



## PETROCHEMICAL SHARED SERVICES (PSS) PROCEDURE WASTE MANAGEMENT PROCEDURE




Procedure Number: PR-PSS-123

Document Classification: Internal

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**Revision / Modification History:**




Rev #	Date	Section No	Reason for Revision / Modification
00	20/06/2016	All	<ul style="list-style-type: none"> <li>Aligned and revised as per new organization &amp; BT-4 documents.</li> <li>Merging the following procedures: <ul style="list-style-type: none"> <li>PR-253-EV-01: Internal Transfer of Wastes.</li> <li>PR-253-EV-02: External Transfer &amp; Disposal of Wastes</li> <li>PR-253-EV-04: Wastes Segregation, Storage and Disposal</li> </ul> </li> <li>Procedure No. change from PR-253-EV-04 to PR-QSS-123</li> </ul>
01	04/Dec/2017	All	<ul style="list-style-type: none"> <li>Waste Management Strategy and minimization goals clearly stated in the procedure.</li> <li>More clear and specific instructions for internal transfer of waste from WTA to WSY with specified time frames.</li> <li>SAP waste management information included.</li> <li>The contents of the whole procedure reorganized to follow a logical waste management process.</li> <li>Forms and annexes information update</li> <li>QAPCO and QVC procedures integration</li> <li>Procedure No. change from PR-QSS-123 to PR-PSS-123</li> </ul>
02	20/Oct/2020	7 8.5 10.8	<ul style="list-style-type: none"> <li>Clarifications regarding roles/responsibilities for generation of WTRs (Section 7 &amp; Section 8.5)</li> <li>Updated the QAPCO Waste Matrix and issued as a separate Appendix from the main document</li> <li>Updated the procedure as per the new QAPCO template</li> </ul>

**Distribution:**




Through *SharePoint*.

Review Team: (*Optional*. May be used when a team is used for reviewing the document)

Rev #	Job Title	Department	Remarks
02	Plant Manager EDC/VCM	EDC/VCM Plan	
	Principal Engineer LLDPE	LLDPE	
	Safety Engineer	Safety (Olefins/Polyolefins)	
	Sr. HSEQ Officer	Manufacturing Group (SC/PE)	
	Day Supervisor-Ethylene	Ethylene	
	Sustainability & Environment Inspector(s)	SED/HSEQ Department	
	Senior Sustainability & Environment Officer	SED/HSEQ Department	
	Sr. Business Analyst-Quality	Quality/HSEQ Department	

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## 1. OBJECTIVE

The purpose of this Waste Management Procedure is to ensure that wastes generated at QAPCO site are managed in compliance with applicable regulations and considering measures for waste minimization, reuse and/or recycling, where feasible. The main objective of this procedure is to establish processes for waste categorization / classification (domestic, non-hazardous, and hazardous), waste segregation, collection, internal and external transfer, and final disposal.

## 2. SCOPE

This procedure applies to all hazardous and non-hazardous waste management activities at QAPCO site performed by or on behalf of QAPCO, including those undertaken by Contractors.

Clinical waste is not included in the scope of this procedure. Clinical waste is managed as per QAPCO clinic procedures in compliance with requirements of Hamad Medical Corporation.

Continuous streams of wastewater (domestic and industrial wastewater), Cooling Seawater and gaseous emissions (stack and fugitive emissions) are not included in the scope of this procedure.



## 3. PROCEDURE SUMMARY

This Procedure sets out a framework for the management of all waste generated at QAPCO site. It establishes process of internal and external management of industrial hazardous and non-hazardous as well as domestic wastes generated in QAPCO. Responsibilities of each department in regard to waste management. Required records to be kept by each department.

## FLOW CHART




## FLOW CHART

Responsible Role	Clause #	Activity	Remarks
Defined in Section 8.1	8.1	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Waste Identification and Categories / Classification</div>	Classify waste as Domestic / Municipal, Non-hazardous Industrial or Hazardous waste
Defined in Section 8.2	8.2	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Waste Quantification &amp; Characterization</div>	Waste generation estimates and quantification
Process Owners	8.3	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Waste Management Strategy &amp; Hierarchv</div>	Description of overall waste management policy regarding reduction, reuse, recycle, recovery and finally disposal.
Defined in Section 8.4	8.4	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Waste Collection, Segregation, containerization, labelling etc</div>	
Defined in Section 8.5	8.5.1	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Internal Transfer to WTA</div>	This step applicable only to hazardous wastes. Some hazardous wastes are not transferred to WTA /WSY and sent to disposal directly from point of generation such as;
Defined in Section 8.5	8.5.2	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Internal Transfer to WSY</div>	<ul style="list-style-type: none"> <li>• Alkyl &amp; Precursor waste</li> <li>• Bio-Sludge from U46</li> <li>• Bio-Sludge from U45</li> </ul>
Defined in Section 8.6	8.6.1	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <div style="border: 2px solid red; padding: 2px; display: inline-block;">Disposal of Hazardous Waste</div> </div>	Hazardous waste disposed as per procedure
Defined in Section 8.6	8.6.2	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <div style="border: 2px solid orange; padding: 2px; display: inline-block;">Disposal of Non-Hazardous Waste</div> </div>	Non-hazardous waste transported to municipal landfill on daily basis
Defined in Section 8.6	8.6.3	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <div style="border: 2px solid gray; padding: 2px; display: inline-block;">Disposal of Sewage Wastewater</div> </div>	Sewage wastewater sent by tankers to outside wastewater treatment plant
Defined in Section 8.8	8.8	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Audit &amp; Inspection</div>	Periodic audit and inspection by SED during: <ul style="list-style-type: none"> <li>• Environmental site visits</li> <li>• Waste inspections as WTA</li> </ul>
Defined in Section 9	9	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Records Management</div>	Records maintained as required

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#### 4. ABBREVIATIONS / DEFINITIONS

#	Abbreviation / Key word	Definition summary
1	<i>Waste</i>	Waste is discarded or abandoned substances which must be disposed of through environmentally acceptable means and in compliance with applicable rules and regulations. Categorization of wastes depends upon its biological, chemical, physical, or toxic and infectious characteristics.
2	<i>Domestic /Municipal Waste</i>	The wastes generated due to non-industrial practices which have chemical and physical characteristics similar to those of household waste like garbage, wood, glass plastic, paper waste, cardboard, leftover food, textiles, kitchen refuse, soft drink cans and similar. Such waste is approved by local authorities and MIC for landfill disposal.
3	<i>Non-hazardous Industrial Waste</i>	This includes wastes generated by industrial processes that are non-hazardous and do not pose any hazard threat to public health and environment in general. However, it may have physical and chemical characteristics, or both, that are different from domestic and municipal wastes. Non-hazardous wastes which are not biologically or chemically active in the natural environment, such as glass, concrete and brick material (construction debris) are also called inert waste. Ref. Waste Lists in Appendix-7
4	<i>Hazardous Waste</i>	Waste substances which can pose a substantial hazard to human health or to the environment when improperly managed. These wastes exhibit one or more of the key characteristics of hazardous nature, i.e., flammable, reactive, corrosive, ignitable, and toxic, radioactive or infectious. Ref. Waste Lists in Appendix-7
5	<i>Waste Segregation</i>	Separating of similar types of wastes from other wastes based on their characteristics
6	<i>Waste Generating Unit (WGU)</i>	Owner of the location (Plant / Department) where waste is generated.
7	<i>Waste Generator</i>	Any Department/ Plant / Section who generates wastes as a result of their activities. The Waste Generator may be the same Department as the WGU or it may be another Department (i.e. I&GS or Maintenance Department as Waste Generator where the WGU may be Ethylene Plant, LDPE, LLDPE or Utilities.
8	<i>Waste Collector</i>	Any approved contractor, (normally under Maintenance Department) who collects wastes as directed
9	<i>Waste Generating Unit Representative</i>	The person who is representing the concerned Department for dealing with the waste material, including the submittal of WTR in SAP system.
10	<i>Requestor</i>	Any QAPCO staff (Waste Generator) intending to transfer waste to Waste Storage Yard from any location within QAPCO. (In case waste generator could not be identified / ascertained, the WGU is responsible to issue the Waste Transfer Request)
11	<i>Waste Transfer Request (WTR)</i>	Request raised through SAP Waste Management System for transferring the waste from the Waste Transit Area (WTA) to the Waste Storage Yard (WSY).
12	<i>WTR Issuer</i>	Party responsible for reviewing for completeness/correctness and issuing the WTR to the SED through the SAP Waste Management System. The Issuer must be the Waste Generating Unit.




