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ASIAN PAINTS LIMITED
PENTA DIVISION
AN ISO 9001
ISO 14001 &
OHSAS 18001 UNIT

Corporate Identification Number (CIN) : L24220MH1945PLC004598
For Shares related queries, email to investor.relations@asianpaints.com
For Customer queries / complaints / Dealership enquiries,
email to customercare@asianpaints.com
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For Media related queries, e-mail to proffice@asianpaints.com
Pan : AAACA3622K
GST No. 33AAACA3622K1Z2

Asian Paints Limited
B-5 to B-10 Sipcot
Industrial Complex,
Kudikadu Village,
Cuddalore - 607 005.
Tamil Nadu
Tel.No-04142-239248
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APL/CDL/TNPCB/FORM-5/2022-23

20th May 2022

To

The Member Secretary,

Tamil Nadu Pollution Control board,

76,Mount Salai,
Guindy,
Chennai – 600 032

Dear Sir,

Sub: Submission of Environmental Statement (FORM V)for PENTA Plant as on 31.03.2022 .

We are enclosing herewith the Environmental statement for Penta Plant (FORM-V) / Annual implementation report for the Financial Year 2021 -2022.

This is for your kind perusal.

Thanking you,

Yours faithfully,
for **ASIAN PAINTS LIMITED**

P. Jayakanthan

P.Jayakanthan
Senior Production Manager
Encl: Environmental statement for Penta Plant (**FORM-V**)

CC TO.

The District Environment Engineer,

Tamil Nadu Pollution Control board,

A-3, SIPCOT Industrial Complex,
Near SIPCOT Fire Station,
CUDDALORE – 607 005

FORM V – PENTA PLANT
Environment Statement for the Financial Year ending 31st March 2022

PART A

1. Name and address of the Owner/Occupier of the Industry operation or Process	:	SHRI.AMIT SYNGLE MANAGING DIRECTOR AND CEO ASIAN PAINTS LIMITED PENTA DIVISION B5 - B10 SIPCOT INDUSTRIAL COMPLEX CUDDALORE 607005.
2. Industry/Category Primary (STC Code)	:	Red / Large
Secondary (STC Code)	:	
3. Production Capacity	:	**Consented Quantity:** PENTAERYTHRITOL 730 MT/MONTH SODIUM FORMATE 480 MT/MONTH FORMALDEHYDE 675 MT/MONTH
4. Year of establishment	:	1986
5. Date of the last environmental Statement submitted	:	28.05.2021

PART-B
WATER AND RAW MATERIAL CONSUMPTION

Water Consumption Cu.M/day	:	85.01
Process Cu.M/day	:	54.14
Domestic Cu.M/day	:	30.87

Name of products Process water consumption per product output		
	During the previous (2020-21) financial year MT (*Fresh &Recycle water considered*)	**During the current (2021-22) financial year (*only Fresh water consumption /MT*)**
Pentaerythiritol Note 1	29.133	2.06
Sodium Formate Note 1	47.773	1.94
Formaldehyde Note 1 (100%)	26.861	0.26

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2. Raw Material Consumption:

Name of Raw Material	Name of products	Consumption of Raw Material per unit of output (Tons/Ton)	
		During the previous financial year (2020-21)	During the current financial year (2021-22)
a. FORMALDEHYDE (100%)	PENTAERYTHIRITOL	1.085	1.095
b. ACETALDEHYDE	AND	0.376	0.378
c. CAUSTIC LYE (100%)	SODIUM FORMATE	0.367	0.367
d. METHANOL		1.155	1.060

PART- C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Concentrations of pollutants in discharges in MT/ year	Percentage of variation from prescribed standards with reasons
a. WATER	TDS 12.78 (MT/ year)	NIL
b. AIR	SPM 2.516 (MT/ year) SO2 0.134 (MT / year) NOx 2.072 (MT/ year) Annual average value of Stacks emission analysis done by TNPCB	NIL

* Averaged values of analysis done by APL laboratory

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PART- D
Hazardous Wastes

(As specified under Hazardous Wastes/Management and Handling Rules, 1989) as amended in 2000

Hazardous Wastes	Total quantity in (Ltrs)	
	During the previous financial year (2020 -21)	During the current financial year (2021 - 22)
a. From Process		
Used System oil	420* Liters	900 Liters
Other Spent oil	300 Liters	300 Liters
Spent Carbon.	3290 * Kgs	5930 Kgs
Distillation residue	243.311* MT	441.860 MT
From Pollution Control Facilities ***From ETP/MEE/ATFD***	166.924 * MT	171.930MT

- Due to covid , plant operation were stopped.

