

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI
Original Application No. 256 of 2020 (SZ)**

IN THE MATTER OF

Tribunal on its own motion

...Applicant

Versus

1. Union of India,
Ministry of Environment, Forest and Climate Change
And Ors.

... Respondents

INDEX TO TYPED SET OF PAPERS – II

S No.	Title	Page No.
1.	Annexure IV	283

DATED AT CHENNAI ON THIS THE 3rd JULY OF 2021

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Place : Chennai

**M/s. ABDUL SALEEM
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TAMILNADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

From

To

P.K.Raguraman, M.Sc., Dip(Ind.Safety)
Chief Scientific Officer,
District Environmental Laboratory, Manali
Tamil Nadu Pollution Control Board,
Arumbakkam,
Chennai-106

M/s.CPCL.,
Manali
Chennai – 600 068.

Lr.No.TNPC Bd/DEL-MNL/Air Survey/F. No. 13/2019-20, Dt. 14.06.2021

Sir,

Sub: Furnishing of Report of Analysis of Ambient Air Quality /
Stack Monitoring / Ambient Noise Level Survey – Reg.

I am herewith sending the Report of Analysis of Ambient Air Quality / Stack Monitoring / Ambient Noise Level Survey conducted in the vicinity of your industry **M/s.CPCL., Manali Chennai-68** on **22.04.2021 to 04.05.2021** with invoice for Rs.2,85,600/- (Rupees Two Lakhs Eighty Five Thousand and Six Hundred only) for payment towards the above survey / analytical charges.

Kindly acknowledge the receipt of the above without fail.


Chief Scientific Officer,
District Environmental Laboratory
Tamil Nadu Pollution Control Board
Manali

Encl.: As above.

Copy submitted to:

1. The Joint Chief Environmental Engineer (M), TNPC Bd. Chennai for favour of kind information please
2. The District Environmental Engineer, TNPC Bd, Ambattur for favour of kind information please.
3. Copy to file.



TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

AMBIENT AIR QUALITY SURVEY – Report of Analysis

Report No. 06/AAQS/2019-20

Date: 14.06.2021

1. Name of the Industry : **M/s.CPCL.,**
 2. Address of the Industry : **Manali Chennai-68**
 3. Date of Survey : **22.04.2021 to 04.05.2021**
 4. Duration of Survey : **8 Hours / 24 hours**
 5. Category : **Red / Orange / Green – Large / Medium / Small**
 6. Land use classification : **Industrial / Commercial / Residential / Sensitive**

Meteorological Conditions

Ambient Temperature (^o C)	Min 29	Max 34	Relative Humidity (%)	Min 56	Max 79
Weather Condition	Partially Cloudy		Rain Fall (mm)	Nil	
Predominant Wind Direction	SE-NW		Mean Wind Speed (km/hr)	19	

Ambient Air Quality Survey Results

Sl. No.	Location	Direction *	Distance (m) *	Height Form GL (m)	Pollutants Concentration (microgram / m ³)			
					PM 2.5	PM 10	SO ₂	NO ₂
1	On top of platform near crude division.	N	500	4.0	-	80	22	14
2	On top of platform near North security gate.	NNE	800	4.0	33	78	11	19
3	On top of Platform near CPP.	NE	900	4.0	-	60	9	13
4	On top of Platform near Flame area.	E	300	4.0	-	58	10	12
5	On top Platform near ETP-I	ESE	500	4.0	-	54	8	10
6	On top Platform near Temple.	SE	750	4.0	20	73	10	16

Note: * With respect to major emission sources. The analytical results are restricted to the sampling period of 8 hrs/24hrs

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 Chief Scientific Officer,
 District Environmental Laboratory
 Tamil Nadu Pollution Control Board
 Manali

Test Performed	Test Method
PM10	IS 5182 : (Part 23) - 2006
SO ₂	Modified West - Graeke / IS 5182 : (Part 2) – 2001 RA: 2012
NO ₂	Jacobs – Hochheiser / IS 5182 : (Part 6) – 2006 RA:2012



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 5. Category : **Red / Orange / Green – Large / Medium / Small**
 6. Land use classification : **Industrial / Commercial / Residential / Sensitive**

Meteorological Conditions

Ambient Temperature (°C)	Min	Max	Relative Humidity (%)	Min	Max
	29	33		59	74
Weather Condition	Partially Cloudy		Rain Fall (mm)	Nil	
Predominant Wind Direction	SE-NW		Mean Wind Speed (km/hr)	14	

