

JADUAL PERTAMA, PENILAIAN KESAN KEPADA ALAM SEKELILING JINTUK CADANGAN PEMBINAAN LOJII PULIH GUNA SISA PLASTIK & PENGHANCURAN DAN PEMISAHAN BUANGAN TERJADUAL (SW104)
DI LOT 13198, LOT P119111 & LOT P12285, MUKIM SUNGAI SIPUT, 31100 SUNGAI SIPUT (TJ), PERAK DARUL RIDZUAN

PEMANTAUAN GARIS ASAS ALAM SEKITAR						PROGRAM PEMANTAUAN ALAM SEKITAR					
KUALITI UDARA			TAHAP BUNYI			KOMPONEN	PARAMETER	LOKASI	FREKUENSI		
PARAMETER	A1	A2	A3	L _{Aeq}	N1	N2	N3	KUALITI UDARA	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ & CO	A1: Sempadan Kilang A2: Tampan Dovenby A3: Perumahan Awam Rimba Panjang	Suku Tamunan
PM ₁₀	45	46	40	Waktu siang, dBA	55.2	57.3	58.2	TAHAP BUNYI	L _{Aeq} , L _{max} , L _{min} , L ₁₀ & L ₉₀	N1: Sempadan Kilang N2: Tampan Dovenby N3: Perumahan Awam Rimba Panjang	Suku Tamunan
PM _{2.5}	21	21	21	Waktu malam, dBA	51.5	51.7	51.2	KUALITI AIR	pH, TSS, BOD ₅ , COD, AMV, O&G & ECOLI		Bulanon
SO ₂	ND	ND	ND					CEROBONG	PM ₁₀	W1: Hilir terdekat daripada titik perlepasan W2: Hilir pertengahan dalam saliran W3: Jauh di hilir dalam saliran	Chimney 1 Chimney 2 Chimney 3
NO ₂	ND	ND	ND								
CO	0.4	0.3	0.6								
VOC	ND	ND	ND								
INDEKS KUALITI AIR						TAHAP GEGARAN					
STESEN	WQI	KELAS	STATUS	Max RMS velocity	V1	V2	V3				
W1	71.60	III	Slightly polluted	Waktu siang, mm/s	0.267	0.206	0.234				
W2	60.40	III	Slightly polluted	Waktu malam, mm/s	0.178	0.117	0.143				
W3	65.79	III	Slightly polluted								

LANGKAH MITIGASI

FASA PERANCANGAN DAN RENOVASI

KUALITI UDARA	TAHAP BUNYI & GEGARAN	KUALITI AIR	PENGURUSAN SISA BUANGAN	SOSIOEKONOMI	KESELAMATAN & KESIHATAN PEKERJAAN	PENILAIAN RISIKO KUANTITATIF
<ul style="list-style-type: none"> Menutup bahan yang berdebu. Menyembur air pada operasi pemotongan yang berdebu 	<ul style="list-style-type: none"> Operasi bising dikendalikan pada waktu siang. Menggunakan peralatan yang diselenggara dengan baik. 	<ul style="list-style-type: none"> Semua bahan dikendalikan dengan berhati-hati untuk mengelakkan tumpahan. Pembersihan segera jika berlaku tumpahan. 	<ul style="list-style-type: none"> Pengendalian dan pelupusan bahan buangan perbandaran mematuhi peraturan. Bahan buangan diambil oleh MPPK untuk pelupusan. 	<ul style="list-style-type: none"> Peluang pekerjaan memenuhi keperluan yang berkeloyokan. Tempat tinggal dan latihan kerja yang mencukupi kepada pekerja. 	<ul style="list-style-type: none"> Pekerja perlu memakai PPE. Budaya selamat perlu diajarkan. Papan keselamatan di paparkan. 	<ul style="list-style-type: none"> Emergency Response Plan (ERP) perlu disediakan untuk menghadapi kemungkiran senario. Sebarang perubahan reka bentuk susunan perlu di analisis untuk menentukn potensi risiko. Cadangan pelan dilaksanakan dan selaras dengan standard keselamatan dan kesihatan pekerjaan.
FASA OPERASI						
<ul style="list-style-type: none"> Kepekatan PM mematuhi Second Schedule, Regulation 13, Table 2. VOCs mematuhi Second Schedule, Regulation 13, (ii). Orang yang kompeten untuk operasi scrubber. Notifikasi bernis perlu dilakukan untuk alatan yang berkesan. Heniti kerja / operasi jika berlaku sebarang aktiviti di dalam Sixth Schedule atau arahan daripada ketua pengarah. 	<ul style="list-style-type: none"> Jentera dan kenderaan dilengkapi dengan penyenyap. Jentera dan alatan perlu diselenggara secara kerap. Memasang penghadang bunyi. Memasang papan tanda keselamatan. Memakai penutup telinga sebagai PPE. Menetapkan operasi bunyi bising pada waktu siang sahaja. 	<ul style="list-style-type: none"> Reka bentuk IETs perlu mematuhi Standard B. Penyelenggaraan berkala untuk IETS. Operator perlu berdaftar GSR untuk mematuhi kelulusan air. Pemantauan prestasi perlu dilakukan di IETS. Pengstoran kimia perlu dilengkapi dengan bunds. Pemantauan pada air keluasan dilakukan secara berkala. 	<ul style="list-style-type: none"> SW104 disimpan di dalam tempat tertutup. Bekas buangan terajual yang digunakan adalah menukupi. Bekas buangan terajual di label. Sisa yang tidak boleh dikitar semula perlu ditinggalkan. Menggunakan bahan kitar semula. Menggunakan bekas khusus untuk mengumpul sisa operasi. 	<ul style="list-style-type: none"> Mengutamakan pasraan buruh tempatan. Menyediakan uliti dan kemudahan yang mencukupi di tempat kerja. Kesihatan pekerja sering diperiksa dan disaring. Melaksanakan pelan pengurusan lalulintas. 	<ul style="list-style-type: none"> Budaya kerja selamat diajarkan. Memberi PPE kepada pekerja. Memastikan kawasan kerja kemas dan bersih. 	

