

ENVIRONMENTAL AUDIT STATEMENT 2019-20

FORM - V

SUBMITTED TO



**KARNATAKA STATE POLLUTION
CONTROL BOARD**

Submitted by

APOTEX RESEARCH PRIVATE LIMITED.

Plot-2, IVth Phase, Bommasandra Industrial area, Jigani link Road,
BANGALORE - 99

CONTENTS

Sl. No.	DESCRIPTION
I.	INTRODUCTION
A.	Preamble
B.	Objectives
II.	ORGANIZATION PROFILE
A.	Organization process / Activity Description
B.	Organization Environment policy.
C.	Organization Chart
III.	ENVIRONMENT STATEMENT FORM V DETAILS
PART - A	Organization Details
PART - B	Water and Raw material consumption
PART - C	Pollution Discharge Details
PART - D	Hazardous Waste
PART - E	Solid Waste Disposal
PART - F	Characteristics of Hazardous and Solid waste
PART - G	Environmental Initiatives taken and cost details
PART - H	Proposed Environmental Initiatives

I. INTRODUCTION

A. PREAMBLE: With the expansion in Industrialization in our developing country, our environment is at stake and thus brings in the requirement of legislations. Various legislations like. The water (Prevention and Control of Pollution) Act, 1986, The Air (Prevention and Control) Act, 1981, Environment protection act, 1986 have been introduced early in our country to combat pollution.

Indian Environment legislation was constituted in the year 1974 with the Central pollution control board and consequently the state boards were also formed. Since then the Board has been active in passing / amending the Environmental Acts / Rules under the regulatory frame from time to time. The Policy Statement for Abatement of pollution (1992) announced by the Government of India seeks integration of Environment consideration into decision making at all levels. Environmental Audit has been reorganized as one of the instruments for achieving this objective.

The Environment protection Act was released in 1986. This act imposes a duty on every person to take steps to prevent or mitigate the environmental pollution. A notification under the Environmental (protection) Act, 1986 has been issued on March 13, 1992 and subsequently-amended on April 22, 1993 requiring all the industries to submit an Environmental statement for the financial year ending on the 31st March in a specified format to the concerned state pollution control board on or before September 30 every year beginning 1993. The submission of environmental statement ins applicable to all those who require consent for discharge under the Water (prevention & Control of pollution) Act, 1974 and the Air (prevention & Control of pollution) Act, 1981 and those requiring authorization under Hazardous wastes (Management & Handling) Rules, 1989.

B. OBJECTIVES: The procedure of an annual environmental statement was introduced in local bodies, statutory authorities and public limited companies to

evaluate the effect of their policies, operations and activities on the environment, particularly compliance with standards and the generation and the recycling of waste.

An annual statement would help in identifying and focusing attention on areas of concern, practices that need to be changed and plans to deal with adverse effects. This will be extended to an environmental audit. The audits would also facilitate the following

- Identifies potential cost savings which can be accrued through reduction in raw material consumption by adoption of reduction / recovery / recycle policy.
- Promotion by companies of environment policies and effective management systems to implement them.
- Promotion of the management tool of environmental auditing.
- Provision of reliable information to the Pollution Control Board and auditors on the environmental performance of firm.

II. ORGANIZATION PROFILE

A. ORGANIZATION PROCESS / ACTIVITY DESCRIPTION

Apotex has set up state-of-the art R & D and manufacturing facilities in India for both active pharmaceutical Ingredients (API's) and Solid Dose formulations. These facilities are located at Bommasandra Industrial area located in outskirts of the city of Bangalore.

The R & D activities will initially focus on developing Solid Dose formulations which will increase our capacity to deliver a greater no of new products submissions to our three key markets Canada, US and Europe, upon regulatory approval these products will be either manufactured in India or Canada. The R & D team will also provide technical support to Toronto for method development, validation and stability studies.

In addition a Bio-equivalence centre in support of ever increasing no of bio studies that are required to meet the regulatory requirements of our new products has also been established. In Bio-availability & Bio-equivalence study we do studies on volunteers to provide R & D services.

III. FORM V DETAILS

PART - A

Name and address of the owner / Occupier of the Industry:

**APOTEX RESEARCH PVT LTD,
PLOT No -2, Bommasandra Industrial Area,
4th Phase, Jigani Link Road,
Bangalore – 560 099**

Industry category Primary - (STC CODE) : **RED**

Secondary - (STC code) : **LARGE**

Production Category – Units : **Bio – availability & Bio – equivalence study**

Year of Establishment : 2006

PART - B

**WATER & RAW MATERIAL
CONSUMPTION**

i. Water & Raw material consumption:

Water Consumption		
Sl. No.	Water Consumption in KL/Day	During 2019-20 in KL/Day
1.	Process/Laboratory	3.3
2.	Cooling	1.8
3.	Domestic	22.6

SL. NO	NAME OF PRODUCTS	Process water consumption per unit of Products	
		During the previous Financial year	During the current Financial year
1.	R & D Services (Bio – availability & Bio – equivalence study)	Used only for cleaning purpose	

Raw Material Consumption:

Name of Raw Materials *	Name of Products	Consumption of Raw material per unit of output	
		During the year 2018-19	During the year 2019-20
Formulation Products	Research & laboratory	0.105MT/Annum	0.085MT/Annum

