

**RINGKASAN EKSEKUTIF**

# CADANGAN KEMUDAHAN LUAR TAPAK BAGI PEMEROLEHAN KEMBALI BUANGAN TERJADUAL (SW 110, SW 422 & SW 104) DAN SISA LOGAM DI ATAS SEBAHAGIAN DARIPADA PT 9723, TELOK PANGLIMA GARANG, 42500 KUALA LANGAT, SELANGOR DARUL EHSAN BY LONG WEI METALS SDN BHD

## JADUAL PERTAMA PENILAIAN IMPAK ALAM SEKITAR (EIA)

### RINGKASAN EKSEKUTIF

### PENDAHULUAN

Ini adalah Laporan Penilaian Impak Alam Sekitar (EIA) yang disediakan untuk Long Wei Metals Sdn Bhd (LWM) untuk diserahkan kepada Jabatan Alam Sekitar (JAS) Selangor untuk kelulusan. Projek EIA dengan ini disebut sebagai “**CADANGAN KEMUDAHAN LUAR TAPAK BAGI PEMEROLEHAN KEMBALI BUANGAN TERJADUAL (SW 110, SW 422 & SW 104) DAN SISA LOGAM DI ATAS SEBAHAGIAN DARIPADA PT 9723, TELOK PANGLIMA GARANG, 42500 KUALA LANGAT, SELANGOR DARUL EHSAN BY LONG WEI METALS SDN BHD.**”. Selepas ini, ia akan dikenali sebagai “Projek”.

### PENGGERAK PROJEK DAN ORANG YANG BERKELAYAKAN



#### PENGGERAK PROJEK

##### LONG WEI METALS SDN BHD (LWM)

Alamat: PT 9723, Telok Panglima Garang,  
42500 Kuala Langat,  
Selangor Darul Ehsan

Orang Dihubungi: Liang Longqing

No. Telefon: 011-5860 2199

Emel : Longweimetals@gmail.com



#### JURURUNDING EIA

##### KESPRO CONSULTANTS SDN BHD

Alamat : No. A-07-09, Level 7, Block A, Sunway Geo Avenue, Jalan Lagoon Selatan, Sunway South Quay, Bandar Sunway, 47500 Subang Jaya, Selangor Darul Ehsan.

Orang Dihubungi: Chong Shiau lun @ Abraham

No. Telefon: 019-8201820

Emel : chongsi@hotmail.com





## AHLI PASUKAN EIA

### Ketua Pasukan EIA

1. Chong Shiau lun @ Abraham  
Jururunding EIA & Pakar Subjek (CEP-CS0111)  
Penilaian Kualiti Air; Pengurusan Air Sisa; Penilaian Risiko Kuantitatif; Pengurusan Keselamatan dan Kesihatan Pekerjaan

### Ahli Pasukan EIA

1. ChM. Tang Ching Ching  
Jururunding EIA & Pakar Subjek (CEP-C0073)  
Penilaian Kualiti Udara dan Bunyi
2. Agatha Francis Nasin  
Pakar Subjek (CEP-SS0140)  
Kajian Impak Sosial
3. Ahmad Nazri Saidin  
Jururunding EIA  
Pengurusan Buangan Terjadual

### Ahli Pasukan Sokongan EIA

1. Tan Vern Yen  
Koordinator Projek; Persekitaran Sedia Ada; dan Penilaian Pencemaran Bunyi
2. Dr. Thaneissha A/P Marimuthu  
Penilaian Pencemaran Udara
3. Freddy Lee  
Pemetaan GIS

## KEPERLUAN PERUNDANGAN

Projek ini adalah tertakluk kepada Perintah Kualiti Alam Sekeliling (Aktiviti yang Ditetapkan) (Penilaian Kesan kepada Alam Sekeliling) 2015:

- Jadual Pertama, Aktiviti 14(a) (i): Pengolahan dan Pelupusan Buangan: Buangan Terjadual: Pembinaan loji pulih guna (luar tapak), dan
- Jadual Pertama, Aktiviti 14(b) (ii): Pengolahan dan Pelupusan Buangan: Sisa Pepejal: Pembinaan loji pulih guna atau loji kitar semula.



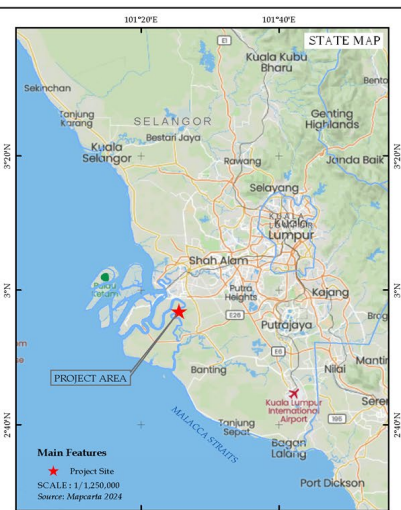
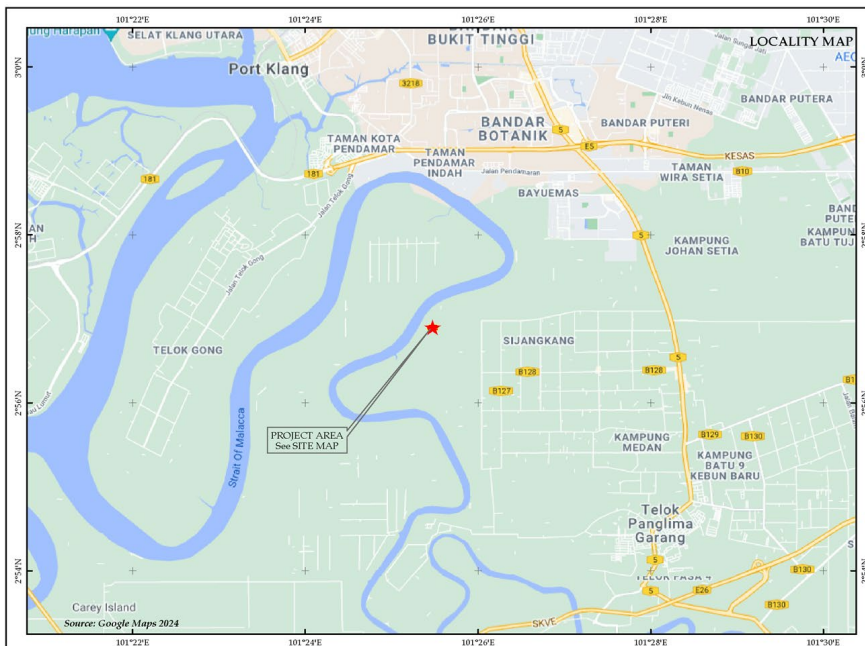
## PENYATAAN KEPERLUAN

