

EIA FOR THE PROPOSED SCHEDULED WASTE & SOLID WASTE RECOVERY PLANT ON LOT 7090, LORONG PERINDUSTRIAN BUKIT MINYAK 16, KAWASAN PERINDUSTRIAN BUKIT MINYAK, SEBERANG PERAI TENGAH, PULAU PINANG

EIA Prescribed Activity 14a(i) Waste Treatment and Disposal – Scheduled Waste: Construction of Recovery Plant (Off-Site)

EIA Prescribed Activity 14(b)(ii): Waste Treatment and Disposal – Solid Waste: Construction of Recovery Plant or Recycling Plan

Project proponent: Jie Yu Metal Sdn Bhd.
EIA consultant: Greenwich Environment Sdn Bhd.
EIA team member: Hung Yee Hon (CEP-C0092), Nikki Wong Foong Mei (CEP-C0020)

Project Concept & Justification

Recovery of scheduled wastes and solid waste with total capacity of 959 MT/mth and 1,110 MT/mth respectively within Kawasan Perindustrian Bukit Minyak. The recovered products include recovered precious metals, cleaned containers and cleaned rags / bags.

Existing industrial lot on (Lot 7090) with factory building (1.5026ha).



The nearest sensitive receptor: Tmn Seri Juru (670m).



Condo Lembah Indah (1.4km).



Statement of Need

Provide recovery of wastes in an efficient and environmental friendly manner

Assist in waste reuse and minimization

Enable and promote of waste reuse in the region

Support to the Government's recycling and reuse campaign

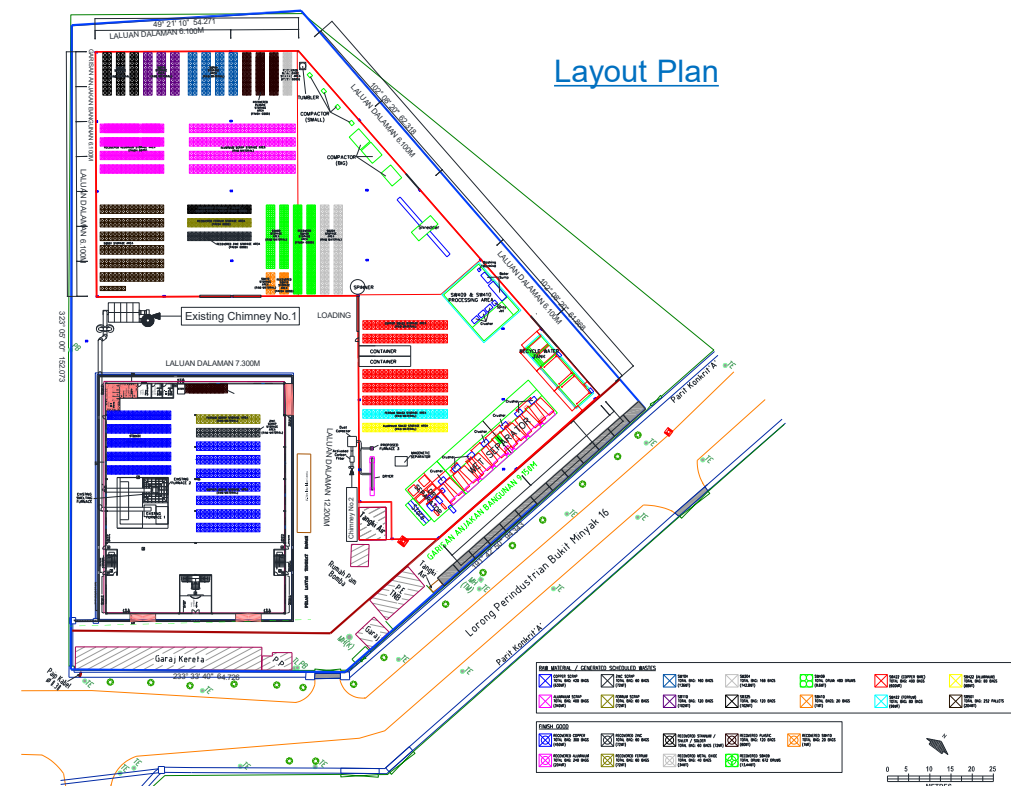
Enable the enhancement of spin off business

PROJECT DESCRIPTION

Waste Sources: local industries

Waste Acceptance Criteria:

Description	Waste Acceptance Criteria
Metal Scrap	Metal scrap not contaminated by oil, solvent or other chemicals on the surface.
SW104	Copper dross containing $\geq 25\%$ copper; silver dross containing $\geq 15\%$ silver; aluminium dross containing $\geq 25\%$ aluminium; stannum dross containing $\geq 49\%$ stannum; zinc dross containing $\geq 25\%$ zinc.
SW110	All type of PCB, Motherboard, and Processor that contain $> 17\%$ copper & other metals.
SW204	Sludge containing $> 14\%$ copper oxide or nickel oxide.
SW325	Solder epoxy paste containing $> 94\%$ silver, stannum and gold.
SW409	Used container i.e. metal drums or plastic container contaminated with oil, coolant, acid or alkaline.
SW410	Used rags or bags contaminated with oil, coolant, acid or alkaline.
SW422	Off cut materials (i.e. aluminium and ferrum) from factories contaminated with $\leq 0.5\%$ coolant and/or oil.
SW422	Copper wire with insulator that free from contaminants such as oil, solvent or other chemicals on the surface.



Process Description

- Metal scrap – smelting or compacting.
- SW104 – magnetic separation & smelting.
- SW110 – tumbler, crushing, wet separation & smelting.
- SW204 – drying & smelting.
- SW325 – heating
- SW409 – water spraying & purging
- SW410 – water spraying, purging & washing
- SW422 – spinning for oil / coolant removal & smelting

EXISTING ENVIRONMENT

Land use – industrial within 500m radius. The nearest receptor is Tmn Seri Juru (670m northwest of project site).

Drainage System

Drainage system → Parit Tok Subuh → Sg Junjung → Sg Jawi → Straits of Penang
within Industrial Estate

No downstream water intake point

BASELINE STUDY

Component	Parameter
Drainage Water Quality	Full parameters of Standard B
Ambient Air Quality	PM10, PM2.5, NO ₂ , SO ₂ , HCl, Cl ₂ , H ₂ SO ₄ and HNO ₃
Ambient Noise Level	L _{eq} , L ₉₀ , L ₁₀ , L _{max} , L _{min}



RESULTS

Drainage Water Quality: W1 & W2 categorized as 'slightly polluted' and W3 categorized as 'polluted'.

Air Quality: Parameters of PM10, PM2.5, NO₂, SO₂ were below the reference limit of the Malaysian Recommended Air Quality Guidelines. Hydrogen chloride was ranged from 1.67 to 2.83 mg/m³ while chlorine gas, sulfuric acid and nitric acid were below their respective detection limits.

Noise level: The average noise level (L_{eq}) recorded was below the permissible sound level for all stations.

IMPACT EVALUATION

Impacts during Construction: Insignificant impact involving machinery installation only in short period.

Impacts during Operations:

Potential Impact	Project Activities and Sources of Pollution	Impact Magnitude
Air Quality	• Emission from recovery process	Minor
Water Quality	• Accidental spillage.	Minor
Noise Pollution	• Plant operational noise. • Vehicular movement.	Minor
Scheduled Waste	• Residues generated from recovery process	Minor
Socio-economic	• Disturbance to surrounding receptors	Minor
Hazard & Risk	• Furnace operations	Minor

ENVIRONMENTAL MANAGEMENT PLAN

