



USER MANUAL

***GREEN INDUSTRY MANAGEMENT AND MONITORING SYSTEM
(SPPIH)***

VERSION 1.0

TABLE CONTENTS

TABLE CONTENTS	1
1 INTRODUCTION.....	3
2 SYSTEM REGISTRATION	4
3 LOGIN	6
4 FORGOT PASSWORD	7
5 EDIT PROFILE	8
6 CHANGE EMAIL	9
7 CHANGE PASSWORD	10
8 AUDIT FORM.....	11
8.1 AUDIT INFORMATION	13
8.2 MAIN PRODUCTS.....	14
8.3 BY PRODUCTS.....	15
8.4 RAW MATERIAL CONSUMPTIONS	16
8.5 UTILITY	17
8.5.1 Utility.....	18
8.5.2 Water Consumption.....	19
8.5.3 Electricity Consumption	20
8.5.4 Fuel Consumption	21
8.5.5 Other Utility Consumption.....	22
8.6 PROCESS FLOW DIAGRAM	23
8.7 UNIT OPERATION/ACTIVITY	24
8.8 OTHER ACTIVITY	25
8.9 FACILITY.....	26
8.10 WASTE QUANTIFICATION.....	27
8.10.1 Wastewater.....	28
8.10.2 Industrial Effluent Treatment System (IETS).....	29
8.11 WASTE.....	30
8.11.1 Non-Scheduled Waste	31

USER MANUAL
INDUSTRY

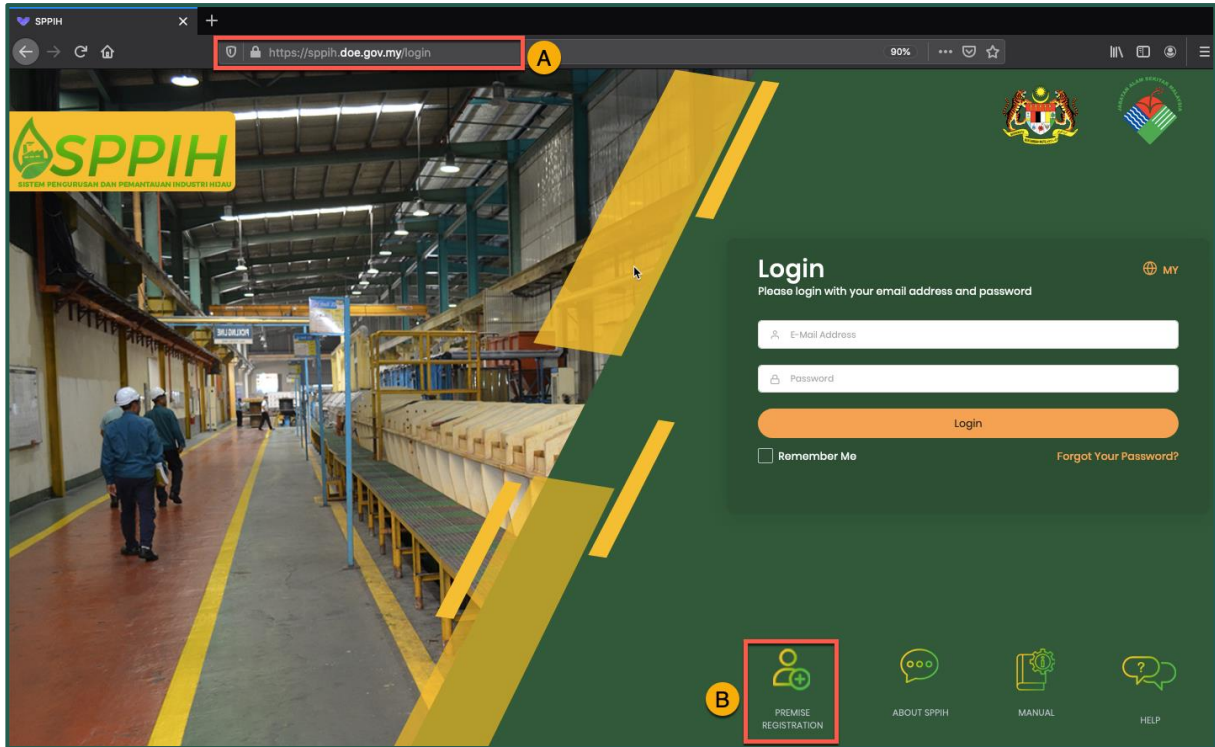
8.11.2	Scheduled Waste	32
8.11.3	Gaseous Emissions Quantification	33
8.12	RAW MATERIAL SPILLAGE / DISCARDED PRODUCT /ETC	34
8.13	ENERGY LOSS.....	35
8.13.1	Energy Loss from Hot Surface	36
8.13.2	Energy Loss Through Hot Material	37
8.13.3	Loss of Energy Through Cold Material	38
8.13.4	Loss Energy from Latent Heat	39
8.14	SAFETY AND HEALTH RISK	40
8.15	COMPLAINT RECEIVED	41
8.16	HOUSEKEEPING ISSUES	42
8.17	OTHER OBSERVATION	43
8.18	SUMMARY OF AUDIT.....	44
9	AUDIT FORM WITH STATUS SEND.....	45
10	AUDIT FORM WITH STATUS AMENDMENT	46
11	SELECTION OF OPTIONS.....	48
12	SELECTION OF OPTIONS WITH STATUS APPLYING FOR OPTIONS	51
13	SELECTION OF OPTIONS WITH STATUS AMENDMENT	52
14	MONITORING FORM	54
15	SUGGESTION OF NEW OPTION	62
16	UTILITY BILL.....	64
17	REPORT.....	65
17.1	REPORT OF TARGETED ENTITY OR HOT SPOT	65
17.2	REPORT OF UTILITY INVENTORY DATA ANALYSIS BY MONTH	66
17.3	LIST OF OPTION IMPLEMENTATION PROGRESS	67

1 INTRODUCTION

Cleaner Production is 'the continuous application of an integrated preventive environmental strategy applied to processes, products, and services to increase eco-efficiency and reduce risks to humans and the environment'. Cleaner Production can be applied to the processes used in any industry, to product themselves and to various services provided in society. The Green Industry Management and Monitoring System (SPPIH) is a system that assists in the management and monitoring of cleaner production audits.

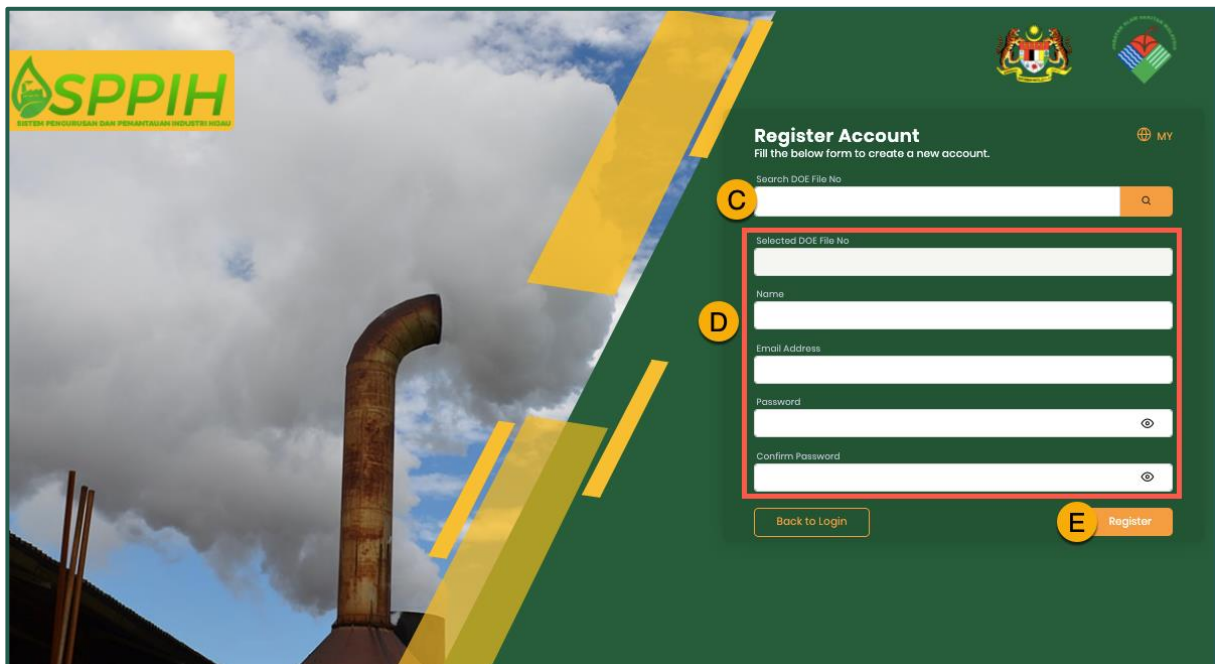
This document is intended for manual for user using the system.

2 SYSTEM REGISTRATION



A) Enter the URL <https://sppih.doe.gov.my/>.

B) Click on Premises Registration.



USER MANUAL
INDUSTRY

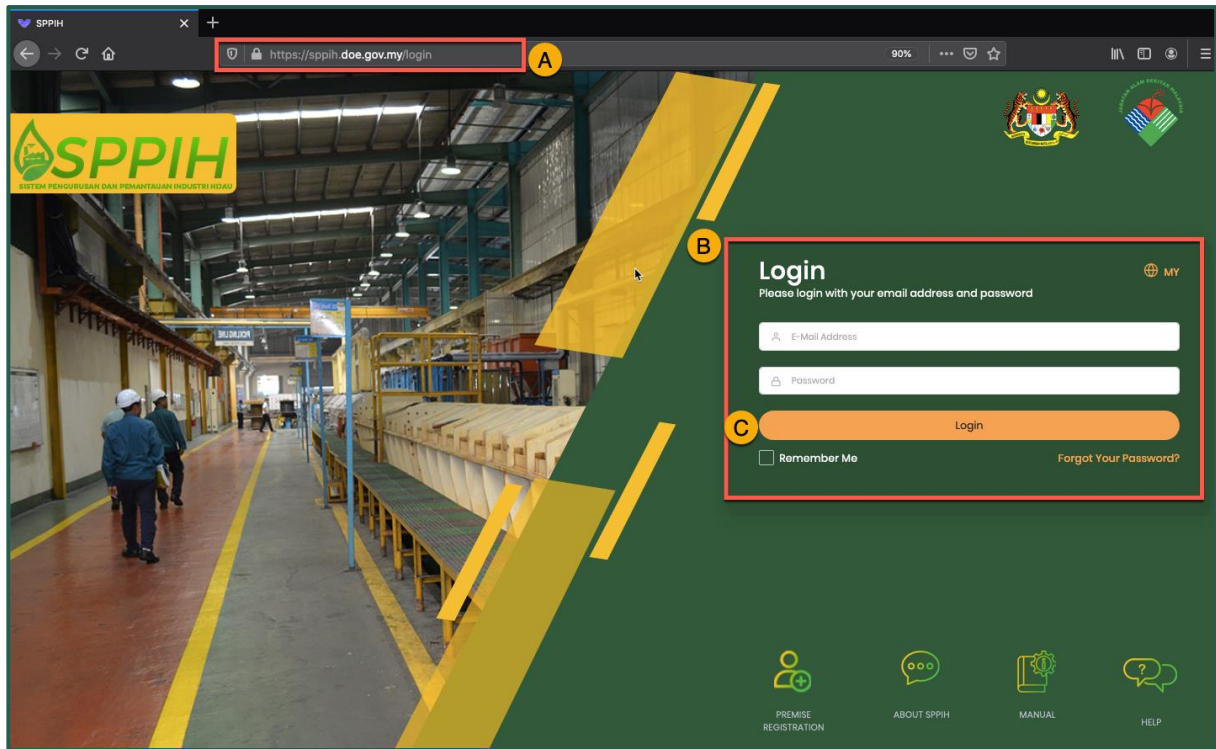
C) Please key-in DOE File Number and click . Check on the name of the Company Name

and click .

D) Please complete the registration information.

