

# Environment Monitoring Report

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Bi-annual Environment Monitoring Report  
August 2016

## PAK: MFF – Power Transmission Enhancement Investment Program (Tranche 2)

Prepared by Multan Electric Power Company, Punjab for the Asian Development Bank.

## NOTES

- (i) The fiscal year (FY) of the Government of the Islamic Republic of Pakistan and its agencies ends on 30 June.
- (ii) In this report “\$” refer to US dollars.

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L2727 PDEIP: BAEMRs (Jan-Jun 2016) of GEPCO, HESCO, IESCO, LESCO and MEPCO approved for disclosure

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to:

Liaquat Ali

12/08/2016 01:50 PM

Cc:

Zhang Lei, Ehtesham Z. Khattak, Zehra Abbas, Jose Tiburcio Nicolas, "Jeffrey Bowyer", Jocelyn M. Cabrera, Maria Ava Golda A. Destura

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5 Attachments



L2727 MEPCO BAEMR (Jan-Jun 2016).docx



L2727 LESCO BAEMR (Jan-Jun 2016).docx



L2727 IESCO BAEMR (Jan - Jun 2016).pdf



L2727 HESCO BAEMR (Jan-Jun 2016).pdf



L2727 GEPCO BAEMR (Jan-Jun 2016).pdf

Dear Liaquat Sb.,

The attached BAEMRs (Jan-Jun 2016) of GEPCO, HESCO, IESCO, LESCO and MEPCO under L2727 PDEIP are approved for disclosure. Kindly have them posted on ADB website and share the weblink with me.

Thanks and regards,

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## Bi-Annual Environmental Monitoring Report

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Project Number: 2727-PK

**Islamic Republic of Pakistan: Power Distribution Enhancement Investment  
Program, Multi-Tranche Finance Facility (PDEPMFF-Tranche-II)  
(Financed by the Asian Development Bank (ADB))**

(January-June, 2016)

Prepared by: Syed Asif Riaz Shahid, Deputy Manager (Environment & Safeguard)  
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For Multan Electric Power Company (MEPCO)

This report does not necessarily reflect the views of ADB or the Government concerned, and ADB and the Government cannot be held liable for its contents.

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## **1-Part I: Introduction**

### **A. BASIC DATA OF TRANCHE-II PROJECT**

a.	ADB Loan No.	2727-PAK
b.	Project Title	Power Distribution Enhancement Investment Project Tranche II
c.	Borrower	Islamic Republic of Pakistan
c.	Executing Agency	Pakistan Electric Power Company (PEPCO)
e.	Implementing Agency	Multan Electric Power Company Ltd. (MEPCO)
f.	(b)Total Project Cost	US \$ 43.35 Million (Excluding contingencies & other charges)
g.	ADB Loan	US \$ 36.07 Million
h.	Loan Approval Date	September 12, 2008
i.	Loan Signing Date	January 28, 2011
k.	Date of Closing	
	i) Original	
	ii) Revised	
l.	Date of Physical Completion	
	i) Original	March 31, 2015
	ii) Revised	
m.	Elapsed Loan Period	
	i) Original	
	ii) Revised	

## **2- MEPCO: Introduction**

3- Multan Electric Power Company Ltd; MEPCO is a Public Limited Utility Company, established in 1998 under Companies Ordinance 1984 responsible for distribution of Electric Power within its territorial jurisdiction and presently serving more than five Million customers (Domestic, Commercial, Agricultural, Industrial and others) in thirteen districts of Punjab Province (Multan, Sahiwal, Bahawalpur, Bahawalnagar, Dera Ghazi Khan, Rajanpur, Rahim Yar Khan, Lodhran, Khanewal, Pakpattan, Muzaffargarh, Vehari and Layyah).

4- MEPCO through GoP has undergone a Project Financing agreement with Asian Development Bank for:

- Strengthening the capacity of Power Distribution and Transmission networks
- To meet the increasing electricity demand in the selected areas more efficiently
- To upgrade the existing power infrastructure.

## **5- Scope of Work**

6- There are 21 Nos. of projects under ADB Tranche-II. Detail is here as under:

- i. Construction of 02 No. of New 132KV Grid Stations and allied Transmission Lines
- ii. Conversion of 03 Nos. of Grid Substations from 66kV to 132kV & allied Transmission Lines
- iii. 14 Nos. of Augmentations
- iv. Capacitors installation

7- Overall the proposed MFF has been designed to address both investment and institutional aspects in electric power sector. Development Objectives/ Project Purpose will be fully achieved after completion of the proposed Sub-projects.

- Grid stations at Noorsar, Kamir, Miranpur & Fatehpur has been completed whereas, works are complete at Alipur subproject but Transmission Line work

was at halt because one of the Affected Person in Tranche-II. Now works of Transmission Line Towers have been erected and stringing of four towers is in progress. Status of Tranche-II subprojects is enclosed. **(Annex-A)**

- Deputy Manager (Environment & Safeguard) & Assistant Manager (Social) are working in Environment & Social Cell (ESC) under Chief Engineer (Development) MEPCO Multan in Project Management Unit (PMU)
- PD(GSC), Contractor(s) and other related staff have been provided continuous orientations on Environmental Management & Implementation of ADB's Safeguard Policy Statement guidelines and rules/regulations of Government of Pakistan.



