

**CERTIFIED AIR POLLUTION CONTROL SYSTEMS CONSULTANT (CAPCSC)
TECHNICAL EXPERIENCE REPORT (TER) PREPARATION**

IMPORTANT REMINDER

Throughout the technical experience report you must clearly identify that you were involved in preparing **design assignments and projects** and are involved in preparing APCS documentation such as design calculations, design drawings and other documents required for submission to DOE in compliance with Regulation 7 of the Environmental Quality (Clean Air) Regulation 2014 (CAR2014) under the Environmental Quality Act, 1974;

Please bear in mind that the report examiner is looking for your contribution to the overall improvement efforts that have been made in the aspect of air pollution control system design compliance and the overall successful future operation of the air pollution control system in premise.

If you have any technical questions regarding the technical experience report preparation, please email your questions to the following:

Mr. Nor A'zman Rosli; na@doe.gov.my atau

Mr. Noor Suffianhadi Ramly; nsr@doe.gov.my

For any general questions about CAPCS, please contact Competency & Industry Certification Centre, EiMAS:

Ms. Noor Baizura Azizan; nba@doe.gov.my

Mr. Mohd Aizuddin Ab Razak; aizuddin@doe.gov.my

Mr. M Yazir Mohd Rashid; ziera@doe.gov.my

Ms. Noor Huda Mohd Yusof; huda@doe.gov.my

Mr. Wan Khairuldin Wan Ismail; khairuldin@doe.gov.my

Competency Committee

Environmental Institute of Malaysia (EiMAS)

2015

EXPLANATORY NOTES ON THE PREPARATION OF TER REPORT

1. Introduction

In partial fulfillment of the requirements for the Certificate of Certified Air Pollution Control System Consultant a candidate who passes the Examination is eligible to submit a **Technical Experience Report (TER)** to EiMAS. The TER shall demonstrate that the candidate has attained the engineering knowledge, understanding, and application in the area of air pollution engineering at the level necessary to underpin the technical competencies required for a CAPCSC.

The TER must be submitted **within three (3) months** from the date of announcement of examination results to the following:

The Director
Environment Institute of Malaysia (EiMAS)
Campus UKM
Universiti Kebangsaan Malaysia
43600 Bangi Selangor

2. Report Specification and Format

TER should follow the general specification and format as below:

2.1 Specification

Covers and Binding

The report should be bound preferably in hard cover (BLACK Color with GOLD LETTERING)

Typeface to be used is Arial

Front Cover of the report should follow the example given in **Appendix A**.

Language of Report

Report may be written in English or Bahasa Malaysia

Typeface and Font Size of the Main Text

Typeface to be used is Arial. Font size of 12 point should be used for the main body of the text.

Margins and Spacing

The margin on the document must comply with the specifications below:

Top - 20 mm

Bottom -40 mm

Left - 40 mm

Right - 25 mm

Text

Text should be: typed one side of the paper only, one and a half-spaced, left-right justified. For captions of figures and tables, single spaces can be used.

Photo

Photographs should be printed in COLOR

Drawing

All drawing plan should be in A3 size

Pagination

Every page except the title page must be numbered; PRELIMINARY PAGES are to be numbered in lower case Roman numerals (i, ii, iii etc); and MAIN TEXT pages are to be numbered at the center of the page (1, 2, 3..) and all pages must be numbered consecutively and continuously. Table of content should be prepared.

2.2 Format

The structure of the report is based on standard format which contains the following sections:

A. Preliminary Pages

B. Main Text

C. Appendices

A. PRELIMINARY PAGES

The preliminary pages shall include at least the following:

a. General information on the candidate

1. Name of Candidate:
2. Contact Address:
3. Designation:
4. Education and Profesional Status :
5. Working Experience : *(list APCS projects that the candidate has been involved in the last three (3) years before the date of submission of the TER to EiMAS)*
6. Date of sitting the examination on Certified Air Pollution Control Systems Consultant:
7. Date of examination result on Certified Air Pollution Control Systems Consultant:
8. Name and address of the premise install Air Pollution Control System that been used for TER
 - i. Type of APCS :
 - ii. Name :
 - iii. Address :
 - iv. Person Contact :
9. Contact officer in the above organization who could verify your experience:
 - i. Name:
 - ii. Designation:
 - iii. Phone number:
 - iv. Fax number:
 - v. E-mail address:

b. Declaration (to be filled out by the candidate)

"I declare that the entire report is the product of my own work and all the facts stated in it and the accompanying information is true and correct and that I have not withheld or distorted any material facts"

Name of Candidate:

NRIC number:

Designation :

Signature:

Date:

Company's stamp:

B. MAINTEXT

The main text or body of your report shall include the following chapters.

