Nazar Tekstil San. ve Tic. A.Ş.

Yarn Production Plant

Waste Management Plan

January 2022

BCA GROUP
Danışmanlık & Mühendislik

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1.0 Introduction

1.1 Project Description

Nazar Textile San. ve Tic. A.Ş. (Nazar Textile) is producing 100% cotton yarn in Ring Compact Mill with a capacity of 35.000 kg per day, count range is between Ne 24/1 – Ne 60/1 both knitting and weaving torsion in Balsuyu Bulvarı No:53/1, Kılılı Mahallesi in Kahramanmaraş Province. The facility has a co-generation facility with a capacity of 4,592 MW and solar energy panels with a capacity of 2.2 MW on the roof of the facility, the energy produced in these facilities is used in yarn production. Construction activities is ongoing within the scope of the capacity increase project for the daily production of 75 000 kg yarn in addition to the existing capacity in the factory area.

BCA Group (BCA) has carried out a comprehensive review to determine the current environmental and social obligations and reviewed the existing environmental and social documents in order to assess the technical/legal risks related to the Plant and the Environmental and Social Management Plans have been prepared in accordance with Environmental Legislation, World Bank Environmental and Social Standards, IFC Performance Standards and IFC / WB Guidelines (Environment, Health and Safety General Guidelines, Environmental, Health, and Safety Guidelines for Textile Manufacturing).

1.2 Purpose and Scope

Within the scope of this study, a Waste Management Plan (WMP) has been prepared in order to minimize the effects of the existing facility and the proposed Capacity Increase Project and to keep it at acceptable levels. The plan covers the construction and operation periods of the project.

IFC Performance Standard 3 outlines a project approach to pollution prevention and reduction in line with common international technologies and practices. The WMP has been prepared taking into account the IFC Performance Standard 3, World Bank Environmental and Social Standards 3, IFC / WB Environment, Health and Safety Guidelines and relevant international criteria, as well as local regulations.

The WMP prepared for the proposed project determines the environmental effects of possible wastes that may occur during the construction and operation phases of the project, the measures to eliminate or minimize the specified effects, and the details of the defined measures.

Waste Management Plan is valid for Nazar Textile and Contractors. Contractors are responsible for developing site procedures to meet the requirements of this plan.

1.3 Legislative Requirements

1.3.1 National Legislation

The list of legislation considered within the scope of the study is as follows, but not limited to:

- Environmental Law No. 2872,
- Environmental Impact Assessment Regulation, published in the Official Gazette dated 25.11.2014 and numbered 30025,
- Environmental Permit and License Regulation, published in the Official Gazette dated 10.09.2014 and numbered 29115;
- Regulation on Environmental Management Services, published in the Official Gazette dated 30.07.2019 and numbered 30847,
- Regulation on Control of Industrial Air Pollution, published in the Official Gazette dated 03.07.2009 and numbered 27277,
- Regulation on Regulation Regarding Landfilling of Wastes published in the Official Gazette dated 26.03.2010 and numbered 27533,
- Exhaust Gas Emission Control Regulation, published in the Official Gazette dated 04.04.2009 and numbered 27190,
- Water Pollution Control Regulation, published in the Official Gazette dated 31.12.2004 and numbered 25687,
- Waste Management Regulation, published in the Official Gazette dated 02.04.2015 and numbered 29314,
- Regulation on Control of Excavated Soil, Construction and Demolition Wastes, published in the Official Gazette dated 18.03.2004 and numbered 25406,
- Packaging Waste Control Regulation, which entered into force by being published in the Official Gazette dated 27.12.2017 and numbered 30283,
- Waste Oil Management Regulation, published in the Official Gazette dated 21.12.2019 and numbered 30985,
- Regulation on Control of Medical Wastes, which entered into force by being published in the Official Gazette dated 25.01.2017 and numbered 29959,
- Regulation on Control of Waste Batteries and Accumulators, published in the Official Gazette dated 31.08.2004 and numbered 25569,
- Regulation on Control of End-of-Life Tires, published in the Gazette dated 25.11.2006 and numbered 26357,
- Regulation on Control of Soil Pollution and Point Source Contaminated Sites, which entered into force by being published in the Official Gazette dated 08.06.2010 and numbered 27605,
- Regulation on Health and Safety Precautions in Working with Chemical Substances, published in the Official Gazette dated 12.08.2013 and numbered 28733,

- Occupational Health and Safety Regulation in Construction Works, published in the Official Gazette dated 05.10.2013 and numbered 28786,
- Occupational Health and Safety Risk Assessment Regulation published in the Official Gazette dated 29.12.2012 and numbered 28512.

