-I	6.5	N.T	N.T	N.T
	HPDC Stack-II	26.4	N.T	6.8	0.016
	SPC Stack	24.8	N.T	6.5	0.016
Jan-19	GSN Stack	16.7	4.2	13.4	0.004
	GSN Stack Continuous	13.9	6.1	12.8	0.0058
	LPDC Stack	17.2	N.T	N.T	N.T
	HPDC Stack-I	29.6	N.T	8.2	0.019
	HPDC Stack-II	28.1	N.T	6.9	0.014
	SPC Stack	37.3	N.T	7.1	0.023
Feb-19	GSN Stack	17.2	6.5	12.3	0.0042
	GSN Stack Continuous	15.8	5.9	14.6	0.0049
	LPDC Stack	21.6	N.T	N.T	N.T
	HPDC Stack-I	25.4	N.T	7.8	0.015
	HPDC Stack-II	30.1	N.T	6.6	0.019
	SPC Stack	46.2	N.T	8.1	0.027
Mar-19	GSN Stack	16.1	8	13.9	0.0048
	LPDC Stack	14.3	6.5	15.8	0.0053
	HPDC Stack-I	19.36	N.T	N.T	N.T
	HPDC Stack-II	31.2	N.T	7.9	0.022
	SPC Stack	24.6	N.T	6.2	0.016

** N.T. - Not Traceable **BDL – Below Detectable Limit

(c) Noise Monitoring

Source of sample : East: East of Press Shop, North: North side of WTP, South: South of PT Shop, West: West of PT Shop			
Month	**Location**	**Noise Level**	
		Day Time (dB)	**Night Time (dB)**
Standards	⟶	**75**	**70**
Apr-18	East: East of Test Track	73.51	60.42
	North: North side of ETB	71.23	58.61
	South: South of Admin Building	66.23	53.45
	West: West of Forging Shop	68.91	56.4
Jul-18	East: East of Test Track	54.1	48.8
	North: North side of ETB	63.4	55.5
	South: South of Admin Building	56.8	54.4
	West: West of Forging Shop	61.1	57.4
Oct-18	East: East of Test Track	54.8	51.3
	North: North side of ETB	66.4	64.3
	South: South of Admin Building	56.1	55.4
	West: West of Forging Shop	64	66.6
Jan-19	East: East of Test Track	54.4	51.3
	North: North side of ETB	66.1	54
	South: South of Admin Building	60	60.5
	West: West of Forging Shop	65.3	63.4

PART -D

HAZARDOUS WASTE

as specified under Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016

Hazardous Waste	**Total Quantity (Kg.)**	
	During the previous financial year (2017-18)	**During the current financial year (2018-19)**
(a) From process		
Category 5.1- Used Oil/Spent Oil	95,000 Liters	100,000 Liters
Category 5.2- waste & Residue Containing Oil	253,000 Kg	290,000 Kg
Category 12.5 – Phosphate Sludge	80,000 Kg	65,000 Kg
Category 21.2 – Spent Solvent	42,000 Liters	54,000 Liters
Category 21.1 – Process Waste residues	128,000 Kg	127,000 Kg
Category 33.1 - Empty Barrels	110772 Nos	53598 Nos

Category 11.4 – Flue gas dust & other particulars	1000 Kg	21000 Kg
(b) **From pollution control facilities** Category 35.3 – ETP Sludge	3,96,000 Kg	3,73,000 Kg

PART - E

SOLID WASTE

		Total Quantity	
		During the previous financial year (2017-18)	**During the current financial year (2018-19)**
(a)	From process	24664	25592
(b)	From pollution control facility	Nil	Nil
(c)	(1) Qnty recycled or re-utilized within the unit	Nil	Nil
	(2) Sold to recycler (tons)	24256	25250
	(3) Disposed (Mix Malwa & Garbage in tons)	408	341

PART - F

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Category 5.1 – Used Oil	Stored in Steel drums and sent for recycling to the authorized recycler.
Category 5.2 – Waste & Residue containing oil	Oil soaked cotton waste is stored in HDPE bags and sent for the registered recycler for co processing in the kiln.. Grinding Sludge stored in HDPE bags and sent for Co-Processing.
Category 12.5 – Phosphate Sludge	Phosphate Sludge is stored in container and sent for land filling to CTDF Udaipur.
Category 21.2 – Spent Solvent	Spent Solvent collected in mild steel drums and sent for recycling to the authorized recycler.
Category 21.1 – Paint Sludge	Paint sludge is sent to the registered recycler for co processing in the kiln.
Category 33.1 – Empty Barrels	All the oil and paint contaminated empty barrels are sent to Registered Recycler for recycling.
Category 35.3 – ETP Sludge	Stored in HDPE Bags and sent for land filling to CTDF Udaipur.