CHAPTER 1: INTRODUCTION

Explain on the premise that proposal of APCS used for TER

1.1 Background of Company or Industry

In this subchapter you should explain the nature of manufacturing carried out in the factory and the products manufactured or the nature activity carried out in your company.

1.2 Process Description

Provide description on the production process of manufacturing industry. Provide the process flow chart and indicates the emission source of pollution and what type of control equipment.

CHAPTER 2 : Environmental Mainstreaming Tools Commitment

2.1 Company's or industry's environmental policy (EP)

Explain the commitment of the industry toward environment compliance based on their EP. Mention the date the EP was made and identify whether the EP is an existing policy or a new EP which has been developed. Explain how they plan the strategies on environment protection and pollution control.

2.2 Competent Person

You should show an organizational structure of the industry and suggest who are the person in the company should be competent in operating and maintaining APCS that be used for the FTR. Provide a list of duties of competent person to operate and maintaining APCS

2.3 Environmental performance monitoring committee (EPMC)

Provide a EPMC structure (operational level) – Explain they job function - frequency of discussion/meeting

2.4 Environmental regulatory compliance monitoring committee (ERCMC)

Provide a ERCMC structure (policy level) – Explain they job function - frequency of discussion/meeting

2.5 Record keeping

Suggestion record keeping format require to be done by industry in maintaining the performance and compliance of APCS- provide justification on the suggestion

2.6 Data analysis and interpretation

Suggestion of the data analysis required to be done by industry in maintaining the performance and compliance of APCS. Providing summary of troubleshooting to be done based on finding of data analysis

2.7 Mini laboratory

Provide list of PM equipment require for the industry and for what purpose

2.8 Discharge and emission monitoring

Explain limit compliance berdasarkan Peraturan Environmental Quality (Clean Air) Regulations 2014 - requirements for continuous / perodic

2.9 Reporting and communication

Explain reporting required by industry to be submitted under CAR Regulation 2014

CHAPTER 3 : AIR POLLUTION CONTROL SYSTEM PROPOSAL SUBMISSION

In this section, candidates are required to briefly describe the proposed installation of air pollution control systems to be submitted based on the requirements of the Written Notice as required under Regulation 5 of the Environmental Quality (Clean Air) 2014

3.1 Emission Stream Information

Type of emission –characteristic of dust/gases – source of pollution - limit CAR 2014

3.2 Design of Ventilation System

Provide summary for details of ventilation systems – provide calculation – mention reference of calculation (page ? / book title/ author) – certified by professional engineer

3.3 Design Fan & Motor System

Provide summary for details of fan systems – provide calculation – provide related catalog – mention reference of calculation/statement (page ? / book title/ author) – certified by professional engineer

3.4 Design of Chimney

Provide summary for details of chimney – provide calculation efflux velocity – provide suggestion of sampling location – certified by professional engineer

3.5 Design of Pollution Control Equipment

Provide summary for details of pollution control equipment – provide calculation – provide related catalog – mention reference of calculation/statement (page ? / book title/ author) – certified by professional engineer

3.6 Management of waste from pollution control equipment

Explain management to store and disposal of waste from pollution control equipment / if recycle explain the process recycle – if scheduled waste – explain how to manage according to Scheduled Waste Regulation 2005

CHAPTER 4: PERFORMANCE MONITORING OF APCS

Describe on performance monitoring program for major unit operation –what is suitable normal operating range for this APCS – explain why – provide reference (page ? / book title/ author) – Provide sample of PM record sheet –provide PM equipment detail for this APCS (mention brand, cost, photos) – Provide piping & instrumentation drawing

CHAPTER 5: CONCLUSIONS

In this chapter, you should make some conclusions on the overall proposal of APCS project for this company or industry.

PRODUCE IN THE APPENDIX:

Appendix 1

Engineering drawing showing the pollution control equipment design

Appendix 2

Engineering drawing showing the ventilation system and chimney design

Appendix 3

Piping & instrumentation drawing showing the PM equipment for this APCS.

Appendix 4

Related catalog of fan/ motor/ component unit/

References

**CERTIFIED AIR POLLUTION CONTROL SYSTEM CONSULTANT
(CAPCSC)**

TECHNICAL EXPERIENCE REPORT

Submitted to

The Director
Environment Institute of Malaysia (EiMAS)
Department of Environment
Universiti Kebangsaan Malaysia Campus
Locked Bag No 24
43600 BANGI, Selangor

By

{NAME CANDIDATE}

{IC NO}

{DATE OF REPORT COMPLETED}

In Partial Fulfillment of the Requirement for the Certificate of Certified Air Pollution
Control System Consultant (CAPCSC)