## **Part II          Environmental Monitoring**

8- GSC & Contractor(s) are continuously being apprised to monitor Environmental aspects during the implementation of Tranche-II subprojects.

Grid Stations have been commissioned at Miranpur, Noorsar, Fatehpur and Kamir. Work at Alipur has been completed at grid station but stringing work of four towers is in progress.

All of the Augmentation subprojects have been completed which required no civil works or minor civil works for replacement of Power Transformers.

Contractor(s) are bound for implementation of Environmental Management Plans for monitoring of following parameters during execution and implementation of subproject works according bidding documents & contract.

- Soil Quality
- Noise and Vibration
- Water Quality
- Air Quality
- Flora and fauna monitoring

9- Contractor(s) do not have updated water quality, air quality and noise measurement reports at subproject sites except for Kamir where contractor has submitted these reports. At other subproject sites contractors have received claims of environmental management without providing any of the water, soil, air or etc test report as mention in BOQ.

## **Part III Environmental Management**

### **10- Submission of EIA /IEE Reports**

- Initial Environmental Examination (IEE) Reports were prepared by PEPCO Consultant (M/S British Power International (BPI) and submitted to PEPCO.

These IEE Reports were received from BPI through PEPCO in December 2010.

- These reports were reviewed, converted from Initial Environmental Examination (IEE) format to Environmental Impact Assessment (EIA) Report format to meet/ comply with the local statutory requirements/ law.
- Approval of these EIA Reports was accorded by the worthy C.E.O (MEPCO). These Reports have also been uploaded/ posted on MEPCO official website ([www.mepco.com.pk](http://www.mepco.com.pk)).
- EIA/IEE reports were submitted to EPA Punjab for obtaining Environmental Approval and subsequently Public Hearings were conducted on 20<sup>th</sup> & 21<sup>st</sup> June, 2011 at Lodhran & Pakpattan respectively.
- The Environmental Monitoring and Management Plan (EMMP) enlisted in EIA Reports have been made part of the bidding documents of civil works (Turnkey Project) and uploaded on MEPCO website. ([www.mepco.com.pk](http://www.mepco.com.pk))
- MEPCO has obtained Environmental Approval from Government of the Punjab for New and Conversion subprojects of Tranche-II. **(Annex-A)**

### **Inspection of Project Sites**

11- ESC PMU has conducted site monitoring of following site. Detail is as under:

- i. New 132 KV Miranpur (Gallaywal) Grid Station Site
- ii. Conversion of 66KV to 132 KV Alipur Grid Station and allied Transmission Line

### **Findings/ Observations**

12- Findings/ Observations noted during the site visit. Its detail is as follows:

- Land for 132 KV Kamir & 132 Miranpur (Gallaywal) new grid stations purchased on willing-seller, willing-buyer basis.
- Control House Building and Switch Yard construction activities and electrical equipment installation have been completed at all sites. Miranpur grid station has been commissioned whereas, transmission line work is under progress at Alipur.
- There are no potential significant environmental impacts associated with the subprojects where no new land is acquired. Minor environmental impacts during execution of new & conversion subprojects are being catered for as per environmental management plan.
- It has been observed at all subproject sites that during this half of the year standard of environmental management has improved. Following observations were noticed while monitoring of the subproject
- Partial plantation has been done at Miranpur Grid Station.
- Use of PPEs by workers at subproject sites was partial
- Waste management improved at subproject sites

- Site restoration and removal of temporary buildings, wash rooms and soaking pits are under progress and need to improve at all subproject sites.
- Neither permanent land acquisition, nor resettlement or property acquisition required for augmentation subprojects.
- No major/potential damages to water channel, land, construction nuisance/ noise/ air/ waste water pollution will likely to be occurred in subprojects area.

### **Corrective action plans**

13- Monitoring Checklists and other monitoring data/record have not been provided by contractor(s) to date. Therefore, improved coordination with sharing of information/record is required for better monitoring and implementation of Environmental Safeguards.

Contractor (M/S Siemens) have been directed for site restoration at completed subprojects as per EMP and proper landscaping at each subproject site.

Concerns as described in Aide-Memoire and partial use of PPEs have been communicated to contractor(s) by this office while awareness sessions are being arranged at each subproject site.

Contractor(s) are directed to provided water, air, noise reports at the earliest to ESC, PMU MEPCO.

### **Consultation and Complaints**

14- Environmental Social Complaint Register in English and Urdu versions has already been communicated to PD(GSC) and contractor(s) are advised to place these registers on each active subproject site.

### **Environmental Awareness & Trainings**

15- Several Environmental Training sessions are being organized at each subproject site for implementation of Environmental Management Plan. Awareness sessions with M/S Siemens, M/S Al-Fazl and M/S Neie-Alhussain's subcontractor have conducted for environmental awareness and ADB's Environmental guidelines which need be implemented on subproject sites.