- Kemudahan pemerolehan buangan terjadual akan memperkenalkan dimensi baru bagi sektor pembuatan.
- Kegiatan ekonomi yang terlibat secara langsung: pengumpulan, pengangkutan, dan pemerolehan kembali dari sisa, penjualan produk yang dipulihkan dan pelupusan buangan terjadual. Perkhidmatan tidak langsung yang terlibat merangkumi perkhidmatan perundingan alam sekitar, penilaian impak, pengurusan dan pemantauan oleh profesional.
- Kegiatan dan faedah ekonomi yang berupaya dijana oleh Projek ini ialah kesedaran and pengetahuan terhadap pemuliharaan alam sekeliling dan pengekalan sumber asli serta tanggungjawab semua penjana buangan.
- Keperluan Projek ini adalah berasaskan sudut pandangan alam sekeliling dan kemampuan di samping membawa kepada kebaikan ekonomi, perniagaan dan pekerjaan.

# LOKASI PROJEK



## PETA LOKALITI



**LEGEND**

**Main Features**

- ★ Project Centre
- ▭ Project Area
- Project boundary
- ▬ Major road
- ▬ Minor road
- ▬ Main river

SCALE: 1/100,000 [LOCALITY A4]

0 1 2 3 4  
 Kilometers

WGS84 Geographic Coordinates

**BOUNDARY COORDINATES**

A	02° 56' 52.7" N, 101° 25' 25.7" E
B	02° 56' 55.0" N, 101° 25' 26.7" E
C	02° 56' 55.0" N, 101° 25' 31.7" E
D	02° 56' 54.8" N, 101° 25' 31.7" E
E	02° 56' 52.7" N, 101° 25' 31.7" E
X	02° 56' 53.0" N, 101° 25' 28.0" E