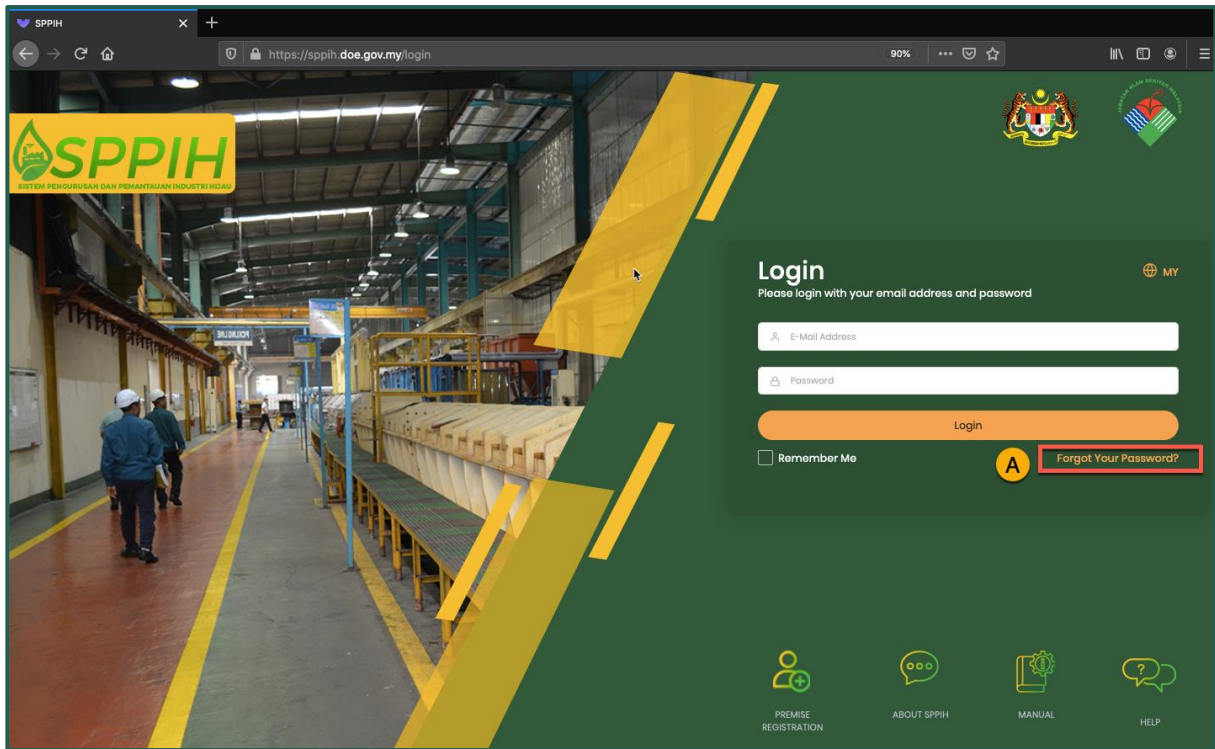
E) Then click 

3 LOGIN

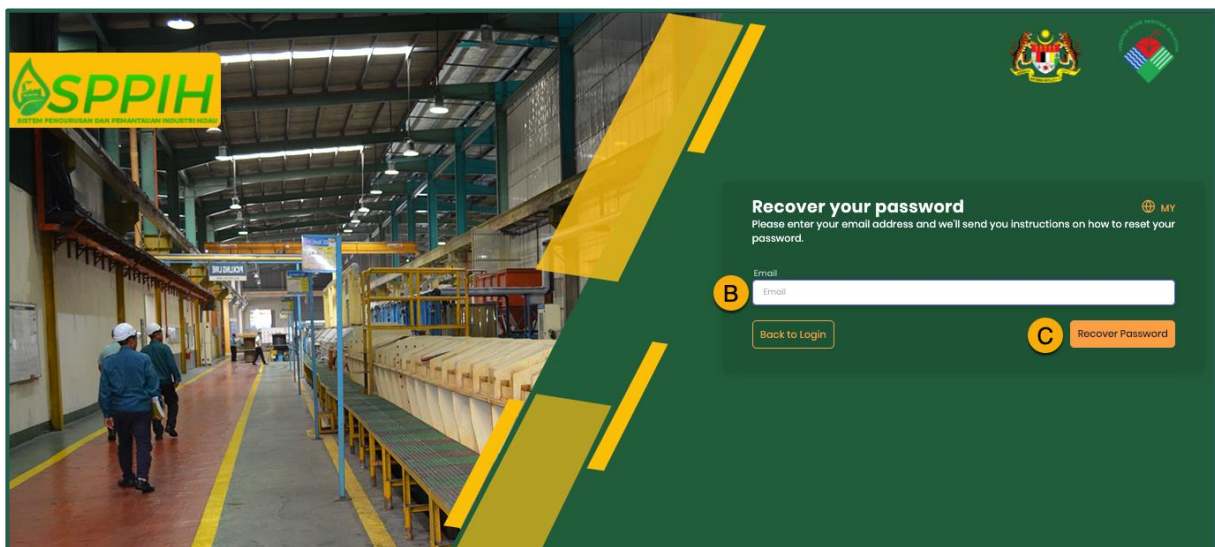


- A) Enter the URL <https://sppih.doe.gov.my/>.
- B) Enter email and password
- C) Click Sign In

4 FORGOT PASSWORD



A) Click Forgot Password



B) Enter email

C) Please check the email for a new password. Click **Recover Password**.

5 EDIT PROFILE

The screenshot displays the 'Edit Profile' interface. At the top, there's a navigation bar with links: Dashboard, Audit, Option, Monitoring, Bill Utility, and Reporting. A user profile dropdown menu is visible in the top right corner, containing 'Edit Profile' and 'Logout' options. The main content area is titled 'Profile' and includes a profile picture upload icon (B). Below this, there are two tabs: 'Company Info' (selected) and 'Change Password'. The 'Company Info' section (C) contains the following fields: DOE File Number, Company Name, Category of Industry (MAKANAN & MINUMAN), Date of Operation* (with a calendar icon), Office Hours* (with time selection icons), Operation Hour (Hour)*, Number of Employee*, Certification (with an example: MS 19000), Name of Company Representative*, Email* (pre-filled with repamig84l@kark5.com), Web, Telephone Number*, and Fax Number*. The 'Company Address' section contains: Address, Zip Code, City, State (W.P. KUALA LUMPUR), Longitude, and Latitude. At the bottom right of the form, there is an 'Update' button (D). The footer of the page states 'Copyrights Reserved © 2020 Department of Environment'.

A) Click Edit Profile at the top to update the profile.

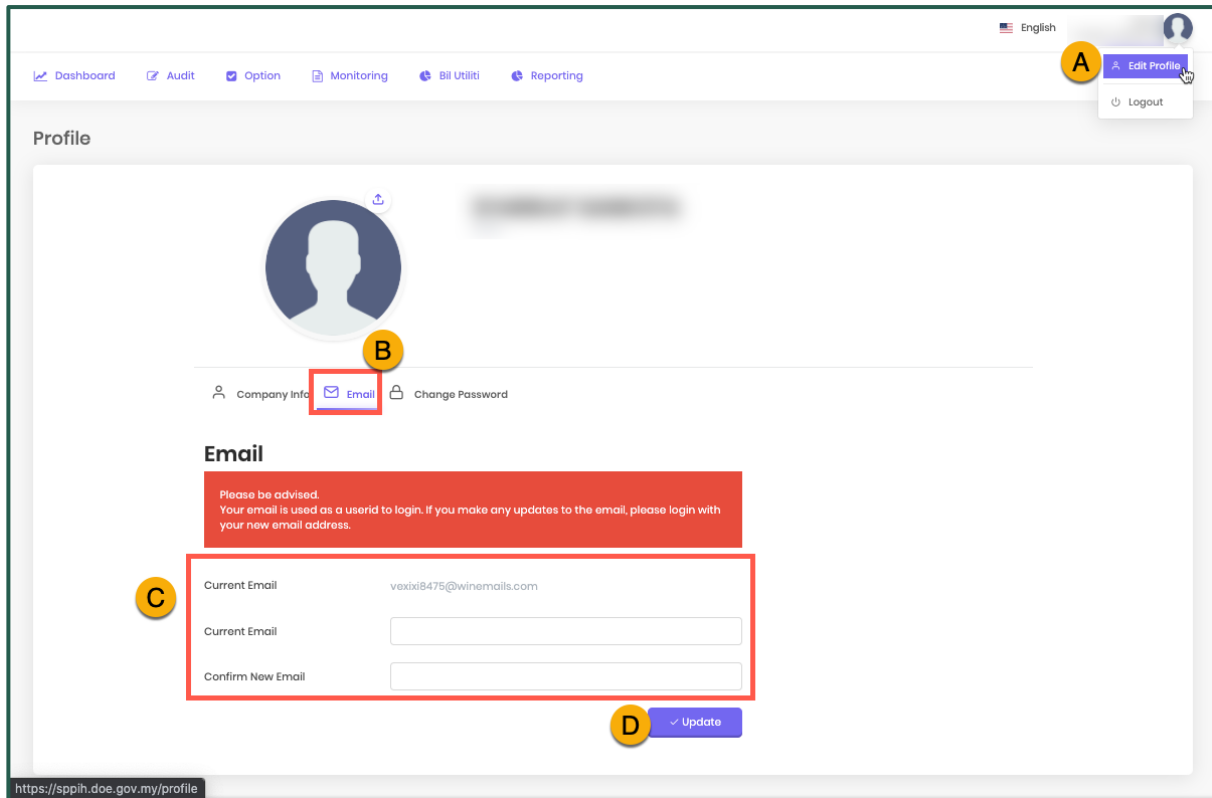
B) Click  to upload a profile picture

C) Complete Premise Profile information.

For those marked (*) it is mandatory to complete.

D) Click  to update profile information.

6 CHANGE EMAIL



A) Click Edit Profile at the top to change the password.

B) Click the tab  **Email**.

C) Complete email information. Please ensure the email is correct.

For those marked (*) is mandatory to complete.

D) Click  to update new email.

7 CHANGE PASSWORD

English

Dashboard Audit Option Monitoring BI Utiliti Reporting

Profile

Company Info Change Password

Change Password

Password must matched with this format: At least capital letter, lowercase letter, number, and symbol. (Example : Abcd@2019)

Current Password

New Password

Confirm New Password

Update

Copyrights Reserved © 2020 Department of Environment

E) Click Edit Profile at the top to change the password.

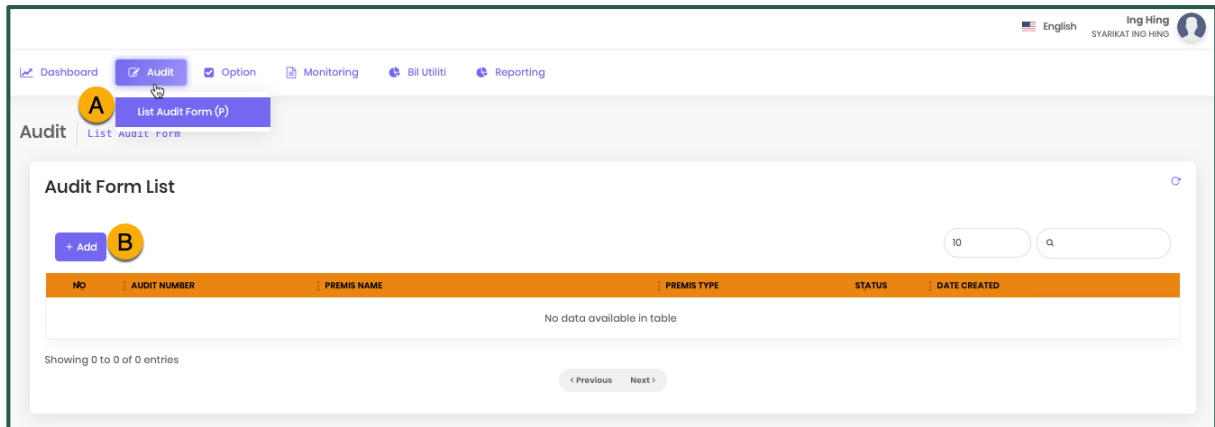
F) Click the tab [Change Password](#).