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13	<i>Skip</i>	A large open metallic container, having capacity of about 6 m <sup>3</sup> , used for collection of bulk waste.
14	<i>Totes</i>	A plastic container with capacity of 1.0 m <sup>3</sup>
15	<i>Industrial Waste Drum</i>	Red metallic or blue plastic colored open-mouth drum with lid having a capacity of 200 Liters (available with Material Warehouse, Labeled as "Industrial Waste").
16	<i>Waste Transit Area (WTA)</i>	An area allocated by the concerned Department/Plant for temporary storage of industrial wastes, in consultation with I&GSD and SED, for further transfer to Waste Storage Yard.
17	<i>Waste Collection Point (WCP)</i>	An area allocated by I&GSD for temporary storage of domestic wastes for further disposal
18	<i>Waste Profile Sheet</i>	Waste Profile Sheets provide brief but important information, such as, type of waste, its hazardous contents, safety precautions, protective equipment required, first aid measure, disposal requirement, emergency contact numbers etc, relevant for handler and transporters of hazardous waste only.
19	<i>I&amp;GSD</i>	Infrastructure and General Services Department
20	<i>MIC</i>	Mesaieed Industrial City.
21	<i>MIC - HWTC</i>	MIC Hazardous Waste Treatment Centre.
22	<i>MD &amp; CEO</i>	MD & Chief Executive Officer
23	<i>CHSEQO</i>	Chief HSEQ Officer
24	<i>Dept</i>	Department
25	<i>HSEQGM</i>	HSEQ Group Manager
26	<i>HSSEQ</i>	Health, Safety, Security, Environment and Quality
27	<i>SED</i>	Sustainability and Environment Department
29	<i>SEM</i>	Sustainability and Environment Manager
30	<i>MME</i>	Ministry of Municipality and Environment

## 5. DOCUMENT REFERENCES

#	Document ID	Document name	Summary of dependency or use
1	Rev. 01, Nov-2007	MIC Environmental Guidelines	Environmental Guidelines
2	Law No. 30 of Year 2002	MME Environmental Protection Law	Environmental Protection Law
3	N/A	QP Hazardous Materials Transport by Road	Hazardous Materials Transport
4	CTO Permit	Consent to Operate (CTO) from MME	Consent to Operate



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## 5.1 Risk Register Reference

#	Risk ID	Risk Description	Remarks
1	Dept RR	Internal transfer of waste – use of Forklift and road transportation	Concerned department Risk Register(s)
2	Dept RR	Internal transfer of waste – handling of Domestic & Non-Hazardous wastes	Concerned department Risk Register(s)
3	Dept RR	Internal transfer of waste – handling of Hazardous wastes	Concerned department Risk Register(s)
4	Dept RR	External transfer of waste – use of Forklift and road transportation	Concerned department Risk Register(s)

## 6. IT SYSTEM REQUIREMENTS

#	IT system module name	Summary of IT system module use
1	SAP ECC	Issuing and processing of WTR

## 7. RASCI SUMMARY

#	Procedure chapter	WGU of Concerned Department	I&GSD	SED
8.1	Waste Identification	R	-	A
8.1	Waste Classification	S/C	-	R/A
8.2	Waste Quantification and Characterization	R	S	A
8.4	Waste Segregation	R/A	R/S/C	S/C
8.5	Internal Transfer of Wastes	R	R	A
8.5	Waste Storage in WTA	R	R	S/C
8.5	Waste Storage in WSY	-	R	R/A
8.5	External Waste Transportation-Non-Hazardous waste	-	R/A	S/C
8.5	External Waste Transportation – Hazardous waste	S/C	R	R/A
8.6	Hazardous Waste Disposal	-	-	R/A
8.6	Non-Hazardous Waste & Sewage Wastewater Disposal	-	R/A	S/C
8.8	Audit & Inspection of Waste Management	S	S	R/A

### Legend:

R = Responsible (the class of people who are ultimately responsible for getting the work done)

A = Accountable (the position that is accountable to oversee that the work gets done)

S = Support (the person who supports by providing information and suggest any deviations from the Procedure)



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C = Consulted (the person who can advise when needed)

I = Informed (concerned persons who are required to be informed or communicated to)

### 7.1 Sustainability & Environment Department (SED):

SED, being the custodian of Waste Storage Yard (WSY), is responsible to:

- Arrange temporary storage arrangement for hazardous and unconfirmed non-hazardous waste in the WSY till final disposal.
- Arrange final disposal of the hazardous waste from WSY to disposal/treatment facility(ies)
- Make sure that specified types of waste containers are available.
- Maintain waste lists and get approval from authorities if it is required
- Waste Profiling of new wastes
- Maintain WSY in proper order.
- Provide proper signs & labels.
- Control unauthorized entry or dumping/storing of waste in the WSY
- Conduct periodic inspections of the units for waste management program compliance
- Keep record of all waste inventory and required documentation and submit required reports/records to Company Management and to external authorities (MME/MIC/QP)

### 7.2 Waste Generating Unit (WGU):

Responsible to:

- Identify and collect the wastes in right containers and label the containers
- Transfer the labelled waste containers to designated WTA
- Initiate WTR in SAP for waste transfer from WTA to WSY

### 7.3 Waste Generator:



Responsible to:

- Ensure waste segregation at the site of waste generation activity
- Collect the wastes in right containers and label the containers
- Coordinate with WGU for transferring the labelled waste containers to designated WTA
- Coordinate with WGU for initiating SAP process for waste transfer from WTA to WSY

### 7.4 I&GS Department:

Responsible to:

- Coordinate with SED for transferring the hazardous waste from the WTA to WSY as per the process detailed in this procedure.
- Complete the required SAP process during the process of transferring waste from WTA to WSY.
- Dispose of domestic/municipal and non-hazardous industrial waste at regular interval to approved facilities.

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## 8. PROCEDURE METHOD

The management of all waste generated at QAPCO site shall meet State of Qatar and QAPCO waste management requirements. Waste shall be handled, stored, and disposed of in a manner that:

- Complies with MME and MIC regulations.
- Complies with Company policy and expectations;
- Minimizes its environmental impacts;

### 8.1 WASTE IDENTIFICATION AND CATEGORIES / CLASSIFICATION:

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- List of Company generated wastes

#### WASTE IDENTIFICATION & CATEGORIES / CLASSIFICATION

ID	Activity	Document reference	Responsible org. position
8.1	Identification of waste	PR-PSS-123	WGU
8.1	Classification of waste	PR-PSS-123	SEM
8.1	Maintain waste classification list	PR-PSS-123	SEM

#### PROCEDURE COMMENTARY

Any waste generated at QAPCO site shall be properly categorized / classified into one of the following categories:

#### Notes:

1. Whenever required, the Material Safety Data Sheet (MSDS), Chemical Analysis Report of the waste and / or Waste Profiling process shall be used to evaluate category of a waste WGU shall be responsible for providing the necessary information about the generated waste (such as process description, relevant MSDS etc). SED shall be responsible to arrange for waste profiling and related chemical analysis if required.
2. The expected Hazardous waste from modifications and maintenance activities shall be identified as part of the JSA and Environment check list. The JSA shall also take into consideration and assess the waste handling methodology, expected quantities, containment specifications and special precautions.

#### 8.1.1 Domestic / Municipal Waste

This includes wastes which have characteristics similar to those of household waste such as garbage, wood, paper, cardboard, plastic, cans, refuse, food waste, office waste, etc. Such waste can often be sent to municipal disposal or recycling facilities.

#### 8.1.2 Non-hazardous Industrial Waste

This includes any non-hazardous waste generated from industrial activities that may have characteristics different from domestic and municipal wastes, such as, Construction wastes, glass, wood, scrap metal, used containers, tires etc. These materials can be sent to Industrial waste management facilities or to normal municipal waste management facilities after waste minimization options are implemented. Scrap metal and other recyclables shall be disposed through approved scrap buyer for recycling.

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**Inert Waste:** Non-hazardous wastes which are not biologically or chemically active in the natural environment, such as glass, concrete and brick material (construction debris) are called inert waste.

### 8.1.3 Hazardous Waste

Waste is classified as being hazardous on the basis of waste characteristics (e.g. flammable, ignitable, toxic, infectious, mutagenic, reactive, corrosive, etc.) or waste may be defined as hazardous if any of its components are categorized as hazardous substances by the applicable regulations.

Various kinds of wastes generated by QAPCO, identified and classified into categories as per section 8.1 above, are given in the attached Appendix-7. The waste categorization in the Appendix-7 is subject to acceptance by an approved facility at the time of waste disposal. Any variance from the list should be recorded and the list should be revised accordingly. The Appendix-7 content is for tentative reference only, and it can be revised and updated by SED, without revising the procedure.

#### OUTPUTS SUMMARY

- Waste Categorization / Classification List

## 8.2 WASTE QUANTIFICATION AND CHARACTERIZATION

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- Waste Categorization / Classification List

#### WASTE QUANTIFICATION AND CHARACTERIZATION

ID	Activity	Document reference	Responsible org. position
8.2	Estimate waste generation quantities for the various types of identified wastes and share with SED	PR-PSS-123	WGU
8.2	Compile Annual Waste Quantification & Characterization Data	PR-PSS-123	SEM

#### PROCEDURE COMMENTARY

SED shall prepare plant-wide annual waste inventory for the coming year by coordinating with all the WGUs to get information on the expected waste quantities. The WGUs shall take into account Turnaround (TA) plans, major projects, maintenance activities and routine operations for estimating waste inventories. SED shall analyze and process the gathered information for waste management planning and budgetary estimates.




#### OUTPUTS SUMMARY

- Annual Waste Quantification & Characterization Data

## 8.3 WASTE MANAGEMENT STRATEGY AND HIERARCHY

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations

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- Waste Categorization / Classification List
- Waste Quantification & Characterization Data

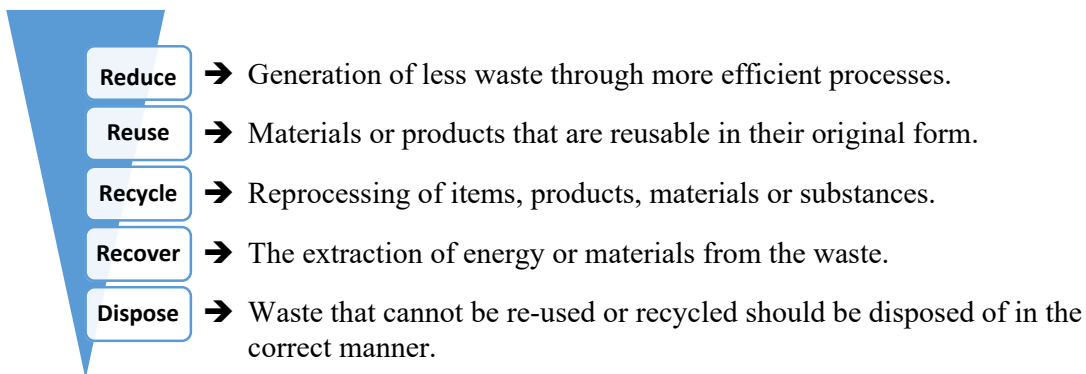
## WASTE MANAGEMENT STRATEGY AND HIERARCHY

ID	Activity	Document reference	Responsible org. position
8.3	Evaluation for source reduction	PR-PSS-123	WGU
8.3	Evaluation of reuse options	PR-PSS-123	WGU
8.3	Evaluation of recycling options	PR-PSS-123	SEM

### PROCEDURE COMMENTARY

The QAPCO Waste Management Hierarchy prioritizes waste prevention and minimization as the most preferential options. Waste minimization can include source reduction or elimination, process or product changes, efficient use of resources, material and energy substitution, reuse, recovery, recycling, reclamation and treatment. Waste minimization ultimately lowers disposal costs, reduces hazards, reduces long-term liability and promotes a cleaner healthier environment.


