

ABBREVIATIONS

Θ	angle of inclination of the plate from the horizontal plane (deg)
n	Horton's Roughness
$\mu\text{g}/\text{m}^3$	Microgram per cubic metre
μm	Micrometre
a	Length of single plate
A_e	Minimum Cross Sectional Vertical Area
A_{sp}	Specific Surface Area
A_{tp}	Surface Area of Total Projected
AC	Activated Carbon
ACGIH	American Conference of Governmental Industrial Hygienists
ADB	Asian Development Bank
Ag	Silver
AIs	Appointed Individuals
ALARP	As Low As Reasonably Practicable
AMR	AMR Environmental Sdn. Bhd.
APCS	Air Pollution Control System
API	Air Pollution Index
ARI	Average Recurrence Interval
As	Arsenic
AT	Averaging Time
ATSDR	Agency for Toxic Substances and Disease Registry
b	Width of Single Plate
B	Boron
Ba	Barium
BAT	Best Available Technology
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
Br	Bromine
C	Carbon
C_{post}	Runoff Coefficients
Ca	Calcium

CaCO ₃	Calcium Carbonate
CBOD	Carbonaceous Biochemical Oxygen Demand
CCTV	Closed-Circuit Television
Cd	Cadmium
CEMS	Continuous Emission Monitoring System
CEMS-DIS	Continuous Emission Monitoring Systems-Data Interface System
CEO	Chief Executing Officer
cP	Centipoise
CePIETSO	Certified Environmental Professional in the Operation of Industrial Effluent Treatment Systems
CePBFO	Certified Environmental Professional in Bag Filter Operation
CePSO	Certified Environmental Professional in Scrubber Operation
CePSWaM	Certified Environmental Professional in Scheduled Waste Management
cfm	Cubic feet per minute
CH ₂ O	Formaldehyde
CJSB	Cenviro (Johor) Sdn. Bhd.
Cl ⁻	Chloride
CM	Compliance Monitoring
CMT	Crisis Management Team
CN	Cyanide
CN	Consignment Note
Co	Cobalt
CO	Carbon Monoxide
COA	Condition of Approval
COD	Chemical Oxygen Demand
CP	Competent Person
CPESC	Certified Professional in Erosion and Sediment Control
CSR	Corporate Social Responsibility
CTI	Collection Transportation Instruction
Cr	Chromium
Cu	Copper
CV	Calorific Value
d	Vertical Separation Distance Between Plate
dBA	A-weighted decibels
DAS	Dry Absorption Systems

DCS	Direct Control System
DID	Department of Irrigation and Drainage
DO	Dissolved Oxygen
DOE	Department of Environment
E-CN	E-Consignment Note
EB	Environmental Budgeting
EC	Environmental Competency
ED	Emergency Director
EE	Environmental Excellence
EF	Environmental Facility
EF	Exposure Frequency
EHRA	Environmental Health Risk Assessment
EIA	Environmental Impact Assessment
EIWIS	Electronic Integrated Waste Information System
EM	Environmental Mainstreaming
EMG	Emergency Management Group
EMC	Environmental Monitoring Committee
EMP	Environmental Management Plan
EMP	Environmental Monitoring Program
EO	Environmental Officer
EOC	Emergency Operations Centre
EP	Environmental Policy
EPA	Environmental Protection Agency
EPMC	Environmental Performance Monitoring Committee
EPMD	Environmental Performance Monitoring Document
EQR	Environmental Quality Report
ERCMC	Environmental Regulatory Compliance Monitoring Committee
ERC	Environmental Reporting and Communication
ERP	Emergency Response Plan
ERT	Emergency Response Team
ESI	Environmental Scoping Information
ESR	Environmental Sustainability Report
ETP	Effluent Treatment Plant
EQA	Environmental Quality Act
ET	Environmental Transparency

ETP	Effluent Treatment Plant
eSWIS	Electronic Scheduled Waste Information Systems
F	Fluorine
Fe	Iron
FeCl ₃	Iron trichloride
FEED	Front-End Engineering Design
FGD	Focus Group Discussion
FIBCs	Flexible Intermediate Bulk Containers
FP	Focal Person
fpm	Feet per minute
FWF	Frequency of Warehouse Fire
GAs	Government Agencies
GJ	Gigajoule
GLC	Ground Level Concentration
GM	General Manager
GPS	Global Positioning Satellite
GSR	Guided Self-Regulation
H	Hydrogen
HCl	Hydrogen Chloride
HF	Hydrogen Flouride
HDPE	High-Density Polyethylene
Hg	Mercury
HI	Hazard Index
HIA	Health Impact Assessment
HOD	Head of Department
HQ	Hazard Quotient
HQ _c	Hazard Quotient for Chronic effects
XHQ _A	Hazard Quotient for Acute effects
HRA	Health Risk Assessment
H ₂ SO ₄	Hydrogen Sulphate (Sulfuric Acid)
i	Rainfall Intensity
IC	Incident Commander
ICS	Incident Command System
ID	Induced Draft