1.3.1 International Criteria

In accordance with IFC / WB Guidelines (Environmental, Health, and Safety General Guidelines and Environmental, Health, and Safety Guidelines for Textile Manufacturing), World Bank Environmental and Social Standards 3 and IFC Performance Standards 3, it is requires not to produce hazardous and non-hazardous waste generation and where this is not possible, reduce as much as practicable required. Nazar Textile will apply the Waste Management Hierarchy, which includes prevention, reduction, recycling/recovery/energy recovery and finally disposal methods, in priority order, in cases where it is not possible to avoid producing waste.

Regarding waste management, the terms of the following contracts are relevant to the waste management of this Project:

- Basel Convention on the Control of Transboundary Transport and Disposal of Hazardous Wastes
- The Montreal Protocol on Substances that Deplete the Ozone Layer;

Nazar Textile will work with companies that have a valid Environmental License from the Ministry of Environment, Urbanization and Climate Change for waste disposal processes. Nazar Textile will control the compliance of on-site applications (Company, Contractor and all subcontractor activities) in line with international standards and Turkish Environmental Legislation.

2.0 Roles and Responsibilities

2.1 Nazar Textile

Nazar Textile is responsible for the comprehensive implementation of this plan, its transmission to the contractors, and regular inspection of the applications related to this plan, and contributing to plan and project decisions in order to reduce the amount of waste and use resources efficiently.

2.2 Contractors

All contractors assigned at site are obliged to carry out their work in accordance with the Waste Management Plan. Where applicable, they will work to reuse waste and reduce waste.

2.3 Employees

2.3.1 Project Manager

Nazar Textile Project Manager is responsible for allocating resources for the implementation of this plan, ensuring that the plan is communicated to the project team and contractors and providing the necessary training, being in contact with the Environmental Responsible/Officer at site to monitor the environmental performance, and making the necessary inspections to close the identified nonconformities.

2.3.2 Environmental Responsible/Officer

The Environmental Responsible/Officer employed within the scope of the project is responsible to update this plan at least annually in accordance with the project needs, to ensure that it is implemented by the project team and contractors, to follow up and control waste management practices and to provide trainings, to share monitoring and performance data with the Project Manager, to discuss waste management with contractors, to ensure communication, implementation and follow-up of corrective actions.

2.3.3 All Employees

All employees assigned at site are obliged to carry out their work in accordance with the Waste Management Plan. They are responsible for notifying the Environmental Responsible/Officer of activities that may cause potential risks to other employees or communities.

3.0 Education

Nazar Textile will assign personnel with vocational training and competence within the scope of the Waste Management Plan. Within the scope of this plan, training requirements will be determined annually and included in the Annual Training Plan.

Both managers and employees will be involved in the trainings. All employees will be informed about their roles in waste management and the hazards that need to be prevented and controlled.

All Project and contractor employees are obliged to attend waste management training and understand the Project's approach to waste management. These trainings will be conducted by the Environmental Responsible/Officer.

On-the-job and periodic trainings on waste reduction, recycling, reuse, waste sorting, waste classes, waste labels, storage, transportation, monitoring, chemical spill/leakage, registration and follow-up procedures will be given to all employees in related to the implementation of the Waste Management Plan.

Job-specific trainings will be provided for key personnel who take an active role in waste management, such as Waste Storage Area responsibles and site cleaners.

4.0 Waste Management and Mitigation Measures

4.1 Waste Management

Nazar Textile and the contractors will implement these plan requirements by adapting them to their own procedures.

Priorities will be determined by considering waste generation and its results before the activity. It will create a Waste Management Hierarchy that includes waste prevention, reduction, recycling/recovery/energy recovery and finally disposal methods.