<b>Date</b>	<b>Contents</b>	<b>Site</b>	<b>Participants</b>	<b>Trainer</b>
16-03-16 18-05-16 24-05-16	<ul style="list-style-type: none"><li>• EMP Implementation</li><li>• RP Implementation</li><li>• Compensation payment procedure</li></ul>	Alipur Subproject Site	Contractor / GSC staff/GSO Staff	<ul style="list-style-type: none"><li>• DM(Environment)</li><li>• AM(Social)</li></ul>

• **Implementation report on EIA/IEE mitigation requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Action to date</b>	<b>Action Required/ Comment</b>
Compliance of Environment Monitoring & Management Plan during execution of Project Civil Work	Inclusion of EIA/ IEE Reports in Bidding documents	EIA/ IEE Reports have been included/ made part of the Bidding documents	DONE
	Inclusion of EMMP in Bidding documents	EMMP draft Documents have been included/ made part of the Bidding documents	DONE
Budget for EMMP Implementation	Allocation of budget by Contractor	Contractor(s) is communicated and trainings session conducted to bound him to perform Environmental Management against the quoted amount in BOQ for Environmental Management Plan Implementation	Management has decreased therefore require immediate attention for improvement in Environmental Management and Mitigation measures
<b>Hydrology And Drainage Aspects</b>	1. Consideration of weather conditions when particular construction activities are undertaken.	All works are being carried out taking into consideration of the climate conditions	Improvement in coordination is required
	2. Limitations on excavation depths in use of recharge areas for material exploitation or spoil disposal.		

Reference	Requirement	Action to date	Action Required/ Comment
	3. Use of landscaping as an integrated component of construction activity as an erosion control measure.		
	4. Minimizing the removal of vegetative cover as much as possible and providing for its restoration where construction sites have been cleared of such areas.		
<b>Orientation for Contractor, and Workers</b>	1. MEPCO ESC environmental specialist to monitor and progress all environmental statutory and recommended obligations.	Orientations have been carried out for contractor(s), workers and GSC officers/officials	Improvement in coordination is required
	2 Conduct special briefing for managers and / or on-site training for the contractors and workers on the environmental requirement of the project. Record attendance and achievement test for contractors site agents.		
	3. Agreement on critical areas to be considered and necessary mitigation measures, among all parties who are involved in project activities.		

Reference	Requirement	Action to date	Action Required/ Comment
<b>Water quality</b>	4. Continuous progress review and refresher sessions to be followed.		
	Compile temporary drainage management plan one month before commencement of works.		
	1. Proper installation of temporary drainage and erosion control before works within 50m of water bodies.	Necessary directions and assistance has been provided to contractor(s) for carrying out necessary tests	Contractor(s) and GSC should take ownership of the environment & social implementation aspects  Implementation of instructions issued by ESC need to be followed while execution of the subprojects
	2. Proper maintenance and management construction of TD and EC measures, including training of operators and other workers to avoid pollution of water bodies by the considerate operation of construction machinery and equipment.	Contractor(s) are directed to repeat the water test to assess the water quality during the subproject activities	
	3. Storage of lubricants, fuels and other hydrocarbons in self-contained dedicated enclosures >50m away from water bodies.	Contractors were advised for waste management and house keeping at the end of the each day	
	4. Proper disposal of solid waste from construction activities.		
	5. Cover the construction material and spoil stockpiles with a suitable material to reduce material loss and sedimentation and avoid stockpiling		



Reference	Requirement	Action to date	Action Required/ Comment
Air quality	near to water bodies.	Contractor(s) have been informed to hire EPA Approved LABs to carry out air quality tests, so far no test report has been provided by contractors.	Ownership of Environmental managements is required from contractor(s) and GSC
	6. Topsoil stripped material shall not be stored where natural drainage will be disrupted.		
	7. Borrow sites (if required) should not be close to sources of drinking water.		
	CONTROL ALL DUSTY MATERIALS AT SOURCE.		
	1. All heavy equipment and machinery shall be fitted in full compliance with the national and local regulations.(Relevant regulations are in the Motor vehicles fitness rules and Highway Act).		
	2. Stockpiled soil and sand shall be slightly wetted before loading, particularly in windy conditions.	Partial measures related to avoid deteriorations of air quality are being carried out by sprinkling of water, fuel efficient vehicles etc.	