The QAPCO Waste Management Strategy incorporates the following hierarchical waste minimization process:



### 8.3.1 Source Reduction

Sustainability and Environment Department and I&GSD shall review and evaluate various options for waste recycling, whenever practical. Source reduction is the process of eliminating or minimizing as far as possible, the volume and/or toxicity of wastes through use of alternative materials and/or more efficient processes, practices or procedures, including:

- Material elimination;
- Inventory control and management;
- Material substitution;
- Reduction in the consumption of natural resources;
- Process modification; and
- Improved housekeeping.

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### 8.3.2 Waste Reuse and Recycling

Whenever possible, waste material should be reused and recycled, either within QAPCO or at outside facilities. Sustainability and Environment Department and I&GSD shall review and evaluate various options for waste recycling, whenever practical.

Various materials or products, which are reusable in their original form include:

- Reuse of plastic bags and boxes;
- Reuse of chemical containers;

#### OUTPUTS SUMMARY

- Implementation of waste management strategy

## 8.4 WASTE SEGREGATION

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- Waste Categorization / Classification List

#### WASTE SEGREGATION

ID	Activity	Document reference	Responsible org. position
8.4	Awareness about waste segregation at source	PR-PSS-123	HSE Support
8.4	Identification of WCP	PR-PSS-123	WGU+SED
8.4	Provision of color-coded drums at WCP	PR-PSS-123	I&GS
8.4	Collection and transfer of wastes from WCP	PR-PSS-123	I&GS
8.4	Collection and transfer of wastes from plant areas to designated WTA	PR-PSS-123	WGU
8.4	Labelling and adequate storage of wastes in designated WTA	PR-PSS-123	WGU
8.4	Inspection of wastes in WTA	PR-PSS-123	SED
8.4	Management of WSY	PR-PSS-123	SED

#### PROCEDURE COMMENTARY

All waste generated shall be segregated and classified at the source in a standardized manner before collection. A policy of source segregation maximize material recycling and recovery and minimize the quantity of waste requiring disposal. The implementation of this waste separation approach requires all staff, contractors and sub-contractors to be made fully aware and adopt the principles.

### 8.4.1 Domestic Waste Collection Points (WCP)

There are Waste Collection Points in various areas, to implement segregation and short-term storage of domestic wastes, metallic waste and oily rags, which should be cleared every day by a contractor under I&GSD. The following color coding must be used for segregation of waste at the waste collection points:

### Color Coding for Domestic Waste Segregation

Waste Category	Color
Domestic Waste	
Metal Waste	
Oily Rags Waste	

Locations of identified WCPs are marked in the attached Appendix-2B. The Appendix-2B content is for tentative reference only, and it can be revised and updated by the concerned plant in coordination with I&GSD and SED, without revising the procedure, for their routine functions.

**Notes:**

1. *These Waste Collection Points (WCPs) are only for handling domestic wastes, metallic waste and oily rags. No other Industrial waste (Hazardous and Non-hazardous) shall be disposed off at these points.*
2. *Accumulated wastes from the WCPs shall be cleared by the I&GSD waste management contractor on daily basis.*
3. *Oily rags waste shall be transferred by I&GSD contractor on daily basis to the hazardous waste storage yard (WSY) managed by SED.*

**8.4.2 Waste Transit Area (WTA)**

Waste Transit Area (WTA) are defined and identified by each plant and approved by the SED to be utilized by concerned plant for the collection of generated waste from its area prior to shifting to the Waste Storage Yard (WSY). All waste generated by each plant from process activities, during maintenance and/or during plant shutdown activities must be collected in the designated WTA of that plant prior to shifting to the WSY. It means that if any waste was generated in a plant area due to maintenance the waste must be transferred to the concerned plant's WTA prior to issuing a Waste Transfer Request (WTR) and shifting said waste to WSY. The WTA locations are marked on map in Appendix-2A




**8.4.3 Waste Labelling**

Waste containers must be appropriately labeled with official QAPCO Waste labels to indicate the type of waste they contain. The labels shall be written by permanent markers. These markings shall be visible during storage and handling. *(Only same type of waste shall be put together in one pellet and providing label on at least one of the drums will be enough).*

SED shall supply labels according to recognized standards for the drums and shall ensure that the waste containers are labelled/marked according to this procedure.

**8.4.4 Waste Storage Yard (WSY)**

Hazardous Waste from WTA shall be transferred through issuance of a WTR to WSY located in the contractors' area. The wastes shall be stored in the WSY in the designated areas as per layout plan in Appendix-3. Appendix-3 content is for tentative reference only, and it can be

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revised and updated by the Sustainability and Environment Department, without revising the procedure, for their routine functions.

- a) The WSY shall always be kept closed except when the wastes materials are being deposited or taken out.
- b) The SED shall have the custody of the keys of WSY. One spare key of the main gate shall be available with Security Main Gate.
- c) All wastes received in the WSY should be stored in accordance with the Waste Storage Yard Layout (SK-G-90-L004-A), which is attached as Appendix-3.
- d) Movement of waste to and from the WSY shall require approval from the SED.
- e) Containers shall be stored in rows not more than two containers wide with sufficient space between the set of two rows, for inspection and leak detection.
- f) Waste containers shall not be stacked more than two containers high. However, the empty containers can be stacked up to three levels high.
- g) Flammable and combustible wastes shall be separated from sources of ignition such as welding, grinding and cutting operations, unprotected electrical equipment etc.
- h) Appropriate spill kit(s) shall be provided in the WSY. Accidental spills of oils/waste/chemicals shall be immediately contained and cleaned
- i) Storage period of hazardous waste in the WSY shall be according to CTO unless approved by MME.

#### **8.4.4.1 Safety Rules for Working in the Waste Storage Yard**

The following rules shall be followed by all, including contractors, inside the WSY:

- a) No smoking inside WSY.
- b) Mixing of different types of wastes is prohibited.
- c) Good housekeeping shall always be maintained.
- d) QAPCO permit system shall be applied for any work to be performed inside the WSY.
- e) Job safety analysis shall be carried out by Safety for any non-routine job if it's required.
- f) All cutting, welding or grinding activities shall be carried out only with Hot Work Permit.
- g) Appropriate PPEs shall be used for any work inside WSY.
- h) Only authorized QAPCO staff and approved contractors are allowed to work inside the WSY.


#### **8.4.4.2 Training of Waste Management Contractors and Entry Pass for WSY:**

- a) The contractors which need to work for waste management shall be trained by the SED, highlighting the hazards and risks involved with the job and the importance of following the applicable rules and instructions.
- b) The contractors who have received the required training should be given the Entry Pass for the WSY by SED.
- c) Only those contractors which are having the WSY Entry Pass are allowed to work inside the WSY.
- d) Entry of external transporters for collection and transportation of wastes outside QAPCO, without the Entry Pass, is permissible under the supervision of SED staff.

#### **8.4.4.3 Training of Company Staff:**

- e) Provides basic training to affected personnel within the organization by L&D



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f) Provides refresher training as per QAPCO Training Matrix by L&D

#### OUTPUTS SUMMARY

- Segregated, adequately labelled and containerized waste streams
- Waste storage in WTAs and/or WSY

## 8.5 WASTE TRANSFER

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- Segregated, adequately labelled and containerized waste streams

#### WASTE TRANSFER

ID	Activity	Document reference	Responsible org. position
8.5	Creating WTR in SAP	PR-PSS-123	WGU
8.5	Internal transfer of Hazardous waste to WTAs	PR-PSS-123	WGU
8.5	Inspection of wastes in WTA	PR-PSS-123	SED
8.5	Internal transfer of Domestic & Non-Hazardous wastes	PR-PSS-123	I&GSD
8.5	External transfer of Hazardous & Non-hazardous industrial wastes	PR-PSS-123	SED / I&GSD
8.5	External transfer of Domestic wastes	PR-PSS-123	I&GSD
8.5	Transfer of domestic wastewater – use of tankers	PR-PSS-123	I&GSD

#### PROCEDURE COMMENTARY



##### 8.5.1 Internal Transfer of Wastes

Domestic and identified Non-Hazardous Wastes already approved by MIC does not require any internal transfer. These wastes shall be sent directly to an approved landfill site from the concerned waste generating plant / Dept, by I&GSD.

