



SEVADAL MAHILA MAHAVIDYALAYA

NAAC RE-ACCREDITED WITH 'A' GRADE

VISIT REPORT

DEPARTMENT OF CHEMISTRY

Academic Session 2021-2022

VISITS

1) PEE VEE TEXTILES LIMITED

Date – 11/03/2022

2) Parle-G Shivam Foods Pvt. Ltd

Date – 29/03/2022

1) Pee Vee Textiles Limited, Jamb

Introduction

Pee Vee Textiles Limited Industrial visit was organized by Department of Chemistry and Department of Textile and Clothing on 11th March 2022. We departed for industrial visit at 9.30 am from our college. The industry is situated at Jamb, Tah. Samudrapur, Dist. Wardha 70 kilometres away from Nagpur.

Pee Vee Textiles Limited (PVTL) manufacturing activity was incorporated in March 1990, belonging to the Mohota family of Hinganghat, Maharashtra.

PVTL was initially set up as a spinning unit with an installed capacity of 7680 spindles in March 1990 at Jamb, District Wardha, Maharashtra for manufacturing of cotton and synthetic blended yarn. The Company went on continuously modernising and expanding its capacity from 1993. Presently the Company is having an installed capacity of 120,000 spindles, 1080 Rotors, 544 Vortex Position and 568 Airjet looms. It currently manufactures synthetic / cotton blended & 100% Cotton / Compact yarn and Grey fabric. PVTL is one of the largest manufacturers of grey fabric with exports constituting more than 40% of its total turnover. It has a well-established position in the market and has a very favourable reputation as well as the capability to deliver high volumes at relatively short notice.

The different divisions & steps observed during the visit are –

1) Cleaning Division:

Different types of raw cotton are collected and suitable cotton is further processed for cloth making.

Combing is optional, but is used to remove the shorter fibre, creating a stronger yarn.



2) Carding Division: In the carding process the fibres are separated and then assembled into a loose strand. The cotton comes off picking machine in laps, and is then taking to carding machine. The carder, line up the fibres nicely to make them easier to spin.

3) Spinning Division: A spinning mill opened raw cotton bales and cleaned the cotton in the blowing room. The cotton staples are carded into lap and straightened and drawn into roving which is spun using either a mule or ring frame. The yarn can be doubled and processed into thread or prepared for weaving.



4) Weaving Division:

It has a weaving unit of 568 Looms of TOYOTA Make. The preparatory machineries are from Karl Mayer. The production capacity is 225000 meters grey Fabric per day.

The weaving process uses a loom. The lengthway threads are known as the warp, and the cross way threads are known as the weft. The warp which must be strong need to be present through loom on a warp beam. The weft passes across loom in a shuttle that carries the yarn on a pin. These pins are automatically changed by the loom. Thus the yarn need to be wrapped on to a bobbin and on to needle before weaving can commence



5) Packaging Unit:



Waste Water Treatment Plant:

Introduction

Wastewater is the polluted form of water generated from rainwater runoff and human activities. It is also called sewage. It is typically categorized by the manner in which it is generated- specifically, as domestic sewage, industrial sewage, or storm sewage (stormwater).

Domestic wastewater results from water use in residences, businesses, and restaurants. Industrial wastewater comes from discharges by manufacturing and chemical industries. Rainwater in urban and agricultural areas picks up debris, grit, nutrients, and various chemicals, thus contaminating surface runoff water.

Wastewater contains a wide range of contaminants. The quantities and concentrations of these substances depend upon their source. Pollutants are typically categorized as physical, chemical, and biological. Common pollutants include complex organic materials, nitrogen- and phosphorus-rich compounds, and pathogenic organisms (bacteria, viruses, and protozoa). Synthetic organic chemicals, inorganic chemicals, microplastics, sediments, radioactive substances, oil, heat, and many other pollutants may also be present in wastewater

As we have seen, wastewater flows into an aeration tank and becomes mixed with water during aeration. Afterward, the wastewater flows into a settling tank or secondary clarifier. There, some of the biosolids clump together and settle to the tank bottom, forming what the waste industry calls flocs, or a sludge blanket.

Working:

Primary industrial wastewater treatment plant uses screens, grit chamber, and sedimentation tank to get quality water which is free from waste and bad bacteria. Before ejection of the quality water, the sewage passes through many cleaning processes. When sewage influent in

the plant for treatment, it come across to a screen for removal of large floating objects that can block or damage pipes or equipment.