Chemicals Consumption

Chemical Name	Quantity/Year 2018-19 (Kgs)	Quantity/Year 2019-20 (Kgs)
Acetonitrile	1536	480
Methanol	2736	480
Dichloromethane	60	24
Diethyl ether	60	24
tributyl methyl ether	576	264
Acetone	960	48
Sodium Hypo chloride	180	12
n-hexane	96	12
Acetic acid	6	1.2
Formic acid	6	1.2
Phosphoric acid	6	0
Ammonia	6	1.2
Ethyl acetate	48	12
Iso-propyl alcohol	60	24
Ammonium acetate	6	1.2
Ammonium phosphate	6	0
Sodium hydroxide	6	1.2

Water Consumption 2019-20

Water Consumption		
Month	During the year 2018-19	During the year 2019-20
April	1038	875
May	897	1000
June	868	850
July	1091	900
Aug	1068	1042
Sept	989	1006
Oct	1042	947
Nov	1020	481
Dec	1319	706
Jan	1109	891
Feb	976	807
Mar	778	420

PART - C

POLLUTION DISCHARGED

TO

ENVIRONMENT

POLLUTION DISCHARGED TO ENVIRONMENT / PER UNIT OF PRODUCT

Pollution Discharged to Environment / unit of product (Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reason.
(a) Water			
(i) TSS	0.00025	0.012	NIL
(ii) TDS	0.01074	0.488	
(iii) COD	0.00106	0.048	
(iv) BOD	0.00012	0.009	
(b) Air			
(i) Acid mist	0.090	0.033	NIL
ii) SO _x	0.002	0.001	
(iii) NO _x	0.014	0.005	
(iv) SPM	0.015	0.005	

PART - D

HAZARDOUS WASTES

Hazardous Waste:

(As specified under Hazardous waste (Management & Handling Rules, 2016))

Hazardous Wastes	Total Quantity	
	2018-19	2019-20
Used / Spent oil (oil generated from DG)	NIL	0.1MT
Wastes / Residues containing oil (Oil soaked cotton waste)	NIL	0.0055MT
Discarded containers/Barrels used for hazardous waste/chemicals	NIL	8 No's
Discarded liners used for hazardous waste/chemicals	NIL	0.008MT
ETP sludge	0.5MT	NIL
Off specification drugs & Medicine.	NIL	0.1MT

Bio Medical Waste:

<u>Bio-Medical Waste</u>	Total Quantity (Kg)	
	FY2018	FY -2019
Yellow	1028.5	1061
Blue	21.6	5.5
White (cans)	714.8	409
Black	3.0	2.96
Red	5617.3	3963

PART - E

SOLID WASTES

SOLID WASTES	Total Quantity (Kg)	
	2018-19	2019-20
Cartoons	4675Kgs	573 Kgs
Metal scrap	85Kgs	30 Kgs
Glass bottles	4137Kgs	518 Kgs
Poly bags	666kgs	339 kgs
Plastic scrap	1484Kgs	145 Kgs
Paper waste	1568kgs	3576 Kgs
Wood waste	525Kgs	158 Kgs
Aluminum waste	522Kgs	NIL

PART - F

**CHARACTERISTICS OF
HAZARDOUS WASTES &
SOLID WASTES**

Hazardous Waste Disposal Details: 2019-20

Sl. No.	Waste category No	Type of Waste	Quantity	Condition of waste	Method of		
					Storage	Treatment	Disposal
1.	5.1	Used / Spent oil (oil generated from DG)	0.1MT	Liquid	In closed shed	NIL	To Authorized Vendors.
2.	5.2	Wastes / Residues containing oil (oil soaked cotton waste)	0.0055MT	Solid	In closed shed	NIL	To Authorized Vendors.
3.	33.3	Discarded containers/liners used for hazardous waste/chemicals.	Containers-8 No's; Liners-0.008MT	Solid	In closed shed	NIL	To Authorized Vendors.
5.	34.3	ETP sludge	NIL	Solid	In closed shed	NIL	To Authorized Vendors.
6	28.3	Off specification Drugs & Medicine.	0.1MT	Solid	In closed shed	NIL	To Authorized Vendors.

PART – G

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

Conservation of Natural Resources:

The company being practicing several natural conservation programmes like

1. **Energy Conservation program:** During this financial year 0.185316 Million Units of electrical energy usage reduced as compared to FY 2018-19 under various energy conservation programs at site.
2. Greenery development by planting trees. *World environment day was celebrated on 5th June 2020, planted 100 saplings as a part of greenery development.*
3. Rain water harvesting.
4. Separation of Hazardous waste from other waste.
5. Separation of BMW at the source itself.
6. Water Conservation program.

PART - H

Proposed Environmental Initiatives

Additional measures / Investment proposal for Environmental protection including abatement of pollution.

1. Greenbelt development by planting trees.
2. Rain water harvesting.
3. Separation of Hazardous waste from other waste.
4. Separation of BMW at the source itself.
5. Water Conservation program.
6. Energy Conservation program

World Environmental Day Celebration

05-June-2020

50 saplings planted at site,

From: ARPL EHS INFO
Sent: June 04, 2020 12:57
To: LST: India ARPL
Subject: This World Environment Day - Theme is BIODIVERSITY



ENVIRONMENT HEALTH AND SAFETY

5th June – World Environment Day Theme : Biodiversity



At APOTEX, around **50** sapling will be planted inside the premises, volunteers please reach out to EHS team.

We can contribute to increase the biodiversity in urban landscape by –

- ▶ Volunteering for ecological restoration activities in our area
- ▶ Use environmental friendly products and opt to Reduce, Reuse and Recycle
- ▶ Choose organic and sustainably harvested food
- ▶ Aim for energy conservation
- ▶ Incorporate renewable energy and check energy efficiency

For internal circulation only. Do not send externally

Thanks,
Team EHS
Extn:1784



