



KEMENTERIAN SUMBER MANUSIA

**LEMBAGA PEPERIKSAAN KOMPETENSI KESELAMATAN
DAN KESIHATAN PEKERJAAN**

**PEPERIKSAAN JURUTEKNIK HIGIEN 1 (PEMONITORAN
KIMIA)**
HYGIENE TECHNICIAN 1 (CHEMICAL MONITORING) EXAMINATION

KERTAS 2
PAPER 2

TUGASAN TEMPAT KERJA
WORKPLACE ASSIGNMENT

GARIS PANDUAN TUGASAN TEMPAT KERJA
WORKPLACE ASSIGNMENT GUIDELINES

ARAHAN:

CALON DIKEHENDAKI MEMBACA ARAHAN DI BAWAH DENGAN TELITI DAN MENGIKUTI SEMUA ARAHAN.

A. TUGASAN TEMPAT KERJA

1. Pilih satu tempat kerja.
2. Namakan semua bahagian / seksyen / unit kerja yang terdapat di tempat kerja tersebut.
3. Lakukan tinjauan tapak.
4. Laksanakan pemantauan diri menggunakan persampelan berturutan jangkamasa penuh (*full period consecutive sampling*) untuk sekurang-kurangnya dua (2) jenis bahan kimia,berbahaya kepada kesihatan dan sekurang-kurangnya dua (2) orang pekerja di tempat kerja tersebut dan bincangkan teknik pemilihan pekerja.
5. Sediakan laporan pemantauan mengikut format laporan yang dilampirkan.

B. FORMAT LAPORAN

1. Format Teks
 - i. Tugas ini hendaklah ditaip dengan jelas menggunakan sama ada dalam Bahasa Melayu atau Bahasa Inggeris.
 - ii. Fon yang digunakan mestilah Times New Roman bersaiz 12 dan menggunakan langkau 1.5 baris.
 - iii. Margin kiri dan kanan mestilah berukuran 2.5 cm, manakala margin atas dan bawah mestilah berukuran 2.5 cm dan diformatkan kepada saiz kertas A4.
 - iv. Gunakan sebelah halaman kertas sahaja.
 - v. Laporan mesti mempunyai muka depan (sila rujuk Lampiran 1) dan mesti dijilidkan.

2. Format Laporan dan Skema Pemarkahan

2.1 BORANG PERAKUAN TUGASAN TEMPAT KERJA (WAJIB)

2.2 RINGKASAN EKSEKUTIF (10 markah)

Tulis satu muka surat ringkasan eksekutif yang menerangkan tentang

- i. Tujuan.
- ii. Aktiviti utama yang dijalankan oleh Juruteknik Higien.
- iii. Kaedah.
- iv. Ringkasan keputusan.
- v. Kesimpulan dan cadangan.

2.3 PENGENALAN (5 markah)

- i. Tarikh Pemonitoran.
- ii. Kawasan Pemonitoran.
- iii. Nama.
- iv. Bilangan dan waktu syif bagi setiap spesifikasi kerja.

2.4 OBJEKTIF PEMONITORAN (5 markah)

Menerangkan tujuan permonitoran dijalankan.

2.5 KETERANGAN PROSES (5 markah)

Keterangan mengenai proses semasa permonitoran dijalankan.

2.6 KAEDAH (15 markah)

- i. Kaedah yang digunakan.
- ii. Peralatan yang digunakan:
 - No. Siri Pam.
 - Jenis Media.
 - Penentuukur.
- iii. Cara pemilihan pekerja.
 - Penerangan tentang kaedah pemilihan pekerja.

iv. Justifikasi jangka masa pemantauan dan bilangan syif:

- Penerangan tentang kenapa sesuatu jangkamasa diambil untuk sesuatu pemantauan.

2.7 KEPUTUSAN PEMONITORAN DIRI (20 markah)

Nama / No. Sampel	No. Sampel <i>blank</i>	Kawasan Kerja	Spesifikasi Kerja	Jangka masa Pemantauan	Aras Pendedahan	PEL	Ulasan (bandingkan dengan PEL)

2.8 PERBINCANGAN (20 markah)

- Bincang keputusan yang diperolehi.
- Bincang faktor-faktor yang mempengaruhi keputusan (Kaedah kawalan kejuruteraan, kawalan pentadbiran).