PART-E
Solid Wastes

	Total quantity	
	During the previous financial year (MT) (2020-21)	During the current financial year (MT) (2021-22)
a. From Process / Ash from Boiler	1729 *MT	3313 MT
b. From Pollution control facilities From ETP	NIL	NIL
c. i. Quantity recycled or reutilized+	NIL	NIL
with in the unit.	NIL	NIL
ii. Sold	NIL	NIL
iii Disposed / Ash from Boiler	1826 *MT	3317 MT

- Due to covid , plant operation were stopped.

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.

Sl. No.	PARAMETERS	USED OILS	WASTE OIL
1	Color (Hazan units.)	Brown	Dark Brown
2	Water %	BDL(DL:0.05%)	0.28%
3	Density (g/cc)	0.8656 kg/l	0.8650 kg/l
4	Total halogens (ppm)	15	16
5	Chromium as cr (ppm)	ND	0.1
6	Nickel as Ni (ppm0	ND	0.3
7	Cadmium as cd (ppm)	< 2.5	3.2
8	Lead as Pb (ppm)	1.4	0.9
9	Arsenic as As (ppm)	ND	ND
10	PAH (ppm)	0.18	0.20
11	PCB (ppm)	BDL(D.L 2.0 ppm)	BDL(D.L 2.0 ppm)

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Both Used and Spent Oils are disposed to authorized Hazardous waste recyclers.

PART G

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

Water consumption

Financial year	Water consumption	Reason
2021-22	229,096 KL	
2020-21	184,644 KL	Due to Covid plant was shut for 2 months in

Production details

Financial year	Pentaerythritol in MT	Sodium Formate inMT	Formaldehyde in MT	Reason
2021-22	8671	5253	7796	
2020-21	6337	3877	6067	Due to Covid plant was shut for 2 months

- 800 tree saplings were planted in our factory premises for the FY 2021-2022.
- The effluent generation is being periodically monitored on shift-wise basis and appropriate action is taken to reduce the effluent generation from source itself.
- The Effluent Treatment Plant is being operated as per the established operating procedure and the performance is being monitored closely to ensure consistent COD & BOD reduction across aeration system.
- The Sewage Treatment plant was successfully operated for achieving the sewage standards and the treated water is used for gardening purpose.
- Recovered water from the Zero Liquid Discharge system is used in our Cooling tower.

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- Water treatment plant performance is maintained at average output between regeneration of 1250 KL.

- Wash water re usage in our crude belt filter is practised.

- The ambient air and various emission discharge points of boiler stack and process stacks are being monitored at regular intervals by engaging external laboratory and Advanced environmental lab, TNPCB. The quality of the emission from the emission points are well within TNPCB norms.

- The sludge generated from ETP and ATFD (ZLD unit) is being sent to TNWMA, Gummidipoondi for disposal as and when required.

- Distillation residue generated from process is sent to M/s GGEPIL, Ranipet for disposal.

- Sprinkler systems is used for gardening purpose.

AIR EMISSION MONITORING

- We are monitoring the ambient air quality weekly twice at two different locations. (Both up wind and Downwind directions.)

- We have been regularly monitoring boiler stack emission by engaging reputed laboratories / TNPCB's laboratory.

- We are monitoring the Ambient VOC / THC / AAQ, in different locations (Both upwind and down wind direction) once in three months and ensured that the values are well within the limit.

- One online NAAQ monitoring station is available in predominant wind direction in consultation with TNPCB officials to monitor $PM_{2.5}$, PM10, SO2 & NOx and the monitored data's are uploaded to CARE AIR CENTRE, TNPCB.

- One TVOC meter is available in the process area and the monitored data is uploaded to CARE AIR CENTRE, TNPCB.

- LDAR is being carried out on a regular basis by which the VOC emissions were identified and controlled.

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Details of activities carried out to maintain the ambient air quality are as follows: -

- Online NAAQ monitoring station has been installed and connected with care air system.
- The entire fuel handling systems in our boiler has been completely covered to avoid dust emission while handling fuel and ash.
- LDAR is being carried out using MoEF approved Laboratory once in a year as per consent requirement and the leaks if any were arrested.