Ambient Air Quality Survey Results

Sl. No	Location	Direction *	Distance (m) *	Height Form GL (m)	Pollutants Concentration (microgram / m ³)			
					PM 2.5	PM 10	SO ₂	NO ₂
1	On top of platform near South Gate	S	500	3.0	-	71	9	13
2	On top of Platform near HTP-II Control Room	S	800	3.0	-	50	7	11
3	On top of Platform near TTP control Room	SW	900	4.0	11	53	8	10
4	On top of Platform near Ref-II sub station	SW	300	3.0	-	63	14	16
5	On top Platform near Fire & Safety	W	500	4.0	-	60	12	15
6	On top Platform near CISF DC Office near gate no. 3 weigh bridge	NW	750	3.0	56	117**	15	19

Note: * With respect to major emission sources. The analytical results are restricted to the sampling period of 8 hrs/24hrs

** Near gate no.3 heavy vehicle movement observed during survey period

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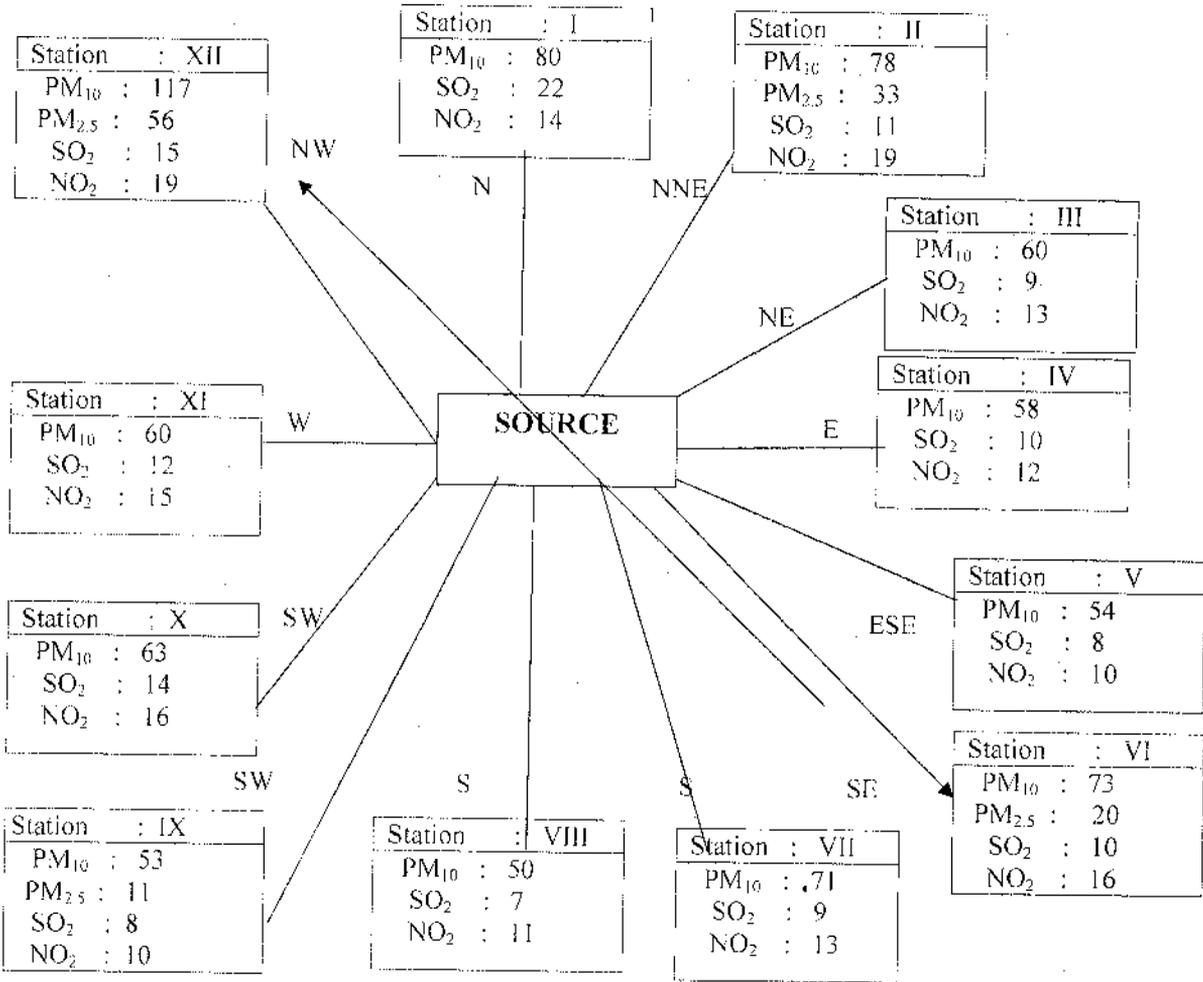
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AMBIENT AIR QUALITY SURVEY