MAP NO.: lwm-fl-locality01

DATE: 10-12-2024

Project Proponent: LONG WEI METALS SDN BHD



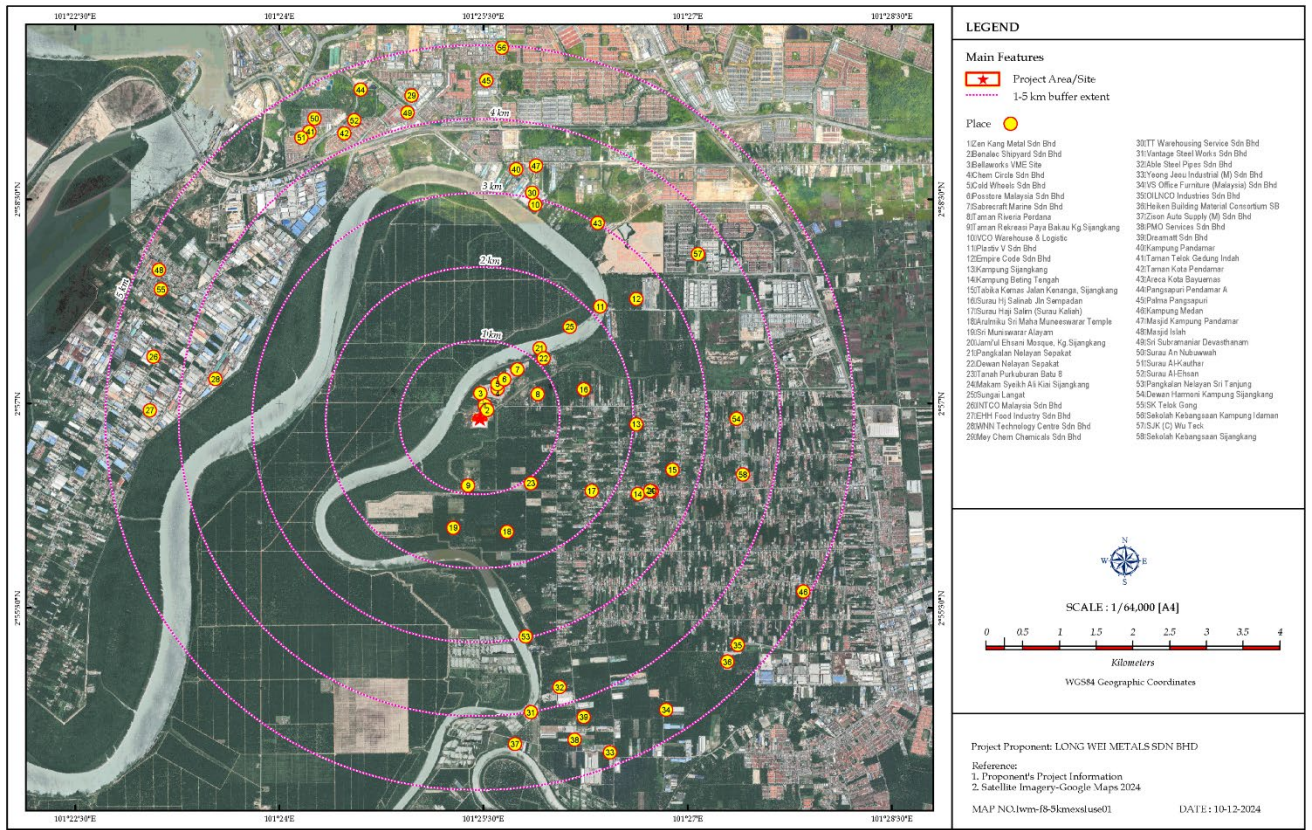
## PETA TAPAK



# LOKASI PROJEK



## PETA GUNA TANAH – 5 KM



## PENERIMA SENSITIF



Taman Riveria Perdana



Bellworks Sdn Bhd



Surau Hj Saliman Jln Sempadan



Zen Kang Metal Sdn Bhd



Pangkalan Nelayan Sepakat

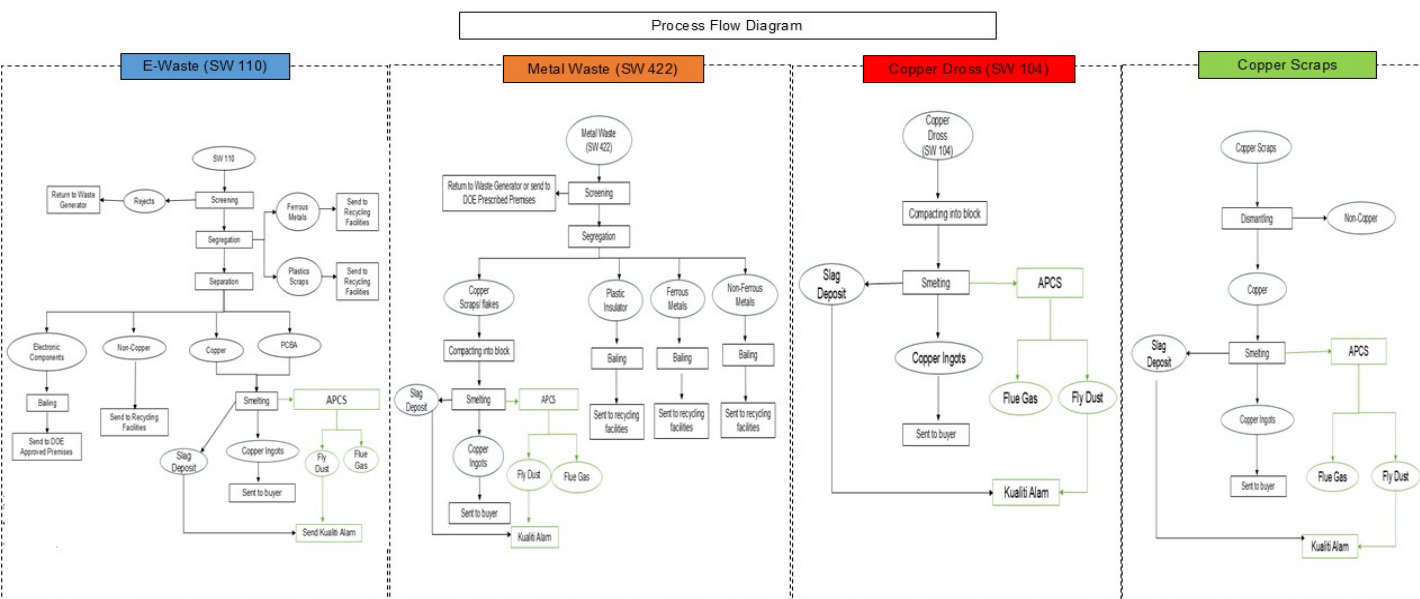


Tanah Perkuburan Islam Kampung Sijangkang

# DESKRIPSI PROJEK

Penggerak Projek (PP) bercadang untuk mengendalikan fasiliti luar tapak bagi pemerolehan kembali sisa terjadual (SW 110, SW 422 & SW 104) dan sisa logam untuk mendapatkan semula bahan-bahan berikut:

- Tembaga Ingots
- Komponen elektronik yang mengandungi logam-logam berharga (SW 110)
- Plastik
- Butiran Bukan Kuprum
- Logam Ferus
- Logam Bukan Ferus



**Rajah Aliran Proses untuk Aktiviti Pemerolehan Kembali Sisa Terjadual (SW 110, SW 422 & SW 104) dan Sisa Logam**



## FASA OPERASI

- Operasi Kemudahan Pemerolehan Kembali Sisa Terjadual (SW 110, SW 422 & SW 104) dan Sisa Logam
- Penyelenggaraan Bangunan, Kemudahan dan Utiliti

## PERSEKITARAN SEDIA ADA



### GEOLOGI

Formasi *Quaternary* dengan litologi batuan sedimen



### TOPOGRAFI

Projek ini akan diletak di atas sebidang tanah rata di Telok Panglima Garang.



### TANAH

Siri Tanah Keranji



### IKLIM

Data Iklim kecuali *Wind Rose* (2014-2023): Stesen Subang

Data Iklim untuk *Wind Rose* (2014-2023): Stesen Subang

Purata Hujan Tahunan: 3,063.4 mm

Purata 24-jam kelembapan relatif: 77.2% to 82.1%

Angin permukaan sering bertiup dari barat laut (17.7 %), diikuti oleh barat (12.0%), kemudian selatan (11.7%) dan utara (10.9%)



### GUNA TANAH

Dalam Tapak Projek:

- Tapak Projek terletak di Telok Panglima Garang.
- Lot berhampiran dengan tapak Projek ialah Zen Kang Metal Sdn Bhd, Benalec Shipyard Sdn Bhd, Bellaworks VME Site, Chem Circle Sdn Bhd and Cold Wheels Sdn Bhd

Dalam lingkungan 3-km Jejari dari Sempadan Tapak Projek:

- Penggunaan tanah dalam jejari 1 km hingga 3 km dari sempadan tapak Projek terdiri daripada kawasan perindustrian, kediaman, institusi dan kemudahan sedia ada

## PROGRAM PEMANTAUAN PEMATUHAN (CM)

Program pemantauan pematuhan (CM) adalah pemantauan prestasi P2M2 yang telah dilaksanakan di dalam premis di mana yang akan dijalankan secara berterusan supaya memastikan pelaksanaan P2M2 yang dicadangkan dan juga semua syarat kelulusan EIA dapat dipatuhi semasa beroperasi. Program ini dapat menilai pematuhan cadangan Projek dan menyediakan peluang untuk mengoptimum dan menambahbaikkan pengurusan alam sekitar projek ini.

Jadual di bawah menunjukkan pemantauan pematuhan untuk APCS.

No.	Stack ID.	APCS No.	Parameters/Limit	Monitoring Type	Reference CAR 2014
1	C1	APCS 1	Total Particulate Matter (10mg/m <sup>3</sup> ); SO <sub>2</sub> (500mg/m <sup>3</sup> ); NO <sub>2</sub> (400mg/m <sup>3</sup> )	Continuous* Continuous* Periodic	Third Schedule, Item D

## PROGRAM PEMANTAUAN KESAN (IM)

Program pemantauan kesan alam sekitar (IM) adalah untuk mengenalpasti perubahan kepada alam sekitar yang diramalkan dan tidak dijangka disebabkan oleh cadangan Projek akan dijalankan seperti yang dinyatakan di bawah. Laporan Pemantauan Kualiti Alam Sekitar suku tahunan adalah disyorkan untuk dikemukakan kepada Jabatan Alam Sekitar berdasarkan data pemantauan yang diambil tiga bulan sekali, atau setiap tahun. Lokasi dan kekerapan pemantauan adalah ditunjukkan di dalam jadual di bawah.