G) Complete password information. Please ensure password is a combination of uppercase, lowercase letters, symbols and numbers. The combination must be at least 8 characters long. (example: Abcd @ 2019)

For those marked (*) is mandatory to complete.

H) Click [Update](#) to update new password.

8 AUDIT FORM



A) Click on the Audit Form in the menu section

B) Click .

USER MANUAL

INDUSTRY

The screenshot displays the 'Industry Audit' web application. The top navigation bar includes links for Dashboard, Audit (active), Option, Monitoring, Bil Utiliti, and Reporting. The user is logged in as 'English'.

The main content area is titled 'Audit' and shows a breadcrumb trail: 'Senarai Borang Audit » Borang Audit'. A sidebar on the left lists 18 parts of the audit form, with Part 1 (Basic Audit Information) highlighted in orange. A red box surrounds the entire sidebar. A yellow circle with the letter 'C' is positioned above the 'Next' button in the bottom right corner of the form.

The main content area is divided into two sections: 'Part 1 (a): Audit Information' and 'Part 1 (b): Audit Information'. The 'Part 1 (a)' section contains 'Audit Objectives' with a note: 'For those marked (*) is mandatory to complete if you want to add and save the information.' It lists objectives for Electricity Consumption, Use of Fuel, Water Consumption, Wastewater Production, and The production of hazardous/solid waste. Below these are input fields for 'Name of Auditors' and 'Date Audit'. A 'Save' button is located at the bottom right of this section.

The 'Part 1 (b): Audit Information' section contains input fields for 'DOE File No' (AS(SBW)(b)-29/012/11/029) and 'Company Name' (SYARIKAT ING HING). At the bottom of this section are 'Previous', 'Next', and 'Send' buttons. The 'Next' button is highlighted with a red box.

Copyrights Reserved © 2020 Department of Environment

C) This part needs to be completed. Please click **Next** for the next section. Or click **Previous** to return to the previous section. Active sections are clickable.

8.1 AUDIT INFORMATION

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Process Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

9 Part 9
Facility

10 Part 10
Waste Quantification

11 Part 11
Wasted

12 Part 12
Raw Material Spillage / Discarded Product / Etc

13 Part 13
Energy Loss

14 Part 14
Safety and Health Risk

15 Part 15
Complaint Received

16 Part 16
Housekeeping Issues

17 Part 17
Other Observation

18 Part 18
Summary

Part 1 (a): Audit Information

Audit Objectives

For those marked (*) is mandatory to complete if you want to add and save the information.

a) Electricity Consumption

- Identify the source of electricity used
- Identify the quantity of electricity and the rate of consumption
- Identify the causes of waste of electricity

b) Use of Fuel

- Identify the type of fuel used
- Identify fuel quantity and usage
- Identify the source of waste fuel consumption

c) Water Consumption

- Identify the source of water used
- Identify the quantity and use of water
- Identify the cause of water consumption

d) Wastewater Production

- Identify sources of wastewater production
- Identify quantities of wastewater production
- Identify steps for reducing wastewater production

e) The production of hazardous/solid waste

- Identify sources of hazardous solid waste generation
- Identify the quantity of solid/hazardous waste production

* Name of Auditors :

* Date Audit :

Save

Audit Scope

The scope of Audit includes :

- Audit the entire premises
- Processing Area
- Administrative and Support Division
- Storage/Warehouse
- Other (specify)

Part 1 (b): Audit Information

DOE File No

Company Name

Previous Next Send

Copyrights Reserved © 2020 Department of Environment

A) Complete the Name of Auditor and Audit Date information. Then click .

For those marked (*) is mandatory to complete.

8.2 MAIN PRODUCTS

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

9 Part 9

Part 2: Main Product

A

* Please fill in the Main Product information and click the Add button to add the information. For those marked (*) it is required to fill out.

* Product

* Production Rate/Month

* Unit

* Packaging Type

B + Add

No	Product	Production Rate/Month	Unit	Packaging Type
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Main Products details.

B) Then click **+ Add**.

For those marked (*) is mandatory to complete if you want to add and save the information.

8.3 BY PRODUCTS

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 3: By Product ⓘ

A

* Sila isi maklumat Produk Sampingan dan klik butang Tambah untuk menambah maklumat. Bagi yang bertanda (*) adalah wajib untuk diisi.

* Product

* Production Rate/Month

* Unit

* Packaging Type

B

No	Product	Production Rate/Month	Unit	Packaging Type
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the By Products details.

B) Then click .

For those marked (*) it is mandatory to complete if you want to add and save the information.

8.4 RAW MATERIAL CONSUMPTIONS

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 4 : Raw Material Consumption **A**

* Sila isi maklumat Bahan Mentah dan klik butang Tambah untuk menambah maklumat. Bagi yang bertanda (*) adalah wajib untuk diisi.

* Raw Material

* Production Rate/Month

* Unit

B + Add

No	Raw Material	Production Rate/Month	Unit
No data available in table			

Showing 0 to 0 of 0 entries

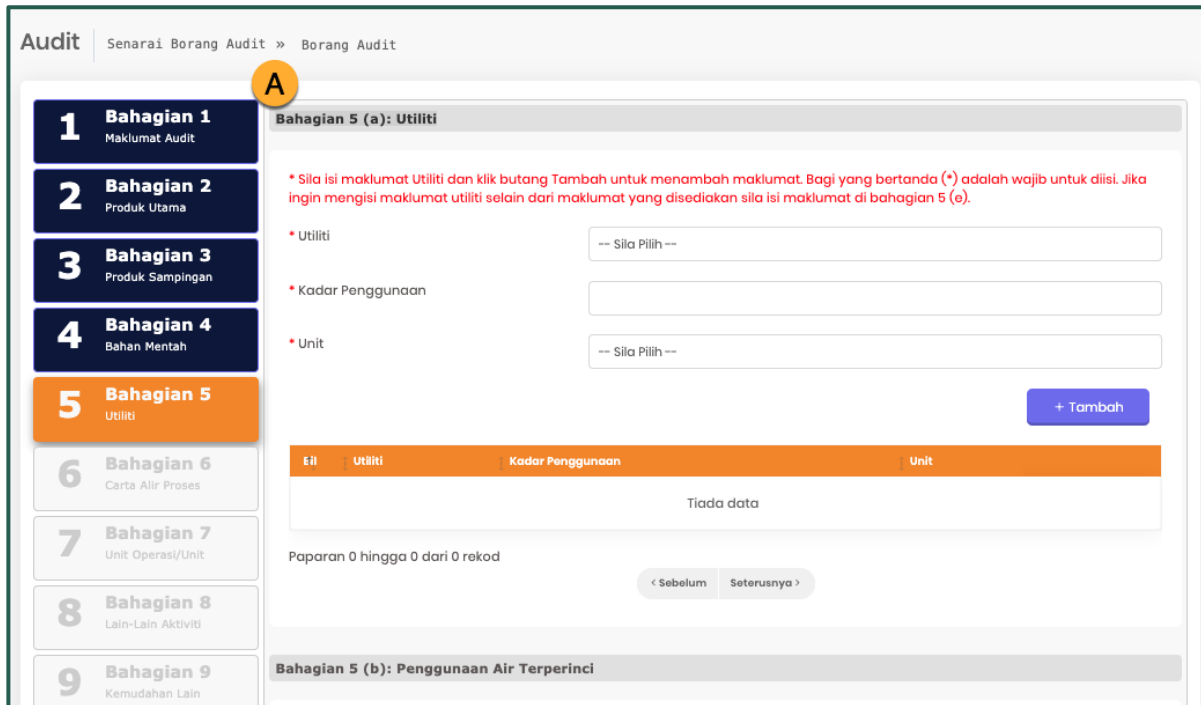
< Previous Next >

A) Complete the Raw Material Consumptions details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.5 UTILITY



Audit | Senarai Borang Audit » Borang Audit

1 Bahagian 1
Maklumat Audit

2 Bahagian 2
Produk Utama

3 Bahagian 3
Produk Sampungan

4 Bahagian 4
Bahan Mentah

5 Bahagian 5
Utiliti

6 Bahagian 6
Certa Alir Proses

7 Bahagian 7
Unit Operasi/Unit

8 Bahagian 8
Lain-Lain Aktiviti

9 Bahagian 9
Kemudahan Lain

Bahagian 5 (a): Utiliti

* Sila isi maklumat Utiliti dan klik butang Tambah untuk menambah maklumat. Bagi yang bertanda (*) adalah wajib untuk diisi. Jika ingin mengisi maklumat utiliti selain dari maklumat yang disediakan sila isi maklumat di bahagian 5 (e).

* Utiliti

* Kadar Penggunaan

* Unit

+ Tambah

Eil	Utiliti	Kadar Penggunaan	Unit
Tiada data			

Paparan 0 hingga 0 dari 0 rekod

< Sebelum Seterusnya >

Bahagian 5 (b): Penggunaan Air Terperinci

A) This section has several sub-sections:

- Sub-Section 5 (a): Utilities
- Sub-Section 5 (b): Detailed Use of Water
- Sub-Section 5 (c): Detailed Electricity Consumption
- Sub-Section 5 (d): Detailed Fuel Consumption
- Sub-Section 5 (e): Other Detailed Utilization of Utilities

Please scroll down to view sub-section 5.

USER MANUAL

INDUSTRY

8.5.1 UTILITY

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 5 (a): Utility

A

* Please fill in the Utility information and click the Add button to add the information. For those marked (*) it is required to fill out. If you would like to fill in the utility information other than the information provided please fill out the information in Part 5 (a).

* Utility

* Production Rate/Month

* Unit

B + Add

No	Utility	Production Rate/Month	Unit
No data available in table			

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Utility details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.5.2 WATER CONSUMPTION

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

Part 5 (b): Water Consumption

A

* Please fill in the Detailed Water Consumption information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type of Usage

* Production Rate/Month (m³/month)

B [+ Add](#)

No	Type of Usage	Production Rate/Month (m³/month)
No data available in table		

Showing 0 to 0 of 0 entries

[< Previous](#) [Next >](#)

A) Complete Water Consumption details.

B) Then click [+ Add](#).

For those marked (*) is mandatory to complete if you want to add and save the information.

USER MANUAL

INDUSTRY

8.5.3 ELECTRICITY CONSUMPTION

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 5 (c): Electric Consumption

A

* Please fill in the Detailed Electric Consumption information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type of Usage

* Quantity

* Rate of Power (kW)

* Production Rate/Month

B + Add

No	Type of Usage	Quantity	Rate of Power (kW)	Production Rate/Month	kWh
No data available in table					

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Electricity Consumption details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.5.4 FUEL CONSUMPTION

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 5 (d): Fuel Consumption

* Please fill in the Detailed Fuel Consumption information and click the Add button to add more information. For those marked (*) are required to fill out.

* Fuel Type -- Please Choose --

* Type of Usage

* Production Rate/Month

* Unit -- Sila Pilih --

B + Add

No	Fuel Type	Type of Usage	Production Rate/Month	Unit
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Fuel Consumption details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.5.5 OTHER UTILITY CONSUMPTION

Part 5 (e): Other Utility Consumptions (If Available)

A

* Please fill in the Additional Utility Details information and click the Add button to add information. For those marked (*) it is required to fill in.

* Utility Type

* Type of Usage

* Production Rate/Month

* Unit

B [+ Add](#)

No	Utility Type	Type of Usage	Production Rate/Month	Unit
No data available in table				

Showing 0 to 0 of 0 entries

[< Previous](#) [Next >](#)

A) Complete Other Utility Consumption details.

B) Then click [+ Add](#).

For those marked (*) is mandatory to complete if you want to add and save the information.

8.6 PROCESS FLOW DIAGRAM

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 6: Process Flow Diagram

Please fill in the Process Flow Diagram information and click the Add button to add more information. For those marked (*) it is required to fill out.

* File Name

* Description

* File Choose file

B

No	File Name	Description
No data available in table		

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the Process Flow Diagram detail. For the File area please click

and select the file. The file formats accepted are jpeg, jpg, gif, svg and pdf only.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.7 UNIT OPERATION/ACTIVITY

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 7: Unit Operation/Activity

* Please fill in the Unit Operations / Activity information and click the Add button to add information. For those marked (*) it is required to fill out.