Schematic Diagram Showing Location of Sampling

Report No. 06/AAQ/SM/2019-20

Name and Address of the Industry : **M/s.CPCL.,
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Date of Survey : **22.04.2021 to 04.05.2021**



Note: All the values are expressed in $\mu\text{g}/\text{m}^3$ and restricted to sampling period of 8 hrs/24hrs

Meteorological Conditions:	
Predominant Wind Direction	SE - NW
Wind Speed (Km/hr)	19
Weather Condition	Partially Cloudy
Rainfall	Nil

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District Environmental Laboratory, Manali

STACK MONITORING SURVEY – Report of Analysis

Report No. 06 / SM/2019-20 **Date: 14.06.2021**

1. Name of the Industry : **M/s.CPCL.,**
2. Address of the Industry : **Manali Chennai-68**
3. Date of Survey : **22.04.2021 to 04.05.2021**
4. Type of Industry : **Coal/Chemical/Sugar/Paper & Pulp/
Power plant / Textile Processing/Petroleum products**

Stack Monitoring Survey Results

Sl. No.	Stack attached to	Fuel used	Stack Temp °K	Velocity in (m/ sec)	Discharge rate In Nm ³ /hr	Pollutants (mg / Nm ³)		
						PM	SO ₂	NO _x
1	15 F2 A- VDU	FG	560	36.19	114426	21	146	89
2	15 F2 B- VDU	FG	553	35.73	114401	38	172	160
3.	15 F1 B-ADU	FG	488	36.93	184181	22	152	116
4.	14 F1 –FOOT OIL MIX	FG	663	27.66	54022	12	168	90
5.	1F1A EAST – ADU	FO + FG	588	27.71	268284	24	128	96

Test Performed	Test Method
PM10	IS 5182 : (Part 23) – 2006
SO ₂	Modified West – Graeke / IS 5182 : (Part 2) – 2001 RA: 2012
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Stack Monitoring Survey Results

Sl. No.	Stack attached to	Fuel used	Stack Temp °K	Velocity in (m/ sec)	Discharge rate In Nm ³ /hr	Pollutants (mg / Nm ³)		
						PM	SO ₂	NO _x
6.	1F1A WEST – ADU	FO + FG	471	22.38	270504	26	112	68
7.	4-F1 Kero Hydrotreater	FG	663	24.98	50374	29	118	52
8.	9F201 -DWO mix	FG	484	19.55	74510	23	51	74
9.	9F301 Slack wax mix	FG	489	20.39	36533	20	72	153
10.	10F101 Lube Hydro-finishing	FO + FG	513	22.33	51910	19	70	82

Test Performed	Test Method
PM10	IS 5182 : (Part 23) -- 2006
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4. Type of Industry : Coal/Chemical/Sugar/Paper & Pulp/
Power plant / Textile Processing/Petroleum products

Stack Monitoring Survey Results

Sl. No.	Stack attached to	Fuel used	Stack Temp °K	Velocity in (m/ sec)	Discharge rate In Nm ³ /hr	Pollutants (mg / Nm ³)		
						PM	SO ₂	NO _x
11.	14 F 101 Wax Hydro finishing	FG	664	27.68	49714	6	14	48
12.	16F1 - FCCU	FO +FG	487	16.32	91438	24	62	40
13.	71 F1 PDA Feed	FG	493	21.19	48707	17	120	146
14.	73F101 -NMP 1	FO +FG	531	16.56	68921	27	72	58
15.	73 F102 -NMP 2	FO + FG	468	18.85	93468	17	26	54

Test Performed	Test Method
PM10	IS 5182 : (Part 23) – 2006
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Report No. 06 / SM/2019-20 Date: 14.06.2021

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Power plant / Textile Processing/**Petroleum products**

Stack Monitoring Survey Results

Sl. No.	Stack attached to	Fuel used	Stack Temp °K	Velocity in (m/ sec)	Discharge rate In Nm ³ /hr	Pollutants (mg / Nm ³)		
						PM	SO ₂	NO _x
16.	205 F1 HGU	FG	529	20.83	105066	10	60	72
17.	205 F2 HGU	Naptha + FG	548	19.99	97333	4	71	36
18.	Boiler-2 Cogeneration plant	RLNG	493	41.50	229686	16	465	192
19.	Boiler-3 Cogeneration plant	RLNG	493	40.58	224594	18	478	187
20.	Boiler-4 Cogeneration plant	FO	488	36.72	205313	19	482	173