Reference	Requirement	Action to date	Action Required/ Comment
<b>Ground Vibration</b>	<p>3. Fuel-efficient and well-maintained haulage trucks shall be employed to minimize exhaust emissions.</p> <p>4. Vehicles transporting soil, sand and other construction materials shall be covered. Limitations to speeds of such vehicles necessary. Transport through densely populated area should be avoided.</p> <p>5. To plan to minimize the dust within the vicinity of orchards and fruit farms.</p> <p>6. Spraying of bare areas with water.</p> <p>7. Concrete plants. to be controlled in line with statutory requirements should not be close to sensitive receptors.</p>		
	<p>1. Review requirements for piling and use of powered mechanical equipment within 100m of SRs.</p> <p>2. Review conditions of buildings and conduct public consultation with SRs to establish less sensitive time for works involving piling and schedule works accordingly.</p>	<p>New grid stations are located away from local communities. Access roads are available for transport and all operations are being carried out in day light hours.</p>	<p>Contractor(s) should ask ESC before establishment of Camps</p>

Reference	Requirement	Action to date	Action Required/ Comment
<b>Noise</b>	3. Non-percussive piling methods to be used wherever practicable.		
	4. Percussive piling shall be conducted in daylight hours.		
	5. Hammer- type percussive pile driving operations shall not be allowed at night time.		
	1. Review requirements for use of powered mechanical equipment within 100m of SRs.		
	2. Conduct public consultation with SRs to establish less sensitive time for works and schedule works accordingly.		
	3. All heavy equipment and machinery shall be fitted in full compliance with the national and local regulations and with effective silencing apparatus to minimize noise.	Necessary actions are being carried out and ESC have arranged noise measurement equipment for monitoring	
	4. Heavy equipment shall be operated only in daylight hours.		
	5. Construction equipment, which generates excessive noise, shall be enclosed or fitted with effective silencing apparatus to minimize noise.		

Reference	Requirement	Action to date	Action Required/ Comment
Soil Erosion / Surface Run-off	7. Well-maintained haulage trucks will be used with speed controls.		
	8. Contractor shall take adequate measures to minimize noise nuisance in the vicinity of construction sites by way of adopting available acoustic methods.		
	SCHEDULE WORKS IN SENSITIVE AREAS (e.g. NEAR RIVERS) FOR DRY SEASON	Being carried out in coordination with GSC & ESC PMU	Improvement in coordination is required
	1. In the short-term, temporary drainage and erosion control plan to be presented with tender. Temporary drainage and erosion control plan one month before commencement of works to protect all areas susceptible to erosion. (Permanent drainage works shall be in the final design).		
	2. Installation of TD and EC before works construction within 50m of water bodies.		
	3. Clearing of green surface cover to be minimized during site preparation.		
	5. Meaningful water quality monitoring		

Reference	Requirement	Action to date	Action Required/ Comment
	up and downstream at any tower site during construction within a river or stream bed. Rapid reporting and feedback to CSC.		
	5. Back-fill should be compacted properly in accordance with MEPCO design standards and graded to original contours where possible.		
	6. Cut areas should be treated against flow acceleration while filled areas should be carefully designed to avoid improper drainage.		
	7. Stockpiles should not be formed within such distances behind excavated or natural slopes that would reduce the stability of the slopes or cause slippage.		
	8. Measures shall be taken to prevent ponds of surface water and scouring of slopes. Newly eroded channels shall be backfilled and restored to natural contours.		
	9. Contractor should arrange to monitor and adjust working and adopt suitable measures to minimize soil erosion during the construction		

Reference	Requirement	Action to date	Action Required/ Comment
<b>Exploitation, Handling, Transportation and Storage of Construction materials</b>	period. Contractor's TD and EC plan should be endorsed and monitored but CSC after consulting with concerned authorities.		
	10. Replanting trees to be done before the site is vacated and handed back to MEPCO with appropriate trees (other vegetation cover as appropriate) to ensure interception of rainwater and the deceleration of surface run-off.		
	(consider also for future trances if civil works)		
	1. Use only EPA licensed sites for raw materials in order to minimize adverse environmental impacts. 2. Measures to be taken in line with any EPA license conditions, recommendations and approval to be applied to the subproject activities using the licensed source including: (i) Conditions that apply for selecting sites for material exploitation.	Sufficient space available at existing and new grid stations for storage of materials which are away from local communities.	Contractor(s) are directed to demark such areas where construction material is stored. Partial compliance has been observed at subprojects this needs to be improved.

Reference	Requirement	Action to date	Action Required/ Comment
	(ii) Conditions that apply to timing and use of roads for material transport.		
	(iii) Conditions that apply for maintenance of vehicles used in material transport or construction.		
	(iv) Conditions that apply for selection of sites for material storage.		
	(v) Conditions that apply for aggregate production.		
	(vi) Conditions that apply for handling hazardous or dangerous materials such as oil, lubricants and toxic chemicals.		
<b>Construction Waste Disposal</b>	1. Waste management plan to be submitted to the CSC and approved by MEPCO ESC one month prior to starting of works. WMP shall estimate the amounts and types of construction waste to be generated by the project.	Materials are being re-used where necessary and lubricants which are to be used in Power Transformers are already being recycle at Power Transformer Reclamation Workshop of MEPCO as and when required. For These subproject new	Improvement in coordination is required as contractor(s) should ask ESC for such waste disposal but no communication on the same. ESC while visiting sites have directed both contractor(s) for proper waste disposals at subproject sites. But partial
	2. Investigating whether the waste can be reused in the project or by other interested parties without any residual environmental impact.		