Wastes generated at site:

1. They will be separated and classified at source,
2. Reuse, recovery and recycling options will be evaluated.
3. They will be stored in predetermined areas.
4. They will not be left on the field indiscriminately.
5. Transport and disposal will be done through licensed facilities.
6. Types and quantities will be continuously monitored and recorded.
7. The inspection of the storage area and its compliance with the records will be carried out regularly by the Environmental Engineer/Responsible.

In accordance with the Waste Management Regulation when the project is in operation phase; an Industrial Waste Management Plan will be prepared in ministry format and submitted to the Provincial Directorate of Environment, Urbanization and Climate Change for approval.

When waste is generated within the scope of the project, the Hazardous Waste Declaration must be filled in every year in January by using the username and password provided by the Ministry to the Hazardous Waste Declaration System (TABS) affiliated to the Ministry of Environment, Urbanization and Climate Change.

Mobile Waste Tracking System (MoTAT) entries will be made for the wastes such as hazardous wastes, medical wastes, waste batteries and accumulators, waste vegetable oils, waste oils, end-of-life tires and waste electrical and electronic equipment, etc. before sent to disposal or recycling facilities.

Since the maintenance and repair works are carried out by the service providers outside the Project site during the construction period of the Project, there is no waste oil at site. Currently, there are wooden pallets and metal scraps as waste in the field, as the construction works continue. Domestic solid wastes are collected by Türkoğlu Municipality and sent to Kahramanmaraş Metropolitan Municipality Solid Waste Landfill Facility.

Possible wastes that may occur during the operation phase of the project are scraps, oils from equipment maintenance, packaging waste, contaminated packaging and cloths, filters, wooden packaging, metals, etc. Refuse cotton (with low quality) is sold as raw material for the other textile manufacturers. After the Capacity Increase Project, the amount of waste is expected to double. According to the waste management plan of the existing facility, wastes produced at site are given in table below:

Table 4-1 Waste Amounts for Operation Period

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT
13 01 10	mineral based non-chlorinated hydraulic oils	2500 kg
15 01 02	plastic packaging	6650 kg
15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances	2
20 01 40	metals	14052
20 01 21	fluorescent tubes and other mercury-containing waste	5
16 06 02	Ni-Cd batteries	1
08 03 17	waste printing toner containing hazardous substances	1
18 01 03	wastes whose collection and disposal is subject to special requirements in order to prevent infection	1
15 01 03	wooden packaging	5

The mitigation measures to be taken on waste management during the construction and operation phases of the project are presented in Table 4-2. In the table, the subject of the impact, necessity, action to be taken, timing, monitoring activity and frequency are indicated.

Table 4-2 Mitigations-Waste Management

ISSUE	MITIGATION MEASURE	REQUIREMENT	TIMING	MONITORING	MONITORING/CONTROL PERIOD
Increasing awareness	Training on waste reduction, recycling, reuse, waste sorting, waste classes, waste labels, storage, transportation, monitoring, chemical spill/leakage, registration and follow-up procedures for all employees will be given in on-the-job and periodic trainings related to the implementation of the Waste Management Plan.	Knowing the waste classes and the risks related to their management and making the right planning IFC PS3	Construction and Operation Period	Training records	Annual
Impacts on inefficient use of resources	Goods will be procured in a way that minimizes waste (preferring returnable products to reduce packaging waste, choosing more harmless and reusable materials); Waste will be planned and managed according to the waste hierarchy. The works will be carried out in a way that will minimize waste with inventory control and good separation of wastes.	Management of waste according to the waste hierarchy IFC PS3	Construction and Operation Period	Monitoring reports	Annual
Impact of Hazardous Substances on the Environment	Substances or chemicals that are not internationally accepted by international conventions and regulations will not be allowed. Hazardous and non-hazardous wastes will be stored separately. Storage equipment suitable for waste types will be used.	Storage, transportation and disposal of hazardous wastes in accordance with national regulations and international agreements IFC PS3	Construction and Operation Period	Monitoring reports Visual inspection	Annual
Storage of Wastes, Reducing the risks arising from the Temporary Waste Storage Area	The wastes will be stored together in accordance with the Chemical Storage Matrix given in Appendix-1. A temporary waste storage area will be created. The waste storage area will have an impermeable floor that is protected from weather conditions. There will be drainage channels and blind wells to prevent leakages and spills from causing environmental pollution. No one will be allowed to enter the waste area except the officials. Appropriate personal protective equipment (PPE) will be used in line with the characteristics of the waste.	Waste Management Regulation	Construction and Operation Period	Monitoring reports Visual inspection	Annual
Reducing the risks arising from the Transport of Wastes	Waste will only be transported by means of transport licensed by the Ministry of Environment, Urbanization and Climate Change. It will be checked that the carriers have suitable transport equipment. MoTAT system will be used for transportation requests and tracking.	Waste Management Regulation	Construction and Operation Period	Monitoring reports Waste records	Annual

