

**THE CONSTRUCTION AND COMPLETION OF A ME METALS FROM SPENT
CATALYST RECOVERY FACILITY (SCaRF)
AT
GEBENG INDUSTRIAL ESTATE (GIE), KUANTAN, PAHANG, MALAYSIA**

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ABBREVIATIONS

%	percent
&	and
'	minute
"	second
°	degree
°C	Degree Celcius
AAQC	Ambient Air Quality Criteria (Ontario AAQC)
AAQM	Ambient Air Quality Monitoring
ACF	Activated Carbon Filter
ADMI	American Dye Manufacturers Institute
AMSAS	Akademi Maritim Sultan Ahmad Shah
<u>AN</u>	<u>Ammoniacal Nitrogen</u>
APC	Air Pollution Control
<u>APCS</u>	<u>Air Pollution Control System</u>
AQM	Air Quality Modelling
ARI	Average Recurrence Interval
BL	Baseline Level
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
BP	Planning Blocks
BPK	Sub-Planning Blocks" Or Blok Perancangan Kecil
CAR	Environmental Quality (Clean Air) Regulations
CAR2014	Environmental Quality (Clean Air) Regulation 2014
CESSWI	Certified Erosion, Sediment And Stormwater Inspector
CM	Compliance Monitoring
CN	Cyanide
COD	Chemical Oxygen Demand
COW	Clerk Of Works
DAF	Dissolved air floatation
DOA	Department of Agriculture
DOE	Department of Environment

DOSH	Department of Safety and Health
DS	Desulphurisation scrubber
DW	Disposable wastes
ECB	Erosion Control Blanket
ECRL	<u>East Coast Rail Link</u>
ECSP	Erosion & Sediment Control Plan
EGIM	Environmental Impact Assessment Guideline In Malaysia
EHS	Environmental, Health, and Safety Guidelines
EIA	Environmental Impact Analysis
EMP	Environmental Management Plan
EO	Environmental Officer
EP	Environmental Policy
EPMC	Environmental Performance Monitoring Committee
EPMD	Environmental Performance Monitoring Document
EQA	Environmental Quality Act
ERP	Emergency Response Plan
FRP	Fibre-Reinforced Plastic
GIE	Gebeng Industrial Estate
GIS	Geographic Information System
GLC	Ground Level Concentration
H	Hour
H ₂ MoO ₄	Molybdic Acid
H ₂ S	Hydrogen Sulfide
HCl	Hydrochloric Acid
HCL	Hydrogen Chloride
HDT	Hydrotreating
HIA	Health Impact Assessment
HSE	Health, Safety and Environmental
HV	Heavy Vehicle
<u>IECS</u>	Industrial Effluent Characteristic Study

IETS	Industrial Effluent Treatment System
ILP	Institut Latihan Perindustrian Kuantan
IM	Impact Monitoring
IWK	Indah Water Konsortium Sdn Bhd
JKR	Public Works Department
JPBD	Jabatan Perancangan Bandar dan Desa
JPS	Jabatan Pengairan dan Saliran Malaysia
KA	Kualiti Alam
KB	Kuala Balok
KIA	Kuantan International Airport
KM	Kilo Metre
KSAS	Kawasan Sensitif Alam Sekitar
KTMB	KTM Berhad
LA	Local Authority
LAMP	Lynas site
LC	Least Concern
LDP2M2	Land Disturbance Pollution Prevention And Mitigation Measures
LOS	Level Of Service
LV	Light Vehicle
MAAQS	Malaysian Ambient Air Quality Standards
MAIC	Maximum Average Incremental Concentration
MBK	Kuantan City Council
MCKIP	Malaysia China Kuantan Industrial Park
Mg(OH) ₂	Magnesium Hydroxide
mg/L	Milligram Per Liter
MMF	Multimedia Filter
MO	Molybdenum
MSMA	Manual Saliran Mesra Alam
MT	Metric Tonne
Na ₂ MoO ₄	Sodium Molybdate
NaVO ₃	Sodium Metavanadate
ND	Non Detectable
NE	Not Evaluated
NH ₃	Ammonia
NH ₄ C	Ammonium Chloride
NH ₄ OH	Ammonium Hydroxide
NH ₄ VO ₃	Ammonium Metavanadate

NO ₂	Nitrogen Dioxide
NS	Not Stated
NT	Near Threatened
NTU	Nephelometric Turbidity Units
NWQS	National Water Quality Standards for Malaysia
O ₂	Oxygen
O ₃	Ground Level Ozone
OSC	On Scene Commander
PAC	Poly aluminium chloride
PDF	Permanent Disposal Facility
PFD	Process Flow Diagram
PGB	Petronas Gas Berhad
PIC	Person In Charge
PMR	Performance Monitoring Report
PP	Project Proponent
QUAL2K	River And Stream Water Quality Model
RC	Reinforced Concrete
RP	Retention Pond
RW	Recyclable wastes
S1	Schedule 1
SB	Sediment Basin
SCaRF	Spent Catalyst Recovery Facility
Sg	Sungai
SI	Soil Investigation
SO ₂	Sulphur dioxide
SO ₄	Sulphate
SOP	Standard Operating Practices
SPA	Sales and Purchase Agreement
SR	Self-Regulation
SRTM	Shuttle Radar Topography Mission
SS	Suspended Solids
STP	Sewerage Treatment Plant
SW	Scheduled Waste
TCU	True Colour Units
TMO	Traffic Management Officer
TOR	Terms of Reference
TSP	Total Suspended Particles
TSS	Total Suspended Solid
TU	Turbidity

UCFFDA	Report On Updating of Condition Of Flooding And Flood Damage Assessment
USLE	Universal Soil Loss Equation
V	Vanadium
V ₂ O ₅	Vanadium Pentoxide
VO	Variation Order
WC	Worst Case
WCA	Malaysia Wildlife Conservation Act
WESP	Wet Precipitation
WIP	Water Intake Point
WQ	Water Quality
WQI	Water Quality Index
WQM	Water Quality Modelling
WW	Waste Water
WWTP	Waste Water Treatment Plant
ZOI	Zone of Impact