Environmental Permit No. EP-414/2011 Monthly Audit Report – March 2013

Date of Audit: <u>26 March 2013</u>

	Mitigation Measures	Implementation Status	Remark		
Air Quality	Air Quality				
Section 5.1.1	Use of watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.	Being implemented			
	Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.	Being implemented			
	Use of side enclosure and impervious sheets, as well as watering, for any dusty material storage piles, if applicable, to reduce emissions	Being implemented			
	Vehicle wheel and body washing at the exit points of the site	Being implemented			
	Imposition of speed controls for vehicles on unpaved site roads. A maximum of 8 kilometers per hour is the recommended limit.	Being implemented			
	Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs	Being implemented			
Construction Noise					
Section 5.1.2	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program.	Being implemented			
	Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program.	Being implemented			
	Mobile plant, if any, should be sited as far from NSRs as possible.	Being implemented			
	Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	Being implemented			

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	Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs	Being implemented	
	Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	Being implemented	
Landscape and Visua	I		
Section 5.1.3	All the steelworks of the temporary bridge will be painted with a light grey colour to match with the adjoining existing concrete structures.	Implemented	
	Employ soft landscape treatment at the areas around the piers for screening, reduction of scale and soften the structures. Planting species employed would be shade tolerant and with dense spread but short trunk so as to provide visual screening at grade.	To be implemented as per construction programme	
Water Quality			
Section 5.1.4	Surface run-off from construction site should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins.	Being implemented	
	Open stockpiles of construction materials on sites should be covered with tarpaulin or similar fabric as necessary during rainstorms	Being implemented	
	Good site practices should be adopted to remove rubbish and litter from construction site so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis	Being implemented	
	The presence of construction workers generates sewage. It is recommended to provide sufficient chemical toilets in the works areas and a licensed waste collector should be deployed to clean the chemical toilets on a regular basis.	Being implemented	
	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment.	Being implemented	

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	Regular environmental audit on the construction site can provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the project would not cause water pollution problem after undertaking all required measures		
Waste Management			
Section 5.1.5	Prepare a Waste Management Plan approved by the Engineer/Supervising Officer of the Project based on current practices on construction sites.	Implemented	
	Training of site personnel in, site cleanliness, proper waste management and chemical handling procedures	Being implemented	
	Provision of sufficient waste disposal points and regular collection of waste	Being implemented	
	Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	Being implemented	
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors	Being implemented	
	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal	Being implemented	
	Encourage collection of aluminum cans by providing separate labeled bins to enable this waste to be segregated from other general refuse generated by the workforce.	Being implemented	
	Proper storage and site practices to minimize the potential for damage or contamination of construction materials.	Being implemented	
	Plan and stock construction materials carefully to minimize amount of waste	Being implemented	

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	generated and avoid unnecessary generation of waste.		
	Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycle	Being implemented	
	Waste should be handled and stored well to ensure secure containment, thus minimising the potential of pollution	Being implemented	
	Maintain and clean storage areas routinely	Being implemented	
	Storage area should be provided with covers and, if necessary, water spraying system to prevent materials from wind-blown or being washed away.	Being implemented	
	Different locations should be designated to stock each material to enhance reuse	Being implemented	
	Wheel washing facilities have to be provided before the trucks leave the works area. This can reduce the introduction of dust to the public road network	Being implemented	
	In order to fully implement the trip-ticket system, it is recommended that warning signs should be put up at the temporary and permanent accesses of vehicle to remind the drivers of dump truck of the proper designated disposal outlet and the penalties of offence. To prevent illegal entrance of the dumping sites at night and during public holidays, fences should be installed.	Being implemented	