Reducing the risks arising from Waste Disposal	Only companies licensed by the Ministry of Environment, Urbanization and Climate Change will be employed for the recovery/disposal of waste. When waste is generated within the scope of the project, the information will be filled into the Hazardous Waste Declaration System (TABS) under the Ministry of Environment, Urbanization and Climate Change by using the username and password provided by the Ministry and entering the information in January every year.	Waste Management Regulation	Construction and Operation Period	Monitoring reports Waste transportation and disposal records will be checked.	Annual
Reducing the Amount of Waste	Different types of waste will be collected separately at source and properly stored in the temporary waste storage area.	Waste Management Regulation	Construction and Operation Period	Visual inspection	Daily
				Waste records	Monthly
	Wastes will be classified and properly labeled and stored in accordance with the Waste Management Regulation.	Waste Management Regulation	Construction and Operation Period	Visual inspection	Daily
				Waste records	Monthly
The Impact of Waste Management on the Environment	In order to keep records of the wastes regularly a Waste Registration Form (Appendix-2) will be created and the specified form will provide information on the type of waste, the waste code given in the Waste Management Regulation, the amount of waste, the source of the waste, the facility to which it is sent, the mode of transportation and the processing methods of the waste.	Waste Management Regulation	Construction and Operation Period	Waste records will be checked and it will be checked whether they are filled regularly.	Monthly
	Evaluable household wastes (plastic, glass, paper, etc.) will be collected separately at their source, collected and recycled.	Packaging Waste Control Regulation	Construction and Operation Period	Visual inspection	Daily
				The protocol made with the Licensed Collection Separation Facility and will be checked.	In the change of the Collection-Separation Facility with the protocol made
	Wastes that cannot be recovered will be collected in closed sanitary garbage bins and will be disposed of by giving them to the solid waste collection system of the Municipality.	Waste Management Regulation	Construction and Operation Period	Visual inspection	Daily
	Hazardous wastes will be temporarily stored in the hazardous waste storage area. In order to prevent possible soil pollution around the site, the ground of the field will be covered with concrete and the site will have a suitable drainage system.	Waste Management Regulation	Construction and Operation Period	Visual inspection	Daily
	If the amount of hazardous waste to be generated exceeds one thousand kilograms per month, permission will be obtained from the Provincial	Waste Management Regulation	Construction and Operation Period	Waste records	Monthly

	Directorate of Environment, Urbanization and Climate Change for the temporary storage area.				
	Hazardous wastes will be stored in containers that are strong, leak-proof, safe and in accordance with internationally accepted standards, the phrase hazardous waste will be placed on the containers, and the amount of the stored material and the date of storage will be indicated on the containers.	Waste Management Regulation	Construction and Operation Period	Visual inspection	Daily
	A waste management plan will be prepared in ministry format and submitted to the Provincial Directorate of Environment, Urbanization and Climate Change.	Waste Management Regulation	Construction and Operation Period	The existence of the waste management plan will be checked.	Annual/3 Years
	The waste declaration form will be filled in, approved and printed using the web-based program prepared by the Ministry, each year until the end of March of the following year at the latest, including the information of the previous year, and the copy will be kept for five years.	Waste Management Regulation	Construction and Operation Period	The existence of declaration forms will be checked.	Annual
	Hazardous wastes will be sent to licensed transport companies and licensed recycling and disposal facilities.	Waste Management Regulation	Construction and Operation Period	The existence of declaration forms will be checked.	Monthly
	Waste oil analyzes will be made and their categories will be determined. Analysis documents will be kept for five years.	Waste Oil Management Regulation	Construction and Operation Period	Analysis reports	Change in oil type
	Waste oils will be placed in the central waste storage area and will be stored in containers labeled "Waste Oil". Different categories of waste oils originating from the facility will be stored separately. The containers will be kept closed and the area will be protected from rain water.	Waste Oil Management Regulation	Construction and Operation Period	Visual inspection	Daily
				Waste records	Monthly
	Waste oils will be sent to licensed transport companies and licensed recycling and disposal facilities.	Waste Oil Management Regulation	Construction and Operation Period	Waste agreements and protocols	Monthly
	Waste batteries will be collected separately from other wastes and delivered to authorized institutions.	Regulation on Control of Waste Batteries and Accumulators	Construction and Operation Period	Waste records	Monthly
	After the waste accumulators become waste, they will be kept in the central waste storage area for a maximum of ninety days and then delivered to the battery manufacturers or authorized institution.	Regulation on Control of Waste Batteries and Accumulators	Construction and Operation Period	Waste records	Monthly