### STESEN PENSAMPELAN UNTUK KUALITI AIR



## PROGRAM PEMANTAUAN KESAN (IM)

Lokasi	Deskripsi	Koordinat	
		Latitud	Longitud
W1	<i>Upstream (External Drain – Before Project Site)</i>	2°56'55.67"N	101°25'35.25"E
W2	<i>Downstream (External Drain – After Project Site)</i>	2°56'23.84"N	101°25'20.94"E
W3	<i>Downstream (Stormwater Drainage)</i>	2°56'22.11"N	101°25'18.23"E



### STESEN PENSAMPELAN UNTUK KUALITI UDARA DAN BUNYI



Lokasi	Deskripsi	Koordinat	
		Latitud	Longitud
A1/N1	<i>Project Boundary</i>	2°56'52.84"N	101°25'31.48"E
A2/N2	<i>Nearest House at Jalan Sempadan Batu 7</i>	2°56'58.72"N	101°25'45.81"E
A3/N3	<i>Residential Area at Jalan Pusara</i>	2°57'45.17"N	101°23'5.49"E

# PENILAIAN IMPAK DAN LANGKAH-LANGKAH MITIGASI

Impak	Punca Impak	Tahap Impak	P2M2 Disyorkan
<b>Fasa Operasi</b>			
Pencemaran air/tanah akibat pengendalian	<ul style="list-style-type: none"> <li>Tumpahan dan pelepasan tidak sengaja</li> </ul>	Boleh Signifikan	<ul style="list-style-type: none"> <li>Penyimpanan dan pengendalian buangan terjadual yang selamat</li> <li>Gunakan kotak dan beg jumbo untuk pembendungan.</li> <li>Simpan semua bahan mentah dengan mematuhi garis panduan amalan baik.</li> <li>Semak bahan mentah yang masuk untuk memastikan penerimaan berdasarkan kriteria penerimaan sisa.</li> </ul>
Pencemaran air/ tanah akibat pengangkutan	<ul style="list-style-type: none"> <li>Tumpahan atau pembuangan buangan terjadual secara tidak sengaja semasa pengangkutan</li> </ul>	Tidak Signifikan	<p><u>Pengangkutan Buangan Terjadual</u></p> <ul style="list-style-type: none"> <li>Sediakan pelan logistik dan laluan.</li> <li>Semua kenderaan hendaklah dilengkapi dengan kemudahan pembersihan</li> <li>Periksa keadaan trak sebelum digunakan.</li> </ul> <p><u>Tumpahan atau Pelepasan Secara Tidak Sengaja</u></p> <ul style="list-style-type: none"> <li>Gunakan peralatan perlindungan kakitangan (PPE) yang sesuai untuk memberi perlindungan kepada pekerja dalam mengendalikan sebarang tumpahan yang tidak disengajakan</li> <li>Kontraktor/PP hendaklah membendung, membersihkan dan mengurangkan sebarang tumpahan atau pembuangan sisa yang tidak disengajakan secepat mungkin.</li> <li>Laluan pengangkutan untuk mengelakkan kawasan berpenduduk padat, kawasan tadahan air dan kawasan sensitif alam sekitar yang lain.</li> </ul>

# PENILAIAN IMPAK DAN LANGKAH-LANGKAH MITIGASI

Impak	Punca Impak	Tahap Impak	P2M2 Di syorkan
Bahaya kebakaran di loji	<ul style="list-style-type: none"> <li>Pencucuhan bahan api secara tidak sengaja</li> </ul>	Boleh Signifikan	<ul style="list-style-type: none"> <li>Mempunyai ERP yang telah dilatih dengan baik yang boleh dilaksanakan dalam masa yang singkat.</li> <li>Sistem pemadam kebakaran dengan siren akan dipasang.</li> <li>Sistem yang perlu diperiksa dan diselenggara secara berkala.</li> <li>Dilarang merokok dan larangan mancis, pemetik api dan alat penyalan lain di Loji.</li> <li>Anggota bomba, apabila perlu, memakai peralatan perlindungan yang betul dan alat pernafasan serba lengkap.</li> <li>Untuk menghubungi balai bomba apabila diperlukan.</li> <li>Semua bilik tertutup hendaklah dipasang dengan pintu berkadar api sekurang-kurangnya satu jam.</li> <li>Alat pemadam api perlu diletakkan di pelbagai lokasi strategik untuk memudahkan akses.</li> </ul>
Buangan terjadual/ sisa-sisa/ enap cemar	<ul style="list-style-type: none"> <li>Bahan ditolak daripada proses pemerolehan kembali</li> </ul>	Boleh Signifikan	<ul style="list-style-type: none"> <li>Buangan terjadual yang dihasilkan daripada operasi kitar semula hendaklah disimpan dalam tempat yang sesuai, dilabel dan kemudian dilupuskan di Kualiti Alam (KA)</li> <li>Buangan yang terhasil daripada proses pemerolehan kembali sisa hendaklah disimpan dalam bekas yang sesuai dan kemudian dilupuskan di tapak pelupusan sampah yang diluluskan untuk sisa tidak berjadual.</li> <li>Kawasan penyimpanan mesti berbumbung untuk mengelakkan kemasukan air hujan dan mesti mempunyai pengudaraan yang mencukupi. .</li> </ul>
Sisa pepejal	<ul style="list-style-type: none"> <li>Sisa domestik</li> </ul>	Tidak Signifikan	<ul style="list-style-type: none"> <li>Sisa domestik akan diuruskan oleh pihak berkuasa tempatan dan dilupuskan di tapak pelupusan sampah yang ditetapkan</li> </ul>
Pencemaran bunyi	<ul style="list-style-type: none"> <li>Disebabkan oleh kenderaan pengangkutan semasa operasi</li> <li>Operasi pam dan kipas ekzos</li> </ul>	Boleh Signifikan	<ul style="list-style-type: none"> <li>Pastikan semua peralatan operasi mempunyai sistem ekzos yang berfungsi baik.</li> <li>Kipas angin dan pam udara emparan hendaklah berfungsi dengan baik sepanjang operasi proses, dengan servis dan penyelenggaraan yang kerap.</li> </ul>

