

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

PROPOSED SETTING UP OF AN
ASPHALT PLANT AT LA MARIE

DEC
2019

**EIA
REPORT**



R.MURUGAN ASPHALT PLANT LTD

This is an Environmental Impact Assessment Report (EIA) for the proposed setting up of an asphalt processing plant over a plot of an extent of 9,983 sq m.

TITLE & SIGNATURE PAGE	1
NON-TECHNICAL SUMMARY	2
CHAPTER 1: INTRODUCTION	5
1.1 BACKGROUND	5
1.2 SCOPE	6
1.3 PROMOTER PROFILE	8
1.4 PROJECT JUSTIFICATIONS	9
1.5 LEGAL REQUIREMENTS	12
1.6 PROJECT TEAM	15
1.7 PROJECTED PROJECT TIMELINE	16
1.8 STRUCTURE OF EIA REPORT	17
CHAPTER 2: SITE DESCRIPTION	20
2.1 PROJECT SITING	20
2.2 GENERAL SITE FEATURE	21
2.3 SITE OWNERSHIP	22
2.4 SITE STATUS AND ZONING	22
2.5 SITE ACCESSIBILITY	23
2.6 SITE SURROUNDING ENVIRONMENT	24
2.7 STATUTORY PROVISIONS	26
2.8 SITE SENSITIVITY	26
2.9 SITE JUSTIFICATION	26
2.10 OUTLINE PLANNING SCHEME	26
2.11 OUTCOME	27
2.12 SITE GEOLOGICAL CHARACTERISTICS	27
2.13 LOCAL CLIMATIC CONDITIONS	28
CHAPTER 3: PROJECT DESCRIPTION	29
3.1 PROJECT OUTLINE	29
3.2 ASPHALT PLANT – OVERVIEW	30

3.3	RAW MATERIALS	31
3.4	EQUIPMENT INVOLVED	32
3.5	FACILITY DESIGN	35
3.6	ASPHALT PROCESSING	36
3.7	PROCESS FLOWS	43
3.8	PRODUCTION CAPACITY & OPERATING HOURS	44
3.9	STORAGE REQUIREMENTS	44
3.10	UTILITIES REQUIREMENTS	45
3.11	TECHNICAL, ECONOMIC & ENVIRONMENTAL FEATURES	46
3.12	REQUIREMENTS	47
3.13	QUALITY ASSURANCE	50
3.14	ENVIRONMENTAL EFFECTS	51
	CHAPTER 4: METHOD OF ASSESSMENT	52
4.1	OVERVIEW ENVIRONMENTAL ASSESSMENT	52
4.2	APPRAISING ENVIRONMENTAL EFFECTS	52
4.3	BASELINE DATA GATHERING	57
4.4	ASSESSMENT METHODOLOGY	58
	CHAPTER 5: PREDICTED ENVIRONMENTAL IMPACT	59
5.1	OUTLINE OF ENVIRONMENTAL EFFECTS	59
5.2	ENVIRONMENTAL EFFECTS – COMMISSIONING PHASE	60
5.2.1	SOLID WASTE MANAGEMENT	61
5.2.2	WASTEWATER MANAGEMENT	62
5.2.3	AIR QUALITY	63
5.2.4	NOISE IMPACT	64
5.2.5	TRAFFIC IMPLICATIONS	65
5.2.6	VISUAL EFFECTS	66
5.2.7	FAUNA / FLORA	67
5.2.8	LAND USE / LAND PLANNING	68
5.2.9	HEALTH & SAFETY	69
5.3	ENVIRONMENTAL EFFECTS – OPERATIONAL PHASE	70
5.3.1	SOLID WASTES	71
5.3.2	WASTEWATER MANAGEMENT	72
5.3.3	AIR EMISSIONS	73
5.3.4	NOISE IMPACT	74

5.3.5	TRAFFIC IMPLICATIONS	75
5.3.6	FIRE SAFETY	76
5.3.7	FLY & RODENTS	77
5.3.8	HEALTH & SAFETY	78
5.3.9	VISUAL IMPACT	79
5.3.10	SOCIO ECONOMIC IMPACT	80
CHAPTER 6: MITIGATION MEASURES		81
6.1 APPROACH TO MITIGATION MEASURES		81
6.2 MITIGATING MEASURES – COMMISSIONING PHASE		82
6.2.1	SOLID WASTE MANAGEMENT	82
6.2.2	WASTEWATER MANAGEMENT	82
6.2.3	AIR QUALITY	83
6.2.4	NOISE IMPACT	83
6.2.5	FAUNA / FLORA	84
6.2.6	LAND USE	84
6.2.7	TRAFFIC IMPLICATIONS	85
6.2.8	HEALTH & SAFETY	85
6.3 MITIGATING MEASURES – OPERATIONAL PHASE		86
6.3.1	SOLID WASTE MANAGEMENT	86
6.3.2	WASTEWATER MANAGEMENT	87
6.3.3	AIR EMISSIONS	88
6.3.4	NOISE IMPACT	89
6.3.5	TRAFFIC IMPLICATIONS	90
6.3.6	FIRE SAFETY	91
6.3.7	FLY & RODENTS	92
6.3.8	VISUAL IMPACT	93
6.3.9	SOCIO ECONOMIC IMPACT	94
CHAPTER 7: RESIDUAL IMPACT		95
CHAPTER 8: SOCIO CULTURAL & SOCIO ECONOMIC IMPACTS		96
8.1 Social Impacts		96
8.2 Economic Implications		96
CHAPTER 9: MONITORING & MAINTENANCE		97
CHAPTER 10: ENHANCEMENT OPPORTUNITIES		105
10.1 Visual Enhancement		105
CHAPTER 11: PROJECT'S ALTERNATIVES		106
11.1	Project's Selection # 1	107
11.2	Site Selection # 2	107
11.3	Project's Features # 3	108
CHAPTER 12: CONCLUSION & SUMMARY OF ENVIRONMENTAL OUTCOMES		109
CHAPTER 13: REFERENCES		111

LIST OF ANNEXES

- Annex 1: Site Compatibility Assessment
- Annex 2: Asphalt Plant Facility Design
- Annex 3: Solid Wastes Management Plan
- Annex 4: Wastewater Management Plan
- Annex 5: Air Impact Assessment
- Annex 6: Noise Level Modelling
- Annex 7: Fire Safety Assessment
- Annex 8: Occupational Health & Safety
- Annex 9: Preliminary Traffic Assessment
- Annex 10: Compliance to Regulations
- Annex 11: Risk Assessment & Disaster Management Plan
- Annex 12: Frequently Asked Questions (FAQ)
- Annex 13: Preliminary Life Cycle Assessment
- Annex 14: Certificate of Incorporation / Business Card
- Annex 15: Title Deed
- Annex 16: Site Plan & Location Plan
- Annex 17: Context Plan
- Annex 18: Site Layout Design
- Annex 19: Equipment Specifications
- Annex 20: Process Flow Diagram
- Annex 21: Fire Safety Drawing
- Annex 22: Material Safety Data Sheets