ENVIRONMENT & SAFETY MANAGEMENT: ISO 14001 & 45001

- We have designed and implemented the Environmental Management System (EMS) as per the international standard ISO 14001& 45001. This system is being regularly audited every six months by M/s Det Norske Veritas (DNV /GL).
- Our unit is certified for ISO 9001 standards by M/S DNV/GL.
- The recommendations from the audits are implemented on a regular basis.

TRAINING OUR EMPLOYEES ON ENVIRONMENTAL ISSUES:

- Regular training programmes are being conducted for our employees to educate, train and motivate their activities in an environmental friendly/responsible manner.
- As a part of ongoing ISO 14001 and ISO 45001 activities, we have been conducting job related environmental training programmes for all our employees in various departments for developing/improving their skill levels.
- We are taking lead for spreading awareness on Environmental preservation by campaigning on environmental issues among our employees and neighbouring villagers.
- The Environment Day was celebrated in our factory every year. Detailed speech was given by environment team to the Employees regarding the importance of maintaining a healthy environment.

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PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution

- Rain water collection and harvesting was done (around 200 cubic meters)..
- We are continuing to using Environmental friendly imported coal originating from Indonesia. This coal contains less Sulphur content.
- Methanol transfer line from unloading pump to storage tank was replaced to reduce fugitive emission.
- Sprinkler system is provided in Acetaldehyde storage, warehouse & coal conveyor.
- Breather valve is provided in storage tank.
- Lake delisting done nearby villages (Photos enclosed)
- Rain water harvested on account of Delisting lakes in 2021-2022 = 22172 cubic meter.
- Cumulative Rain water harvested from 2017-2022 = 79312 cubic meter.

PART - I

Any other particulars for improving the quality of the environment.

- We are conducting characterisation of the effluent and recycling the same in the plant for various process applications.
- New Multiple Effect Evaporator setup was commissioned.
- Solar dryers in sludge drying beds for improving the drying efficiency of the sludge drying beds is performing well.
- Category-wise identification of population of trees (13000 Nos.) within the plant and 1400 trees beyond the boundary made.
- Participated in CII ESHS award giving all details of our performance in environment.
- Carbon sequestration study was completed.
- Energy audit was conducted.
- The rain water harvesting trenches in the boiler area was constructed for effective harvesting of rain water.
- Environment Management Cell details:

P. Jayakanthan.

Name	Designation	Qualification
P. Jayakanthan	Senior Production Manager	B.Tech (Chemical) & Diploma in Industrial Pollution & Control
K.Marimuthu	Senior Executive	M.Sc.(Chemistry) ,MBA.,DCPI,RBP.,
Devaganesh	Safety Offier	BE (Chemical)& PG Diploma in factory safety
A.Karthikeyan	Chemist	M.Sc.(Chemistry)

CSR activities carried out during FY 2021-22

Corporate Social Responsibility

Location	Investment category	Project description	Expenditure (Rs. Lakhs)
Penta	Health and Hygiene	Primary Health Centres at Kudikadu, Karaikadu, Eechankadu and Pachankuppam village	16.71
Penta	Water	Rejuvenation of Agragarathu Lake	67.58
Penta	Health and Hygiene	Improve health and sanitation of students by renovating and providing additional toilets at Govt. ITI Institute Semendalam	13.12
Penta	Water	Construction of Rain Water Harvest in Govt. Hr Sec. School, Poondiyankuppam and repair work of 4 RO plants in Govt. ITI institute, Semmendalam	7.82
Total			**105.23**

P. Jayakanthan.

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CSR ACTIVITIES 21-22

Primary Health Centre @ Panchayankuppam Village, Cuddlaore-OT.

Primary Health Centre @ Panchayankuppam Village, Cuddlaore-OT.

P. Jayakanthan

CSR ACTIVITIES 21-22

Inauguration of Primary Health centre at Eachankadu Village, Sipcot, Cuddalore.

Inauguration of Primary Health centre at Eachankadu Village, Sipcot, Cuddalore.

P. Jayabantha

CSR ACTIVITIES 21-22

Inauguration of Primary Health centre at Eachankadu Village, Sipcot, Cuddalore.

P. Jayakandan