After completion of the primary screening process, water falls into a grit chamber where small objects are separated from the water. It set cinders, sand, and stones at the bottom.

After above two applications for removal of big and small objects, sewage water contains many suspended solids with the organic and inorganic materials. For water purification, minute particles are needed to be yet removed. Sedimentation tank is used for this process. In this tank, solids sink to the bottom as and when the flow of water gets reduced. This collection of solid is known as raw primary bio solids formerly sludge that is thrown out of the tank through pumping.

By using the trickling filter and activated sludge process, this stage throws out around 85% of the organic and inorganic waste material from the water.

After completion of the primary stage and when effluent leaves sedimentation tank, trickling filter comes into play. The trickling filter is around six feet deep bed of stones through which sewage flows. Partially treated sewage gets transmitted to another sedimentation tank after trickling filter to remove bacteria.

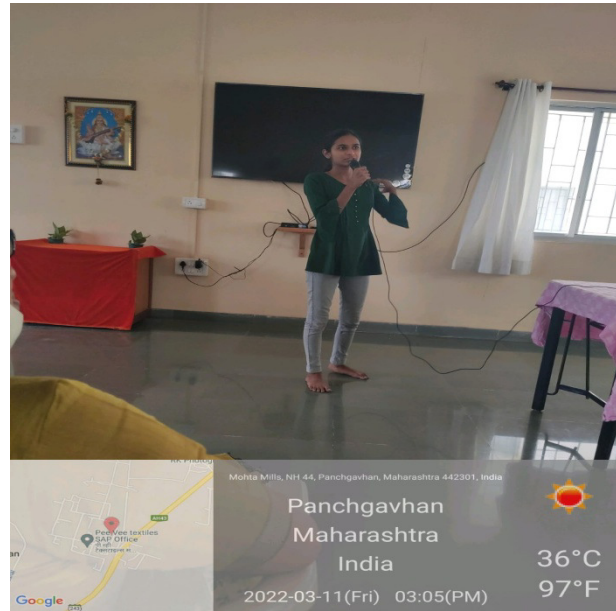
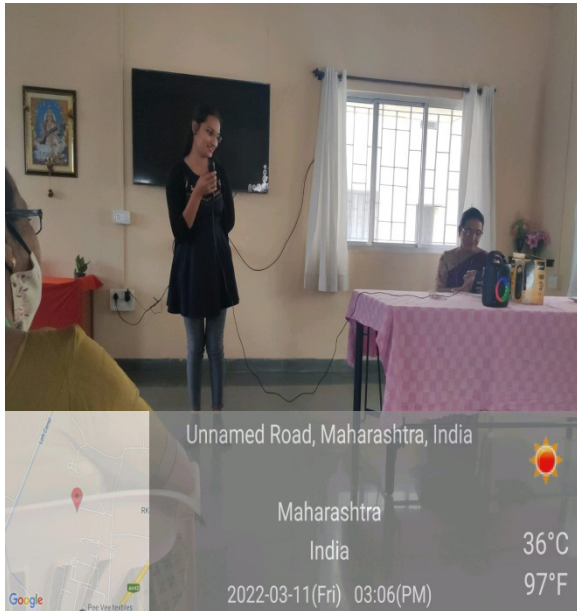
Nowadays, activated sludge process is used in place of trickling filter. The process is fast and early result giving compared to the tricking filter. After primary stage sedimentation tank, sewage flows into aeration tank. For few hours, it is blended with air and sludge loaded with bacteria to break down the organic matters. Like tricking filter, partially treated sewage sent to another sedimentation tank for further process.

At the end of the stage, the effluent of sedimentation tank is disinfected with the help of chlorine to remove odour and kill pathogenic bacteria before being discharged to water communities.



During the complete visit, we were guided by different section officers at their respective sections. The complete process, from raw material to cloth making was observed and explained to us. Waste Water Treatment Plant was also well explained.

At the end we all assembled in auditorium with their official. Students expressed their views and vote of thanks was given from both the ends. We departed from Pee Vee Textiles at 5:00 pm. and reached Nagpur at 6:30 pm. with sweet memories.







PEE VEE TEXTILES LIMITED

(CIN No. : U17110 MH 198 6PL CO39 177)

E-mail : info@peeveetextiles.com

N.H.No. 44, Post Jamb - 442 305, Tah. Samudrapur, Dist. Wardha (M.S.)