Test Performed	Test Method
PM10	IS 5182 : (Part 23) – 2006
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TAMILNADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

Stack Details
Report No. 06/AAQ/SM/2019-20

 1. Name and Address of the Industry : **M/s.CPCL.,
Manali Chennai-68**

 2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars	1	2	3	
1.	Stack attached to	VDU	VDU	ADU	
2.	Details of process stack	15 F2 A	15 F2 B	15 F1 B	
3.	Height from G Level in (m)	32	32	60	
4.	Diameter in (m)	1.45	1.45	1.70	
5.	Port hole height from Ground Level or bends or ducts in (m)	*	*	*	
6.	Fuel Used (with % Sulphur content)	FG	FG	FG	
7.	Fuel Consumption rate per hour (mention units)	12000 nm ³ /hr	3500 nm ³ /hr	22000 nm ³ /hr	
8.	Boiler type and capacity	*	*	*	
9.	APC Measures provided	Acoustic enclosures with stack	Acoustic enclosures with stack	Acoustic enclosures with stack	
10.	APC functional status	Functional	Functional	Functional	
11.	Composition of flue gas mg/m ³	CO %	101	72	102.6
		CO ₂ %	9.9	10.3	10.1
		O ₂ %	7.6	8.8	8.8
12.	Moisture content in %	--	--	--	
13.	Ambient temp in °K	304	305	307	
14.	Temp of flue gas in °K	560	553	488	
15.	Velocity of flue gas in m/sec	36.19	35.73	36.93	
16.	Volume of flue gas sampled in m ³	0.97723	0.9740	0.9651	
17.	Gaseous Discharge rate per day in Nm ³ /hr	114426	114401	184181	
18.	Combustion efficiently %	--	--	--	

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Stack Details

Report No. 06/AAQ/SM/2019-20

1. Name and Address of the Industry : **M/s.CPCL.,
Manali Chennai-68**

2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars		4	5	6
1.	Stack attached to		Foots Oil Mix	ADU	ADU
2.	Details of process stack		14F1	1F1A EAST	1F1A WEST
3.	Height from G Level in (m)		32.38	63.40	63.40
4.	Diameter in (m)		1.24	2.60	2.60
5.	Port hole height from Ground Level or bends or ducts in (m)		*	*	*
6.	Fuel Used (with % Sulphur content)		FG	FO + FG	FO +FG
7.	Fuel Consumption rate per hour (mention units)		95 Nm ³ /hr	1000 kg/hr FO + 1500 kg/hr FG	
8.	Boiler type and capacity		*	*	*
9.	APC Measures provided		Acoustic enclosures with stack	Acoustic enclosures with stack	Acoustic enclosures with stack
10.	APC functional status		Functional	Functional	Functional
11.	Composition of flue gas mg/m ³	CO %	181	57	52
		CO ₂ %	8.76	3.7	4.6
		O ₂ %	11.9	13.9	13.7
12.	Moisture content in %		--	--	--
13.	Ambient temp in °K		303	305	305
14.	Temp of flue gas in °K		663	588	471
15.	Velocity of flue gas in m/sec		27.66	27.71	22.38
16.	Volume of flue gas sampled in m ³		0.9804	0.9711	0.9711
17.	Gaseous Discharge rate per day in Nm ³ /hr		54022	268284	270504
18.	Combustion efficiently %		--	--	--

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TAMILNADU POLLUTION CONTROL BOARD

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Stack Details
Report No. 06/AAQ/SM/2019-20

 1. Name and Address of the Industry : **M/s.CPCL.,
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 2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars	7	8	9	
1.	Stack attached to	Kero Hydrotreater	DWO mix	Slack Wax Mix	
2.	Details of process stack	4F1	9F201	9F301	
3.	Height from G Level in (m)	37.80	47.93	36.40	
4.	Diameter in (m)	1.26	1.48	1.02	
5.	Port hole height from Ground Level or bends or ducts in (m)	*	*	*	
6.	Fuel Used (with % Sulphur content)	FG	FG	FG	
7.	Fuel Consumption rate per hour (mention units)	200 nm ³ /hr	400 kg/hr	100 kg/hr	
8.	Boiler type and capacity	*	*	*	
9.	APC Measures provided	Acoustic enclosures with stack	Acoustic enclosures with stack	Acoustic enclosures with stack	
10.	APC functional status	Functional	Functional	Functional	
11.	Composition of flue gas mg/m ³	CO %	6.2	20.3	15.1
		CO ₂ %	6.8	2.68	5.63
		O ₂ %	12.6	12.7	13.3
12.	Moisture content in %	--	--	--	
13.	Ambient temp in °K	304	305	304	
14.	Temp of flue gas in °K	663	484	489	
15.	Velocity of flue gas in m/sec	24.98	19.55	20.39	
16.	Volume of flue gas sampled in m ³	0.9767	0.9725	0.9768	
17.	Gaseous Discharge rate per day in Nm ³ /hr	50374	74510	36533	
18.	Combustion efficiently %	--	--	--	