PART-G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of Production:

1. Multistage RO plant installation for re utilization of Process effluent – investment **INR 153 Million.**
2. CO2 Emission reduction by changing the mode of transportation of Press parts – Approx. 1.33 MT/ Year saving (Depends on production load).
3. Electricity consumption reduction by around 33069 KWH by introduction of VFD (Variable Frequency Drive) at Hydraulic press m/c. - Investment **INR 1.5 Lakhs.**
4. Around 36864 KWH electricity consumption reduction by changing LED from CFL lighting.

PART - H

Additional measures / investment proposal for environment protection including abatement of pollution prevention of pollution:

1. Electricity Consumption reduction by different activities like - CFL to LED conversion, VFD Installation, Energy efficient Pump Installation – Investment INR 53.7 Million
2. Waste Heat Recovery System Installation is planned in this financial year to reduce electricity consumption – Investment INR 25 Million.
3. Air pollution reduction by installing dust collector at Stacks. Investment INR 70 million.
4. Reduction of Food Waste (Approx. 4 Gms. / Person) is planned by awareness and sensitizing the associates.

PART - I

Any other particular for improving the quality of the environment:

- 3500 Nos. of Tree plantation is planned in this financial year to improve air quality.
- Reduction in packing material by changing the mode of packaging from one way packing to returnable case packing.
- Water consumption reduction by utilizing the condensate water for cooling tower.

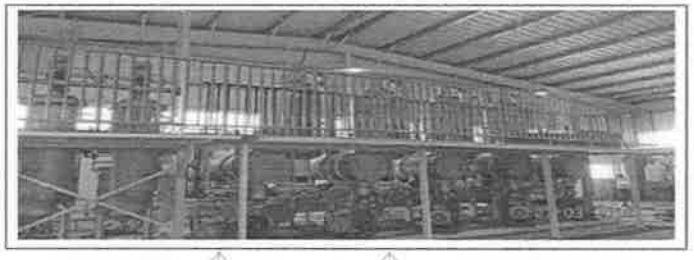
  Thinner Consumption reduction in PMR by optimizing cleaning activity. Etc

HONDA

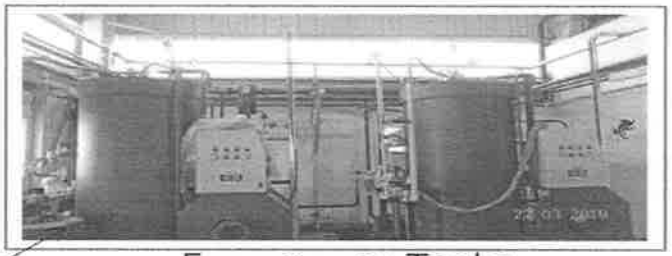
Zero Liquid Discharge Plant (ZLD Plant)