Reference	Requirement	Action to date	Action Required/ Comment
	3. Identifying potential safe disposal sites close to the project, or those designated sites in the contract.	materials shall be used.	compliance is observed.
	4. Investigating the environmental conditions of the disposal sites and recommendation of most suitable and safest sites.		
	5. Piling up of loose material should be done in segregated areas to arrest washing out of soil. Debris shall not be left where it may be carried by water to downstream flood plains, dams, lagoons or other water bodies.		
	6. Used oil and lubricants shall be recovered and reused or removed from the site in full compliance with the national and local regulations.		
	7. Oily wastes must not be burned. Disposal location to be agreed with local authorities/EPA.		
	8. Waste breaker insulating oil to be recycled, reconditioned, or reused at DISCO's facility.		
	9. Machinery should be properly maintained to minimize oil spill during the construction.		



Reference	Requirement	Action to date	Action Required/ Comment
<b>Work Camp Operation and Location</b>	10. Machinery should be maintained in a dedicated area over drip trays to avoid soil contamination from residual oil spill during maintenance.		
	11. Solid waste should be disposed at an approved solid waste facility and not by open burning which is illegal and contrary to good environmental practice.		
	1. Identify location of work camps in consultation with local authorities. The location shall be subject to approval by the MEPCO. If possible, camps shall not be located near settlements or near drinking water supply intakes.	<p>Local labour is hired at II sites.</p> <p>Worker Camps are located within the boundary of subprojects sites</p>	<p>Improvement in coordination is required while establishment of camps and contractor(s) mobilization.</p>
	<p>2. Cutting of trees shall not be permitted and removal of vegetation shall be minimized.</p> <p>3. Water and sanitary facilities (at least pit latrines) shall be provided for employees. Worker camp and latrine sites to be backfilled and marked upon vacation of the sites.</p>		

Reference	Requirement	Action to date	Action Required/ Comment
	4. Solid waste and sewage shall be managed according to the national and local regulations. As a rule, solid waste must not be dumped, buried or burned at or near the project site, but shall be disposed of to the nearest sanitary landfill or site having complied with the necessary permits of local authority permission.		
	5. The Contractor shall organize and maintain a waste separation, collection and transport system.		
	6. The Contractor shall document that all liquid and solid hazardous and non-hazardous waste are separated, collected and disposed of according to the given requirements and regulations.		
	7. At the conclusion of the project, all debris and waste shall be removed. All temporary structures, including office buildings, shelters and toilets shall be removed.		
	8. Exposed areas shall be planted with suitable vegetation.		

Reference	Requirement	Action to date	Action Required/ Comment
<b>Loss of Trees and Vegetation Cover of the Areas for Towers and Temporary Work-space</b>	9. MEPCO and Construction Supervising Consultant shall inspect and report that the camp has been vacated and restored to pre-project conditions.		
	1. Tree location and condition survey to be completed one month before tender.	All necessary arrangements have been made while designing the route of transmission lines.	Contractor(s) are partially complying with the restoration of subproject transmission line sites.
	2. The route for the distribution line should be selected so as to prevent the loss or damage to any orchard trees or other trees. Use of higher towers to be preferred to avoid trees cutting.	Contractor(s) is directed for restoration of sites of towers and ROW.	Tree plantation is directed by PMU indicating that trees should be planted instead of saplings.
	3. Clearing of green surface vegetation cover for construction, borrow of soil for development, cutting trees and other important vegetation during construction should be minimized by careful alignment. Written technical Justification for tree felling included in tree survey.	Compensation for AHs are being prepared.	Compensation for land purchased for grid stations have been paid. Whereas, compensation for crops, trees and other damages during transmission line work is being prepared by GSC.
	4. At completion all debris and waste shall be removed and not burned.		

Reference	Requirement	Action to date	Action Required/ Comment
	5. The contractor's staff and labour will be strictly directed not to damage any vegetation such as trees or bushes outside immediate work areas. Trees shall not be cut for fuel or works timber.		
	6. Land holders will be paid compensation for their standing trees in accordance with prevailing market rates (LARP). The land holders will be allowed to salvage the wood of the affected trees.		
	7. The contractor will plant three (3) suitable new trees outside the 30 meter corridor of the transmission line in lieu of one (1) tree removed.		
	8. Landscaping and road verges to be re-installed on completion.		
	9. Compensatory planting of trees/shrubs/ornamental plants (at a rate of 3:1) in line with best international practice.		
	10. After work completion all temporary structures, including office buildings, shelters and toilets shall be removed.		

Reference	Requirement	Action to date	Action Required/ Comment
<b>Safety Precautions for the Workers</b>	1. Providing induction safety training for all staff adequate warning signs in health and safety matters, and require the workers to use the provided safety equipment.	Contractor have been directed to ensure the use of PPEs for workers and all the staff.	Partial compliance is observed at sites. Strict compliance is required
	2. Providing workers with skull guard or hard hat and hard toe shoes.		
	1. Submit temporary haul and access routes plan one month prior to start of works. 2. Routes in vicinity of schools and hospitals to be avoided.	Paved road are available for transportation.	Improvement in coordination is required
<b>Social Impacts</b>	1. Potential for spread of vector borne and communicable diseases from labour camps shall be avoided (worker awareness orientation and appropriate sanitation should be maintained).	Public Consultations and Orientations regarding STDs and other diseases are being done regularly	ESC is continuously arranging awareness sessions to avoid and mitigate social issues. Improved coordination is required while subproject activities with ESC by contractor(s).
	2. Complaints of the people on construction nuisance / damage close to ROW to be considered and responded to promptly.		