FIRST SCHEDULE ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED RECOVERY OF PLASTIC WASTE & CRUSHING AND SEPARATION OF SCHEDULED WASTE (SW104) PLANT AT LOT 13198, LOT PT19111 & LOT PT2285, MUKIM SUNGAI SIPUT, 31100 SUNGAI SIPUT (U), PERAK DARUL RIDZUAN

ENV. BASELINE MONITORING						ENV. MONITORING PROGRAMME			
AIR QUALITY RESULT			NOISE LEVEL RESULT			COMP.	PARAMETER	LOCATION	FREQUENCY
PARAMETER	A1	A2	A3	L _{aeq}	N1	N2	N3		
PM ₁₀	45	46	40	Day Time, dbA	55.2	57.3	58.2	A1: Factory Boundary A2: Taman Dovenby A3: Perumahan Awam Rimba Panjang	Quarterly
PM _{2.5}	21	21	21	Night Time, dbA	51.5	51.7	51.2		
SO ₂	ND	ND	ND					N1: Factory Boundary N2: Taman Dovenby N3: Perumahan Awam Rimba Panjang	Quarterly
NO ₂	ND	ND	ND						
CO	0.4	0.3	0.6						
VOC	ND	ND	ND						
WATER QUALITY INDEX RESULT						VIBRATION LEVEL RESULT			
STATION	WQI	CLASS	STATUS	Max RMS velocity	V1	V2	V3		
W1	71.60	III	Slightly polluted	Day Time, mm/s	0.267	0.206	0.234		
W2	60.40	III	Slightly polluted	Night Time, mm/s	0.178	0.117	0.143		
W3	65.79	III	Slightly polluted					DUST/STA CK	Monthly

MITIGATION MEASURES

PLANNING AND RENOVATION PHASE

AIR QUALITY	NOISE & VIBRATION LEVEL	WATER QUALITY	WASTE MANAGEMENT	SOCIO-ECONOMY	OCCUPATIONAL SAFETY & HEALTH	QUANTITATIVE RISK ANALYSIS
<ul style="list-style-type: none"> Dusty materials stored outside should be covered up or kept moist. Dusty-cuffing operation should be sprayed with water beforehand. 	<ul style="list-style-type: none"> Restricted day time hours for noisy operation. Well-maintained and low noise equipment to be used. 	<ul style="list-style-type: none"> All materials are to be handled and transferred carefully to avoid spills. Immediate clean up and contain any spills to prevent contamination of the drainage system. 	<ul style="list-style-type: none"> Handling and disposal of municipal waste to comply with the requirement under Act 2007. Waste to be collected by MPKK for disposal at designated landfill. 	<ul style="list-style-type: none"> Employment opportunities to cater qualified resident. Workers to be given decent living quarters to reduce public health problems and given adequate job training. 	<ul style="list-style-type: none"> Workers to wear PPE. Safety rules and cultures to be maintained at all times. Safety signage to be erected and prominently displayed. 	

OPERATIONAL PHASE

<ul style="list-style-type: none"> PM concentration to comply with Second Schedule, Regulation 13, Table 2. VOCs to comply with Second Schedule, Regulation 13, (ii). Competent personnel for scrubber operation is required. Written notification for all necessary equipment to be carried out. To stop work/operation if any occurrence in Sixth Schedule happen or given direction from the Director General. 	<ul style="list-style-type: none"> Machinery and vehicle to be equipped with acoustic enclosure or silencers. Machinery, equipment and vehicle to be regularly maintained. Install noise barriers. Safety signage to be installed at high noise area. Provision of ear plug and muff as PPE. Schedule loud activities during day time and avoid night time. 	<ul style="list-style-type: none"> EIS design should adhere to discharge Standard B effluent. Regular maintenance to be conducted to ensure the efficiency of the EIS. Operator to apply Guided Self-Regulation (GSR) to ensure water discharge is in compliance. Performance monitoring of the EIS should be conducted. Fuel/chemical storage areas to be equipped with bunds. Monitoring of the discharge of the drain outlet shall be conducted on quarterly basis. 	<ul style="list-style-type: none"> SW104 to be stored and kept in an enclosed area to avoid moisture. Scheduled waste container to be adequately designed and contained. Non-recyclable waste to be segregated before disposal. Reuse recyclable materials to promote 4R concepts. All scheduled waste container to be labeled and marked accordingly. To provide dedicated containers to collect process waste. 	<ul style="list-style-type: none"> Prioritize local labor market for the employment opportunities. Provide adequate utilities and facilities to the working area. Wellness of foreign workers to be checked and follow the health screening process. Project proponent to ensure all activities to comply with DOE guideline and environmental standards. 	<ul style="list-style-type: none"> Safe work practices by providing safety briefing and proper training. Provide PPE to the workers. Maintain clean and orderly work areas by doing housekeeping regularly. 	<ul style="list-style-type: none"> Emergency Response Plan (ERP) shall be prepared to address all potential scenarios. Design changes during the subsequent engineering phases post EA should be analyzed to determine the severity of the potential hazards. The proposed management plan has to ensure the implementation of an effective health and safety management system which governs a safe operating condition for the proposed facility.
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