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TAMILNADU POLLUTION CONTROL BOARD
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Stack Details

Report No. 06/AAQ/SM/2019-20

1. Name and Address of the Industry : **M/s.CPCL.,
Manali Chennai-68**

2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars	10	11	12
1.	Stack attached to	Lube Hydro-finishing	Wax Hydro finishing	FCCU
2.	Details of process stack	10F 101	14 F 101	16 F1
3.	Height from G Level in (m)	42.70	42.70	58.20
4.	Diameter in (m)	1.19	1.19	1.80
5.	Port hole height from Ground Level or bends or ducts in (m)	*	*	*
6.	Fuel Used (with % Sulphur content)	FO +FG	FG	FO +FG
7.	Fuel Consumption rate per hour (mention units)	100 kg/hr FO + 23 Nm ³ /hr	155 Nm ³ /hr	F.O - 700kg/hr and F.G - 650 kg/hr
8.	Boiler type and capacity	*	*	*
9.	APC Measures provided	Acoustic enclosures with stack	Acoustic enclosures with stack	Acoustic enclosures with stack
10.	APC functional status	Functional	Functional	Functional
11.	Composition of flue gas mg/m ³	CO %	104	133
		CO ₂ %	4.99	5.58
		O ₂ %	14.7	12.7
12.	Moisture content in %	--	--	--
13.	Ambient temp in °K	302	307	306
14.	Temp of flue gas in °K	513	664	487
15.	Velocity of flue gas in m/sec	22.33	27.68	16.32
16.	Volume of flue gas sampled in m ³	0.9827	0.9666	0.96837
17.	Gaseous Discharge rate per day in Nm ³ /hr	51910	49714	91438
18.	Combustion efficiently %	--	--	--

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Stack Details

Report No. 06/AAQ/SM/2019-20

1. Name and Address of the Industry : **M/s.CPCL.,
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2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars	13	14	15	
1.	Stack attached to	PDA FEED	NMP 1	NMP 2	
2.	Details of process stack	71 F1	73F101	73 F102	
3.	Height from G Level in (m)	45.82	53.38	48.85	
4.	Diameter in (m)	1.16	1.62	1.66	
5.	Port hole height from Ground Level or bends or ducts in (m)	*	*	*	
6.	Fuel Used (with % Sulphur content)	FG	FO +FG	FO +FG	
7.	Fuel Consumption rate per hour (mention units)	150nm ³ /hr	F.O - 150 Kg/hr and F.G- 700nm ³ /hr	F.O - 100 kg/hr and F.G - 300nm ³ /hr	
8.	Boiler type and capacity	*	*	*	
9.	APC Measures provided	Acoustic enclosures with stack	Acoustic enclosures with stack	Acoustic enclosures with stack	
10.	APC functional status	Functional	Functional	Functional	
11.	Composition of flue gas mg/m ³	CO %	139	120	21.7
		CO ₂ %	9.2	3.91	2.63
		O ₂ %	6.9	14.7	13.9
12.	Moisture content in %	--	--	--	
13.	Ambient temp in °K	303	305	304	
14.	Temp of flue gas in °K	493	531	468	
15.	Velocity of flue gas in m/sec	21.19	16.56	18.85	
16.	Volume of flue gas sampled in m ³	0.9791	0.97200	0.9756	
17.	Gaseous Discharge rate per day in Nm ³ /hr	48707	68921	93468	
18.	Combustion efficiently %	--	--	--	