* Name

* Function

B + Add

No	Name	Function
No data available in table		

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Operations / Activity Unit details.

B) Then click **+ Add**.

For those marked (*) is mandatory to complete if you want to add and save the information.

8.8 OTHER ACTIVITY

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

Part 8: Other Activity

A

* Please fill in the Other Activity information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Activity

* Function

B + Add

No	Activity	Function
No data available in table		

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Other Activity details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.9 FACILITY

Part 9: Facility

Please fill in the Facility information and click the Add button to add information. For those marked (*) it is required to fill out.

* Facility

* Function

+ Add

No	Facility	Function
No data available in table		

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete Facility details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.10 WASTE QUANTIFICATION

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

9 Part 9
Facility

**10 Part 10
Waste Quantification**

11 Part 11
Wasted

12 Part 12
Raw Material Spillage /
Discarded Product / Etc

13 Part 13
Energy Loss

14 Part 14
Safety and Health Risk

15 Part 15
Complaint Received

16 Part 16
Housekeeping Issues

17 Part 17
Other Observation

18 Part 18
Summary

Part 10 (a): Wastewater

** Please fill in the Wastewater information and click the Add button to add more information. For those marked (*) it is required to fill out. If there is no value for COD or BOD please enter value 0.*

* Source

* Amount Generated (m³/month)

* Wastewater Characteristic (COD) (mg/l)

* Wastewater Characteristic (BOD) (mg/l)

+ Add

No	Source	Amount Generated (m ³ /month)	Wastewater Characteristic	
			COD (mg/l)	BOD (mg/l)
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

Part 10 (b): Industrial Effluent Treatment System (IETS)

** Please fill in the information on the Industrial Effluent Treatment System and click the Add button to add more information. For those marked (*) it is required to fill out.*

* Type

* Function

+ Add

No	Type	Function
No data available in table		

Showing 0 to 0 of 0 entries

< Previous Next >

Previous Next Send

↑

Copyrights Reserved © 2020 Department of Environment

A) This section has several sub-sections:

- Sub-Section 10 (a): Wastewater
- Sub-Section 10 (b): Industrial Effluent Treatment System (IETS)

Please scroll down to view sub-section 10.

8.10.1 WASTEWATER

Part 10 (a): Wastewater

A

* Please fill in the Wastewater information and click the Add button to add more information. For those marked (*) it is required to fill out. If there is no value for COD or BOD please enter value 0.

* Source

* Amount Generated (m³/month)

* Wastewater Characteristic (COD) (mg/l)

* Wastewater Characteristic (BOD) (mg/l)

B

No	Source	Amount Generated (m ³ /month)	Wastewater Characteristic	
			COD (mg/l)	BOD (mg/l)
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete WasteWater details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

USER MANUAL

INDUSTRY

8.10.2 INDUSTRIAL EFFLUENT TREATMENT SYSTEM (IETS)

Part 10 (b): Industrial Effluent Treatment System (IETS)

* Please fill in the information on the Industrial Effluent Treatment System and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type

* Function

B [+ Add](#)

No	Type	Function
No data available in table		

Showing 0 to 0 of 0 entries

[< Previous](#) [Next >](#)

A) Complete Industrial Effluent Treatment System (IETS) details.

B) Then click [+ Add](#).

For those marked (*) is mandatory to complete if you want to add and save the information.

8.11 WASTE

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

9 Part 9
Facility

10 Part 10
Waste Quantification

**A 11 Part 11
Wasted**

12 Part 12
Raw Material Spillage /
Discarded Product / Etc

13 Part 13
Energy Loss

14 Part 14
Safety and Health Risk

15 Part 15
Complaint Received

16 Part 16
Housekeeping Issues

17 Part 17
Other Observation

18 Part 18
Summary

+ Add

No	Waste	Location	Amount Generated	Unit
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

Part 11 (b): Schedule Waste

* Please fill in the Schedule Waste information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type of Waste

-- Sila Pilih --

* Waste Explanation

* Location

* Amount Generated

* Unit

-- Sila Pilih --

+ Add

No	Type of Waste	Waste Explanation	Location	Amount Generated	Unit
No data available in table					

Showing 0 to 0 of 0 entries

< Previous Next >

Part 11 (c): Gaseous Emissions Quantification

* Please fill in the Gaseous Emissions Quantification information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type

* Location

* Amount Released

Previous Next Send

Copyrights Reserved © 2020 Department of Environment

A) This section has several sub-sections:

- Sub-Section 11 (a): Solid Waste Produced (Non-Scheduled)
- Sub-Section 11 (b): Production of Scheduled Wastes
- Sub-Section 11 (c): Release of Gas Emissions (other than Steam)

Please scroll down to view sub-section 11.

8.11.1 NON-SCHEDULED WASTE

Part 11 (a): Non-Schedule Waste

A

* Please fill in the Non-Schedule Waste information and click the Add button to add the information. For those marked (*) it is required to fill in.

* Waste

* Location

* Amount Generated

* Unit

-- Sila Pilih --

B

+ Add

No	Waste	Location	Amount Generated	Unit
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the Non-Scheduled Waste details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.11.2 SCHEDULED WASTE

Part 11 (b): Schedule Waste

A

* Please fill in the Schedule Waste information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type of Waste

* Waste Explanation

* Location

* Amount Generated

* Unit

B

No	Type of Waste	Waste Explanation	Location	Amount Generated	Unit
No data available in table					

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the Scheduled Waste details.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.11.3 GASEOUS EMISSIONS QUANTIFICATION

Part 11 (c): Gaseous Emissions Quantification

A

* Please fill in the Gaseous Emissions Quantification information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Type

* Location

* Amount Released

* Unit

B

No	Type	Location	Amount Released	Unit
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the Gaseous Emissions Quantification details

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.12 RAW MATERIAL SPILLAGE / DISCARDED PRODUCT /ETC

Part 12: Raw Material Spillage/Discarded Product/Etc

A

* Sila isi maklumat Kehilangan Bahan Mentah/ Produk Rosak/ DLL dan klik butang Tambah untuk menambah maklumat. Bagi yang bertanda (*) adalah wajib untuk diisi.

* Material

* Possible Causes

* Amount

* Unit

B

No	Material	Possible Causes	Amount	Unit
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

- A) Complete the information Raw Material Spillage / Discarded Product / and Other details.
- B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.13 ENERGY LOSS

1 Part 1
Basic Audit Information

2 Part 2
Main Product

3 Part 3
By Product

4 Part 4
Raw Material Consumption

5 Part 5
Utility

6 Part 6
Progress Flow Diagram

7 Part 7
Unit Operation / Activity

8 Part 8
Other Activity

9 Part 9
Facility

10 Part 10
Waste Quantification

11 Part 11
Wasted

12 Part 12
Raw Material Spillage /
Discarded Product / Etc

A 13 Part 13
Energy Loss

14 Part 14
Safety and Health Risk

15 Part 15
Complaint Received

16 Part 16
Housekeeping Issues

17 Part 17
Other Observation

18 Part 18
Summary

Part 13 (a): Energy Loss From Hot Surface

Please fill in the Energy Loss from Hot Surface information and click Add button to add more information. It is required to fill out field marked (*).

Click the '📄' button to get results of Total Surface Area. To reprint the results of Total Surface Area, please click button: '🖨'

* Source

* Surface Area, A m²

* Energy Loss, h

* Surface Temperature, T_s (°C)

No	Source	Surface Area, A (m ²)	Energy Loss, h	Surface Temperature, T _s	Total Heat Loss (kW) Q = hA(T _s - 28)
No data available in table					

Showing 0 to 0 of 0 entries

< Previous Next >

Part 13 (b): Energy Loss Through Hot Material

* Please fill in the Energy Loss Through Hot Material information and click the Add button to add information. For those marked (*) it is required to fill out.

* Source

* Mass FlowRate, m (kg/s)

* Heat Capacity (C_p)

* Material Temperature, T_b (°C)

No	Source	Mass FlowRate, m (kg/s)	Heat Capacity, C _p	Material Temperature, T _b	Total Heat Loss (kW) Q = mC _p (T _b - 28°C)
No data available in table					

Showing 0 to 0 of 0 entries

Previous Next Send

Copyrights Reserved © 2020 Department of Environment

A) This section has several sub-sections:

- Sub-Section 13 (a): Energy Loss from Hot Surface
- Sub-Section 13 (b): Energy Loss Through Hot Material
- Sub-Section 13 (c): Energy Loss Through Cold Materials
- Sub-Section 13 (d): Energy Loss from Latent Heat

Please scroll down to view sub-section 13.

8.13.1 ENERGY LOSS FROM HOT SURFACE

Part 13 (a): Energy Loss From Hot Surface

Please fill in the Energy Loss from Hot Surface information and click Add button to add more information. It is required to fill out field marked (*).

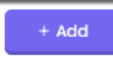
Click the '  ' button to get results of Total Surface Area. To reprint the results of Total Surface Area, please click button. '  '.

* Source

* Surface Area, A m² 

* Energy Loss, h

* Surface Temperature, T_s (°C)

No	Source	Surface Area, A (m ²)	Energy Loss, h	Surface Temperature, T _s	Total Heat Loss (kW) $Q = hA(T_s - 28)$
No data available in table					

Showing 0 to 0 of 0 entries

- A) Click  to calculate surface area. Select Type of Surface and click . Other surface types can be added and by clicked . Click  to copy a surface result. Click  in the surface area to paste the result surface area.
- B) Complete the details of Energy Loss from Hot Surface
- C) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.13.2 ENERGY LOSS THROUGH HOT MATERIAL

Part 13 (b): Energy Loss Through Hot Material

* Please fill in the Energy Loss Through Hot Material information and click the Add button to add information. For those marked (*) it is required to fill out.

* Source

* Mass FlowRate, m (kg/s)

* Heat Capacity (Cp)

* Material Temperature, T_b (°C)

B + Add

No	Source	Mass FlowRate, m (kg/s)	Heat Capacity, C _p	Material Temperature, T _b	Total Heat Loss (kW) Q = mC _p (T _b - 28°C)
No data available in table					

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the details of Energy Loss of Through Hot Materials

B) Then click + Add.

For those marked (*) is mandatory to complete if you want to add and save the information.

8.13.3 LOSS OF ENERGY THROUGH COLD MATERIAL

Part 13 (c): Energy Loss Through Cold Material

A

* Please fill in the Energy Loss Through Cold Material information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Source

* Mass FlowRate, m (kg/s)

* Heat Capacity (Cp)

* Material Temperature, T_b (°C)

B

No	Source	Mass FlowRate, m(kg/s)	Heat Capacity, C _p	Material Temperature, T _b	Total Heat Loss (kW) $Q = mC_p 28^\circ\text{C} - T_b$
No data available in table					

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the information Energy Loss Through Cold Materials

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.13.4 LOSS ENERGY FROM LATENT HEAT

Part 13 (d): Energy Loss From Latent Heat (Steam)

A

* Please fill in the Energy Loss From Latent Heat (Steam) and click the Add button to add information. For those marked (*) it is required to fill out.

* Source

* Rate of Discharged, m (kg/s)

B

No	Source	Rate of Discharged, m	Thermal Conductivity, L	Energy Loss, Q = mL (kW)
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the details of Energy Loss from Latent Heat.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.14 SAFETY AND HEALTH RISK

Part 14: Safety and Healthrisk ⓘ

* Please fill in the Safety & Healthrisk information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Observation

* Comment

* Possibility ⓘ

* Risk ⓘ

B

No	Observation	Comment	Possibility
No data available in table			

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete details of Safety and Health Risk.

B) Click ⓘ to display the information guide.

C) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.15 COMPLAINT RECEIVED

Part 15: Complaint Received

* Please fill in the Complaint Received information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Complaint

* Frequency

* Action Taken

+ Add

No	Complaint	Frequency	Action Taken
No data available in table			

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the details of Complaint Received.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.16 HOUSEKEEPING ISSUES

Part 16: Housekeeping Issues

* Please fill in the Housekeeping Issues information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Issue

* Location

* Effect on Quality/Productivity/Safety

B + Add

No	Issue	Location	Effect on Quality/Productivity/Safety
No data available in table			

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the details of Housekeeping Issues.