There may be certain other industrial (hazardous/non-hazardous) wastes that require direct transfer from the concerned waste generating plant / area to designated external waste disposal facilities by approved contractors. Such wastes will not follow internal waste transfer process. The following waste streams are directly transferred to waste disposal facilities from the point of generation:

- Alkyl and Pre-cursor waste from LLDPE
- Bio-Sludge from U46, Vinyl Plant
- PACT-Sludge from U45, Ethylene Plant

Wastes that ultimately require transfer to WSY shall be moved by the WGUs from the plant areas to their respective WTA (refer to section 8.4.2). The wastes accumulated at WTAs shall be transferred internally from WTAs to the WSY in accordance with the mechanism explained below:

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#### 8.5.1.1 Waste Transfer Request (WTR) Form

The Waste Transfer Request Form is attached as Appendix-1. This is an electronic form and maintained in SAP. It shall be filled for the following types of wastes when internally transferring the waste from WTA to WSY:

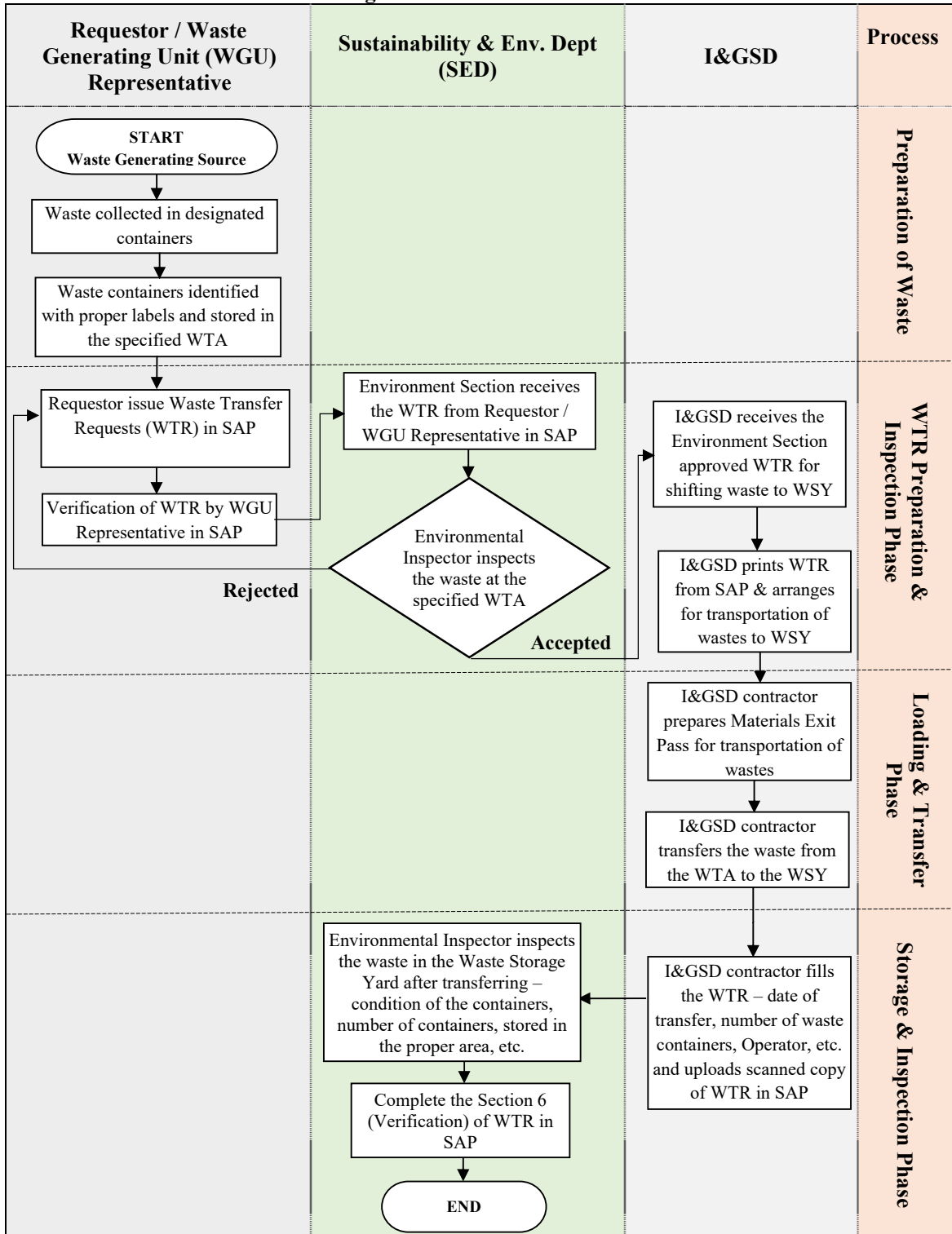
- a) Hazardous Industrial Wastes: The waste is moved to the WSY for ultimate transfer to final treatment/disposal facility in accordance with applicable regulations.
- b) Non-hazardous Industrial Wastes, which needs analysis reports to confirm that they are Non-hazardous: These wastes should also be stored in the WSY until the necessary approval from the MIC / MME is obtained
- c) Empty containers (IBCs, Metallic drums, plastic drums, drums and cans).




#### 8.5.1.2 Internal Waste Transfer Mechanism

This section refers to wastes that require to be transferred from WTA to WSY (Flow Diagram-1) using the WTR Form:

- a) The Requestor shall make the “Waste Transfer Request” in SAP and submit, which then need to be reviewed and approved by WGU in SAP. In case the Requester is from the same section in which waste is generated then the Requester and the Waste Generating Unit (WGU) Representative can be the same person.
- b) The Waste Generating Unit Representative shall physically verify the information and approve the WTR in SAP in order to issue a notification to SED for approval. This process shall be completed by the WGU Representative of the responsible department within 48 hours after shifting the waste to WTA.
- c) WGU shall ensure that waste transferred to WTA are in conformance with Waste Management Guidelines of Section 6.7.
- d) The Sust. & Env. Inspector / SED shall physically verify the waste for its contents, labelling, packaging, and segregation etc at the WTA within 48 hours after receiving the WTR through SAP system.

**Flow Diagram 1: Internal Transfer of Wastes**



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- If the waste in WTA does not conform to the information provided in the WTR or if the waste labelling, packaging, segregation etc. does not meet the requirements as per this procedure, Sust. & Env. Inspector / SED should reject the WTR in SAP. The WTR should return to the WGU Representative in the SAP system. WGU Representative shall rectify the situation as per the remarks/instructions from Sust. & Env. Inspector / SED and resubmit a revised WTR through SAP within 24 hours after receiving WTR rejection from Sust. & Env. Inspector / SED.
  - If the waste is found acceptable for transfer to WSY, Sust. & Env. Inspector / SED should approve the WTR in SAP. The SAP system will forward the form to I&GSD for further action.
- e) Upon receiving the approved WTR in SAP, I&GSD representative shall print a copy of the WTR from SAP system and submit to SED with required information and arrange the transfer of the waste, from the identified Waste Transit Areas of each Plants / Departments to the appropriate storage area in the Waste Storage Yard, as directed by the SED in the WTR Form. This process shall be completed within 48 hours after receiving the approved WTR in SAP.
- f) After completing the waste transfer, I&GSD representative shall return the WTR Form to the SED, for final verification.
- g) The SED shall verify the waste transferred to the WSY, and fill the Verification part of the Form, and update the waste inventory record in SAP.

**Note: WTR Must be issued separately for each type of waste in SAP.**


## 8.5.2 External Transfer of Waste

### 8.5.2.1 Transfer of Hazardous Wastes:

- a) All hazardous wastes should be collected in WSY (exceptions can be made during Plant Turnaround (Shutdown) subject to prior agreement among all the concerned departments for alternate arrangements) and should be sent to an approved facility as described in Flow Diagram-2.
- b) SED shall ensure that hazardous wastes are sent to approved disposal/treatment facilities within 90 days after receiving in WSY to comply with regulations.
- c) The wastes not accepted by any approved facility, shall be stored in the WSY till suitable arrangements are made.
- d) For transfer of wastes outside MIC Controlled area or outside Qatar, specific approval from MME shall be taken. For exports outside the State of Qatar, the requirements of Basel Convention shall be followed.

### 8.5.2.2 Transfer of Wastes generated by Contractor's activities:

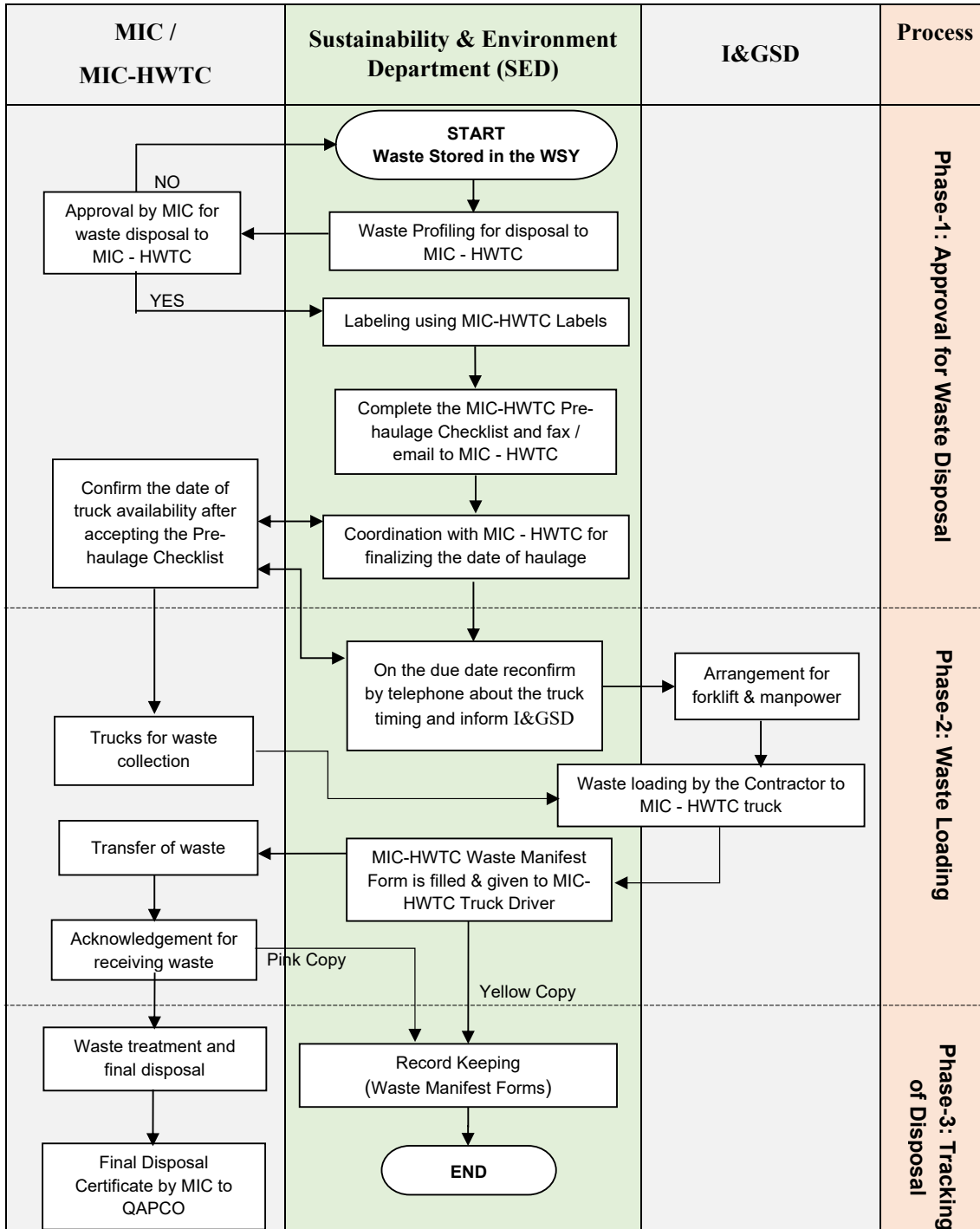
- a) All industrial and construction wastes generated by Contractor activities (whose disposal responsibilities lies with the contractor) shall be collected and transferred to Approved Facilities by the Contractor directly from Point-of-generation.
- b) Waste Transfer Requests are not required for transferring of the above types of wastes.