Reference	Requirement	Action to date	Action Required/ Comment
Institutional Strengthening and Capacity Building	3. Contractor should make alternative arrangements to avoid local community impacts.		
	Capacity building activities were taken by Environmental Officer in Tranche-I. Environmental Management Unit (EMU) was setup within MEPCO under Director Operations in Tranche 1. Development of strengthening plan for the EMU should be taken up with resources.	Continuous process and trainings plan have been implemented.	More trainings are needed to be imparted to all concerned

**Annex-A**

ADB Tranche-II (Grid Stations & Associated Transmission Lines)				
SR.NO.	NAME OF GRID STATION	Prop:	Voltage KV	REMARKS / PROGRESS
1	Kamir a/w T/Line	N	132	<b>Commissioned on 13.05.2015.</b>
2	Ali Pur a/w T/Line	C	132	<p>Contract Effective Date - 17.05.2013  Completion Period - 360 Days  Contract Completion Date:- 11.05.2014  Expected completion Date 15.01.2015  Project Cost – PKR 236,642,715  (Ali Pur + Fateh Pur) USD 203,286  EUR 525,068  Released up till now - PKR 152,927,000 (Ali Pur + Fateh Pur)  USD 526,000  EUR 203,000</p> <p><b><u>Physical Progress</u></b>  <b><u>A. Grid Station:-</u></b>  <b><u>Civil Work</u></b>  <b>100%</b> of CHB completed.  <b>100%</b> Switch yard foundations completed  <b><u>Electrical Work (80% completed)</u></b>  <b><u>Remaining Work</u></b>  Wiring Termination, Testing and Commissioning  <b><u>B. Transmission Line: (90% completed)</u></b>  Foundations:- <b>47/47</b>  Erection:- <b>47/47</b>  Stringing:- <b>43/47</b></p>
3	Fatehpur a/w T/Line	C	132	<b>Commissioned on 13.04.2015.</b>
4	Miran Pur (Galaywal) a/w T/Line on turnkey basis <b>(New)</b>	132	2x26 MVA T/Bay 2xL/Bays & 1xPT/Bay	<b>Commissioned on 09.07.2015.</b>

<b>ADB Tranche-II (Grid Stations &amp; Associated Transmission Lines)</b>				
5	Noor Sar	C	132	<b>Commissioned on 19.10.2014.</b>
6	Duniya Pur	A	132	<b>Energized on 06.09.2012.</b>
7	Sheikh Fazal	A	132	<b>Energized on 05.11.2012.</b>
8	Basti Malook	A	132	<b>Energized on 27.11.2012.</b>
9	Multan Ind: Estate	A	132	<b>Energized on 04.12.2012.</b>
10	Baghdad-ul-Jadeed	A	132	<b>Energized on 24.01.2013.</b>
11	Kot Addu	A	132	<b>Energized on 06.12.2012.</b>
12	Noor Pur	A	132	<b>Energized on 11.12.2012.</b>
13	Layyah	A	132	<b>Energized on 20.12.2012.</b>
14	Bahawal Nagar	A	132	<b>Energized on 22.01.2013.</b>
15	Chak 211/WB	A	132	<b>Energized on 07.01.2013.</b>
16	Multan Qasim Pur	A	132	<b>Energized on 31.01.2013.</b>
17	Sadiqabad	A	132	<b>Energized on 04.02.2013.</b>
18	Vehari Road	A	132	<b>Energized on 07.02.2013.</b>
19	D.G.Khan	A	132	<b>Energized on 10-07-2012</b>





# ENVIRONMENT PROTECTION DEPARTMENT

Government of the Punjab  
National Hockey Stadium, Lahore

NO. DD (EIA/EPA F-05) (EIA) 2011/1712/98

Date: 27/12/2011



To

✓  
Mr. Mohammad Shaukeel  
Chief Engineer (Development)  
PML - MEPSO Complex  
Khawar Road, Multan

Subject

ENVIRONMENTAL APPROVAL

(Under Section 12 of P.E.P.A. 1997 read with E.E. EIA Regulations, 2000)

1. Description of Project: Installation of 132 Kv and conversion of grid stations (66-132) trench II, and associated transmission lines.
2. Location of Project: The GSS and transmission lines are located at Miranpur district Lodhran (132 Kv), Kameer district Pakpattan (132-66 Kv), Alipur district Muzaffargarh (66-132 Kv), Fatehpur district Layyah (66-132 Kv) and Noorsar district Bahawalnagar (66-132 Kv).