B) Then click .

For those marked (*) is mandatory to complete if you want to add and save the information.

8.17 OTHER OBSERVATION

Part 17: Other Observation A

* Please fill in the Other Observation information and click the Add button to add more information. For those marked (*) it is required to fill out.

* Observation

* Location

* Effect on Quality/Productivity

B + Add

No	Observation	Location	Effect on Quality/Productivity
No data available in table			

Showing 0 to 0 of 0 entries

< Previous Next >

A) Complete the details of Other Observations.

B) Then click + Add.

For those marked (*) is mandatory to complete if you want to add and save the information.

8.18 SUMMARY OF AUDIT

Part 18: Summary

* Sila isi maklumat Ringkasan dan klik butang Simpan untuk menyimpan maklumat yang sudah diisi. Bagi yang bertanda (*) adalah wajib untuk diisi.

Part 10 (a): Wastewater

Sl	Source	Amount Generated (m ³ /month)	Wastewater Characteristic	
			COD (mg/l)	BOD (mg/l)
No data available in table				

Showing 0 to 0 of 0 entries

< Previous Next >

*** Comment**

Save

Previous Next Send

Copyrights Reserved © 2020 Department of Environment

A) Click the relevant tab to comment each of the section.

B) This table is as a guide to complete the comment.

C) Complete the comments in this section.

D) Then click **Save**.

For those marked (*) it is mandatory to complete if you wish to retain such information.

E) When you're done please scroll down and click **Send**

9 AUDIT FORM WITH STATUS SEND

A) The status will be change to the **Dihantar** after sending the audit form.

B) Click  to display the submitted audit form.

C) Click on the tab **Audit Form** or **Premises Audit Report** to display the completed audit form details.

D) To print this Audit Form please click  **Print**.

10 AUDIT FORM WITH STATUS AMENDMENT

ID	NO AUDIT	NAMA PREMIS	JENIS KATEGORI INDUSTRI	STATUS	TARikh MENCIPTA
1	JAS/01/182188111		Plastik	Pindaan	06/07/2020 00:49:45

A) DOE Officer will review the audit form. If there is an amendment, the status section will change to **Pindaan**

HALAMAN UTAMA	PENGESAHAN DISEMAK	CATATAN
Maklumat Asas	Setuju	Sudah disemak
Produk Utama	Setuju	Sudah disemak
Produk Sampungan	Setuju	Sudah disemak
Bahan Mentah	Setuju	Sudah disemak
Utiliti	Tidak	Semak semula
Carta Aliran Process	Setuju	Sudah disemak
Unit Operasi/ Unit	Setuju	Sudah disemak
Lain-Lain Aktiviti	Setuju	Sudah disemak
Kemudahan Lain	Setuju	Sudah disemak
Air Sisa	Setuju	Sudah disemak
Penghasilan Buangan	Setuju	Sudah disemak

B) Click  to display the audit verification form.

USER MANUAL

INDUSTRY

Audit | Senarai Borang Audit > Borang Audit

1 Bahagian 1
Maklumat Audit

2 Bahagian 2
Produk Utama

3 Bahagian 3
Produk Sampingan

4 Bahagian 4
Bahan Mentah

5 Bahagian 5
Utiliti

6 Bahagian 6
Carta Alir Proses

7 Bahagian 7
Unit Operasi/Unit

8 Bahagian 8
Lain-Lain Aktiviti

9 Bahagian 9
Kemudahan Lain

10 Bahagian 10
Air Sisa

11 Bahagian 11
Penghasilan Buangan

12 Bahagian 12

Bahagian 1 (a): Maklumat Audit

Objektif Audit

Bagi yang bertanda (*) adalah wajib untuk diisi.

a) Penggunaan Tenaga Elektrik

- Mengenalpasti sumber tenaga elektrik yang digunakan
- Mengenalpasti kuantiti tenaga elektrik dan kadar penggunaan
- Mengenalpasti punca berlakunya pembaziran penggunaan tenaga elektrik

b) Penggunaan Bahan Bakar

- Mengenalpasti jenis bahan bakar yang digunakan
- Mengenalpasti kuantiti bahan bakar dan penggunaan
- Mengenalpasti punca berlakunya pembaziran penggunaan bahan bakar

c) Penggunaan Air

- Mengenalpasti sumber air yang digunakan
- Mengenalpasti kuantiti dan penggunaan air
- Mengenalpasti punca berlakunya pembaziran penggunaan air

d) Penghasilan air sisa

- Mengenalpasti punca-punca penghasilan air sisa
- Mengenalpasti kuantiti penghasilan air sisa
- Mengenalpasti langkah-langkah pengurangan penghasilan air sisa

e) Penghasilan sisa berbahaya/ sisa pepejal

- Mengenalpasti punca-punca penghasilan sisa pepejal berbahaya
- Mengenalpasti kuantiti penghasilan sisa pepejal/berbahaya

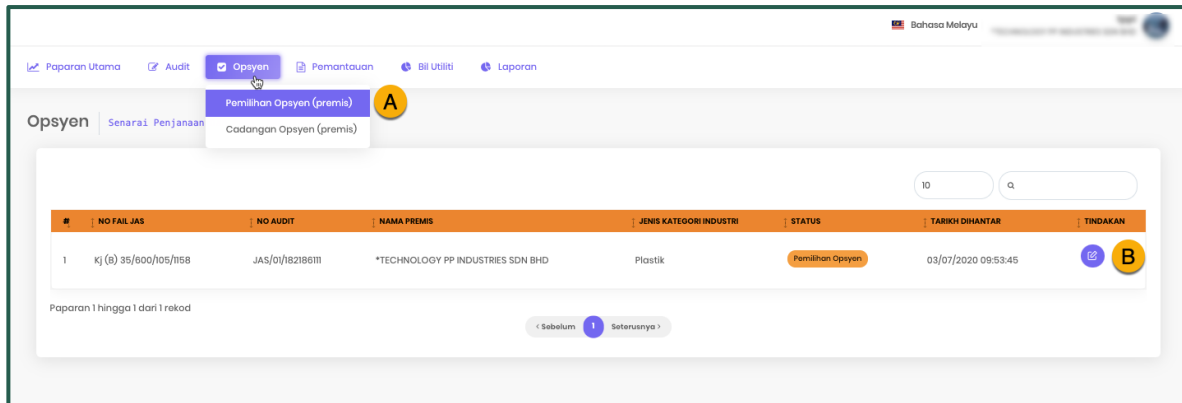
* Nama Auditor :

* Tarikh Audit :

 Simpan

C) Click  to correct the amendment of the audit form. Marked part  is the part where the amendment is made. Only the parts that need to be changed can be updated.

11 SELECTION OF OPTIONS



- A) Click Options in the menu section and click the Selection of Options sub-menu.
- B) Click the button  to complete the Option Selection.

USER MANUAL INDUSTRY

Penjanaan Dan Pemilihan Opsyen

10

#	Nama Opsyen	Faedah	Pilih Opsyen
1	Menukar mesin pengupas sekam dan pengayak sekam kepada mesin baru, Paddy Husker di mana kedua-dua proses tersebut dijalankan secara serentak di dalam satu unit mesin. [Hurufan] - Ruang premis yang terhad. - Sistem operasi yang lambat. - Pencemaran habuk di dalam kilang.	- Sistem operasi yang lebih cekap. - Kurang penghasilan habuk. - Kos operasi dikurangkan dan profit dapat dipertingkatkan.	TIDAK ☐ YA ☐
2	Optimalkan masa pengadukkan. [Hurufan] Masa pengadukkan tidak sistematik	- Pengurangan penggunaan tenaga elektrik. - Peningkatan produktiviti.	TIDAK ☐ YA ☐
3	Cadangan pemasangan variable speed driver (VSD) atau inverter pada kipas ID dan pam untuk mengawal kadar aliran arus (current) pada motor dapat menjimatkan tenaga elektrik adalah di antara [Hurufan] - Pembaziran tenaga elektrik. - Motor tidak optimum dan tidak tahan lama.	- Penjimatan tenaga elektrik. - Motor berfungsi secara optimum dan tahan lebih lama	TIDAK ☐ YA ☐
4	Optimalkan jenis pengaduk. [Hurufan] Tiada kaedah kerja piawai (SOP) untuk kakitangan.	- Pengurangan penggunaan tenaga elektrik. - Peningkatan produktiviti.	TIDAK ☐ YA ☐
5	Penukaran Tariff Elektrik Dari Tariff D Ke Tariff E1 [Hurufan] - Pekerja kurang terlatih. - Penyelenggaraan mesin dan pembaikan kerosakan dilakukan oleh pekerja separuh mahir. - Kurang kesedaran tentang keselamatan dan kesihatan pekerjaan.	- Penjimatan kos sebanyak 8% akan diperolehi oleh pihak premis daripada tariff transformasi	TIDAK ☐ YA ☐
6	Pasang kipas dan sistem ventilasi untuk mempercepatkan proses penyejukan produk. [Hurufan] Proses penyejukan yang lambat dengan menggunakan suhu persekitaran	- Peningkatan produktiviti. - Peningkatan kualiti produk.	TIDAK ☐ YA ☐
7	Pasang pemacu boleh laras kelajuan (variable speed drive) [Hurufan] Kelajuan pengaduk tidak sekata	- Pengurangan penggunaan tenaga elektrik dari pengoptimuman proses pengadukkan.	TIDAK ☐ YA ☐
8	Pasang pemacu boleh laras kelajuan (variable speed drive) [Hurufan] Pembaziran tenaga elektrik dan motor tidak optimum dan tidak tahan lama.	- Pengurangan penggunaan tenaga elektrik dari pengoptimuman proses pengadukkan.	TIDAK ☐ YA ☐
9	Automasikan sistem pencucian botol. [Hurufan] Pencucian botol secara manual	- Peningkatan produktiviti.	TIDAK ☐ YA ☐
10	Optimalkan kelajuan proses pengisian. [Hurufan] Kelajuan yang tidak sekata menyebabkan bahan tumpah	- Kurangkan kehilangan bahan melalui tumpahan. - Peningkatan produktiviti.	TIDAK ☐ YA ☐

Paparan 1 hingga 10 dari 47 rekod

Sebelum 1 2 3 4 5 Seterusnya

Next

Sebelum Seterusnya

Hakcipta Terpelihara © 2020 Jabatan Alam Sekitar

C) Click the tab to select options for different entities or click [Next](#).

D) Click ☐ NO ☐ YES to select an option.

E) Click this section to select the next option.

F) Click the section  Summary of Option to display the selected options.

USER MANUAL

INDUSTRY

Penjanaan Dan Pemilihan Opsyen

Tenaga Elektrik 91.78% — Sisa Pepejal 4.76% — Bahan Api 2.78% — Risiko — Tatasusun — Ringkasan Pemilihan Opsyen

Nama Opsyen

1	Sisa Pepejal Meletak papan tanda atau label berkaitan kebersihan premis.
2	Tatasusun Merekod data kapasiti berat beras di bahagian kemasukan atau intake beras.
3	Tenaga Elektrik Optimakan masa pengadukkan.

Paparan 1 hingga 3 dari 3 rekod

Tarikh Pelaksanaan Opsyen

Tarikh Mula* **Tarikh Selesai***

DD/MM/YYYY DD/MM/YYYY

DD/MM/YYYY DD/MM/YYYY

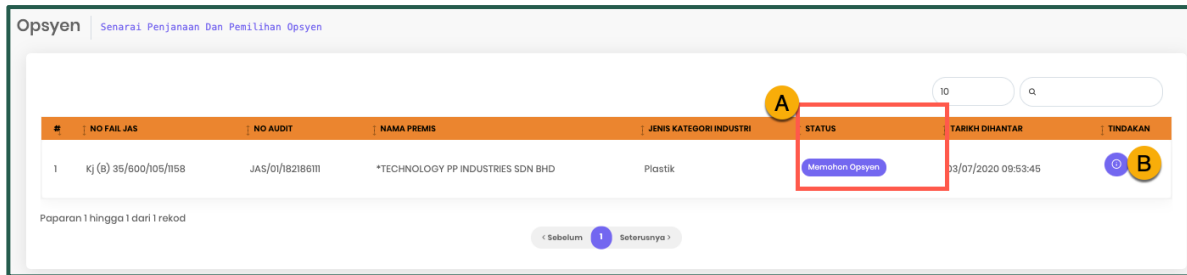
DD/MM/YYYY DD/MM/YYYY

Sebelum **Selesai**

G) Enter option implementation date (Start and End Date)

H) Click **Finish** to send the Selected Options.