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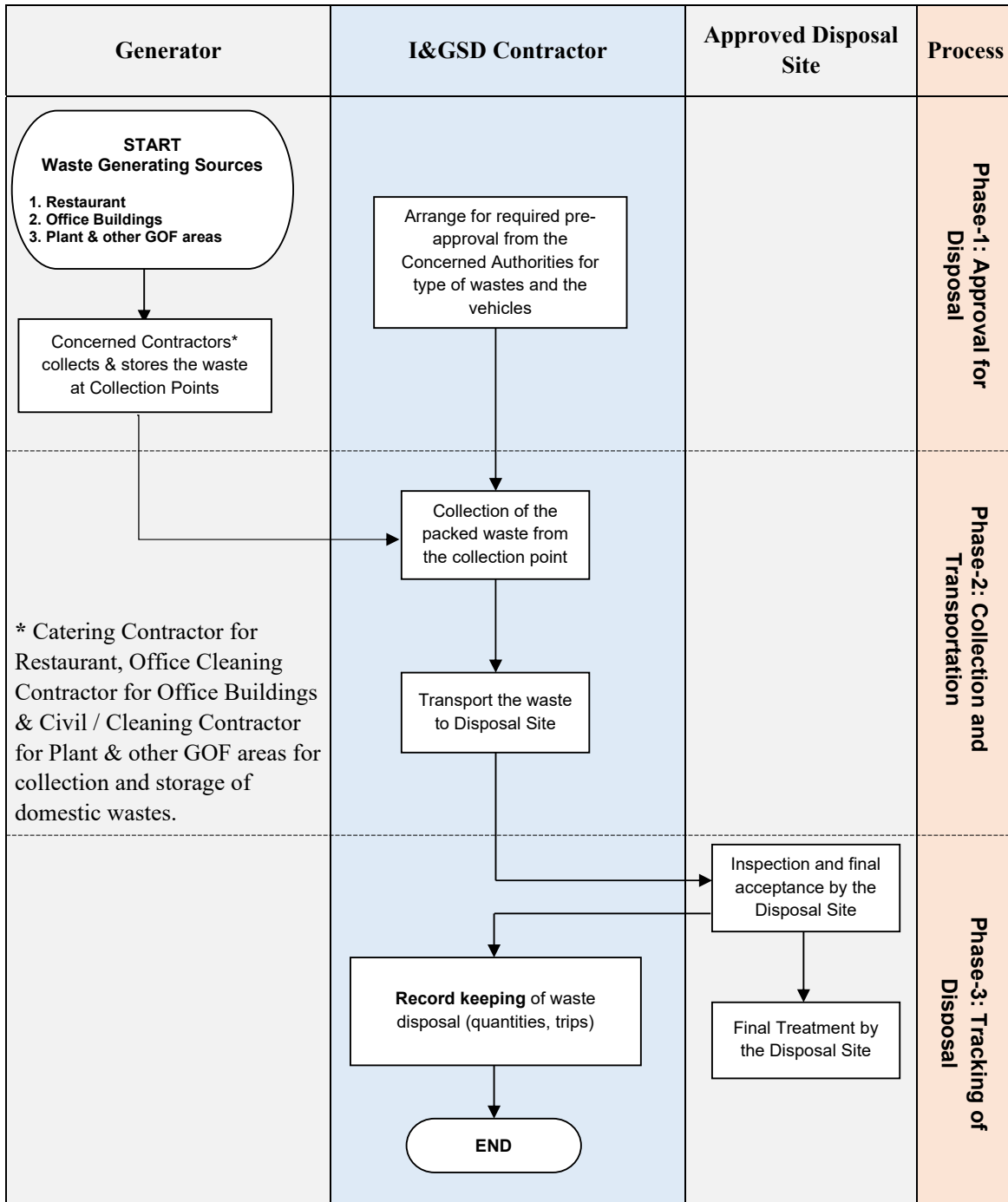
#### 8.5.2.3 Transfer of Domestic Wastes and Domestic Wastewater (Sewage):

- a) **Domestic wastes** shall be collected and transferred to the approved facilities by I&GSD Contractors directly from Point-of-generation or from the approved waste collection points (WCP) as per Flow Diagram-3.
- b) **Domestic wastewater** shall be collected and transferred to the approved facilities by I&GSD Contractors directly from Point-of-generation or from the Main Sewer Pit as per Flow Diagram-4.
- c) Waste Transfer Requests (WTR) are not required for transferring of Domestic wastes and Domestic wastewater.
- d) Generated and disposed Quantities of these wastes/wastewater must be recorded by I&GSD and provided to the SED on a monthly basis.

**Flow Diagram-2: Waste Disposal to MIC - HWTC**

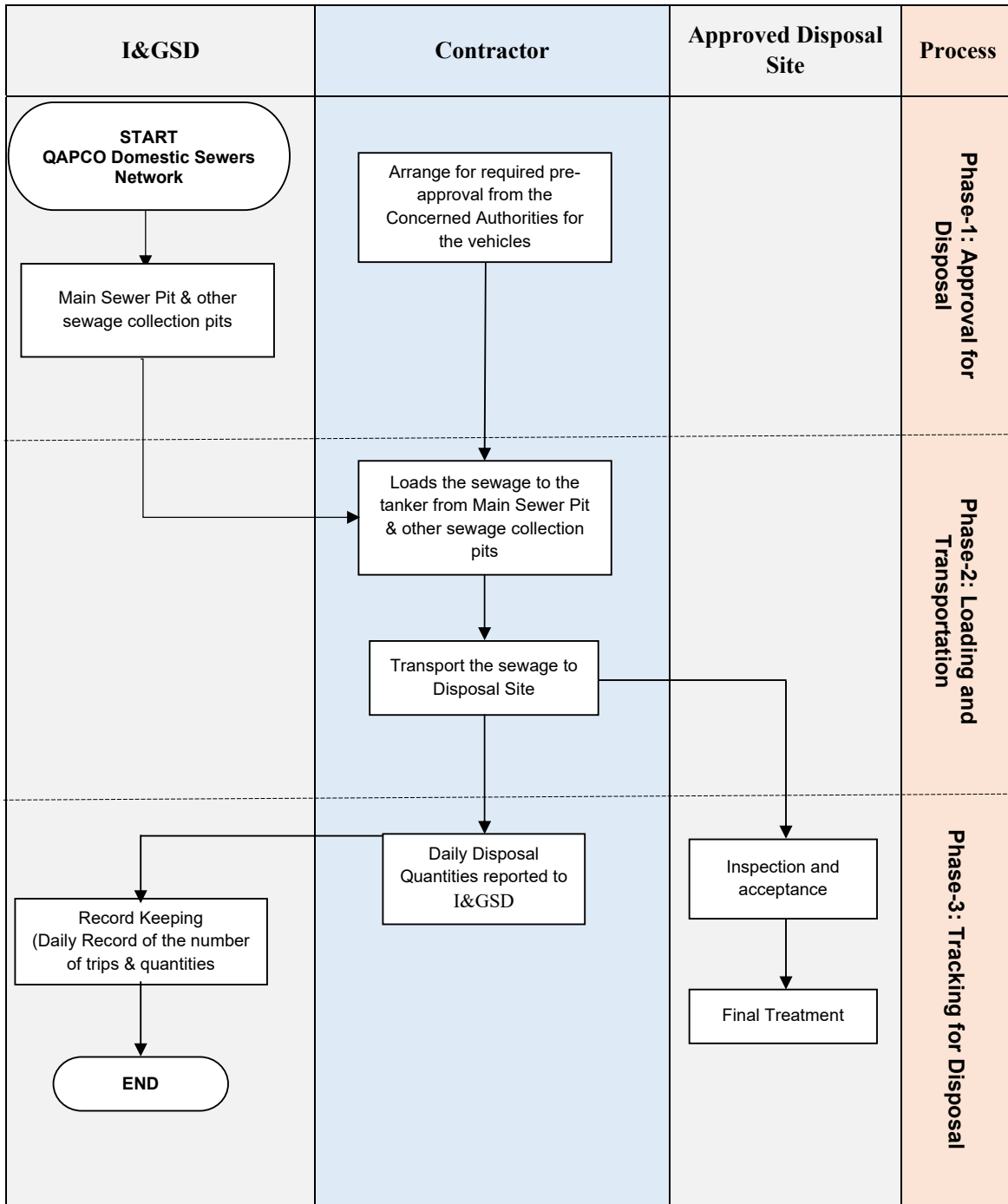




**Flow Diagram-3: Domestic Waste Collection & Disposal**





**Flow Diagram-4: Domestic Wastewater (Sewage) Collection & Disposal**



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#### 8.5.2.4 Transfer of Non-Hazardous Industrial Wastes:

- a) Non-hazardous industrial wastes shall be collected and transferred to Approved Facilities by I&GSD Contractors directly from Point-of-generation or from the approved collection points.
- b) Waste Transfer Requests are not required for transferring of such wastes.
- c) Generated and disposed Quantities of these wastes must be recorded by I&GSD and provided to the SED on a monthly basis.