Date of receiving: 18/01/2011

1. After review of Environmental Impact Assessment (EIA) Report and other relevant record, the Environmental Protection Agency, Punjab accords approval for construction phase of the above mentioned unit at the aforementioned site, to safeguard the environmental issues subject to the following conditions:

- i. The proponent shall ensure compliance of National Environmental Quality Standards (NEQS).
- ii. Mitigation measures suggested in the EIA Report and Environmental Management and Monitoring Plan (EMMP) should be strictly adhered to minimize any negative impacts on soil, ground water, air and biological resources of the project area. The proponent shall deposit staff to monitor compliance of EMMP.
- iii. Monitoring shall be carried out during the entire period of the project activities.
- iv. Monitoring reports shall be submitted to EPA, Punjab on monthly basis.
- v. The proponent shall be responsible for adopting appropriate mitigation measures for controlling anticipated environmental hazards.
- vi. Camping sites shall be located at suitable distance from any settlement to avoid disturbance to the local people. Sewage generated from camping sites shall be treated in septic tanks and soak pits or by other appropriate methods. The septic tanks and soak pits shall be constructed at a suitable distance from any permanent or seasonal water source. Septic tank and soak pits shall not be located in the areas where high ground water table exists.
- vii. At least 90% unskilled and to the extent possible skilled jobs shall be given to the locals after providing them proper training.
- viii. Compensation shall be provided to inhabitants in case of loss of agricultural land, crop, property, etc. in accordance with the rates that are agreed upon. All conflicting issues regarding compensation, etc. shall be settled amicably before or during the project activities.
- ix. The proponent shall not discharge treated/untreated wastewater in a surface or sub-surface water body that may be used for drinking purpose.
- x. Arrangements shall be made for safe disposal of solid and hazardous waste. The solid waste will be retained within the unit boundary premises and shall be disposed off in an environment friendly way at a suitable disposal facility.
- xi. The construction material shall be piled / stored in such a way that it shall not destroy the flora environment of the locality.
- xii. The proponent shall ensure that strict and efficient health and safety measures are in place for protection of workers backed by a comprehensive emergency response system.
- xiii. The proponent shall plant at least 30,000 trees of minimum height of 06 to 07 feet especially of indigenous species on available space in and around the project area in consultation with DG, PHA (Lahore) within six months. The proponent shall also take measures for the safety and maintenance of these trees.

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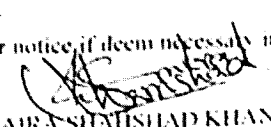
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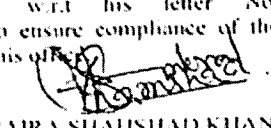
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- xiii. The proponent shall do proper landscaping after completion of the project.
  - xiv. The proponent shall use Gas Insulated Switchgear (GIS) technology for the establishment of Grid Stations.
  - xv. The proponent shall not use Polychlorinated Biphenyl (PCBs) in the transformers and shall use environment friendly oil for this purpose.
  - xvi. The objections/complaints of the local stakeholders (if any) shall be redressed on priority basis.
  - xvii. The proponent shall care about noise issues during construction and operation stage of the project.
  - xviii. The proponent shall provide a copy of this letter and EIA report to the contractor for his information and compliance.
  - xix. The proponent shall appoint Environmental Manager (having qualification of B.S. Environmental Sciences) for the project and shall convey his name along with his complete Mailing Address and Phone Numbers.
5. The proponent shall be liable for correctness and validity of information supplied to this department by the consultant.
6. The proponent shall be liable for compliance of Sections 13, 14, 17 and 18 of H.E.E.A Regulations, 2000, regarding approval, confirmation of compliance, entry, and inspection and monitoring.
7. This approval is accorded only for the construction phase of the project. The proponent will obtain approval for operation of the above mentioned project in accordance with Section 13(2)(b) and Section 18 of the H.E.E.A Regulations, 2000.
8. Any change in the approved project shall be communicated to EPA, Punjab and shall be commenced after obtaining the approval.
9. This approval does not absolve the proponent of the duty to obtain any other approval or consent that may be required under any law in force. The approval shall be treated as null and void if all or any of the conditions, mentioned above, is/are not complied with and is subjudice to the legal proceedings in any court of competent jurisdiction. Legal fora.
10. This approval shall be valid (for commencement of construction) for a period of three years from the date of issue under Section 16 of H.E.E.A Regulations, 2000.
11. This approval can be withdrawn at anytime without any prior notice if deemed necessary in public/national interest.