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2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars	16	17	18
1.	Stack attached to	HGU	HGU	Cogeneration plant
2.	Details of process stack	205 F1	205 F2	Boiler -2
3.	Height from G Level in (m)	60	60	100
4.	Diameter in (m)	1.78	1.78	1.80
5.	Port hole height from Ground Level or bends or ducts in (m)	*	*	*
6.	Fuel Used (with % Sulphur content)	FG	NAPTHA + PURGE GAS	RLNG
7.	Fuel Consumption rate per hour (mention units)	40 nm ³ /hr	Naphtha- 4m ³ /hr and purge gas - 35000 nm ³ /hr	260 Nm ³ /hr
8.	Boiler type and capacity	*	*	*
9.	APC Measures provided	Acoustic enclosures with stack	Acoustic enclosures with stack	Acoustic enclosures with stack
10.	APC functional status	Functional	Functional	Functional
11.	Composition of flue gas mg/m ³	CO %	46	1.1
		CO ₂ %	3.39	16.54
		O ₂ %	14.7	9.3
12.	Moisture content in %	--	--	-
13.	Ambient temp in °K	306	305	304
14.	Temp of flue gas in °K	529	548	493
15.	Velocity of flue gas in m/sec	20.83	19.99	41.50
16.	Volume of flue gas sampled in m ³	0.9682	0.97138	0.9708
17.	Gaseous Discharge rate per day in Nm ³ /hr	105066	97333	229686
18.	Combustion efficiently %	--	--	--

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Stack Details

Report No. 06/AAQ/SM/2019

1. Name and Address of the Industry : **M/s.CPCL.,
Manali Chennai-68**

2. Date of Survey : **22.04.2021 to 04.05.2021**

Sl. No.	Particulars	19	20
1.	Stack attached to	Cogeneration plant	Cogeneration plant
2.	Details of process stack	Boiler -3	Boiler -4
3.	Height from G Level in (m)	100	100
4.	Diameter in (m)	1.80	1.80
5.	Port hole height from Ground Level or bends or ducts in (m)	*	*
6.	Fuel Used (with % Sulphur content)	RLNG	FO
7.	Fuel Consumption rate per hour (mention units)	260 Nm ³ /hr	300 Nm ³ /hr
8.	Boiler type and capacity	*	*
9.	APC Measures provided	*	*
10.	APC functional status	*	*
11.	Composition of flue gas mg/m ³	CO %	12.7
		CO ₂ %	15.96
		O ₂ %	5.2
12.	Moisture content in %	--	--
13.	Ambient temp in °K	306	304
14.	Temp of flue gas in °K	493	488
15.	Velocity of flue gas in m/sec	40.58	36.72
16.	Volume of flue gas sampled in m ³	0.9644	0.9708
17.	Gaseous Discharge rate per day in Nm ³ /hr	224594	205313
18.	Combustion efficiently %	--	--

* NOT FURNISHED

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STACK MONITORING SURVEY – Additional details

Report No. 06/ SM/2019-20

Date: 14.06.2021

1. Name of the Industry : **M/s.CPCL.,
Manali Chennai-68**
2. Address of the Industry : **Royapuram,Chennai – 13**
3. Date of Survey : **22.04.2021 to 04.05.2021**
4. Type of Industry : **Coal/Chemical/Sugar/Paper & Pulp/
Power plant / Textile Processing/ **Petroleum products****

Stack Monitoring Additional details

Sl. No.	Details of stack mentioned in the Air Consent order	Details of stack available and in working condition	Details of stack for which stack Emission sampling have been done	Justification for the left out of stack Emission Sampling
1.	15 F2 A- VDU	Working	Sampling Done	--
2.	15 F2 B- VDU	Working	Sampling Done	--
3.	15 F1 B-ADU	Working	Sampling Done	--
4.	14 F1 –FOOTS OIL MIX	Working	Sampling Done	--
5.	1F1A EAST – ADU	Working	Sampling Done	--
6.	1F1A WEST – ADU	Working	Sampling Done	--
7.	4-F1 Kero Hydrotreater	Working	Sampling Done	--
8.	9F201 -DWO mix	Working	Sampling Done	--
9.	9F301 Slack wax mix	Working	Sampling Done	--
10.	10F101 Lube Hydro-finishing	Working	Sampling Done	--

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STACK MONITORING SURVEY – Additional details

Report No. 06/ SM/2019-20

Date: 14.06.2021

1. Name of the Industry : **M/s.CPCL.,
Manali Chennai-68**
2. Address of the Industry : Royapuram, Chennai – 13
3. Date of Survey : **22.04.2021 to 04.05.2021**
4. Type of Industry : Coal/Chemical/Sugar/Paper & Pulp/
Power plant / Textile Processing/ **Petroleum products**

Stack Monitoring Additional details

Sl. No.	Details of stack mentioned in the Air Consent order	Details of stack available and in working condition	Details of stack for which stack Emission sampling have been done	Justification for the left out of stack Emission Sampling
11.	14 F 101 Wax Hydro finishing	Working	Sampling Done	--
12.	16F1 - FCCU	Working	Sampling Done	--
13.	71 F1 PDA Feed	Working	Sampling Done	--
14.	73F101 -NMP 1	Working	Sampling Done	--
15.	73 F102 -NMP 2	Working	Sampling Done	--
16.	205 F1 HGU	Working	Sampling Done	--
17.	205 F2 HGU	Working	Sampling Done	--
18.	Boiler-2 Cogeneration plant	Working	Sampling Done	--
19.	Boiler-3 Cogeneration plant	Working	Sampling Done	--
20.	Boiler-4 Cogeneration plant	Working	Sampling Done	--

