## MITIGATION MEASURES IMPLEMENTATION SCHEDULE FOR CONSTRUCTION STAGE

EIA Ref. Section	EM&A Ref. Section	Environmental Protection Measures	Location/Duration of Measures/ Timing of completion measures	Relevant Legislation & Guidelines
4.7	2.8	<ul> <li>Air Quality</li> <li>Hoarding of not less than 2.4m high shall be provided along the site boundary section adjoins a road, street, service land or other area accessible to the public</li> <li>Spray water to where excavation to be taken place immediately prior to, during and after excavation</li> <li>Any stockpile of dusty material shall be either: (a) covered entirely by impervious sheeting; (b) placed in an area sheltered on the top and the three sides; or (c) sprayed with water or a dust suppression chemical so as to maintain the entire surface wet</li> <li>Cement bags or any other dusty materials collected during the work should be disposed of in totally enclosed containers</li> <li>All dusty materials should be sprayed with water immediately prior to any loading, unloading or transfer operation so as to minimise the dusty materials wet</li> <li>Any dusty material remaining after a stockpile of cement or other materials is removed should be wetted and removed from the surface of roads</li> <li>Where a vehicle leaving the construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle</li> <li>Conveyor belts shall be fitted with windboards, and conveyor transfer points and hopper discharge areas shall be enclosed and fitted with belt cleaners</li> <li>Skip hoist for the transport of construction wastes should be properly enclosed</li> <li>Vehicle washing facilities including a high pressure water jet shall be provided at the designated vehicle exit point and every vehicle immediately before leaving the construction site shall be washed to remove any dusty materials from its body and wheels</li> <li>Every main haul road, vehicle washing areas and the section of road between the washing facilities and the exit point shall be paved with concrete, bituminous materials, hardcore or metal plates and kept clear of dusty materials or sprayed with water so as to maintain the entire road sur</li></ul>	Construction site of the proposed WFM/ Throughout the construction period	APCO/EIA Study
5.7	3.7	Noise  Use quiet construction equipment  Use silencers / mufflers, noise barriers / enclosure where practicable  The Contractor is required to determine the number and type of construction equipment taking	Construction site of the proposed WFM throughout the	NCO/EIA Study

Ref. I	M&A Ref. ection	Environmental Protection Measures	Location/Duration of Measures/ Timing of completion measures	Relevant Legislation & Guidelines
		<ul> <li>into account the use of quiet plant while devising a feasible work programme</li> <li>Only well-maintained plant shall be operated on-site and all equipment shall be routinely checked</li> <li>Turn off or throttle down idle plant</li> <li>Plants known to emit noise strongly shall be oriented away from NSRs</li> <li>Mobile plants shall be sited as far away from NSRs as possible</li> <li>Stockpiles and other structures shall be effectively utilised as practicable to screen noise from on-site construction activities</li> <li>Obtain valid noise permits for construction work during restricted hours</li> </ul>	construction period	
6.7	4.1	<ul> <li>Water Quality</li> <li>Site shall be kept clean and tidy to avoid construction materials and waste being washed off from site</li> <li>Works shall be planned to avoid rainy season so as to minimize the runoff and reduce the amount of soil that can be carried offsite</li> <li>Surface run-off from the construction site shall be directed to silt traps or sedimentation basin before reuse or discharge with help of channels, earth bunds or sand bag barriers for suspended solids removal prior to its being discharged to storm water drain. Silt trap design shall conform to the guidelines laid down in Appendix A1 of ProPECC PN 1/94</li> <li>Wastewater likely to be contaminated with oil or grease should be passed through an oil separator or grease trap before entering the site drainage system</li> <li>Hoarding gaps should be tightly sealed to avoid the seepage of wastewater to the nullah and outside the site</li> <li>Perimeter channels shall be provide at site boundaries, where necessary, to intercept stormwater runoff from outside the site</li> <li>Silt traps, sedimentation basins, channels and manholes shall be regularly cleaned to remove the deposited silt and grit</li> <li>Temporarily exposed slope surfaces and construction material stockpiles shall be covered with tarpaulin or similar fabric to prevent erosion</li> <li>Wastewater generated from bored-piling shall be re-circulated after sedimentation as practicable. The final discharge of the wastewater shall be via silt removal facilities</li> <li>All fuel tanks and chemical storage areas shall be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters</li> <li>Obtain valid discharge license for construction site discharges</li> <li>Chemical toilets shall be provided on site</li> <li>Monitor the quality of water discharge to ensure compliance of the license condition</li> </ul>	Construction site of the proposed WFM Throughout the construction period	WPCO/EIA Study

EIA Ref. Section	EM&A Ref. Section	Environmental Protection Measures	Location/Duration of Measures/ Timing of completion measures	Relevant Legislation & Guidelines
		Surface drainage channels of operational areas shall be easily cleaned and connected to foul sewerage		
7.2	5.1	<ul> <li>Waste Management</li> <li>Reuse of excavated soils for back-filling and landscaping purposes</li> <li>All reusable and recyclable waste materials shall be segregated and stored in different containers, skips or stockpiled</li> <li>Separate the inert and non-inert portions of construction material for disposal of public fill and landfill respectively</li> <li>Employ approved licensed waste collectors to collect the inert construction materials to be disposed of at public fill</li> <li>Provide a temporary storage areas for storing and stockpiling reusable and recyclable materials</li> <li>Contractor should register as chemical waste producer should chemical waste is produced</li> <li>Licensed waste collectors shall be employed for collecting chemical wastes for disposal</li> <li>Handling and Disposal of chemical waste shall be in accordance with the Code of Practice on the Practice on the Packaging, Labelling and Storage of Chemical Wastes issued under the Waste Disposal Ordinance</li> <li>Quantities of waste materials generated on site and disposal record (e.g. trip ticket) shall be kept on site for inspection</li> <li>A Waste Management Plan (WMP) shall be prepared to set out waste handling and disposal strategy and submitted for the architect's approval</li> <li>Material being temporary used for construction shall be recyclable as possible</li> <li>Design and provide an area within the construction site to allow on-site sorting and segregation of waste materials</li> <li>Training shall be provided to site staff on waste minimisation practices including waste reduction, reuse and recycling</li> <li>Disposal of C&amp;D material shall be monitored by Trip-Ticket System</li> <li>In order to minimize the amount of waste disposal, durable and reusable containers should be</li> </ul>	Construction site of the proposed WFM Throughout the construction period	WDO/EIA Study  WBTC No.5/99
8.7	6.1	<ul> <li>used, where practicable, instead of plastic bags</li> <li>Hazard to Life</li> <li>Cranes shall be located away from the LPG compound and its access as far as possible</li> <li>Before excavation work is undertaken, the gas company should be contacted to obtain information (drawings, plans) of all gas pipes in the vicinity of the site. Suitable pipe locating devices must be used to locate underground pipes. Hand dug trial holes must then be used to confirm the position of underground pipes. Excavation must be carried out with extreme care following any advice given by the Gas Authority or Gas Company</li> </ul>	Construction site of the proposed WFM Throughout the construction period	

EIA	EM&A	Environmental Protection Measures	Location/Duration of	Relevant
Ref.	Ref.		Measures/ Timing of	Legislation &
Section	Section		completion measures	Guidelines
		<ul> <li>Sufficient guidance shall be given to all workers before carrying out excavation in the vicinity of pipelines</li> <li>Manually operated warning siren shall be installed to instruct people to take timely shelter</li> <li>Fire drill exercises shall be organized for the workers at the site and users of the WFM</li> </ul>		