Executive Summary

Environmental Impact Assessment (2nd Schedule)

Proposed Development of Solid Waste Transfer Station

Lot PT 27065, Mukim Batu, Jalan Lingkaran Tengah II, Taman Beringin, Wilayah Persekutuan Kuala Lumpur



PROJECT PROPONENT

3

PROJECT DEVELOPER



ENVIRONMENTAL CONSULTANT

JABATAN PENGURUSAN SISA PEPEJAL NEGARA (JPSPN) KEMENTERIAN PERUMAHAN DAN KERAJAAN TEMPATAN (KPKT)

Aras 23 & 24, Persiaran Perdana, Presint 4, Pusat Pentadbiran Kerajaan Persekutuan, 62100 Putrajaya. BUMI SEGAR INDAH SDN. BHD. (0964331-W)
No. 619, Block B2, Leisure Commerce Square,
Jalan PJS 8/9, 46150 Petaling Jaya,
Selangor Darul Ehsan.

VELCRO ENVIROTECH SDN. BHD. ^(971013-A)
No. 17A, Jalan Perniagaan Pulai 1 (PBC 1),
Pusat Perniagaan Pulai,

31300 Simpang Pulai, Perak Darul Ridzuan.





Demand for Waste
Management Facility

Waste Manager
Efficiency



Create New Job & Business Opportunities

Concept: Vertical Transfer Station Technology

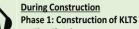
Statement of Need



Project Activities

re-Construction

- **Desk studies**
- Site investigation.



- **Site Clearing**
- **Farthwork**
- **Commencement of Structure**
- **Establishment of Access Road & Drainage**
- · Landscaping & Revegetation.



During Construction

Phase 2: Development of Existing KLTS Area

- **Transition Work**
- **Relocation of Washing Bay**
- **Bulk Waste to Phase 2 Area**

During Operation

- **Waste Receiving**
- **Transfer Station Activities**
- **Washing Activities**
- **Leachate Treatment**
- **Bulk Waste Activity**
- Waste Disposal to Bukit Tagar Landfill
- System Breakdown

Total Construction Period: 12 months

Phase 1: 8 months; Phase 2: 4 months

Waste Receiving, Screening & Measurement (Weighing) **Domestic Waste Bulk Waste** Transfer Station Shredding Activities Activities Disposal to Landfill

Existing Environment

Geology

- Project site is geologically stable
- · Underlain by sedimentary rocks from Silurian-Ordovician to Permian-Jurassic period.
- Located above KL Limestone formation:
- Plagioclase, K-feldspar & Quartz

Hydrogeology

Located within high groundwater potential. Groundwater present in alluvial & hard-rock aquifers.

Average water table ranges from 0.21-0.54m below ground level.

Groundwater flows from west to east.

Topography

- Terrain is flat and slightly undulating
- Elevation range of 5 550m.



Underlain by mined land, rengam, steepland telemong urban land.

Hydrology

Located within Sg. Klang river basin

Main tributaries: Sg. Batu & Sg. Gombak

Major tributaries: Sg. Ampang, Sg. Kerayong, Sg. Kuyoh, Sg. Jinjang, Sg. Rasau, Sg. Damansara and Sg. Air Hitam.

2 Dams present North of Project Site Klang Gates Dam & Batu Dam. Nearest Water Intake Point located upstream.

Socio-Economy

- Population of WPKL: 1.78million people (2020).
- Mukim Batu: 2nd highest number of population

<u>Awareness</u>

Aware: 24.6%; Not aware: 75.4%

Acceptances

Agreed: 34.1%; Disagree: 49.2%; Not sure: 16.7%

Existing Environment

Odour Intensity

- 5 sampling station.
- No odour detection for sample station OU4.
- Barely recognizable odour for OU1, OU2 & OU3 at point below than 3.9 OU/m3
- Strong indicator for OU5.

Noise

5 sampling analysis on ambient noise level (LAeq)

Result of LAGO were within the recommended limit per Guidelines for Environmental Noise Limits and Control, Third Edition, DOE (2019).

Water Quality

- Water quality study at 11 points along Sg. Jinjang and ponds near Project Site.
- DOE WQI Classification for all sampling stations are in Class III except for WQ1 (Class II), WQ2 & WQ5 at class IV while WQ4 at class V.
- Non-compliance from standard limit: COD, BOD5. pH, and TSS, heavy metals (Manganese), phosphorus, colour, ammoniacal nitrogen and Total Escherichia Coli.

