İzmir Institute of Technology, Food Engineering Department

Summer Practice Report

1. Introduction

- 1.1. Company name
- 1.2. Company location
- 1.3. Foundation year
- 1.4. Name and locations of the branches of the company
- 1.5. List of all the brands of the company in sales
- 1.6. Organization chart of the company
- 1.7. Number of workers and number of qualified personnel in each department
- 1.8. Qualifications of the engineers in the related departments
- 1.9. Company policy
- 1.10. Company objectives

2. Processing Plant or Research and Development Center

2.1. Processing Plant

- 2.1.1. Process (Choose 1 product for this section.)
- 2.1.2. Process flow diagram for the product
 - 2.1.2.1. Process parameters such as temperature, pressure, pH, processing time, flow rate, etc.
 - 2.1.2.2. Semi-products, products, waste products on the process flow diagram
 - 2.1.2.3. The capacity of each equipment on the process flow diagram
 - 2.1.2.4. Choose one unit operation during processing and provide the material and energy balances around that unit
- 2.1.3. Theory of each unit operation on the process flow diagram
- 2.1.4. Hygiene and sanitation practices during production including CIP

2.2. Research & Development Center

- 2.2.1. Details about the research conducted in the center
- 2.2.2. Test and Analyses
- 2.2.3. Laboratory-scale Process Flow Diagram (if there is any)
 - 2.2.3.1. Process parameters such as temperature, pressure, pH, processing time, flow rate, etc.
 - 2.2.3.2. Semi-products, products, waste products on the process flow diagram
 - 2.2.3.3. The capacity of each equipment on the process flow diagram
- 2.2.4. Theory of each unit operation on the process flow diagram
- 2.2.5. Hygiene and sanitation practices during production including CIP

3. Quality assurance (Based on the product chosen for section 2.1. of this report)

- 3.1. Quality specifications and related tests of the final product
- 3.2.Quality specifications and related tests of all the ingredients/raw materials
- 3.3.Quality specifications and related tests of the semi-product

- 3.4. Quality specifications and related tests of the packaging material
- 3.5.Shelf life determination tests
- 3.6.Quality specifications and related tests of the waste stream
- 3.7. List of quality documents

4. Warehouse

- 4.1.Storage criteria/period
- 4.2.Pest and rodent control procedure
- 4.3. Warehousing principle

5. Research and development (if present)

- 5.1. Projects of this department
- 5.2.Info on brand patents, if any

6. Waste treatment

- 6.1. Annual quantity of waste produced
- 6.2. Waste product evaluation policy of the company

7. Conclusion

- 7.1.Reason for choosing the facility
- 7.2. Your expectations from this training period
- 7.3. Your learning outcomes
- 7.4.Positive and negative criticism of the processes applied and suggestions to improve the processes
- 7.5.Other recommendations

8. Acknowledgment

9. References

10. Appendices

- 10.1. Summer practice work log (Daily list of your work)
- 10.2. Tables (if present)
- 10.3. Figures (if present)
- 10.4.Photos (if present)
- 10.5.Codex of the product