11th Mar'2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that, 35 Students of Post Graduate Department of Chemistry of Sevadal Mahila Mahavidyalaya, Nagpur alongwith 3 Faculty Members visited our industry on 11.03.2022 as a part of their curriculum activity.

We wish them all the best for future.

(B.S.SHAHANE)
GENERAL MANAGER (F & A)

2) Parle-G. Shivam foods Pvt. Ltd.

INTRODUCTION

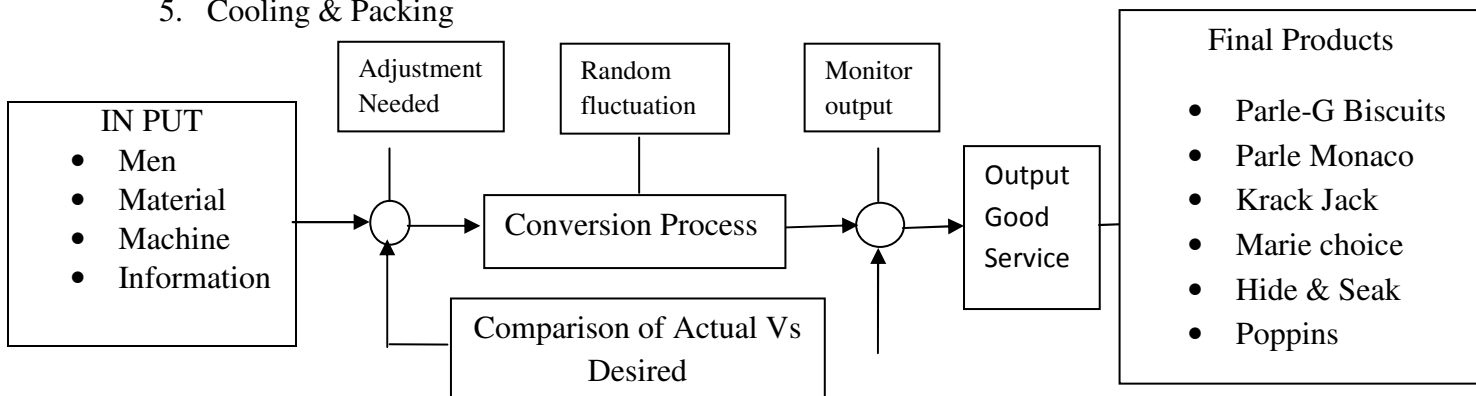
We departed for industrial visit to Shivam food Pvt. Ltd. On 29th March 2022 at 10.30 am. from our college. The industry is situated at Dighori, Umred road, Nagpur.

The coordinator of Shivam food received us & documentary film on Parle industry was shown in their auditorium. He also explained us the various steps of manufacturing process of Parle products. Parle-G is one of the famous business brands of India. It has a quality of food products. The first unit of Parle-G was established in Rajasthan in 1929. At present 80 units of Parle-G products are spread all over India.

PRODUCTION SYSTEM :-

STEPS OF MANUFACTURING:-

1. Raw material testing
2. Mixing
3. Moulding
4. Baking
5. Cooling & Packing



All these steps were explained during our visit to different sections. Students were eager to know about Parle products



CONCLUSION & FINDING :-

1. Parle-G is world famous company.
2. It is easily available in the market.
3. It uses natural resources.
4. It provides better nutrition, good quality & healthy products.
5. It is well affordable to all the sections of society.



Packing of Parle-G,-Biscuits



Watching documentary film in auditorium



Factory :

Opp. Nagpur Vyapari Gorakshan,
Umrer Road, Village Bahadura,
Nagpur-441204.
Cell : 7798160111, 9986642456



GST NO.: 27AALFS0297A1Z8 • E-mail : shivam.foods@parle.biz

CERTIFICATE

DT.29.03.2022

*THIS IS TO CERTIFY THAT SEVADAL MAHILA MAHAVIDYALAY SAKKARDARA NAGPUR,
VISITED TO OUR INDUSTRY. DEPT. CHEMISTRY . WE ARE PROVIDED NECESSARY
INFORMATION ABOUT THE MANUFACTURING PROCEDURE OF PARLE G BISCUIT.
VISIT HAS SUCCESSFULLY DONE.*

THANKING YOU

FOR SHIVAM FOODS

A handwritten signature in blue ink, appearing to read "Ajay Petkar", is written over a circular stamp.

COORDINATOR

AJAY PETKAR

M/S. SHIVAM FOODS

Opp. Nagpur Vyapari Gorakshan
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