	Waste vegetable oils will be collected separately from other wastes and will be stored in impermeable, internal and external corrosion resistant drums or containers.	Regulation on Control of Waste Vegetable Oils	Construction and Operation Period	Visual inspection	Daily
	Waste vegetable oils will be sent to licensed recycling or disposal facilities by licensed carriers.	Regulation on Control of Waste Vegetable Oils	Construction and Operation Period	Waste agreements and protocols	Monthly
	Medical wastes produced will be stored in bags resistant to tearing, puncture, medium-density polyethylene raw material, sealed, with double bottom seams and without bellows, with a double layer thickness of 100 microns, with a lifting capacity of at least 10 kilograms and they will be transported apart from other wastes. The bags will have "International Biohazard" emblem on both sides and the phrase "CAUTION MEDICAL WASTE".	Regulation on Control of Medical Wastes	Construction and Operation Period	Visual inspection	Daily
	An agreement will be made with the relevant licensed disposal facility for the collection of medical wastes. During waste deliveries, medical waste receipt documents will be issued and the specified documents will be kept for one year.	Regulation on Control of Medical Wastes	Construction and Operation Period	Waste agreements and protocols	-
				Waste records	Monthly
	When vehicle tires are replaced, old tires will be delivered to companies that distribute and sell tires or vehicles with transportation licenses.	Regulation on Control of End-of-Life Tires	Construction and Operation Period	Waste records	Monthly

5.0 Audits and Reporting

5.1 Audits and Monitoring

Nazar Textile will conduct regular audits in order to evaluate the performance of waste management. A sample audit form is given in Appendix-2.

In order to control whether the contractors fulfill the requirements of the Waste Management Plan, Nazar Textile Environment Responsible/Officer will conduct daily and weekly site tours and audit the contractors' waste records every month. In addition, the Project Manager will be informed if non-compliance is detected.

The field studies of the waste carriers and disposal companies will be inspected, and their permits/licenses will be checked through the Ministry of Environment, Urbanization and Climate Change system before sending the waste.

