

ENVIROMENTAL IMPACT ASSESSMENT (SCHEDULE 1)

PROJECT TITLE

PROPOSED INDUSTRIAL DEVELOPMENT ON PART OF LOT 48066 & LOT 5073, MUKIM KULAI, DISTRICT OF KULAI, JOHOR

EIA CONSULTANT



Sustainable Resources Management Sdn Bhd
Qualified Person: Tsen King Foh

PROJECT PROPONENT

MSR GREEN DIGITAL PARK SDN. BHD.

LEGAL ASPECT

The EIA report was prepared according to the provisions of Section 34A, Environmental Quality Act, 1974 and Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015 under Prescribed Activity Number 17 Industrial Estate Development: Development of industrial estate covering an area of 20 hectares or more.

STATEMENT OF NEED

Malaysia has emerged as the new hub for data centers catering to global enterprises, driven by digital growth and heightened demand for digital services in the Asia Pacific (APAC) region, aligning with economic expansion. Support industries of data centers need to be co-located in proximity to the data centers hence the need for industrial space. The proposed project will create industrial and commercial space needed. Area exceeded 20 hectares, hence there a need for EIA.

PROJECT LOCATION

The project site covers an area of 98.5 hectares (243.734 acres) and is located at Lot 48066 & Lot 5073, Mukim Kulai, District of Kulai, Johor. The site is adjacent to the North–South Expressway, including the Kulai North and South Lay-By areas. It is located approximately 0.5 km southwest of Kampung Sri Paya and about 4.3 km west of the Kulai Toll Plaza.



Project Location	GPS Coordinates
Northeast	1°28'18.72"N 103°58'38.54"E
Northwest	1°28'18.72"N 103°58'32.72"E
Southeast	1°28'11.46"N 103°58'38.55"E
Southwest	1°28'11.45"N 103°58'32.73"E

SENSITIVE RECEPTORS

S1	1°39'45.92"N 103°31'4.74"E	• Kampung Sri Paya
S2	1°40'49.47"N 103°30'47.83"E	• Masjid Jamek Kampung Rahmat
S3	1°40'3.92"N 103°31'38.51"E	• Kuan Ti Temple

PROJECT BASIC NEEDS

Energy Source

- Electricity is supplied by Tenaga Nasional Berhad (TNB)

Water Source

- Ranhill SAJ, Water Abstraction from Downstream of Sg Pontian Besar (BAKAJ)

Labour Requirement

- Construction stage – 100 workers

PROJECT CONCEPT

The project will involve land use change from agricultural to industrial, land clearing of existing oil palm plantation during earthwork, platform preparation for construction of data center, construction of sewage treatment plant (STP), PPU and landscaping within and surrounding of project area.

PROJECT COMPONENT

Project Component	Unit	Land Area, m ²	Percentage (%)	Acre
Land Plot				
• Industrial Plot	2	501,608	50.85	123.95
• Commercial Plot	1	53,054	5.38	13.11
Total Plots		554,663	56.23	137.06
Buildings				
• Research Center	1	11,938	1.21	2.95
• Transmission Main Intake	1	64,993	6.59	16.06
• Consumer Substation	1	18,009	1.83	4.45
• Sewage Treatment Plant	1	7,608	0.77	1.88
Total Buildings		102,547	10.40	25.34
Reserve				
• Drain Reserve		41,804	4.24	10.33
• Utility Reserve		486	0.05	0.12
• Detention Pond Reserve		44,637	4.53	11.03
• Transmission Line Reserve		58,072	5.89	14.35
Total Reserve		144,999	14.70	35.83
Water Reservoir / Water Tank	1	10,562	1.07	2.61
Open Spaces		46,822	4.75	11.57
Landscape		44,111	4.47	10.90
Total Green Area		90,933	9.22	22.47

PROJECT ACTIVITIES

Pre-Construction Stage	Construction Stage	Operation Stage
•Project Planning •Site Land Surveying •Geological and Soil Investigation	•Mobilization of workers •Mobilization of construction machineries •Construction of buildings and structures Infrastructure development •Factory construction •Installation of equipment	•Data Center Operation

EXISTING ENVIRONMENT

Physical Characteristics	•An existing palm oil plantation. •Maximum spot height about +50.919m RL at the southwest of the site and minimum of +9.755m RL at the northwest boundary
Geological and Soil Condition	•Land mainly Triassic age. •Project site superimposed with Mineral Resources Map of Johor. There is no unknown bauxite, kaolin, tin, silica sand or iron ores to be extracted.
Meteorology Wind	• Wind dominant from north with annual frequency 22.1 % • Highest calm wind recorded 26.2 % • Highest mean wind speed 2.4 m/s
Rainfall	•Average rainfall 2581.6mm •Total annual days : 203day/year (1992 to 2023) •Rainfall : Lowest : February 125.2 mm ; Highest : November 280.1 mm
Temperature	•Mean temperature : Lowest : January 26.1°C ; Highest : May 27.2°C
Relative Humidity	•Mean 24-hour RH : Lowest : February 82.4 % ; Highest : November 87.0%
Secondary Air Quality Records	•Data from telemetric station at Larkin Johor •API reading at Larkin : 13.42% Good Air Quality & 86.3 % Moderate Air Quality
Existing Land Use	•Rancangan Tempatan Daerah Johor Bahru dan Kulai 2025 (Penggantian) Jilid 1: Bahagian B Blok Perancangan Kecil 5.2 – Cadangan Perumahan 6 • SPC Approval for Mixed Industrial obtained – Approval letters in Annex 6-6