Air Quality

5 sampling station for ambient monitorina.

Results for PM₁₀, PM_{2.5}, SO₂, NO 2 and CO were within the MAAQS Interim Target 2 (IT-2 in 2018) and Interim Target 3 (IT-3 in 2020).

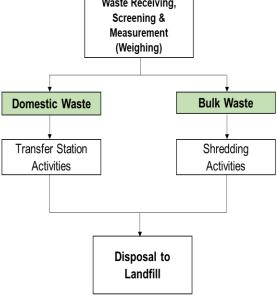
Groundwater Quality

- 9 sampling points in Project Site vicinity.
 - The result indicate non-compliance for bicarbonate alkalinity, BOD & COD as per Standards and Groundwater Index Malaysia, DOE (2019) & National Standard for Drinking Water (NSDW), KKM (2004).

Vibration Level

5 sampling station.

Results were within the DOE recommended limit as per Caution Level; Schedule 1: Recommended Limits for Damage Risk in Buildings From Steady State Vibration, The Planning Guidelines for Vibration Limits and Control in the Environment, DOE (2007).



Waste Handling Process



Mitigating Measures (During Construction)



- Site clearing done in dry season.
- Prepare construction schedule.
- Restricted clearing areas only.
- Biomass generated temporarily stockpile and disposed at authorized landfill.
- Construct BMP's before earthwork.
- Equipped with earth drain & silt fence along existing retention pond.
- Re-vegetation/landscaping will be carried out upon completion of earthworks

- Mitigating measures as recommended in the
- Regular maintenance of temporary drainage. · Repairing & servicing of machineries
- conducted outside from the Project site. Provide scheduled waste storage area.
- Temporary storage areas for construction
- material shall be covered with plastic sheet • Implement portable self-contained toilet.
- · During monitoring:
- Surface water monitoring will be conducted on quarterly basis.
- Take corrective action if discharge of water quality is not complied with the regulatory

- Regular damping on exposed area.
- Open burning is prohibited.
 - · Covered construction material with plastic sheet · Install tire washing facilities.

On vehicle

- · Lorries not be overloaded & properly covered.
- · Practices strict compliance with speed restriction. · Regular maintenance of all vehicles &
 - machineries
- Avoidance of unnecessary machineries operation On the roads

· Water bowser implemented twice per day Monitoring:

· Ambient air monitoring will be conducted at two sampling station on quarterly basis.

Mitigating Measure (During Operation)



i) Upgrading of LTP:

- a) Maintenance and desludging of LTP shall be conducted regularly.
- b) Operation of LTP supervised by a competent person.
- · c) Performance monitoring of LTP will be conducted every
- ii) Transportation of Waste:
- a) Leachate from KLTS will flow into LTP.
- iii) Sewage from workers
- a) Desludging regularly.
- iv) Domestic waste
- · a) Do not accumulate and burn • b) Provision of designated
- collection point and waste



- Avoidance of unnecessary running of vehicle and equipment.
- Regular damping on the exposed area. Regular inspection of the
- bulk waste storage area. Proper installation of air
- pollution control system. · Performance monitoring of APCS shall be
- The APCS supervised by appointed competent person.

conducted regularly.



- · Construction activities conducted during daytime. Limit and control traffic
- movement and use of high volume intensity machinery. PPE provided to all
- workers. Avoiding simultaneous
- noisy activities

Performance



Compliance

- container during waste transportation.
- · Regular inspection on truck

Impact

Proposed Environmental Monitoring Program

Phase	No. & Type of Monitoring	Performance Monitoring (PM)	Compliance Monitoring (CM)	Impact Monitoring (IM)
Construction	1 water quality monitoring station	Not Applicable	✓	✓
	1 silt trap monitoring station	✓	✓	Not Applicable
	2 ambient air quality monitoring stations	Not Applicable	✓	✓
	2 noise monitoring stations	Not Applicable	✓	✓
	2 vibration monitoring stations	Not Applicable	✓	✓
Operation	3 ambient air quality monitoring stations	Not Applicable	Not Applicable	✓
	3 noise monitoring stations	Not Applicable	Not Applicable	✓
	5 ambient odour monitoring stations	Not Applicable	Not Applicable	✓
	1 stack monitoring station	Not Applicable	✓	Not Applicable
	3 groundwater monitoring stations	Not Applicable	✓	✓
	1 leachate monitoring station	Not Applicable	✓	✓
	2 water quality monitoring stations	Not Applicable	Not Applicable	✓