Recycling - 4 Stage RO

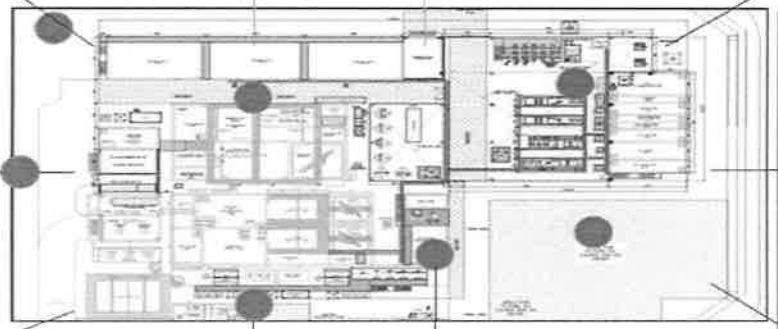
MEE (Muti Effect Evaporator) 4 Stage



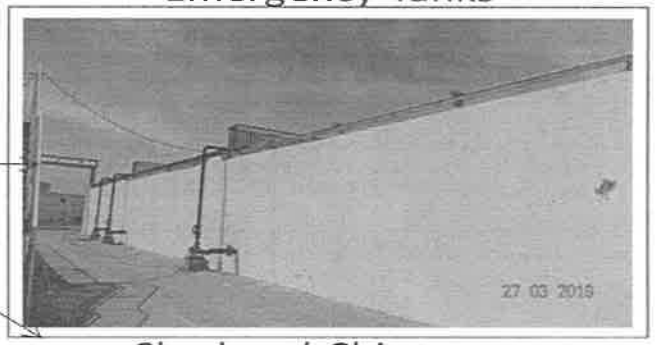
NON Boiler Installation



ZLD Shed & Panel Room

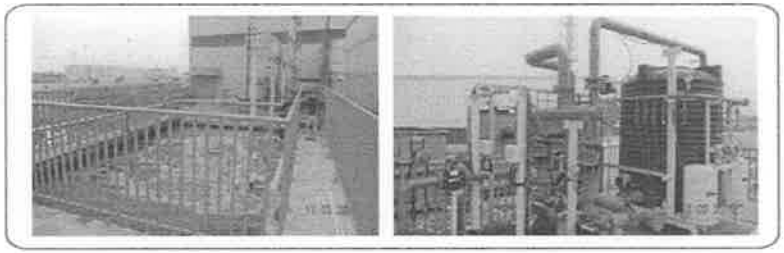


Emergency Tanks

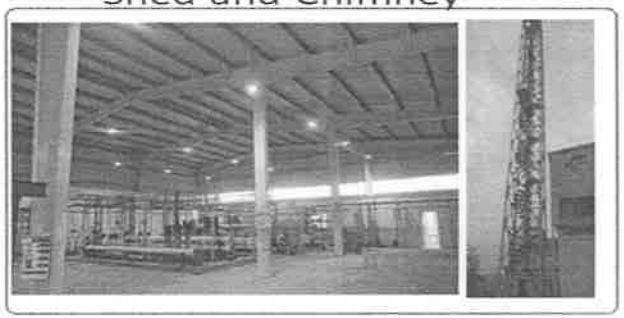


Shed and Chimney

RO Feed pumping system
Instruments



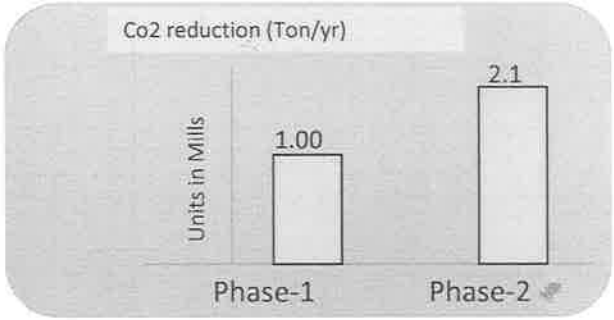
MBR System (Make G.E.)



● Photograph Location

Solar Plant Implementation at HCIL(TKR)-Capacity -3.7 MW

S.N	Location	Area (Sq.m)	Power (KW)
Project Start Date			
Project Finish Date			
1	Roof Top (Fe shop)	28000	2.5
	Total	28000	2.5 MW



CETP Water Usage For Green Development

Background

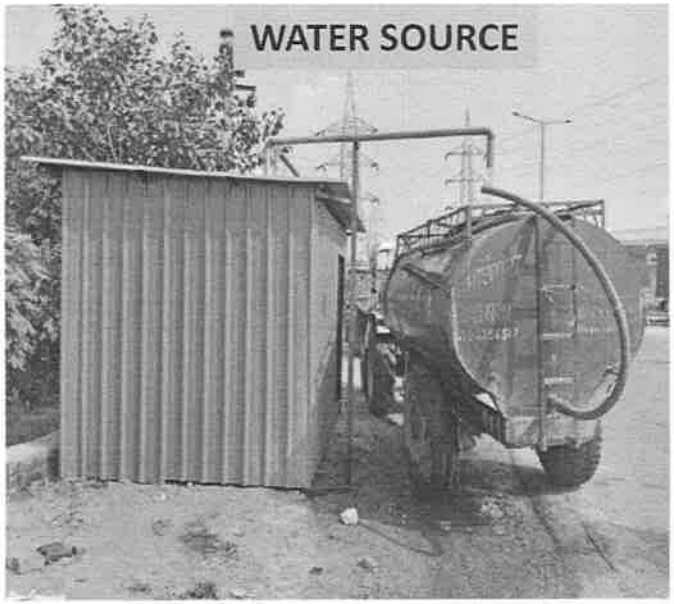
PCB- Jaipur has requested HCIL to utilize Bhiwadi CETP water for green area,

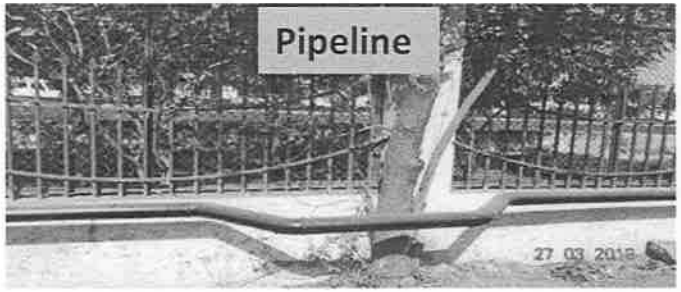
On Management direction HCIL has tested the water, and test was Positive, and we can use the water for Green area.

HCIL Conditions

HCIL will use the water for green development.

- In 1st Phase- HCIL started utilizing the water for outer area – (RICCO Road & Supplier cluster Green area)- from Oct'18
- In 2nd Phase- HCIL has expand the water connection inside HCIL premises through pipeline and using water mainly for Horticulture purpose.





We are using around 1MLD water on daily basis from this source

HONDA

Maintaining Greenery

HONDA

Particulate Matter reduction project at Die Casting Stacks