BASELINE MONITORING LOCATION



Water Quality Sampling

Station	Coordinates	CLASS
W1	1°38'51.26"N 103°30'57.17"E	II
W2	1°38'49.65"N 103°30'44.18"E	II
W3	1°39'15.27"N 103°30'53.97"E	II
W4	1°39'12.00"N 103°30'32.88"E	III
W5	1°39'23.68"N 103°30'30.59"E	II
W6	1°39'35.47"N 103°31'12.54"E	II
W7	1°39'39.16"N 103°30'49.43"E	II
W8	1°40'08.03"N 103°30'27.56"E	II

Ambient Air Sampling

Station	GPS Coordinates	Remarks
A1	1°39'24.47"N 103°30'25.31"E	Site Boundary
A2	1°39'24.40"N 103°31'13.98"E	Kg Sri Paya

Noise Sampling

Station	GPS Coordinates	Remarks
N1	1°39'24.47"N 103°30'25.31"E	Site Boundary
N2	1°39'24.40"N 103°31'13.98"E	Kg Sri Paya

Vibration Sampling

Station	GPS Coordinates	Remarks
V1	1°39'18.28"N 103°30'42.13"E	Site Boundary

IMPACT ASSESSMENT DURING CONSTRUCTION

The main impact that are assessed in this project during construction are:

Air Pollution



- Dust during earthwork especially during hot sunny days

Noise Pollution



- Noise anticipated from construction equipment and transportation

Flood Risk



- Debris from construction may block drainage leading to potential flash flood

Water Pollution



- Potential Muddy runoff from land disturbing earthwork & construction and sewage discharge from construction workforce

Traffic



- Main traffic generated from movement of construction machineries within the site

Waste Generation



- Generate solid waste and solid trade waste, construction waste and scheduled waste

MITIGATION DURING CONSTRUCTION

The mitigation that are proposed in this project during construction are:

Air Pollution



- Wetting to prevent dust nuisance

Noise Pollution



- Administrative control
- Engineering control

Flood Risk



- Inspection on debris in earth drain and sediment basin after each episode of storm and clear any soil debris

Water Pollution



- Proper scheduled waste management
- Debris and solid waste management
- Cater adequate PE of septic tanks
- Engage vacuum tanker to de-sludge septic tank
- Minimized exposed soil areas

Traffic



- Site induction program
- Safety signs in the site
- Proper limit of vehicle speed
- Maintenance of vehicles

Waste Generation



- Proper waste management and housekeeping
- Scheduled Waste Management comply with EQ (SW) 2005
- De-sludge temporary toilets regularly.

IMPACT ASSESSMENT DURING OPERATION

The main impact this project during operation are:

Water Pollution



- Sewage generated from workers.
- Water discharge from data center cooling system.

Flood Risk



- Increase if impervious surface
- Potential a higher maximum peak flow

Land Contamination



- Potential spillage at maintenance area

Hazards



- Identified events are lithium battery fire

Waste Generation



- Domestic solid waste generated during operation

MITIGATION DURING OPERATION

The mitigation that are proposed in this project during operation are:

Water Pollution



- Sewage are connected to and treated in Sewage Treatment Plant, STP

Flood Risk



- Detention pond to ensure zero increase in peak discharge.

Land Contamination



- Comprehensive training program, ToolBox Briefing
- Inspection at maintenance area concrete slab

Hazards



- Facilities built to recognized design standards / specifications including control on materials of construction.
- Regular maintenance / inspections of the facilities.

Waste Generation



- Proper management of domestic wastes

COMPLIANCE MONITORING (IM)

During Construction Stage



Environmental Quality	No Stations	Location Description		Coordinates
Sediment Basin	1	WS1	Sediment Basin Discharge	1°39'13.58"N 103°30'55.39"E
	2	WS2	Sediment Basin Discharge	1°39'07.24"N 103°30'49.64"E
	3	WS3	Sediment Basin Discharge	1°39'13.58"N 103°30'55.39"E
	4	WS4	Sediment Basin Discharge	1°39'14.04"N 103°30'53.37"E
	5	WS5	Sediment Basin Discharge	1°38'54.62"N 103°30'51.02"E
	6	WS6	Sediment Basin Discharge	1°39'13.86"N 103°30'50.59"E
	7	WS7	Sediment Basin Discharge	1°39'13.03"N 103°30'29.07"E
	8	WS8	Sediment Basin Discharge	1°39'23.17"N 103°30'30.49"E

IMPACT MONITORING (IM)

During Construction Stage



Environmental Quality	No Stations	Location Description		Coordinates
Ambient Water	4	W1	Upstream of Discharge Point	1°38'51.26"N 103°30'57.17"E
		W2	Upstream of Discharge Point	1°38'49.65"N 103°30'44.18"E
		W3	Downstream of Discharge Point	1°39'15.27"N 103°30'53.97"E
		W4	Downstream of Discharge Point	1°39'12.00"N 103°30'32.88"E
Ambient Air	2	A1	Southwest corner of the project site	1°39'24.47"N 103°30'25.31"E
		A2	Northeast corner of the project site	1°39'24.40"N 103°31'13.98"E
Noise Climate	2	N1	Southwest corner of the project site	1°39'24.47"N 103°30'25.31"E
		N2	Northeast corner of the project site	1°39'24.40"N 103°31'13.98"E