#### OUTPUTS SUMMARY

- WTR in SAP
- Waste Inventory data for WSY
- Domestic waste, non-hazardous industrial waste and domestic wastewater transfer inventory

### 8.6 WASTE DISPOSAL

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- Segregated, adequately labelled and containerized waste streams

#### WASTE DISPOSAL

ID	Activity	Document reference	Responsible org. position
8.6	Waste disposal to approved disposal facility	PR-PSS-123	SED / I&GSD

#### PROCEDURE COMMENTARY

Waste Manifest system shall be implemented for all types of waste disposal.

#### 8.6.1 Hazardous Industrial Wastes Disposal:

This type of waste shall be sent to an approved facility or stored in the Waste Storage Yard till a suitable disposal method is available.

#### 8.6.2 Non-hazardous Industrial Wastes Disposal:

Shall be sent to an approved non-hazardous industrial waste disposal facility.

**Note: MIC landfill site does not accept liquid wastes and hazardous waste.**

#### 8.6.3 Domestic Waste Disposal:

Shall be sent to domestic landfill site.




#### OUTPUTS SUMMARY

- Waste Disposal records and waste manifest certificates

### 8.7 WASTE MANAGEMENT GUIDELINES

#### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- Waste Categorization / Classification List

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## WASTE MANAGEMENT GUIDELINES

ID	Activity	Document reference	Responsible org. position
8.7	Implementation of waste management guidelines	PR-PSS-123	WGU /Waste Generator / I&GSD / SED

### PROCEDURE COMMENTARY

- a) Containers or Drums used for storing waste must be in good condition, clean, and free of rust or dents, prior to use.
- b) Containers holding liquid waste must always be tightly closed, except when wastes are added or removed.
- c) All waste drums / containers must be kept on pallets. No cracked, broken or fragile Pallets shall be used for loading purpose.
- d) Wastes in leaking or damaged containers must be handled by proper means and re-containerized by Waste Generators / WGU / I&GSD Contractors in collaboration with WGU / I&GSD / SED.
- e) Containers shall be handled properly to prevent ruptures and leaks by all concerned during handling.
- f) Drums containing any wastes should not be filled to full capacity. Must be filled to 80% capacity.
- g) Ensure there is no free-floating liquid on top of the waste in the containers.
- h) Waste containers must be appropriately labeled to indicate the type of waste they contain by official QAPCO Waste labels, written by permanent markers. These markings shall be visible during storage and handling. All relevant fields on the label should be properly filled and complying with the information in the WTR.
- i) Ensure that different types of non-compatible wastes, as detailed in the Appendix 3, are segregated and kept separately in the WTA before transfer to the Waste Storage Yard. Same type of waste should be in one pallet.
- j) Ensure that wastes are not unnecessarily accumulated inside the Plant / Department and are regularly transferred to the identified Waste Transit Area for further transfer to Waste Storage Yard.
- k) Ensure that wastes are not accumulated for long period in the Waste Transit Area, by issuing the Waste Transfer Request in SAP system within 48 hours of moving the waste to WTA.
- l) Wastes shall be stored in compatible containers. The compatibility of the waste with the container shall always be ensured by the Waste Generating Unit (i.e. corrosive wastes shall not be stored in metal drums). When in doubt, contact the Concerned Plant or the SED.
- m) Ensure that the drained liquid from the drains which are open to the ground, is collected in a suitable container and put into the proper drainage system.

### OUTPUTS SUMMARY

- Management of wastes as per regulations

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## 8.8 AUDIT & INSPECTION REQUIREMENTS

### INPUTS SUMMARY

- Company CTO requirements, MME and MIC Waste management regulations
- Waste Categorization / Classification List

### AUDIT & INSPECTION REQUIREMENTS

ID	Activity	Document reference	Responsible org. position
8.8	Audit and inspection of waste collection, transfer and storage	PR-PSS-123	SED

### PROCEDURE COMMENTARY

A waste management monitoring program shall be implemented and maintained to demonstrate compliance with this Procedure. Waste management inspections should be covered during scheduled environmental site visits to ensure that waste management requirements are followed. Inspections should follow a checklist that covers segregation, storage, disposal and record keeping in plant areas (Appendix-5) and at the WSY (Appendix-4).

SED shall implement waste disposal monitoring to ensure compliance with regulatory requirements of disposal of hazardous waste from Company to the disposal facility within max of 90 days.


### OUTPUTS SUMMARY

- Audit & Inspection Reports
- Audit & Inspection Action Tracking Report
- Hazardous Waste Disposal KPI (on monthly basis)

## 9. RECORDS

The owner / executor of waste management activities as per the instructions of this procedure shall retain the following, but not limited to, documented information (records) for reference:

Ch.	#	Documented Information (Record) ID /Name	Responsible department or section
Internal Transfer of Waste	1	Waste Transfer Request	Requestor (WGU) /in SAP
	2	Completed "Waste Transfer Request"	SED /in SAP
External Waste Transfer and Disposal	1	Acknowledgement from the Disposal Sites for domestic wastes	Contractor
	2	Records of Domestic waste and non-hazardous waste disposal	I&GSD
	3	Daily Record of domestic wastewater - trips & quantities disposed	I&GSD
	4	MIC - HWTC Pre-haulage Checklist (faxed to MIC – HWTC)	SED

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<b>Wastes Segregation, Storage and Disposal</b>	5	MIC-HWTC Waste Manifest Records (System Generated Form)	SED
	1	Environmental Site Visit (monitoring /inspection) Reports and Action Tracking Reports	SED
	2	Quarterly / Yearly Inventory of hazardous waste for reporting to MME (Appendix-6)	SED
	3	General Industrial Waste Record.	SED

## 10. APPENDIX

### 10.1 SERVICE LEVEL DEFINITION

The key services and service levels listed below are required to complete the activities contained within this procedure