# PENILAIAN IMPAK DAN LANGKAH-LANGKAH MITIGASI

Impak	Punca Impak	Tahap Impak	P2M2 Di syorkan
Pencemaran udara	<ul style="list-style-type: none"> <li>Pembebasan zarahhan terampai daripada sistem kawalan pencemaran udara (APCS)</li> </ul>	Boleh Signifikan	<ul style="list-style-type: none"> <li>Habuk fugitif boleh dikawal dengan membasahkan skraps (bahan bersaiz besar) jika perlu</li> <li>Penyelenggaraan semua peralatan kawalan pencemaran udara di loji</li> <li>Pemantauan prestasi pelepasan pencemaran udara dengan menjalankan pemantauan berkala,</li> </ul>
Bahaya kesihatan dan keselamatan	<ul style="list-style-type: none"> <li>Semasa Operasi</li> </ul>	Tidak Signifikan	<ul style="list-style-type: none"> <li>Untuk menerima pakai prosedur keselamatan industri yang diberikan dalam Peraturan OSHA 1994.</li> <li>Helaian Data Keselamatan hendaklah disimpan di tapak untuk pemeriksaan.</li> <li>Prosedur kecemasan, pelan tindakan dan latihan tetap akan dilaksanakan.</li> <li>Dilarang merokok di dalam Loji.</li> <li>Pekerja hendaklah memakai sarung tangan pelindung, cermin mata keselamatan dan pakaian pelindung lain apabila diperlukan.</li> <li>Latihan kepada pekerja tertentu perlu disediakan seperti kursus memberikan pertolongan cemas. Peti pertolongan cemas perlu disediakan degan mudah diakses.</li> <li>Latihan intensif mengenai prosedur keselamatan perlu disediakan untuk semua kakitangan.</li> </ul>
Sosio-Ekonomi	<ul style="list-style-type: none"> <li>Pekerjaan; Estetika Persekitaran; Kebajikan Awam</li> </ul>	Tidak Signifikan	<ul style="list-style-type: none"> <li>Kesempatan pekerjaan akan diberi keutamaan kepada orang tempatan dalam proses pengambilan.</li> <li>Landskap dan penanaman semula dengan tumbuhan dan pokok renek yang sesuai.</li> <li>Pekerja asing perlu diperiksa status kesihatannya bagi mengelakkan kemungkinan penularan wabak dalam kalangan pekerja.</li> </ul>

## **EXECUTIVE SUMMARY**

# PROPOSED OFF-SITE RECOVERY PLANT FOR SCHEDULED WASTES (SW 110, SW 422 & SW 104) AND METAL SCRAPS AT PART OF PT 9723, TELOK PANGLIMA GARANG, 42500 KUALA LANGAT, SELANGOR DARUL EHSAN BY LONG WEI METALS SDN BHD

## FIRST SCHEDULE ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

### EXECUTIVE SUMMARY

### INTRODUCTION

This is an Environmental Impact Assessment (EIA) report prepared for Long Wei Metals Sdn Bhd (LWM), to be submitted to the Department of Environment (DOE) Selangor for approval. This EIA Project is herewith referred to as the "PROPOSED OFF-SITE RECOVERY PLANT FOR SCHEDULED WASTES (SW 110, SW 422 & SW 104) AND METAL SCRAPS AT PART OF PT 9723, TELOK PANGLIMA GARANG, 42500 KUALA LANGAT, SELANGOR DARUL EHSAN BY LONG WEI METALS SDN BHD ". Hereafter, it will be known as the Project.

### PROJECT PROPONENT AND QUALIFIED PERSON



#### PROJECT PROPONENT

##### LONG WEI METALS SDN BHD (LWM)

Address : PT 9723, Telok Panglima Garang,  
42500 Kuala Langat,  
Selangor Darul Ehsan.

Contact Person : Liang Longqing

Telephone No : 011-58602199

Email : Longweimetals@gmail.com



#### EIA CONSULTANT

##### KESPRO CONSULTANTS SDN BHD



Address : No.A-07-09, Level 7, Block A, Sunway Geo Avenue,  
Jalan Lagoon Selatan, Sunway South Quay,  
Bandar Sunway,  
47500 Subang Jaya, Selangor Darul Ehsan.

Contact Person : Chong Shiau Iun @ Abraham (EIA Team Leader)  
(EIA Consultant:CEP-CS0111)

Telephone No : 019 - 820 1820

Email : chongsi@hotmail.com

# PROJECT PROPONENT AND QUALIFIED PERSON



## EIA STUDY TEAM MEMBER

### EIA Study Team Leader

1. Chong Shiao lun @ Abraham  
EIA Consultant (CEP-CS0111)  
Wastewater Management; Quantitative Risk Assessment; Occupational Safety and Health; Industrial Process

### EIA Study Team Member

1. ChM. Tang Ching Ching  
EIA Consultant (CEP-C0073)  
Air Quality; Noise Quality; Baseline Monitoring
2. Agatha Francis Nasin  
Subject Consultant (CEP-SS0140)  
Social Impact Assessment
3. Ahmad Nazri Saidin  
EIA Consultant (CEP-C0346)  
Waste Management

### EIA Study Supporting Personnel

1. Tan Vern Yen  
Project Coordinator; Landuse and Socioeconomic Assessment
2. Dr Thaneissha A/P Marimuthu  
Air Quality
3. Freddy Lee  
GIS Mapping

## LEGISLATIVE REQUIREMENTS

This Project which falls under First Schedule, Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 2015:

- First Schedule, Activity 14(a)(i): Waste Treatment and Disposal: Scheduled Waste: Construction of Recovery Plant (off-site), and
- First Schedule, Activity 14 (b)(ii) Solid Waste: Construction of Recovery or Recycling Plant.



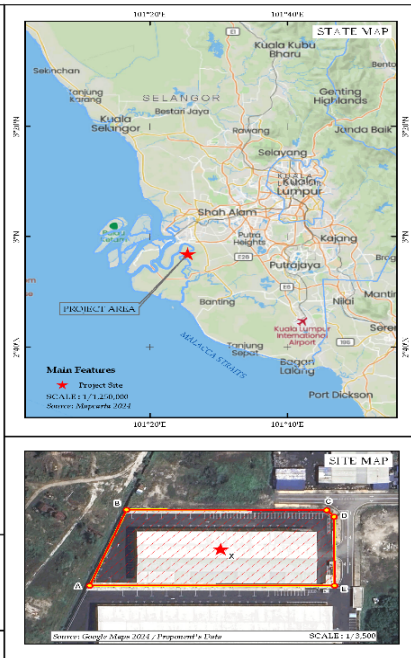
## STATEMENT OF NEED

- The scheduled waste facility will introduce a new dimension to the economics of the manufacturing sector.
- The economic activities directly created include collection, transportation and recovery from wastes, sales of recovered products and disposal of scheduled wastes. Indirect services created include environmental consultancy, impact assessment, management and monitoring services by professionals.
- These economic activities and benefits are derived from environmental awareness and consciousness in conservation of resources and responsibility of all waste generators in circular economy.
- The need for this Project is therefore justified from environmental and sustainability point of view besides offering economic benefits, business and job opportunities.