IEC	International Electro-technical Commissioning
IETS	Industrial Effluent Treatment Systems
IM	Impact Monitoring
IPTA	Institut Pengajian Tinggi Awam
IR	Individual Risk
IRIS	Integrated Risk Information System
JAS	<i>Jabatan Alam Sekitar</i>
JPDC	Johor Petroleum Development Corporatio
JPAM	<i>Jabatan Pertahanan Awam Malaysia</i>
K	Potassium
KASB	Kualiti Alam Sdn. Bhd.
KAWMC	Kualiti Alam Waste Management Centre
Kg/day	Kilogram per day
Kg/L	Kilogram per litre
kg/m ³	Kilogram per cubic metre
kW/m ²	Kilowatt per square metre
LD-P2M2	Land Disturbing Pollution Prevention and Mitigation Measures
M	Absolute Viscosity of Waste Water
m ³	Cubic metre
m/s	Metre per second
m ³ /s	Cubic metre per second
MAAQS	Malaysian Ambient Air Quality Standards
MBBR	Moving Bed Biofilm Reactor
MCL	Maximum Contaminant Level
Mg	Magnesium
mg/L	Milligram per litre
mg/m ³	Milligram per cubic metre
MJ/kg	Mega joules per kilogram
MLSS	Mixed Liquor Suspended Solid
MLVSS	Mixed Liquor Volatile Suspended Solid
MMD	Malaysian Meteorological Department
MMS	Malaysian Meteorological Service
Mm Wg	Millimeters watergauge
Mn	Manganese

MOH	Ministry of Health
MSD	Meteorological Services Department
MSMA	<i>Manual Saliran Mesra Alam</i>
MSL	Mean Sea Level
MRF	Materials Recovery Facilities
MUSLE	Modified Universal Soil Loss Equation
MT	Metric Ton
MWTA	Medical Waste Tracking Act 1988
MWR	Main Water Reservoir
N	Nitrogen
Na	Sodium
NH ₃ N	Ammoniacal Nitrogen
NHMIS	National Health Management Information System
Ni	Nickel
NMVOC	Non-Methane Volatile Organic Compound
NO _x	Nitrogen Oxide
NO ₂	Nitrogen Dioxides
NO ₃ -N	Nitrate
NWQS	National Water Quality Standards
O	Oxygen
O ₃	Ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OG	Oil and Grease
P	Phosphate
P17	Package 17
P2M2	Pollution Prevention and Mitigation Measures
Pb	Lead
PCB	Polychlorinated biphenyls
PCDD	Polychlorinated dibenzo-p-dioxins
PCDF	Polychlorinated dibenzofurans
PCS	Pollution Control System
PCT	Polychlorinated triphenyls
pcu/hr	Passenger Car Unit per Hour
PETRONAS	Petroleum Nasional Berhad

PIJ	Perbadanan Islam Johor
PLC	Programmable Logic Controller
PM	Particulate Matter
PM	Performance Monitoring
PMD	Performance Monitoring Document
PMR	Performance Monitoring Report
PP	Project Proponent
PPE	Personal Protective Equipment
PRPC	Refinery and petrochemical Corporation Sdn. Bhd.
Q	Peak discharge / Influent Flow
QC	Quality Control
Q _m	Flow Rate of Waste Water
Q _{min}	Minimum Peak Discharge
Q _{max}	Maximum Peak Discharge
QRA	Quantitative Risk Assessment
RAPID	Refinery and Petrochemical Integrated Development
RC	Refinery and Cracker
RfC	Reference Concentration
RFI	Request for Inspection
Rk	Rotary Klin
RME	Reasonable Maximum Exposure
S	Sulphur
S _{post}	Slope Gradient
S ₀	Specific gravity of oil in waste water
S _w	Specific gravity of waste water
SAJ	<i>Syarikat Air Johor</i>
Sb	Antimony
SCADA	Supervisory Control and Data Acquisition
SCC	Secondary Combustion Chamber
SDE	Senai-Desaru Expressway
SO _x	Sulphur Oxide
SO ₂	Sulphur Dioxides
SO ₄ ²⁻	Sulphate
SOP	Standard Code of Practice

SOR	Surface Overflow Rate
SOTE	Standard Oxygen Transfer Efficiency
SP	Special Provider
SPV	Special Purpose Vehicle
STP	Sewage Water Treatment Plant
SV	Sludge Volume
SW	Scheduled Waste
TWHT	Treated Water Holding Tank
SWMCJ	Schedule Waste Management Centre
SWTTA	Scheduled Waste Transportation and Treatment Agreement
SWRRA	Scheduled Waste Recycling and Recovery Agreement
t_c	Duration
TCLP	Toxicity Characteristic Leaching Procedures
TI	Thallium
TOC	Total Organic Carbon
TOR	Terms of Reference
TRC	Technical Review Committee
TSS	Total Suspended Solid
TWG	Transport of Waste Generator
UEM	United Environment's Malaysia
UF	Ultrafiltration
UK	United Kingdom
URF	Unit Risk Factor
USEPA	Unite State Environmental Protection Agency
USGS	United State Geological Survey
USLE	Universal Soil Loss Equation
V	Vanadium
V_h	Horizontal Velocity
V_t	LAMELLA Velocity / Vertical Velocity
VOC	Volatile Organic Compounds
WAC	Waste Acceptance Criteria
WAP	Waste Acceptance Procedures
WASP	Water Quality Analysis Simulation Program
WCS	Worst Case Scenario
WCCS	Worst Case Credible Scenario

WG	Waste Generator
WHO	World Health Organization
WMC	Waste Management Centre
WQI	Water Quality Index
Zn	Zinc
ZOI	Zone of Impact