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AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 06/ NLS/2019-20

Date: 14.06.2021

1.	Name of the Industry	M/s.CPCL.,		
2.	Address of the Industry	Manali Chennai-68		
3.	Date of Survey	22.04.2021 to 04.05.2021		
Category	RL	Land use Classification	Industrial	
Type of Survey	Ambient/Source	Time of Survey	Day	
Meteorological conditions		Calm/Windy/Rainy	Windy	

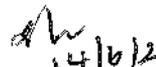
Logging Parameters

Instrument Used	CESVA Model SC310	Serial No	T243103	
Logging Interval	10 Minutes each point	Measuring Range	50-110 dB(A)	
Weighting	"A"	Peak Weighting	"C"	Time Weighting
				FAST
Sound Incidence	RANDOM		Time in hrs	14.00 - 15.00

Report of Noise Level Monitoring

Sl No	Location	Duration (min)	Distance (M)	Direction	Sound Level - dB (A)		
					Leq	Min	Max
1	Near Fire Station	10	700	N	57.8	55.3	59.1
2	Near R & D	10	900	NNE	56.3	52.7	58.9
3	Near CPP Online Station	10	800	NE	61.7	59.8	63.1
4	Near Cooling Tower	10	500	ENE	77.2	74.0	79.4
5	Near Flare Area	10	300	E	62.4	59.9	65.1

Note: Leq value is the average energy for the measured period.


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AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 06/NLS/2019-20

Date: 14.06.2021

1.	Name of the Industry	M/s.CPCL.,		
2.	Address of the Industry	Manali Chennai-68		
3.	Date of Survey	22.04.2021 to 04.05.2021		
Category	RL	Land use Classification	Industrial	
Type of Survey	Ambient/Source	Time of Survey	Day	
Meteorological conditions		Calm/Windy/Rainy	Windy	

Logging Parameters

Instrument Used	CESVA Model SC310	Serial No	T243103		
Logging Interval	10 Minutes each point	Measuring Range	50-110 dB(A)		
Weighting	"A"	Peak Weighting	"C"	Time Weighting	FAST
Sound Incidence	RANDOM		Time in hrs	14.00 – 15.00	

Report of Noise Level Monitoring

Sl No	Location	Duration (min)	Distance (M)	Direction	Sound Level – dB (A)		
					L _{eq}	Min	Max
6	Near Fire & Safety	10	700	W	60.3	54.3	68.6
7	Near CISF DC Office	10	900	WNW	65.6	59.8	66.4
8	Near Over Bridge	10	300	NNW	70.9	68.7	72.6
9	Near ref 111 Sub station	10	500	NW	65.4	53.6	67.8
10	Near Pond	10	700	NW	64.5	55.4	69.1

Note: Leq value is the average energy for the measured period.

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AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 06/ NLS/2019-20

Date: 14.06.2021

1.	Name of the Industry	M/s.CPCL.,		
2.	Address of the Industry	Manali Chennai-68		
3.	Date of Survey	22.04.2021 to 04.05.2021		
Category	RL	Land use Classification	Industrial	
Type of Survey	Ambient/Source	Time of Survey	Day	
Meteorological conditions		Calm/Windy/Rainy	Windy	

Logging Parameters

Instrument Used	CESVA Model SC310	Serial No	T243103	
Logging Interval	10 Minutes each point	Measuring Range	50-110 dB(A)	
Weighting	"A"	Peak Weighting	"C"	Time Weighting
				FAST
Sound Incidence	RANDOM		Time in hrs	14.00 – 15.00

Report of Noise Level Monitoring

Sl No	Location	Duration (min)	Distance (M)	Direction	Sound Level – dB (A)		
					L _{eq}	Min	Max
11	Near ETP-1	10	700	ESE	51.2	49.3	55.4
12	Near temple	10	900	SE	49.3	45.1	57.3
13	Near South Gate	10	800	S	45.1	43.5	59.2
14	Near Tank No.119	10	500	SW	43.5	42.2	56.9
15	Near Sub station Ref 11	10	300	WSW	55.5	53.5	69.0

Note: L_{eq} value is the average energy for the measured period.

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INFERENCE REPORT ON A.A.Q.S./ S.M.