2.9 CADANGAN (10 markah)

- Kaedah Pematuhan.
 - Cara Kejuruteraan.
 - Cara Pentadbiran.
- Pemakaian Kelengkapan Pelindung Diri.
- Pematuhan Peraturan.
- Pemantauan Tambahan.
- Cara-cara lain, jika ada
 - Cadangan yang diberikan mestilah boleh membantu mengurangkan pendedahan atau meningkatkan lagi tahap keselamatan pekerja di tempat tersebut.

2.10 KESIMPULAN (5 markah)

Pernyataan sama ada objektif tercapai/tidak.

2.11 LAMPIRAN (5 markah)

Pilihan	Wajib
i. Carta Alir Proses.	i. Surat pengesahan majikan bahawa persampelan telah dijalankan.
ii. Salinan Kaedah yang digunakan (etc: <i>NIOSH Method</i>).	ii. Salinan sijil tentukur bagi peralatan yang digunakan (yang terkini).
iii. Pelan Lakar dan Pemetaan: <ul style="list-style-type: none">• Kedudukan Jentera.• Kedudukan Pekerja.	iii. Borang Data & Pengiraan.
	iv. Salinan Sijil Analisa Makmal.

C. PENGESAHAN LAPORAN TUGASAN TEMPAT KERJA

Anda dikehendaki mengesahkan bahawa Laporan Tugas Tempat Kerja yang dihantar kepada Sekretariat Peperiksaan HT1 adalah hasil kerja anda sendiri. Sila isikan Borang Perakuan Tugas Tempat Kerja (Rujuk Lampiran 2) dan menjilidnya bersama di atas Tugas Tempat Kerja. Pengesahan syarikat bersama cop syarikat adalah wajib. Pengesahan syarikat dengan cop syarikat adalah diwajibkan.

D. PENYERAHAN LAPORAN TUGASAN TEMPAT KERJA

Laporan Tugas Tempat Kerja (WPA) yang lengkap hendaklah dilampirkan bersama:

1. Borang Perakuan Tugas Tempat Kerja (Lampiran 2)
2. Borang Notifikasi HT - Rujuk *Appendix (ii) Guidelines on Monitoring of Airborne Chemical Hazardous to Health 2022* (Lampiran 3)

Semua elemen perlu dimuat naik secara dalam talian di <https://myexam.niosh.net.my/> sebelum tarikh akhir pengemukaan WPA (Rujuk Jadual Peperiksaan).

E. KERTAS 2 – BAHAGIAN B: PEMBENTANGAN

1. Pembentangan adalah berdasarkan kepada **laporan tugas dan pengetahuan dalam bidang pemantauan pendedahan kimia**. Anda dikehendaki membentangkan laporan seolah-olah anda membentangkannya kepada pihak pengurusan. Pembentangan tersebut hendaklah merangkumi perkara-perkara seperti berikut:
 - i. Tujuan pemantauan udara.
 - ii. Penerangan tentang strategi persampelan.
 - iii. Kaedah persampelan dan analisis.
 - iv. Keputusan dan perbincangan.
 - v. Kesimpulan dan saranan.
2. Pembentangan ini hendaklah disediakan dalam bentuk Microsoft PowerPoint dan dicetak sebanyak DUA (2) salinan untuk diberikan kepada panel pembentangan. Pembentangan ini hendaklah selari dengan WPA yang dihantar.
3. Calon **TIDAK DIBENARKAN** membuat apa-apa perubahan terhadap pembentangan selepas pengemukaan WPA.
4. Tempoh sesi pembentangan:
 - i. Pembentangan = 15 minit.
 - ii. Soal jawab = 25 minit.

INSTRUCTION:

CANDIDATES MUST READ THE FOLLOWING INSTRUCTIONS CAREFULLY AND FOLLOW ALL INSTRUCTIONS.