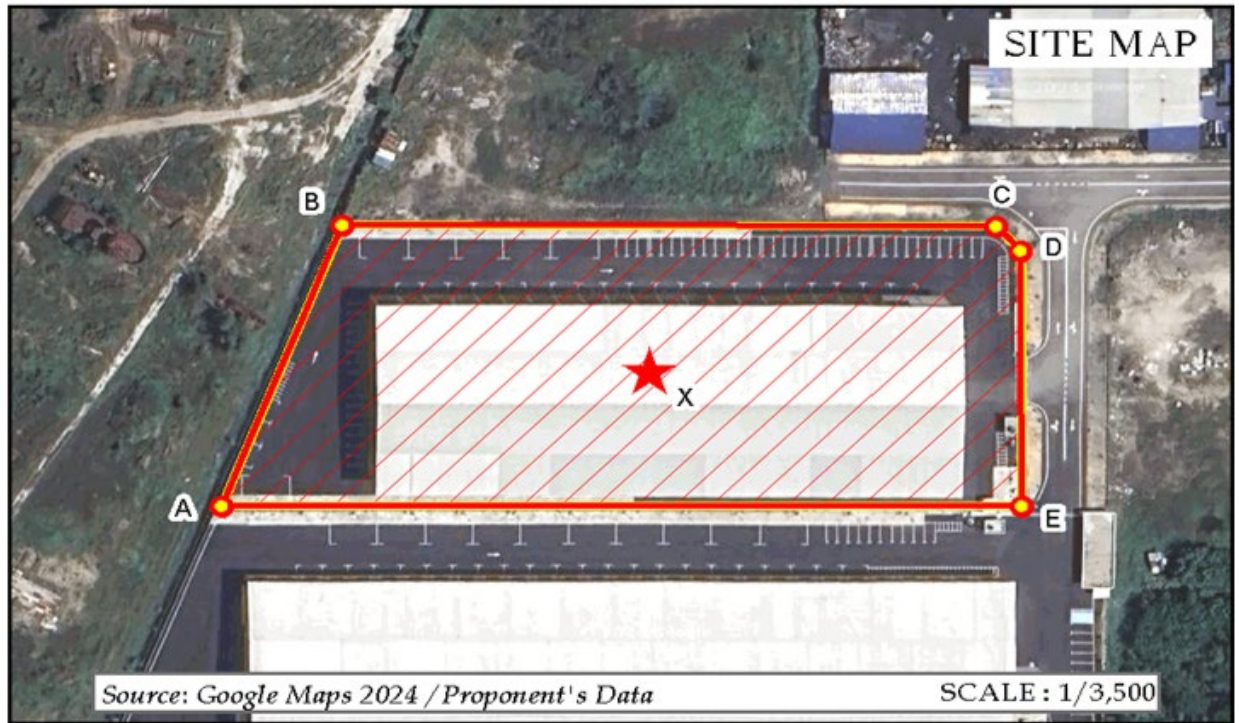
# PROJECT LOCATION



## LOCALITY MAP



## SITE MAP

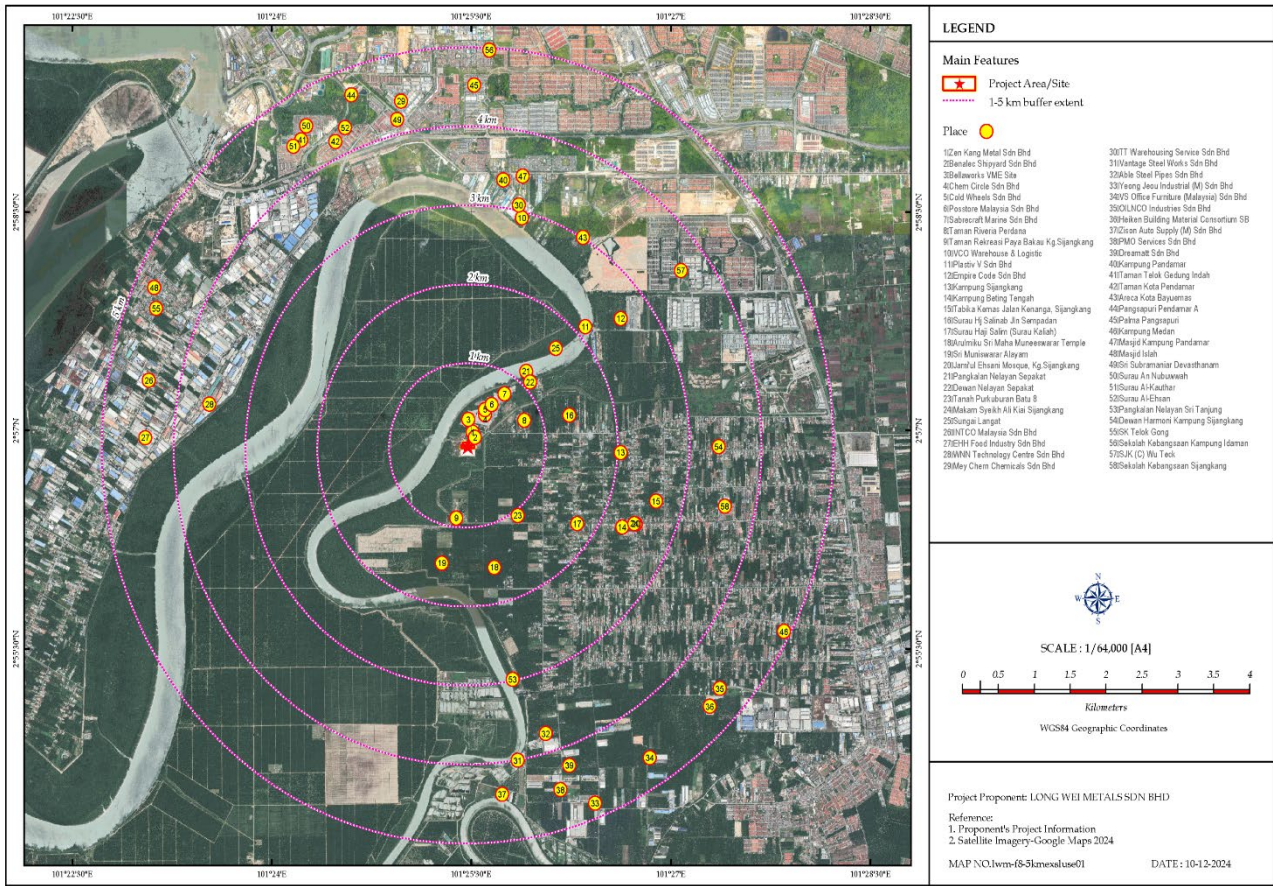


Point	Position	Northing	Easting
A	Northwest Corner	2°56'55.05"N	101°25'26.24"E
B	Northeast Corner	2°56'55.01"N	101°25'31.08"E
C	Northeast Corner	2°56'54.80"N	101°25'31.32"E
D	Southeast Corner	2°56'52.66"N	101°25'31.35"E
E	Southwest Corner	2°56'52.66"N	101°25'25.27"E
X	Centre	2°56'53.57"N	101°25'28.87"E