12 SELECTION OF OPTIONS WITH STATUS APPLYING FOR OPTIONS



A) The status will be change to the **Memohon Opsyen** after selected option send.

B) Click  to display the Selected Options Selection.

13 SELECTION OF OPTIONS WITH STATUS AMENDMENT

Opsyen | Senarai Penjanaaan Dan Pemilihan Opsyen

#	NO FAIL JAS	NO AUDIT	NAMA PREMIS	JENIS KATEGORI INDUSTRI	STATUS	TARIKH DIHANTAR	TINDAKAN
1	KJ (a) 35/600/105/1168	JAS/01/182186111	*TECHNOLOGY PP INDUSTRIES SDN BHD	Plastik	Pindaan Opsyen	03/07/2020 09:53:45	

Paparan 1 hingga 1 dari 1 rekod

< Sebelum 1 Seterusnya >

A) DOE officers will check the Option Selection. If there is an amendment, the status section will change to **Pindaan**

Penjanaaan Dan Pemilihan Opsyen








10 Q

#	Nama Opsyen	Faedah	Pilih Opsyen
1	Menukar mesin pengupas sekam dan pengayak sekam kepada mesin baru, Paddy Husker di mana kedua-dua proses tersebut dijalankan secara serentak di dalam satu unit mesin. [Kuraian] · Ruang premis yang terhad. · Sistem operasi yang lambat. · Pencemaran habuk di dalam kilang.	· Sistem operasi yang lebih cekap. · Kurang penghasilan habuk. · Kos operasi dikurangkan dan profit dapat dipertingkatkan.	TIDAK ☐ YA ☐
2	Optimalkan masa pengadukkan. [Kuraian] Masa pengadukan tidak sistematik	· Pengurangan penggunaan tenaga elektrik. · Peningkatan produktiviti.	TIDAK ☒ YA ☐
3	Cadangan pemasangan variable speed driver (VSD) atau inverter pada kipas ID dan pam untuk mengawal kadar aliran arus (current) pada motor dapat menjimatkan tenaga elektrik adalah di antara [Kuraian] · Pembaziran tenaga elektrik. · Motor tidak optimum dan tidak tahan lama.	· Penjimatan tenaga elektrik. · Motor berfungsi secara optimum dan tahan lebih lama	TIDAK ☐ YA ☐
4	Optimalkan jenis pengaduk. [Kuraian] Tiada kaedah kerja piawai (SOP) untuk kakitangan.	· Pengurangan penggunaan tenaga elektrik. · Peningkatan produktiviti.	TIDAK ☐ YA ☐

Seterusnya

B) Click  to display the generation and selection of options.

C) Click in part  Summary of Option to display the status of the selected option.

You can still add new option selections.

USER MANUAL INDUSTRY

#	Nama Opsyen	Tarikh Pelaksanaan Opsyen		Keputusan	Komen
		Tarikh Mula*	Tarikh Selesai*		
1	Sisa Pepejal Meletak papan tanda atau label berkaitan kebersihan premis.	07/07/2020	15/07/2022	!	E
2	Tatasusun Merekod data kapasiti berat beras di bahagian kemasukan atau intake beras.	07/07/2020	12/07/2024	X	
3	Tenaga Elektrik Optimalkan masa pengadukkan.	07/07/2020	21/07/2022	✓	

Paparan 1 hingga 3 dari 3 rekod

Sebelum Selesai

D) The results of the selection process are:

- i. ! is a sign for option selection that requires a date amendment

Please make the amendments to the new date by including the option date (Start and End Date).

- ii. X is a sign for the selection of a disagreement option.

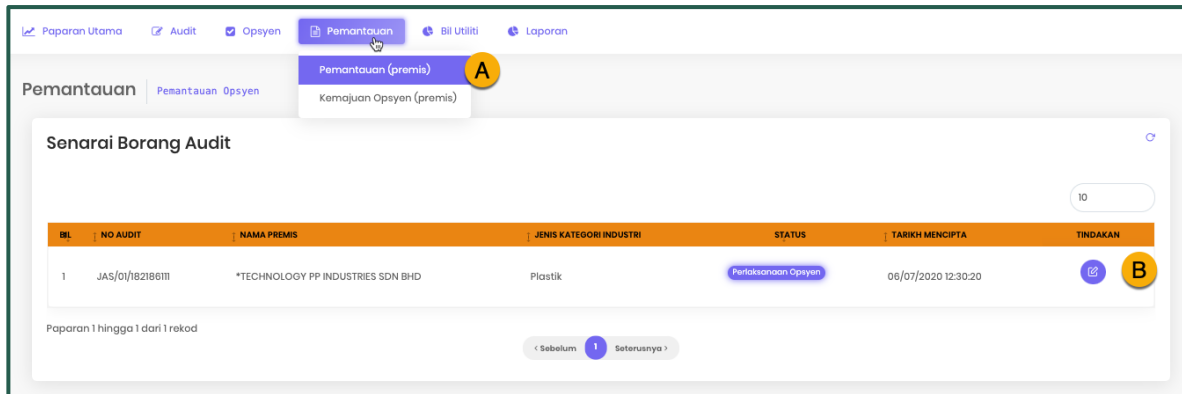
If the selection of options that not been verify by DOE, this option will not be included in the monitoring of options. This option will be dropped immediately.

- iii. ✓ is a sign of selection of options that had been verified

E) Click  to display comments from DOE Officers or to add new comments to DOE Officers.

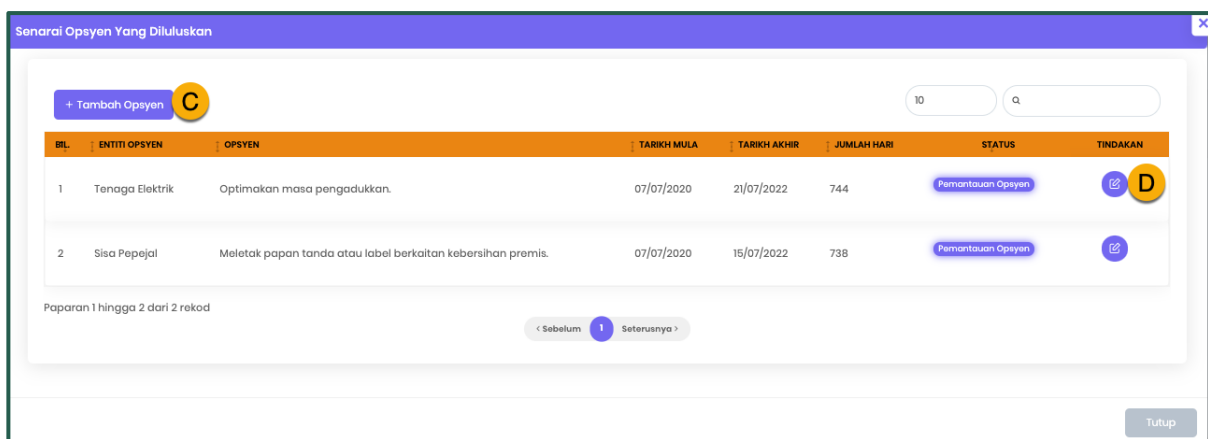
F) Click  to submit the Amendments Options.

14 MONITORING FORM



A) Click Monitoring in the menu section and click the Monitoring sub-menu.

B) Click the button  to display the approved options list.



C) Click  to add a new option

D) Click  to complete the monitoring form.

USER MANUAL INDUSTRY

Borang Pemantauan Opsyen

Isu	:	Masa pengadukan tidak sistematik
Kawasan	:	Kawasan
Sumber / Punca	:	Pengurangan penggunaan tenaga elektrik., Peningkatan produktiviti.
Opsyen	:	Optimalkan masa pengadukan.
Tarikh Opsyen	:	07/07/2020 - 21/07/2022

F

1 Bahagian 1
Cabaran Mungkin Hadapi

2 Bahagian 2
Sumber Yang Diperlukan

3 Bahagian 3
Kos Pelaburan

4 Bahagian 4
Penambahan Kos

5 Bahagian 5
Pulangan (kadar bulanan)

6 Bahagian 6
Pulangan lain

7 Bahagian 7
Merit Implementasi

8 Bahagian 8
Dokumentasi

9 Bahagian 9
Pelan Pemantauan

Bahagian 1: Cabaran Mungkin Hadapi
Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.

No	Jenis Cabaran	Tindakan
1	Tiada kepakaran	☐
2	Komitment pihak pengurusan syarikat	☐
3	Proses pembuatan yang tidak boleh dihentikan	☐
4	Terlalu Berisiko	☐
5	Boleh memberi kesan terhadap kualiti produk	☐

< Sebelum **1** Seterusnya >

F Kembali Seterusnya

Peratusan pelaksanaan opsyen terkini: 0 % **G**

H ☒

E) Enter Area information.

F) These parts need to be completed. Please click **Next** to the next section. Or click **Previous** to return to the previous section. Active sections are clickable.

1 Bahagian 1
Cabaran Mungkin Hadapi

2 Bahagian 2
Sumber Yang Diperlukan

3 Bahagian 3
Kos Pelaburan

4 Bahagian 4
Penambahan Kos

5 Bahagian 5
Pulangan (kadar bulanan)

6 Bahagian 6
Pulangan lain

7 Bahagian 7
Merit Implementasi

8 Bahagian 8
Dokumentasi

9 Bahagian 9
Pelan Pemantauan

Bahagian 1: Cabaran Mungkin Hadapi
Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.

No	Jenis Cabaran	Tindakan
1	Tiada kepakaran	☒ a
2	Komitment pihak pengurusan syarikat	☐
3	Proses pembuatan yang tidak boleh dihentikan	☐
4	Terlalu Berisiko	☐
5	Boleh memberi kesan terhadap kualiti produk	☐

< Sebelum **1** Seterusnya >

i. Part 1: Possible Challenges

(a) Click ☒ to select the relevant

USER MANUAL

INDUSTRY

1 Bahagian 1 Cabaran Mungkin Hadapi	Bahagian 2: Sumber Yang Diperlukan
2 Bahagian 2 Sumber Yang Diperlukan	Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.
3 Bahagian 3 Kos Pelaburan	
4 Bahagian 4 Penambahan Kos	
5 Bahagian 5 Pulangan (kadar bulanan)	
6 Bahagian 6 Pulangan lain	
7 Bahagian 7 Merit Implementasi	
8 Bahagian 8 Dokumentasi	
9 Bahagian 9 Bahasa Berbilang	

#	Sumber-sumber yang diperlukan	Tindakan
1	Teknologi	
2	Tenaga kerja	
3	Latihan	
4	Kesedaran	
5	Modifikasi Process	
6	Modifikasi Parameter Pengoperasian	
7	Penukaran Bahan	

ii. Part 2: Required Resources

(a) Click  to select the relevant

1 Bahagian 1 Cabaran Mungkin Hadapi	Bahagian 3: Kos Pelaburan
2 Bahagian 2 Sumber Yang Diperlukan	Sila masukkan amaun dengan menekan button dibahagian Tindakan.
3 Bahagian 3 Kos Pelaburan	
4 Bahagian 4 Penambahan Kos	
5 Bahagian 5 Pulangan (kadar bulanan)	
6 Bahagian 6 Pulangan lain	
7 Bahagian 7 Merit Implementasi	
8 Bahagian 8 Dokumentasi	
9 Bahagian 9 Bahasa Berbilang	

#	Item	Amaun Diperlukan (RM)	Tindakan
1	Kerja-Kerja elektrik (cth: pendawaian)	0	
2	Pembelian Peralatan	0	
3	Kerja-Kerja Pembinaan	0	
4	Kehilangan Pendapatan Semasa Shut-Down	0	
5	Kos Tenaga Kerja	0	

iii. Part 3: Investment Costs

(a) Click  to update this section.