A. WORKPLACE ASSIGNMENT

1. *Choose one workplace.*
2. *Name all the division / sections available at the workplace.*
3. *Conduct a walk-through survey at the selected work area / section.*
4. *Conduct personal sampling using full period consecutive sampling for at least two (2) chemical hazardous to health and at least two (2) workers at the workplace and discuss selection of workers method.*
5. *Prepare a monitoring and assessment report based on the attached report format.*

B. FORMAT OF ASSIGNMENT REPORT

1. Text Format
 - i. *This assignment must be in either Bahasa Malaysia or English and clearly typed.*
 - ii. *The fonts used must be Times New Roman size 12 and using double spacing (except for title page).*
 - iii. *The left and right margin must be 2.5 cm, while the top and bottom margin must be 2.5 cm and formatted in paper sized A4.*
 - iv. *Use one side of the paper.*
 - v. *The report must have a front (title) cover and it must be bound.*

2. Report Format and Marking Scheme

**2.1 WORKPLACE ASSIGNMENT DECLARATION FORM
(COMPULSORY)**

2.2 EXECUTIVE SUMMARY (10 marks)

Write a one-page summary to explain the

- i. *Objective.*
- ii. *Main activities carried out by hygiene technician.*
- iii. *Methodology.*
- iv. *Summary of findings*
- v. *Conclusion and recommendation.*

2.3 INTRODUCTION (5 marks)

- i. *Date of monitoring.*
- ii. *Monitoring area.*
- iii. *Name.*
- iv. *Working hours and number of shift for each work specification.*

2.4 SAMPLING OBJECTIVES (5 marks)

Explain the purpose of sampling that have been conducted.

2.5 PROCESS DESCRIPTIONS (5 marks)

Description of sampling process that have been conducted.

2.6 METHODOLOGY (15 marks)

- i. *Method used.*
- ii. *Equipment used:*
 - *Sampling pump: serial no.*
 - *Collection media.*
 - *Calibrator.*

- iii. *Selection of workers.*
 - *Description of workers selection method.*
- iv. *Justification of sampling duration & number of shift.*
 - *Explanation of why certain duration is taken for monitoring.*

2.7 PERSONAL MONITORING RESULT (20 marks)

<i>Name / Sample No</i>	<i>Blank Sample</i>	<i>Working Area</i>	<i>Job Specification & Task</i>	<i>Sampling Duration</i>	<i>Exsure Level</i>	<i>PEL</i>	<i>Comparison with PEL</i>

2.8 DISCUSSION (20 marks)

- i. *Based on finding.*
- ii. *Factors contributing towards the results (Engineering Control, Administrative Control).*

2.9 RECOMMENDATION (10 marks)

- i. *Method Compliance.*
 - *Engineering Control.*
 - *Administrative Control.*
- ii. *Used of Personal Protective Equipment.*
- iii. *Regulations Compliance.*
- iv. *Additional Monitoring.*
- v. *Others (if any).*
 - *(Recommendation given should be able to reduce the exposure or improve the level of workers safety of that particular place).*

2.10 CONCLUSIONS (5 marks)

Statement: whether objectives has been achieved or not.

2.11 APPENDICES (5 marks)

Optional	Mandatory
<ul style="list-style-type: none">i. Process Flowchart.ii. Copy of Sampling Method (etc: NIOSH Method).iii. Layout Plan:<ul style="list-style-type: none">• Machinery location.• Workers Position.	<ul style="list-style-type: none">i. Employer's Confirmation letter that sampling has been conducted.ii. A copy of latest (Valid) calibration certificate for equipment used.iii. Data Form & Calculation.iv. A copy of Laboratory Analysis Certificate.

C. VERIFICATION OF WORKPLACE ASSIGNMENT

You are required to verify that the Workplace Assignment submitted to the HTI Examination Secretariat **is your own work. Your assignment should be seen to be independent and should not be identical to other candidate's submission.** Please fill out the Workplace Assignment Declaration Form (Refer to Appendix 2) and bind it together with your Workplace Assignment as the first page of your assignment. Company authentication with a company stamp is mandatory.

D. SUBMISSION OF THE WORKPLACE ASSIGNMENT

The completed Workplace Assignment Report (WPA) should be attached with:

1. Workplace Assignment Certification Form (Appendix 2).
2. HT Notification Form - Refer Appendix (ii) Guidelines on Monitoring of Airborne Chemical Hazardous to Health 2022 (Appendix 3)

All elements need to be uploaded online at <https://myexam.niosh.net.my/> before the deadline of the WPA submission (Refer to the Examination Schedule).