  
 UMAIRA SHAHISHAD KHAN  
 ASSISTANT DIRECTOR (EIA)  
 for Director General, EPA, Punjab  
 Ph: # 042-99232228

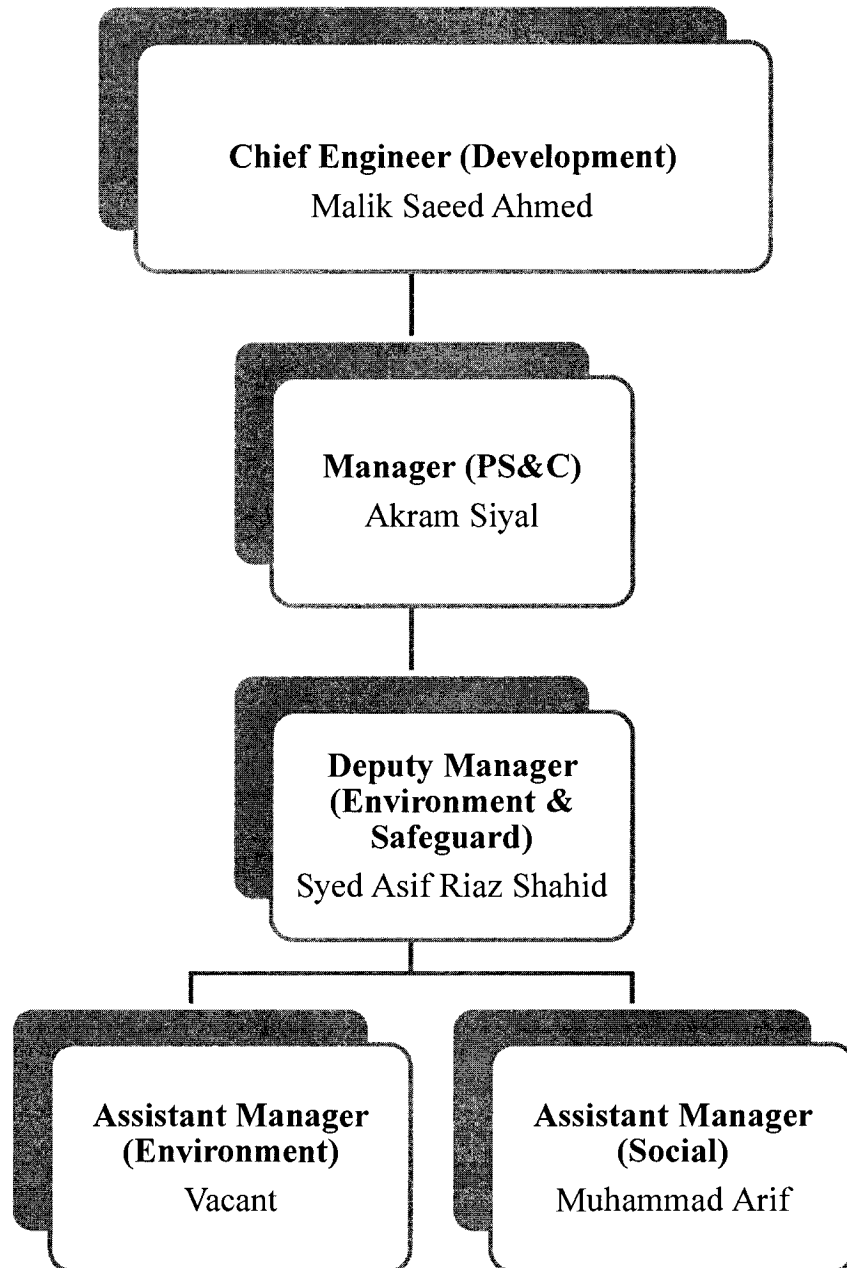
#### NO. & DATE EVEN

- A copy is forwarded for information to:
1. The Director (North), EPA, Punjab, Lahore.
  2. The District Officer (Environment), Bahawalnagar w.r.t his letter No. 134/DO(Env)/BWN dated 19.02.2011. He is requested to ensure compliance of the above mentioned conditions / measures under intimation to this office.
  3. The District Officer (Environment), Layyah w.r.t his letter No. EPA/LYA/1495 dated 04.03.2011. He is requested to ensure compliance of the above mentioned conditions / measures under intimation to this office.
  4. The District Officer (Environment), Pakpattan w.r.t his Memo No. 1385/DO(Env)/EPA/PPN dated 12.05.2011. He is requested to ensure compliance of the above mentioned conditions / measures under intimation to this office.
  5. The District Officer (Environment), Lodhran w.r.t his letter No. 3450/DO/EPA/LDN dated 11.04.2011. He is requested to ensure compliance of the above mentioned conditions / measures under intimation to this office.
  6. The District Officer (Environment), Muzaffargarh w.r.t his letter No. 3341/DO(Env)/MZG dated 24.10.2011. He is requested to ensure compliance of the above mentioned conditions / measures under intimation to this office.

  
 UMAIRA SHAHISHAD KHAN  
 ASSISTANT DIRECTOR (EIA)  
 for Director General, EPA, Punjab

**Environment & Social Safeguard Section**

**PMU MEPCO**



## Photographs



**Photograph 1: Workers at Alipur Grid Station Site**



**Photograph 2: Works in progress at Alipur Grid Station Site**



**Photograph 3: Works in progress at Alipur Grid Station Site**



**Photograph 4: Works in progress at Alipur Grid Station Site**



**Photograph 5: Works in progress at Alipur Grid Station Site**



**Photograph 6: First Aid Box at Alipur Grid Station Site**



**Photograph 7:PPEs at Alipur Grid Station Site**