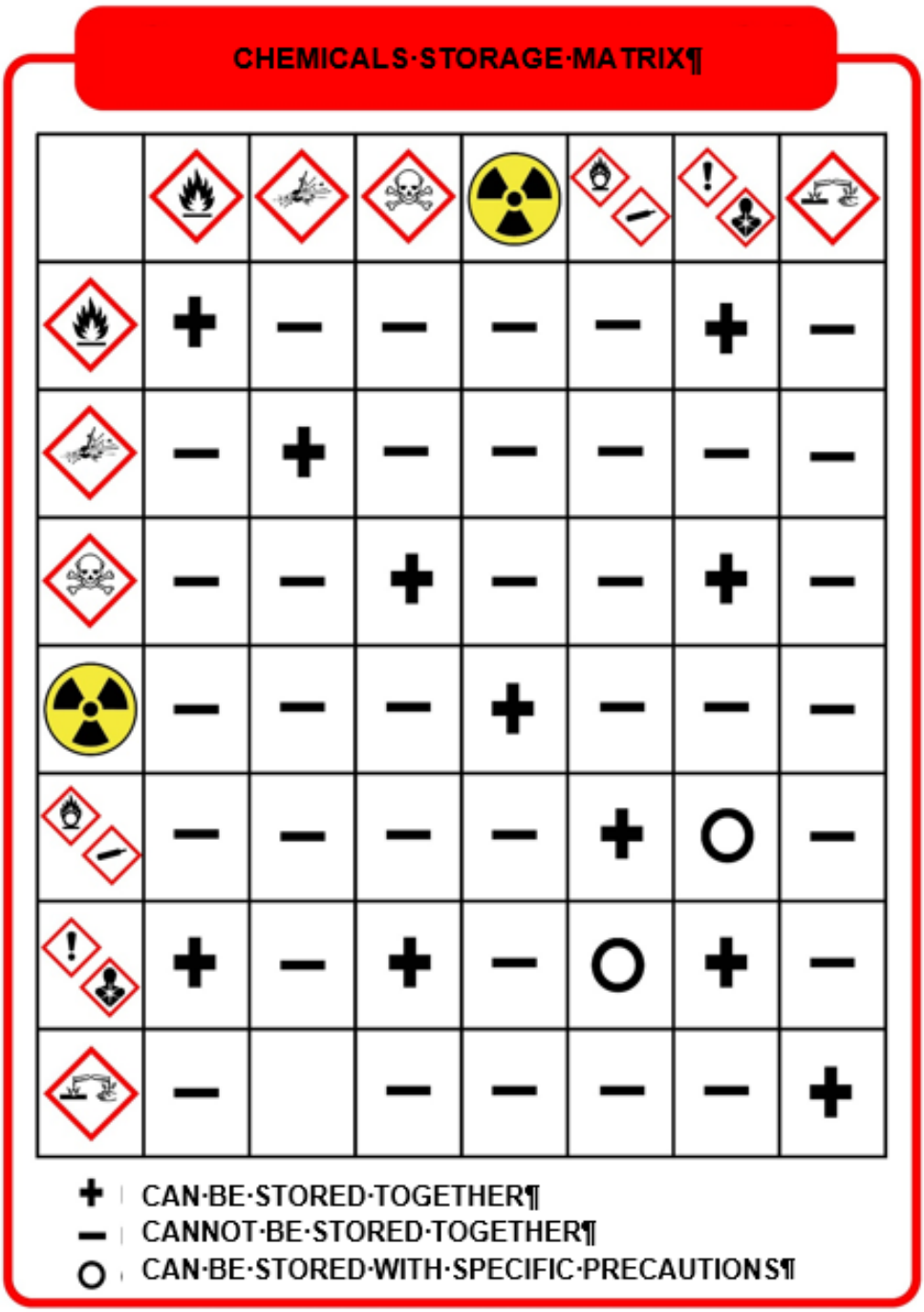
5.2 Reporting

Nazar Textile will create a waste inventory for tracking waste management procedures/instructions for the site and waste amount and class. (Appendix-3 Sample Waste Inventory)

Nazar Textile will keep on-site training on waste management, waste transportation, disposal companies contracts, authorization approvals, shipping slips, transportation records, waste type, quantities and disposal methods, environmental inspections, near-miss, incident, accident records/reports. Copies of these documents belonging to the contractors will also be sent to Nazar Textile.

All records related to this subject, including all waste management procedures/instructions related to the project, waste records, monitoring, audit and training records, will be kept in the field office.

Appendix-1 Chemicals Storage Matrix[1]



[1] http://isg.ankara.edu.tr/wp-content/uploads/sites/160/2020/01/Kimyasallar%C4%B1n-G%C3%BCvenli-Depolanmas%C4%B1-Rehberi.pdf

Appendix-2 Audit Form (Sample)

Contractor Company: **Date:**	**OK/Not OK**	**Explanation**
Are hazardous and non-hazardous wastes segregated and labeled?		
Are employees informed about waste management? Are there training records?		
Are wastes stored by taking precautions against leakage/spill?		
Do waste containers have appropriate labels?		
Are the label and content on the waste container compatible?		
Do the labels contain information on the waste class code and description, the amount of waste, known hazards (MSDS, if any), and the need for personal protective equipment?		
Is the waste inventory up to date?		
Has a contract been made with the waste carrier and disposal companies?		
Are the licenses/permits of the waste carrier and disposal companies up-to-date?		

Appendix-3 Waste Inventory (Sample)

								Source				
No	Waste Code	Waste Description	Amount	Transportation Company	Disposal Company	Date	Disposal Method	Personnel	Production Building	Laboratory	Management Building	Workshop