E. PAPER 2 – PART B: PRESENTATION

1. *The oral examination will be based on the **assignment report and knowledge in the field of chemical exposure monitoring**. You are required to present the report as if you are presenting it to the management. The presentation should contain the following:
 - i. *Purpose of the air monitoring.*
 - ii. *Description of sampling strategy.*
 - iii. *Method of sampling and analysis.*
 - iv. *Findings and discussions.*
 - v. *Conclusion and recommendation.**

2. *The presentation has to be prepared in Microsoft PowerPoint and must be printed out in **TWO (2)** copies for panel presentation. The presentation must tally with the WPA submitted.*

3. *The candidate is **NOT ALLOWED** to make any changes to the presentation after submission the WPA.*

4. *Duration of presentation session:*
 - i. *Presentation = 15 minutes.*
 - ii. *Questions and answers = 25 minutes.*



Lampiran / Appendix 1

(Note: This is only a sample report that guides you on the format and write-up of the workplace assignment)

Report of Chemical Exposure Monitoring

at

A Manufacturing Company

(font size 22)

Type of Monitoring
(Personal/Area)

Location
(Factoru/Workplace Name, Registration Number and Full Address)

By

Index No: ND3000

MyKad No: XXXXXX-XX-XXXX

(font size 16)

Chemical Exposure Monitoring Examination

Paper 2: Workplace Assignment

(font size 12)

Lampiran / Appendix 2

BORANG PERAKUAN TUGASAN TEMPAT KERJA
WORKPLACE ASSIGNMENT DECLARATION FORM

Adalah saya dengan ini mengaku bahawa Tugas Tempat Kerja ini yang disediakan untuk Peperiksaan **Juruteknik Higienn 1 (Pemonitoran Kimia)** adalah berdasarkan hasil kerja asal saya sendiri dan maklumat diperolehi hasil lawatan tapak ke tempat kerja saya yang berkenaan kecuali sedutan atau petikan yang dinyatakan.

Sekiranya maklumat yang dinyatakan tidak benar, pihak Jawatankuasa Kompetensi HT1 di bawah Lembaga Peperiksaan Kompetensi Keselamatan dan Kesihatan Pekerjaan (LPKKKP) berhak membatalkan Tugas Tempat Kerja ini.

*I hereby certify that this Workplace Assignment prepared for the **Hygiene Technician 1 (Chemical Monitoring)** Examination is based on my original work and information's are gathered from the site visit except for citation and quotation made.*

If the information stated is not true, the Jawatankuasa Kompetensi HT1 under Lembaga Peperiksaan Kompetensi Keselamatan dan Kesihatan Pekerjaan (LPKKKP) reserves the rights to cancel this Workplace Assignment.

Tandatangan / Signature :

Nama / Name :

No. MyKad / MyKad No. :

Tarikh / Date :

PENGESAHAN SYARIKAT / COMPANY VERIFICATION

Saya mengesahkan penama seperti di atas telah menjalankan tugas tempat kerja di premis ini :

I confirm the above-named person has conducted the workplace assignment at this premises :

Tandatangan / Signature :

Nama / Name :

Jawatan & Jabatan :
Position & Department

No. Tel. (Pej./Bimbit) :
Tel. No (Off./ Handphone)

Tarikh / Date :

Cop rasmi syarikat
Company official stamp



Lampiran / Appendix 3

(GUIDELINES ON MONITORING OF AIRBORNE CHEMICAL HAZARDOUS TO
HEALTH 2022)

HT Notification Form

Date: : _____

Workplace: : _____

Contact Person: : _____

Ref: REPORT ON MONITORING OF AIRBORNE CHEMICAL HAZARDOUS TO HEALTH

This is to certify that monitoring of airborne chemical hazardous to health for the above premise has been **conducted and explained** to the Safety and Health Committee member's/employer's representative of the workplace on the _____ (*date of presentation*).

2. The report has been submitted to the employer on _____ (*date of submission*).

Signature of Hygiene Technician

DOSH Registration No. : _____

Monitoring Report Received by: (To be filled by employer)

Name : _____

Designation : _____

Date of receipt report : _____

Signature : _____