* Jumlah Amaun Yang Diperlukan	RM	
* Nota: Sila tekan butang Tambah untuk menambah Jumlah Amaun		Tambah

Click to store that information.

USER MANUAL

INDUSTRY

1 Bahagian 1 Cabaran Mungkin Hadapi	Bahagian 4: Penambahan kos pengoperasian disebabkan oleh modifikasi (kadar bulanan)
2 Bahagian 2 Sumber Yang Diperlukan	Sila masukkan amaun dengan menekan button dibahagian Tindakan.
3 Bahagian 3 Kos Pelaburan	
4 Bahagian 4 Penambahan Kos	
5 Bahagian 5 Pulangan (kadar bulanan)	
6 Bahagian 6 Pulangan lain	
7 Bahagian 7 Merit Implementasi	
8 Bahagian 8 Dokumentasi	
9 Bahagian 9 Pelaksanaan Pemantauan	

Item	Amaun Diperlukan (RM)	Tindakan
1 Tenaga Kerja	0	
2 Tenaga Elektrik	0	
3 Stim	0	
4 Bahan Api	0	
5 Penyelenggaraan	0	

iv. Part 3: Increase in Operating Cost due to Modifications (Monthly Basis)

(b) Click  to update this section.

* Jumlah Amaun Yang Diperlukan	RM	
* Nota: Sila tekan butang Tambah untuk menambah Jumlah Amaun		Tambah

Click to store that information.

1 Bahagian 1 Cabaran Mungkin Hadapi	Bahagian 5: Pulangan (kadar bulanan)
2 Bahagian 2 Sumber Yang Diperlukan	Sila masukkan amaun dengan menekan button dibahagian Tindakan.
3 Bahagian 3 Kos Pelaburan	
4 Bahagian 4 Penambahan Kos	
5 Bahagian 5 Pulangan (kadar bulanan)	
6 Bahagian 6 Pulangan lain	
7 Bahagian 7 Merit Implementasi	
8 Bahagian 8 Dokumentasi	
9 Bahagian 9 Pelaksanaan Pemantauan	

Item	Amaun Diperlukan (RM)	Tindakan
1 Tenaga Kerja	0	
2 Tenaga Elektrik	0	
3 Stim	0	
4 Bahan Api	0	
5 Penyelenggaraan	0	

v. Part 3: Returns (Monthly Basis)

(c) Click  to update this section.

* Jumlah Amaun Yang Diperlukan	RM	
* Nota: Sila tekan butang Tambah untuk menambah Jumlah Amaun		Tambah

Click to store that information.

USER MANUAL

INDUSTRY

1 Bahagian 1 Cabaran Mungkin Hadapi	Bahagian 6: Pulangan-pulangan lain
2 Bahagian 2 Sumber Yang Diperlukan	Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.
3 Bahagian 3 Kos Pelaburan	
4 Bahagian 4 Penambahan Kos	
5 Bahagian 5 Pulangan (kadar bulanan)	
6 Bahagian 6 Pulangan lain	
7 Bahagian 7 Merit Implementasi	
8 Bahagian 8 Dokumentasi	
9 Bahagian 9 Pelan Pemantauan	

Bil	Jenis Pulangan	Tindakan
1	Penambahbaikan kualiti	a ☒
2	Penambahbaikan imej	☐
3	Pengoperasian yang lebih selamat	☐
4	Operasi yang kurang berisiko	☐
5	Meningkatkan motivasi	☐
6	Persekitaran pekerjaan yang lebih selesa	☐
7	Mengurangkan isu-isu alam sekitar	☐

vi. Part 6: Other Returns

(a) Click ☒ to select the relevant

1 Bahagian 1 Cabaran Mungkin Hadapi	Bahagian 7: Merit Implementasi
2 Bahagian 2 Sumber Yang Diperlukan	Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.
3 Bahagian 3 Kos Pelaburan	
4 Bahagian 4 Penambahan Kos	
5 Bahagian 5 Pulangan (kadar bulanan)	
6 Bahagian 6 Pulangan lain	
7 Bahagian 7 Merit Implementasi	
8 Bahagian 8 Dokumentasi	
9 Bahagian 9 Pelan Pemantauan	

Bil	Merit	Tindakan
1	Implementasi segera	a ☒
2	Implementasi dalam masa 6 bulan	☐
3	Implementasi apabila ada sumber kewangan	☐
4	KIV	☐
5	Nilai semula selepas 10 Tahun	☐
6	Abaikan	☐

vii. Part 7: Merit Implementation

(a) Click ☒ to select the relevant

USER MANUAL

INDUSTRY

1 Bahagian 1
Cabaran Mungkin Hadapi

2 Bahagian 2
Sumber Yang Diperlukan

3 Bahagian 3
Kos Pelaburan

4 Bahagian 4
Penambahan Kos

5 Bahagian 5
Pulangan (kadar bulanan)

6 Bahagian 6
Pulangan lain

7 Bahagian 7
Merit Implementasi

8 Bahagian 8
Dokumentasi

Bahagian 8: Dokumentasi

Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.

Bil	Dokumentasi	Tindakan
1	Dokumentasi	☒
2	Video	☐

Paparan 1 hingga 2 dari 2 rekod

< Sebelum 1 Seterusnya >

Sila Upload Dokumen Untuk Dokumentasi. Bagi yang bertanda (*) adalah wajib untuk diisi.

* Nama File

* Penerangan

* File

Choose file

Browse

+ Tambah

Bil	Nama File	Penerangan	Tindakan
Tiada data			

Paparan 0 hingga 0 dari 0 rekod

< Sebelum Seterusnya >

viii. Part 8: Documentation

(a) Click ☒ to select the relevant

(b) For the selection of documentation need to upload the relevant documents. Click

+ Add

to save.

USER MANUAL

INDUSTRY

1 Bahagian 1
Cabaran Mungkin Hadapi

2 Bahagian 2
Sumber Yang Diperlukan

3 Bahagian 3
Kos Pelaburan

4 Bahagian 4
Penambahan Kos

5 Bahagian 5
Pulangan (kadar bulanan)

6 Bahagian 6
Pulangan lain

7 Bahagian 7
Merit Implementasi

8 Bahagian 8
Dokumentasi

9 Bahagian 9
Pelan Pemantauan

Bahagian 9: Pelan Pemantauan

Sila masukkan Pelan Pemantauan.

* Nama File Gant Chart

* Penerangan Gant Chart

* File

Choose file

Browse

+ Tambah

Bil	Nama File	Penerangan	Tindakan
Tiada data			

Paparan 0 hingga 0 dari 0 rekod

ix. Part 9: Monitoring Plan

(a) Monitoring Plans need to upload relevant documents.

(b) Click  to save.

USER MANUAL

INDUSTRY

Borang Pemantauan Opsyen

Isu	:	Masa pengadukan tidak sistematik
Kawasan	:	Kawasan E
Sumber / Punca	:	. Pengurangan penggunaan tenaga elektrik.. Peningkatan produktiviti.
Opsyen	:	Optimakan masa pengadukan.
Tarikh Opsyen	:	07/07/2020 - 21/07/2022

F

1 Bahagian 1
Cabaran Mungkin Hadapi

2 Bahagian 2
Sumber Yang Diperlukan

3 Bahagian 3
Kos Pelaburan

4 Bahagian 4
Penambahan Kos

5 Bahagian 5
Pulangan (kadar bulanan)

6 Bahagian 6
Pulangan lain

7 Bahagian 7
Merit Implementasi

8 Bahagian 8
Dokumentasi

9 Bahagian 9
Pelat Pemantauan

Bahagian 1: Cabaran Mungkin Hadapi

Sila tandakan dibahagian Tindakan bagi yang mana berkaitan.

No	Jenis Cabaran	Tindakan
1	Tiada kepakaran	☐
2	Komitment pihak pengurusan syarikat	☐
3	Proses pembuatan yang tidak boleh dihentikan	☐
4	Terlalu Berisiko	☐
5	Boleh memberi kesan terhadap kualiti produk	☐

< Sebelum 1 Seterusnya >

F Kembali Seterusnya

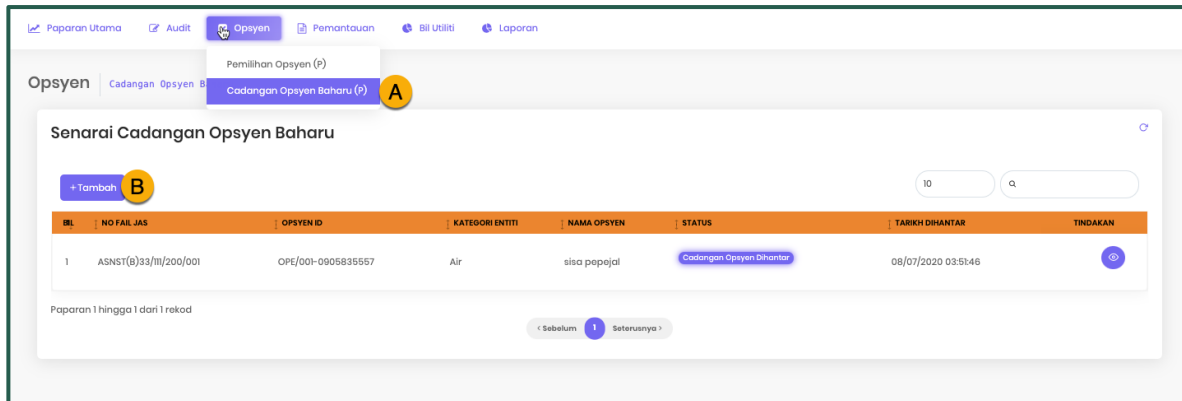
Peratusan pelaksanaan opsyen terkini % **G**

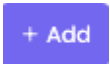
H ☒

G) Enter the Current Option Execution Percentage. This percentage is an estimation of the progress of Options that have been done by the Premises.

H) Click ☒ to update the Option Monitoring Form.

15 SUGGESTION OF NEW OPTION



- A) Click Options in the menu section and click the Suggestion of New Option sub-menu.
- B) Click button  to add a Suggestion Option.

Permohonan Opsyen Baharu

* Kategori Entiti
-- Please Choose --

* Nama Opsyen

* Suggested Option

* Huraian Masalah

* Problem Statement

* Faedah

* Benefit of Option Implementation

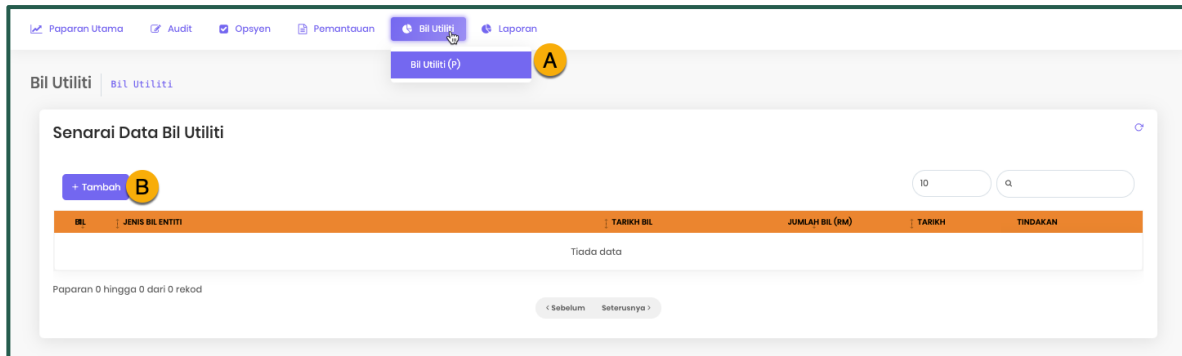
Tutup Hantar

C) Complete the new option application information.

For those marked (*) is mandatory to complete if you want to send the information.

D) Click  Submit to submit a new option proposal.

16 UTILITY BILL



A) Click Utility Bill in the menu section and click the Utility Bill sub-menu.

B) Click button **+ Add** to add a new Utility Bill.