1. Name of Industry : **M/s.CPCL.,
Manali Chennai-68**
2. Pollution Category : Red Large
3. Date of A.A.Q. Survey : **22.04.2021 to 04.05.2021**
4. Predominant Wind Direction : SE -NW
5. Weather condition : Partially Cloudy

STATUS OF POLLUTANTS LEVEL

I. AMBIENT AIR QUALITY:-

1. Total No. of A.A.Q. stations monitored : 12
2. No. of A.A.Q. stations in which Pollutants Level exceeded the Boards standards : 1

Maximum and Minimum values of Pollutants Level observed:

Sl. No.	POLLUTANT	Values in microgram/m ³		BOARD'S STANDARD (As per consent order)
		Maximum	Minimum	
1.	PM ₁₀	117	50	100
	PM _{2.5}	56	11	60
2.	<u>GASEOUS POLLUTANTS:-</u>			
	(i) SO ₂	22	7	80
	(ii) NO ₂	19	10	80

II. STACK MONITORING:-

1. Total No. of Stacks Monitored : 20
2. No. of Stacks in which Pollutants level Exceeded the Boards standards : Nil

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District Environmental Laboratory, Manali

TVOC Survey – Report of Analysis

Report No.06/TVOC/2019-20

Dated:14.06.2021

1. Name of the Industry : **M/s.CPCL.,**
2. Address of the Industry : **Manali Chennai-68**
3. Date of Survey : **22.04.2021 to 04.05.2021**
4. Pollution Category : **Red Large**

TVOC – Analysis Report

Sl.No.	Location	Direction	Distance (mts)	TVOC ($\mu\text{g}/\text{m}^3$)
1	Near Fire Station	N	700	600
2	Near R & D	NNE	900	550
3	Near CPP Online Station	NE	800	450
4	Near Cooling Tower	ENE	500	510
5	Near Flare Area	E	300	790
6	Near ETP-1	ESE	500	432

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TVOC Survey – Report of Analysis

Report No.06/TVOC/2019-20

Dated: 14.06.2021

1. Name of the Industry : **M/s.CPCL.,**
2. Address of the Industry : **Manali Chennai-68**
3. Date of Survey : **22.04.2021 to 04.05.2021**
4. Pollution Category : **Red Large**

TVOC – Analysis Report

Sl.No.	Location	Direction	Distance (mts)	TVOC ($\mu\text{g}/\text{m}^3$)
7	Near temple	SE	900	590
8	Near South Gate	S	800	762
9	Near Tank No.119	SW	900	875
10	Near Ref II Sub station	WSW	300	968
11	Near Fire & Safety	W	400	926
12	Near CISF DC Office	WNW	600	825

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TVOC Survey – Report of Analysis

Report No.06/TVOC/2019-20

Dated: 14.06.2021

1. Name of the Industry : M/s.CPCL.,
2. Address of the Industry : Manali Chennai-68
3. Date of Survey : 22.04.2021 to 04.05.2021
4. Pollution Category : Red Large

TVOC – Analysis Report

Sl.No.	Location	Direction	Distance (mts)	TVOC ($\mu\text{g}/\text{m}^3$)
13	Near Bridge	NW	400	1102
14	Near rcf 111 Sub station	NW	600	1110
15	Near Pond	NNW	700	973

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BILL

Report No. 06/AAQ/SM/2019-20

Revised Bill No.	06/2019-20
Date	14.06.2021

To

M/s.CPCL., Manali Chennai-68

Ref: 1. B.PMs.No.6 Dt.31.03.2009.

Sl. No.	Description	Rate (Rs.)	No. of Stations/ Stacks	Amount (Rs.)
1.	SAMPLING CHARGES:			
	(i) Ambient Air Quality monitoring PM ₁₀	2000	12	24,000
	(ii) Source Emission Monitoring (PM, SO ₂ , NO _x etc.,)	7500	20	1,50,000
	(iii) Ambient Air Quality monitoring PM _{2.5}	2000	4	8,000
2.	ANALYTICAL CHARGES:			
	(i) Ambient Air Samples PM ₁₀ , SO ₂ , NO ₂ (each Rs. 600/-)	1800	12	21,600
	(ii) Ambient Air Samples PM _{2.5}	1000	4	4,000
	(iii) Source Emission Samples PM, SO ₂ , NO _x (each Rs.600/-)	1800	20	36,000
3.	AMBIENT NOISE MONITORING CHARGES:			
	(i) For first 5 stations	800	15	12,000
4.	VOC	2000	15	30,000
Total				285600
To be Paid				285600

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Chief Scientific Officer
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