#	Service	Service level	Service provider	Service customer
1	N.A	N.A	N.A	N.A

## 10.2 APPENDIX-1

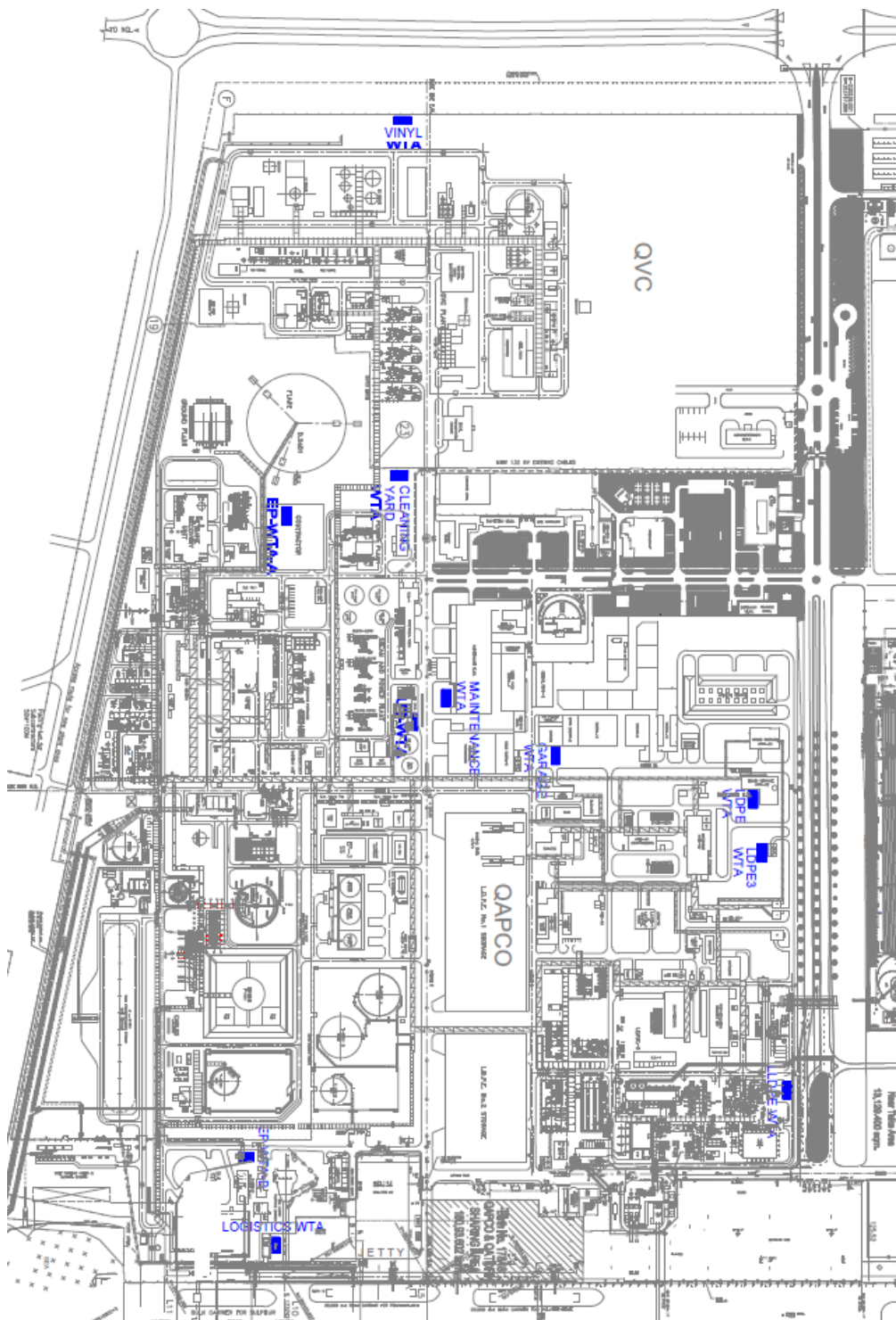
### WASTE TRANSFER REQUEST FORM

1. REQUESTOR	WTR Ref. No. : _____ Date : _____				
	Plant : _____ Location : _____				
	Equipment No./Source : _____				
	Waste Category : Non Hazardous Industrial <input type="checkbox"/> Hazardous Industrial <input type="checkbox"/>				
	Type Of Waste : Liquid <input type="checkbox"/> Solid <input type="checkbox"/> Semi Solid <input type="checkbox"/> N/A <input type="checkbox"/>				
	Waste Description : _____				
	Quantity : _____ Unit : _____ No Of Containers : _____				
2. WGU	Container Type : Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Other <input type="checkbox"/> No Container <input type="checkbox"/>				
	Labeled : Yes <input type="checkbox"/> No <input type="checkbox"/>				
3. ENVSECTION	Requester Name : _____ Dept / Sec. : _____				
	Name : _____ Date : _____ Time: _____				
	Remarks (if any) : _____				
4. GIS	<b>INSPECTION AT THE SOURCE OF GENERATION</b>				
	Name : _____ Date : _____ Time: _____				
	Location in WSY: _____				
5. GIS CONTRACTOR	Remarks (if any) : _____				
	GIS Contractor Name : _____				
	Name : _____ Signature : _____ Date : _____				
6. SED	Operator's Name : _____				
	Date of Transfer : _____ No of Containers / Quantity : _____				
	Date : _____ Foreman's Name : _____ Signature : _____				
6. SED	Remarks (if any) : _____				
	<b>VERIFICATION AT WSY</b>				
	Location in WSY : _____				
	Waste : _____				
	Waste Description : _____				
	Waste Type : _____ Waste Category : _____				
	Quantity : _____ Unit : _____ No. of Containers : _____				
Remarks (if any) : _____					
<table border="1" style="float: right;"> <tr> <td style="text-align: center;"><b>Verified By</b></td> </tr> <tr> <td>Name : _____</td> </tr> <tr> <td>Date : _____</td> </tr> <tr> <td>Time : _____</td> </tr> </table>		<b>Verified By</b>	Name : _____	Date : _____	Time : _____
<b>Verified By</b>					
Name : _____					
Date : _____					
Time : _____					

\*WGU = Waste Generating Unit Representative  
 XXX / YYY / ZZZZ = Location / Sequence No. / Year

10.3 APPENDIX-2

A: WASTE TRANSIT AREA (WTA) LOCATION DRAWING (DWG S-KG-1-150-0)




1. Ethylene WTA – A (for all hazardous waste except sulfur)
2. Ethylene WTA – B (only for sulfur waste)
3. LDPE WTA
4. LLDPE WTA
5. LDPE3 WTA
6. Utility WTA
7. Cleaning Yard WTA
8. Maintenance WTA
9. Garage WTA
10. Vinyl WTA
11. Logistics WTA

LEGEND:

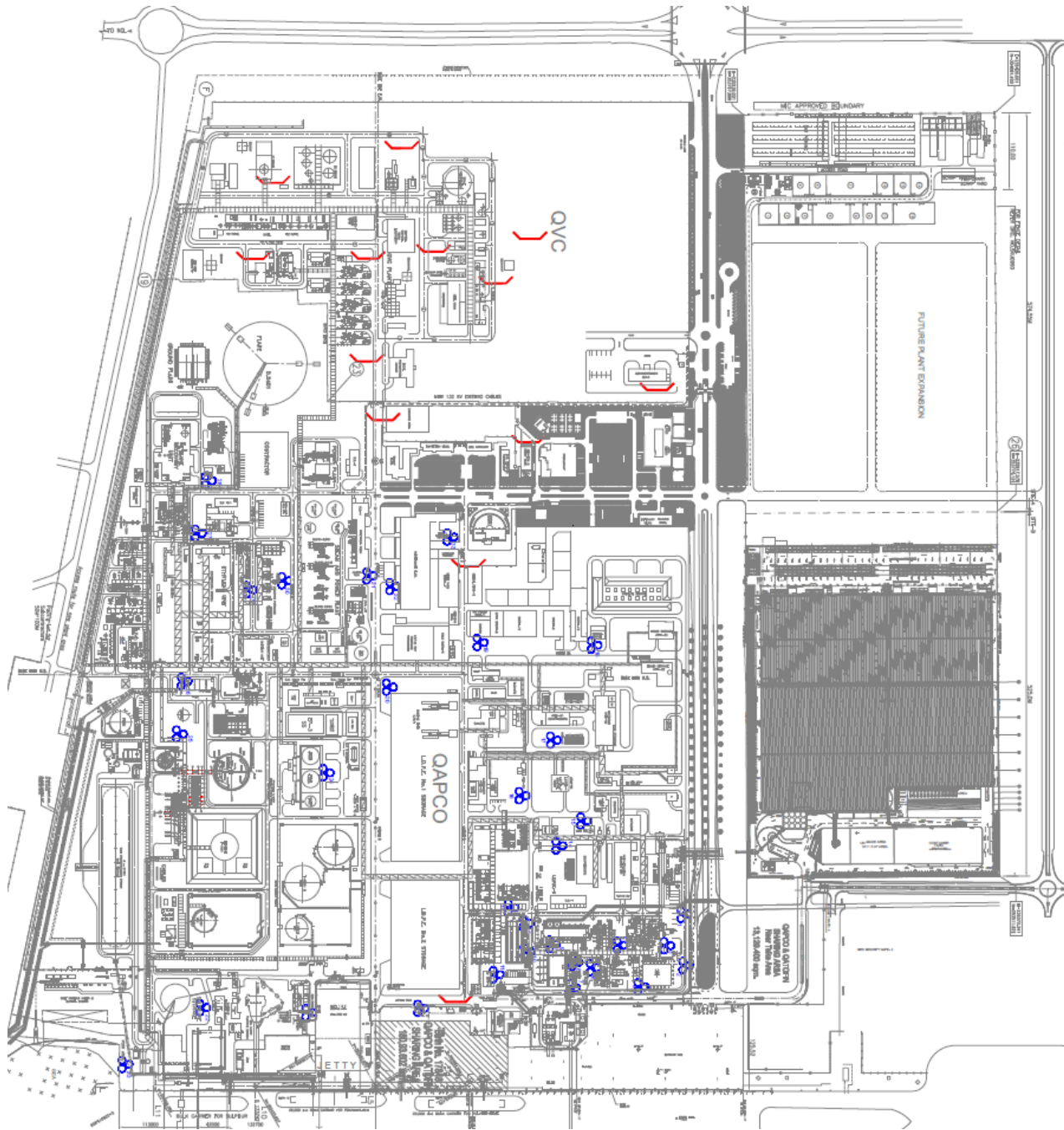
 WASTE TRANSIT AREA (WTA)

The drawing can be revised without revising the Procedure. The updated copy shall be maintained by Environment Section. Please contact SED for the latest revision of the drawing.



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**B: WASTE COLLECTION POINTS (WCP) LOCATION DRAWING (DWG S-KG-1-150-0)**



**LEGEND:**

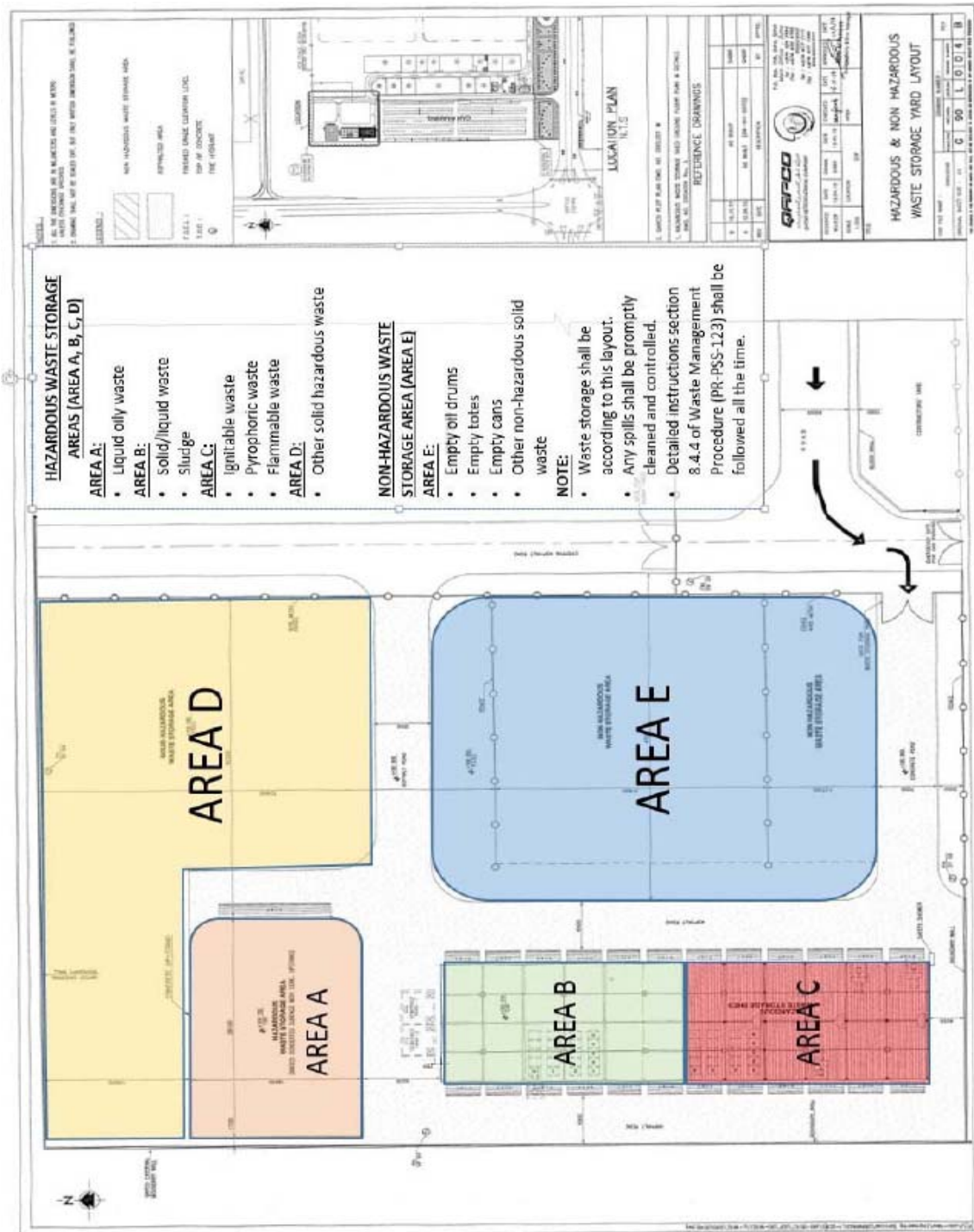
 DOMESTIC WASTE SKIP (DWS)

 WASTE COLLECTION POINTS (WCP)

The drawing can be revised without revising the Procedure. The updated copy shall be maintained by Environment Section. Please contact SED for the latest revision of the drawing.