# PROJECT LOCATION



## LAND USE MAP – 5 KM



## SENSITIVE RECEPTORS



Taman Riviera Perdana



Belloworks Sdn Bhd



Surau Hj Saliman Jln Sempadan



Zen Kang Metal Sdn Bhd



Pangkalan Nelayan Sepakat

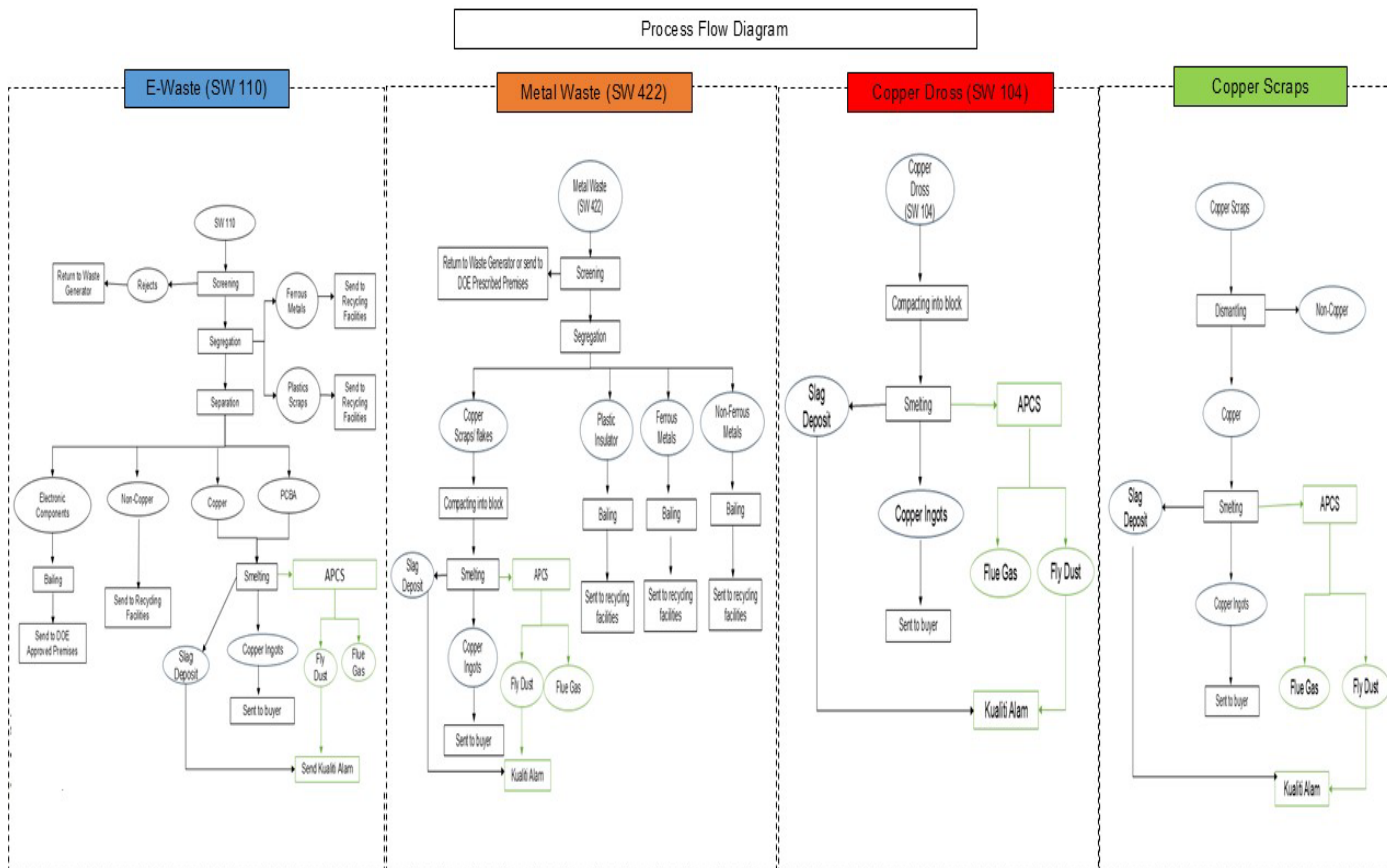


Tanah Perkuburan Islam Kampung Sijangking

# PROJECT DESCRIPTION

The Project Proponent (PP) intends to operate an off-site recovery facility to recover the following scheduled wastes (SW 110, SW 422 & SW 104) and metal scraps:

- Copper Ingots
- Electronic components with precious metals (SW 110)
- Plastic
- Non-copper Granules
- Ferrous Metals
- Non-Ferrous Metals



**Process Flow for Scheduled Wastes (SW 110, SW 422 and SW 104) and Metal Scraps Recovery Activity**



## OPERATION PHASE

- Operation of sorting and Waste Recovery Facility Operations
- Maintenance of building, facilities and utilities

# EXISTING ENVIRONMENT



## GEOLOGY

Quaternary Formation with lithology of sedimentary rocks.



## TOPOGRAPHY

This Project will be sited on a piece of flat land area within Telok Panglima Garang.



## SOIL

Keranji Soil Series.



## CLIMATE

Climate Data except Wind Rose (2014- 2023): Subang Station Climate Data for Wind Rose (2014-2023): Subang Station Average Annual Rainfall: 3,067.4 mm  
24-hr mean temperature: 27.3 °C to 28.6 °C  
24-hr mean relative humidity: 73.1% to 82.1%  
Surface winds often blow from northwest (17.7%), followed by west (12.0%) and then south (11.7%) and north (10.9%).



## LAND USE

Within the Project site:

The Project site is located within Telok Panglima Garang– an industrial area in Selangor. The immediate neighboring lots of the Project site are Zen Kang Metal Sdn Bhd, Benalec Shipyard Sdn Bhd, Bellaworks VME Site, Chem Circle Sdn Bhd and Cold Wheels Sdn Bhd

Within 3-km Radius from the Boundary of the Project site:

- Land use within 1 km to 3 km radius from the boundary of the Project site area made up of industry, residential areas, institutions and amenities.



## COMPLIANCE MONITORING (CM)

The compliance monitoring program (CM) is the performance monitoring of P2M2 that has been implemented in the premises where it will be carried out continuously to ensure that the proposed P2M2 implementation and also all EIA approval conditions can be complied with during operation. This program can assess compliance with Project recommendations and provide opportunities to optimize and improve the project's environmental management.

The table below shows compliance monitoring for APCS.

