

HEALTH RISK ASSESSMENT OF  
METALS BOUND TO THE FINE  
PARTICULATE MATTER (PM<sub>2.5</sub>) AT  
JALAN MAHKOTA, KUANTAN

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Bachelor of Occupational Safety and Health  
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## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor in Occupational Safety and Health (Hons.)

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## **STUDENT'S DECLARATION**

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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## LIST OF SYMBOLS

$\mu\text{g}/\text{m}^3$	Microgram Per Cubic Meter
[ ]	Concentration
$\mu\text{m}$	Micrometre
L/min	Litre Per Minute
mm	Millimetre
nm	Nanometre
$\text{ng}/\text{m}^3$	Micrograms per Cubic Meter of Air
$^{\circ}\text{C}$	Degree Celsius
m/s	Meter per Second
ppm	Parts Per Million
S	South
SE	Southeast

## LIST OF ABBREVIATIONS

WHO	World Health Organization
IARC	International Agency For Research On Cancer
US EPA	United States Environmental Protection Agency
PM <sub>2.5</sub>	Particulate Matter (PM <sub>2.5</sub> )
Fe	Iron
Cd	Cadmium
Cr	Chromium
Zn	Zinc
K	Potassium
Ca	Calcium
Mg	Magnesium
Na	Sodium
Ba	Barium
Mn	Manganese
Mo	Molybdenum
Sb	Antimony
Sr	Srontium
Al	Aluminium
Co	Cobalt
Cu	Copper
RfD	Reference Dose
ICP-OES	Inductively Coupled Plasma Optical Emission Spectrometry
ADD	Average Daily Dose
LADD	Lifetime Average Daily Dose
HI	Hazard Index
HQ	Hazard Quotient
RI	Carcinogenic Risk