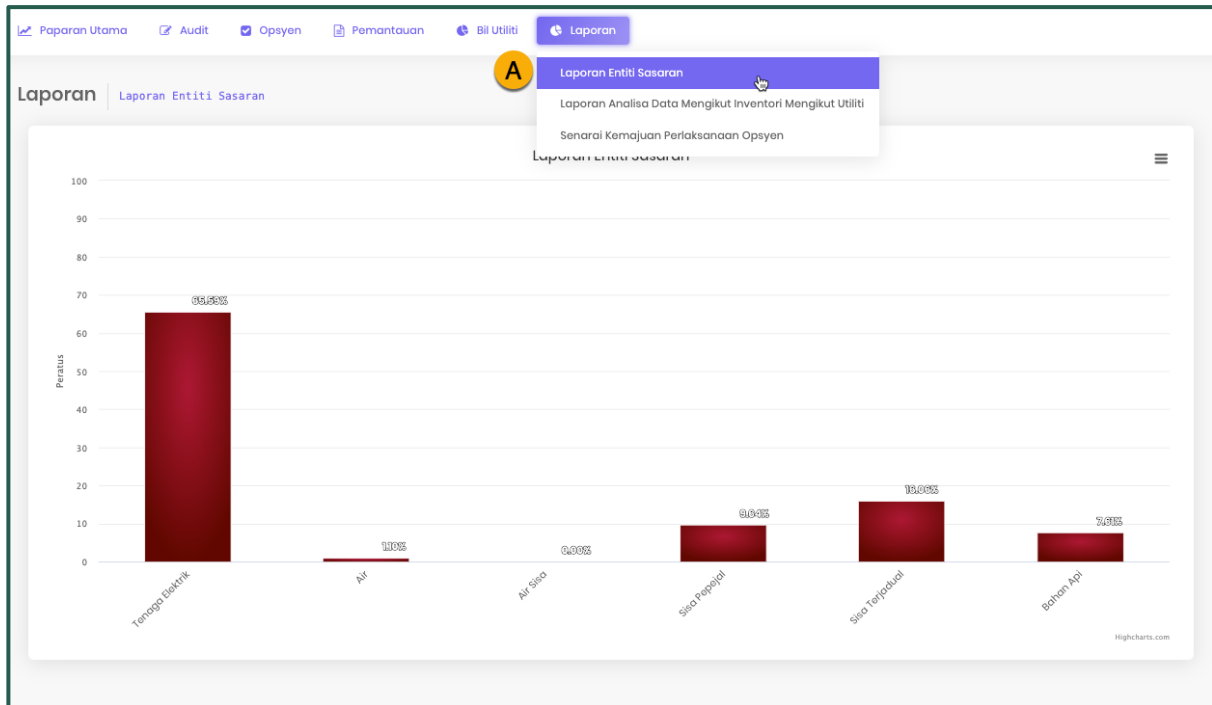
C) Complete utility bill information.

For those marked (*) it is mandatory to complete if you want to send the information.

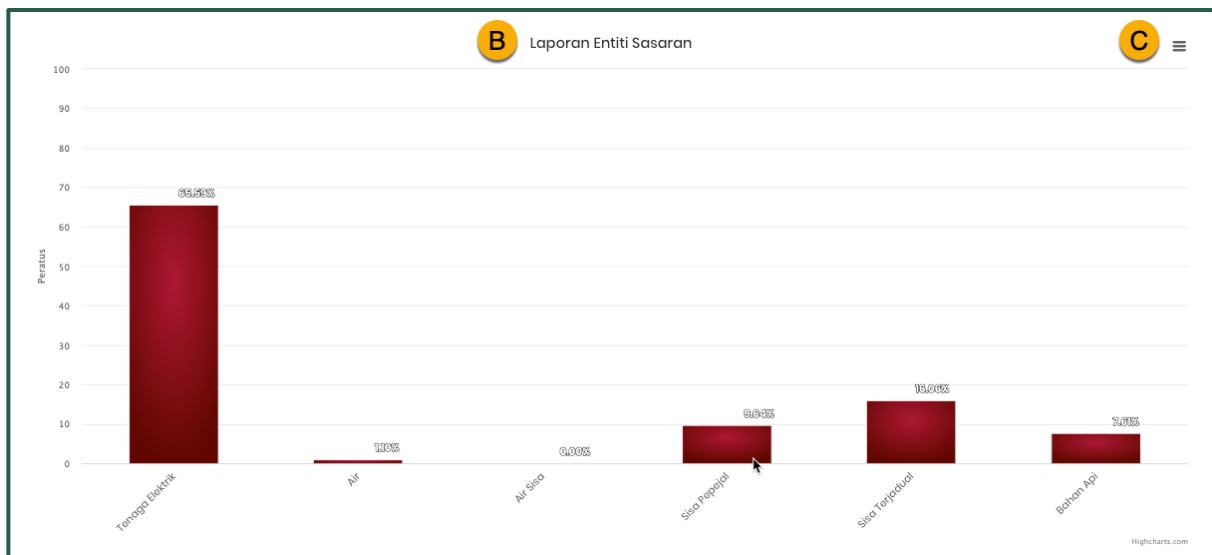
D) Click **Submit** to submit utility bills.

17 REPORT

17.1 REPORT OF TARGETED ENTITY OR HOT SPOT



A) Click Report in the menu and click the Target Entities Report sub-menu.



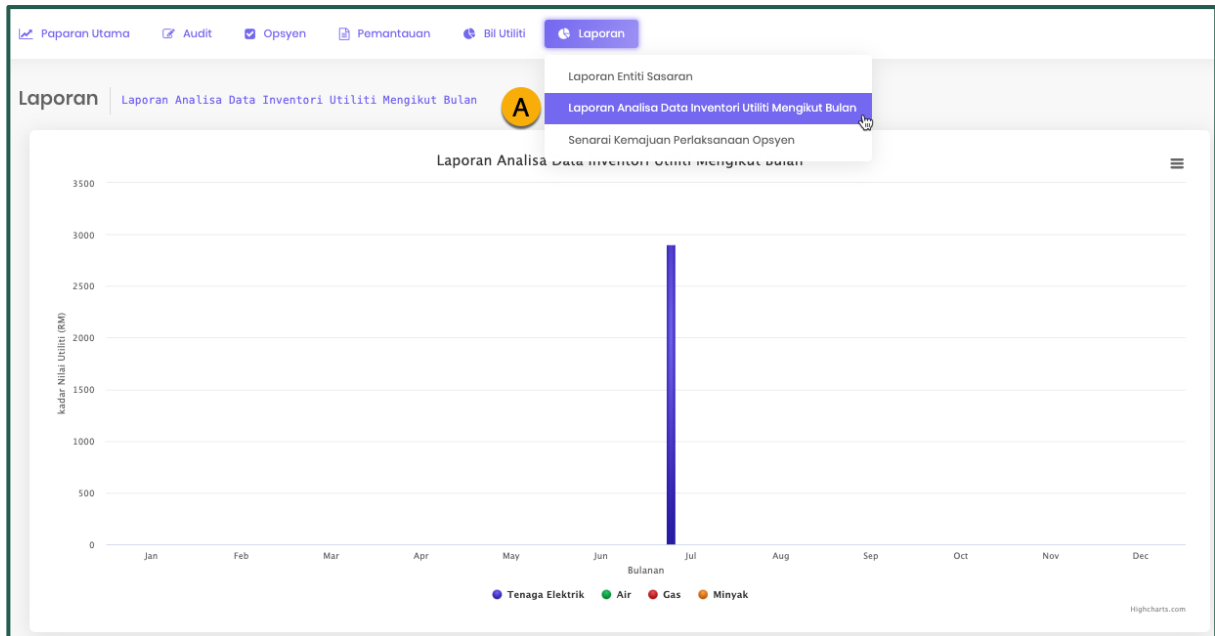
B) This Target Entity Report is an entity report according to the percentage of CO₂e Analysis based on the audit form.

USER MANUAL

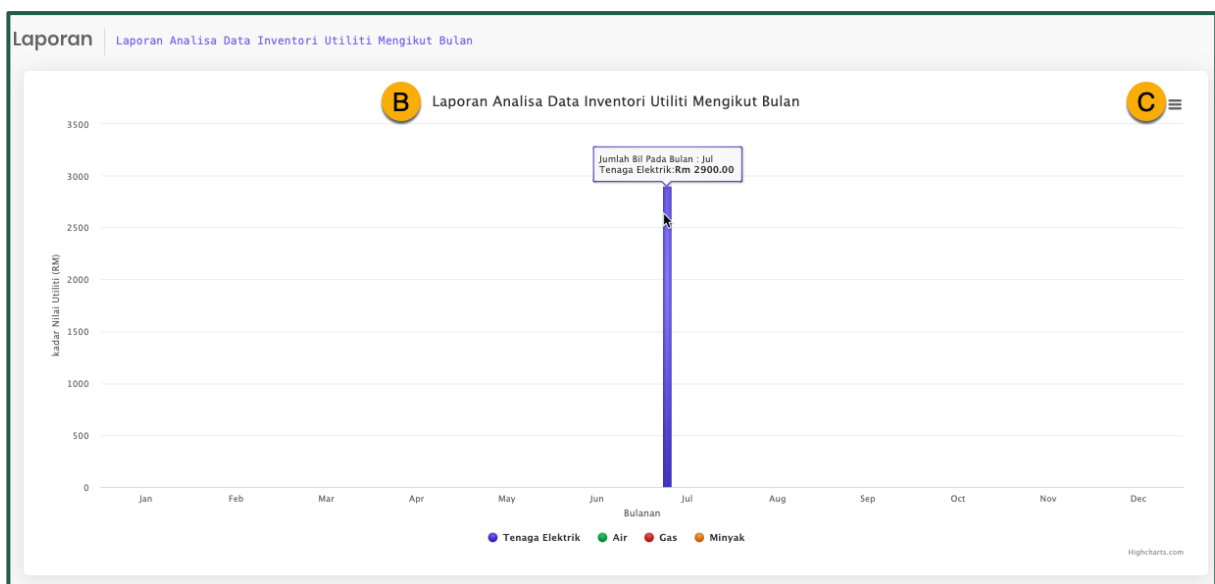
INDUSTRY

- C) Click  to display functions for full-screen graphs, print graphs, download graphs, and graphical displays.

17.2 REPORT OF UTILITY INVENTORY DATA ANALYSIS BY MONTH



- A) Click Report in the menu and click the Sub-menu Utility Inventory Data Analysis by Month.



USER MANUAL

INDUSTRY

- B) Utility Inventory Data Analysis Report by Month is taken based on data from the Utility Bills that have been entered. This data will be displayed if the premise enters utility information.
- C) Click  to display functions for full-screen graphs, print graphs, download graphs, and graphical displays.

17.3 LIST OF OPTION IMPLEMENTATION PROGRESS

Laporan | Senarai Kemajuan Pelaksanaan Opsyen

A Laporan

- Laporan Entiti Sasaran
- Laporan Analisa Data Mengikut Inventori Mengikut Utiliti
- Senarai Kemajuan Pelaksanaan Opsyen**

10 Q

B

ID	OPSYEN	TARIKH MULA	TARIKH AKHIR	JUMLAH HARI	STATUS
1	Pasang pemacu boleh laras kelajuan (variable speed drive)	09/ 07/ 2020	28/ 07/ 2025	1846	Pemantauan Opsyen
2	Simpan kain lap yang telah dicelup dengan pelarut di dalam bekas tertutup apabila tidak digunakan.	09/ 07/ 2020	13/ 07/ 2023	1100	Opsyen Diluluskan
3	Memasang papan tanda atau label berkaitan kebersihan premis.	09/ 07/ 2020	24/ 07/ 2025	1842	Pemantauan Opsyen
4	Beri latihan kepada pekerja untuk mengurangkan kehilangan bahan dan produk.	09/ 07/ 2020	17/ 07/ 2025	1835	Pemantauan Opsyen
5	Penggunaan "ear plug" kepada pekerja-pekerja di kawasan/proses yang boleh mendatangkan pencemaran bunyi yang melebihi standard 80dB.	09/ 07/ 2020	30/ 07/ 2027	2578	Pemantauan Opsyen

Paparan 1 hingga 5 dari 5 rekod

< Sebelum 1 Seterusnya >

- A) Click Report in the menu section and click the List of Option Implementation Progress sub-menu
- B) Displays List of Option Implementation Progress based on the selected option.