10.4 APPENDIX-3

A: WASTE STORAGE YARD LAYOUT (DWG G-90-L-004-A)



The drawing can be revised without revising the Procedure. The updated copy shall be maintained by Environment Section. Please contact SED for the latest revision of the drawing.




## B: GUIDANCE FOR WASTE MANAGEMENT INSIDE THE WASTE STORAGE YARD

Area	Wastes Categories	Notes
Hazardous Waste Storage Area - A	<ul style="list-style-type: none"> <li>Only used oil /grease</li> </ul>	<ul style="list-style-type: none"> <li>Always keep containers closed when not adding waste</li> <li>Used oil and grease shall be properly segregated.</li> </ul>
Hazardous Waste Storage Area - B	<ul style="list-style-type: none"> <li>Liquid hazardous waste (except flammable and used oil)</li> <li>Spent Resin</li> <li>Carbon Fines/granules</li> <li>Acidic/Alkaline sludge</li> <li>Oil contaminated waste (PE cakes)</li> <li>Waste Wax</li> <li>Waste electrolyte solution</li> <li>Molecular Sieves</li> <li>Liquid/ solid expired chemicals if not flammable/ignitable</li> <li>Contaminated solids (sand, gravel)</li> <li>Waste catalyst</li> <li>Waste Ceramic Balls/Materials</li> </ul>	<ul style="list-style-type: none"> <li>Liquid and solid waste to be segregated properly</li> <li>Segregate as per following characteristics: <ul style="list-style-type: none"> <li>Non-halogenated organics (includes organic acids)</li> <li>Halogenated organics</li> <li>Inorganic acids and heavy metal solutions</li> <li>Inorganic bases</li> <li>Cyanides</li> </ul> </li> <li>All flammable/ignitable and pyrophoric wastes (liquid or solid) shall always be kept in the shaded hazardous waste storage area-C</li> </ul>
Hazardous Waste Storage Area - C	<ul style="list-style-type: none"> <li>All flammable / ignitable and pyrophoric waste</li> <li>Sulphur / Sulphur contaminated</li> <li>Amine tank sludge</li> <li>Xylene waste</li> <li>Filter elements contaminated with pyrophoric</li> <li>Oil contaminated rags</li> <li>Flammable/ignitable liquid/solid expired chemicals</li> </ul>	
Hazardous Waste Storage Area - D	<ul style="list-style-type: none"> <li>Only solid hazardous waste allowed in this area</li> <li>This area shall be used only for temporarily storing the solid waste in case it cannot be accommodated in Hazardous Waste Storage Area B.</li> <li>Liquid waste shall not be stored in this area even on temporary basis.</li> </ul>	<ul style="list-style-type: none"> <li>Dust in the work area should be kept to a minimum. Avoid inhalation of dust.</li> <li>Waste shall be properly segregated and with appropriate arrangement for monitoring and inspection of waste</li> </ul>
Non-Hazardous Waste Storage Area - E	<ul style="list-style-type: none"> <li>Empty drums, totes and cans</li> <li>Sandblasting waste if non-hazardous</li> <li>Non-hazardous sludge</li> <li>Other solid non-hazardous industrial waste in jumbo bags/skips</li> </ul>	<ul style="list-style-type: none"> <li>Ensure safety in stacking the empty drums and totes.</li> <li>Ensure the empty drums are clean and free of harmful residues.</li> </ul>

### Important HSE Instructions to be Followed in the Waste Storage Yard (WSY)

The following rules shall be followed by all, including contractors, inside the WSY:

- No smoking inside WSY.
- Mixing of different types of wastes is prohibited.
- Good housekeeping shall always be maintained.
- QAPCO permit system shall be applied for any work to be performed inside the WSY.
- Appropriate PPEs shall be used for any work inside WSY.
- All wastes received in the WSY shall be stored in accordance with the Waste Storage Yard Layout (SK-G-90-L004-A).
- Flammable and combustible wastes shall be separated from sources of ignition.
- Appropriate spill kit(s) shall be provided in the WSY. Accidental spills of oils/waste/chemicals shall be immediately contained and cleaned




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## 10.5 APPENDIX-4

### SITE VISIT CHECKLIST FOR WASTE STORAGE YARD

S. No.	Checklist	Observation (Y / N)	Remarks (if any)
1	Is the yard access obstructed?		
2	Is the general housekeeping satisfactory?		
3	Is there any spillage on the ground / floor?		
4	Is the generated waste segregated?		
5	Is the waste stored in suitable / appropriate containers?		
6	Are there any leaks / rust / ballooning / rupture / damage in waste containers?		
7	Are waste containers stacked safely?		
8	Are the waste containers identified?		
9	Any waste stored for more than 3 months?		
10	Are wastes stored in closed / covered drums?		
11	Is the waste stored as per the specified layout?		
12	Is there any Contractor's activity inside the WSY? – If yes:		
	a) Is the WSY entry pass available with Contractor staff?		
	b) Are the contractors using proper PPEs wherever necessary (dust mask, safety glass, gloves, coverall, etc.)?		
	c) Is Contractor staff using proper tools / equipment during the activity inside WSY?		
13	Other Remarks		

The Checklist can be revised without revising the Procedure. The updated copy shall be maintained by SED.

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## 10.6 APPENDIX-5

### ENVIRONMENTAL SITE VISIT CHECKLIST

S. No.	Checklist	Observation (Y / N)	Remarks (if any)
1	Any Leaks / spillages of liquid chemicals observed in the area?		
2	Any soil contamination in the area?		
3	Any water accumulation created by drains or overflows?		
4	Is there any waste accumulation inside the Plant Area?		
5	Is there any waste accumulation in the Waste Transit Area?		
6	Is the waste stored in proper containers?		
7	Are the waste containers identified?		
8	Is the generated waste segregated & arranged in Waste Transit Area?		
9	Any mixing of wastes in storage containers / skips?		
10	Cleanliness of equipment and surroundings (oil leaks, dirt, etc.)		
11	Is the general housekeeping satisfactory?		
12	Pending issues		
13	Positive observations		
14	Others		

The Checklist can be revised without revising the Procedure. The updated copy shall be maintained by SED.

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10.7 APPENDIX-6

**GENERAL INDUSTRIAL WASTE RECORD**

Sr. No	Waste Description	Quantity Generated				Qty Recycled / Disposed				Balance in the Yard	Remarks
		For the Quarter			For the year	For the Quarter			For the year		
		April	May	June	'17	April	May	June	'17		
<b>Non – Hazardous Wastes (Domestic, Wooden and Construction Wastes Disposal) M3</b>											
1	Domestic Waste										
2	Wooden Waste										
3	Construction Waste										
4	Marine growth waste										
5	Dried Biological Sludge										
<b>Hazardous Wastes (Tons)</b>											
1	Furnace Decoking Residue										
2	Spent Activated Carbon										
3	Spent Resin										
4	Spent Molecular Sieves										
5	Ceramic Balls & materials										
6	Waste Sulphur+Sand+Gravel										
7	Amine Tank Sludge										
8	Process Waste – Solid										
9	Process Sludge										
10	Process Waste - Liquid										
11	Oil Sludge										
12	Tar Sludge										
13	Spent Additives (Talc)										
14	Oil Cont. PE Cakes										
15	Spent Xylene Residue										
16	Dry Chemical Powder										
17	Waste Wax – Oily										
18	Slip Agent										
19	Expired Foam Extinguisher										
20	Cont. Soil with Sulphur										
21	Electrolyte Solution										
22	Waste Perlite										
23	Cont. Soil / Sand – Oil										
24	SPP Pit Sludge										
25	Polyelectrolyte sludge										
26	Acid Contaminated Gravel										
27	Used Oils										
28	Cont. Sand with PE dust										
29	Burn Carbon										
<b>Wastes Recorded as Number (Nos.)</b>											
31	Filters Cartridge										
<b>Empty Containers - Hazardous Chemicals (Nos.)</b>											
32	Empty Metallic Oil Drums										
33	Empty Metallic Chemical Drums										
34	Empty Plastic Drums										
35	Empty Plastic Totes										
36	Empty Jerry Cans										

*A typical format for maintaining records; it can be revised and updated by the Environment Section, without revising the procedure.*

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10.8 APPENDIX-7

**CATEGORIZATION / CLASSIFICATION OF WASTES – (QAPCO WASTE MATRIX)**



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QAPCO Waste MATR

*Note: The contents of this APPENDIX can be revised and updated by the SED, without revising the procedure.*