No.	Stack ID.	APCS No.	Parameters/Limit	Monitoring Type	Reference CAR 2014
1	C1	APCS 1	Total Particulate Matter (10 mg/m <sup>3</sup> ) SO <sub>2</sub> (500mg/m <sup>3</sup> ); NO <sub>2</sub> (400mg/m <sup>3</sup> )	Continuous* Continuous* Periodic	Third Schedule, Item D

## IMPACT MONITORING (IM)

The environmental impact monitoring program (IM) is to identify changes to the environment that are predicted and not expected due to the proposed Project will be carried out as stated below.

A quarterly Environmental Quality Monitoring Report is recommended to be submitted to the Department of Environment based on monitoring data taken every three months, or annually. The location and frequency of monitoring are shown in the table below.



### MONITORING STATION FOR WATER QUALITY



## PROGRAM PEMANTAUAN KESAN (IM)

Location	Description	Coordinates	
		Latitude	Longitude
W1	Upstream (External Drain – Before Project Site)	2°56'55.67"N	101°25'35.25"E
W2	Downstream (External Drain – After Project Site)	2°56'23.84"N	101°25'20.94"E
W3	Downstream (Stormwater Drainage)	2°56'22.11"N	101°25'18.23"E

## MONITORING STATION FOR AIR AND NOISE QUALITY



Location	Description	Coordinates	
		Latitude	Longitude
A1/N1	Project Boundary	2°56'52.84"N	101°25'31.48"E
A2/N2	Nearest House at Jalan Sempadan Batu 7	2°56'58.72"N	101°25'45.81"E
A3/N3	Residential Area at Jalan Pusara	2°57'45.17"N	101°23'5.49"E

# IMPACT ASSESSMENT AND MITIGATION MEASURES

Impact	Sources of Impact	Degree of Impact	Proposed P2M2
<b>Operation Phase</b>			
1. Water/Soil pollution due to handling	Spillage and accidental discharge	Can Be Significant	<ul style="list-style-type: none"> <li>• Safe Storage and handling of raw materials</li> <li>• Use durable boxes or jumbo bags for containment.</li> <li>• Store all raw materials in compliance with good practice guidelines.</li> <li>• Check incoming feedstock to ensure acceptance based on waste acceptance criteria.</li> </ul>
2. Water/ Soil pollution due to transportation	Spillage or accidental discharge of scheduled wastes during transportation	Insignificant	<p><b><u>Transport of Scheduled Wastes</u></b></p> <ul style="list-style-type: none"> <li>• Prepare a logistic and routing plan.</li> <li>• All vehicles to be equipped with cleaning up facilities</li> <li>• Check condition of the trucks before use.</li> </ul> <p><b><u>Accidental Spillage or Discharge</u></b></p> <ul style="list-style-type: none"> <li>• Use appropriate personnel protective equipment (PPE) to provide protection for workers in handling any accidental spillage.</li> <li>• The contractor/PP to contain, clean and abate any accidental spillage or discharge of the waste as soon as possible.</li> <li>• Transport route to avoid densely populated areas, water catchment areas and other environmentally sensitive areas.</li> </ul>

# IMPACT ASSESSMENT AND MITIGATION MEASURES

Impact	Sources of Impact	Degree of Impact	Proposed P2M2
3. Fire hazard in the plant	Accidental ignition of combustible materials for furnace;	Can Be significant	<ul style="list-style-type: none"> <li>• Have a well-rehearsed ERP that can be put into effect at short notice.</li> <li>• A central automatic fire-fighting system with sirens to be installed.</li> <li>• The system to be regularly inspected and maintained.</li> <li>• No smoking and prohibition of matches, lighters and other ignition devices in the Plant.</li> <li>• To call the fire stations when needed firefighters, when required, to wear proper protective equipment and self-contained breathing apparatus.</li> <li>• All enclosed rooms should be fitted with fire rated doors of at least one hour.</li> <li>• Fire extinguishers should be placed at various strategic locations for easy access.</li> </ul>
4. Scheduled waste/ residual waste	Rejects from recovery process  Furnace Ash	Can Be Significant	<ul style="list-style-type: none"> <li>• Scheduled wastes generated from the recovery operation shall be stored in suitable container, labelled and then disposed at Kualiti Alam or Prescribed Premises by DOE.</li> <li>• Rejects/Residues from scheduled waste recovery process shall be stored in suitable container and then disposed at approved landfill for non-scheduled wastes.</li> <li>• Slag from APCS process shall be stored in suitable container and then disposed at Prescribed Premises by DOE.</li> <li>• The storage area must be roofed to prevent entry of rainwater and must be ventilated adequately.</li> </ul>

# IMPACT ASSESSMENT AND MITIGATION MEASURES

Impact	Sources of Impact	Degree of Impact	Proposed P2M2
5. Solid waste	Domestic waste	Insignificant	<ul style="list-style-type: none"> <li>Domestic waste will be collected and disposed at the approved landfill site by Local Authority.</li> </ul>
6. Noise pollution	<p>Caused by transport vehicles during the operation</p> <p>Pumps and exhaust fan operations</p>	Can Be Significant	<ul style="list-style-type: none"> <li>Ensure all operation equipment has functional exhaust systems.</li> <li>Air fan and centrifugal air pumps shall function adequately throughout the smelting process operation, with regular service and maintenance.</li> </ul>
7. Air pollution	Emission of hazardous gases and particulates from chimneys (APCS)	Can Be significant	<ul style="list-style-type: none"> <li>Maintenance of all air pollution control equipment in the Plant</li> <li>Performance monitoring of the air pollution emissions by conducting periodic monitoring as well as CEMS (continuous emission monitoring system) for important parameters.</li> </ul>
8. Health and safety hazards	During operation	Insignificant	<ul style="list-style-type: none"> <li>To adopt industrial safety procedures given in the OSH Act 1994 and its Regulation.</li> <li>Safety Data Sheets to be kept on site for inspection.</li> <li>Emergency procedures, action plans and regular drills to be executed.</li> <li>No smoking allowed within the Plant.</li> <li>Workers, when necessary, to wear protective gloves, safety goggles and other protective clothing.</li> <li>Train certain workers to provide first aid and have available easily accessible first aid kits.</li> <li>Intensive training on safety procedures should be provided for all personnel.</li> </ul>

# IMPACT ASSESSMENT AND MITIGATION MEASURES

Impact	Sources of Impact	Degree of Impact	Proposed P2M2
10.Socio-Economy	Employment; Environmental Aesthetics; Public Welfare	Insignificant	<ul style="list-style-type: none"><li>• Local to given priority in recruitment process</li><li>• Landscaping and replanting with suitable plants and shrubs</li><li>• Foreign workers need to be checked for health status to avoid possible spread of epidemics among workers</li></ul>