



INVITATION OF BIDS FOR ENVIRONMENTAL MONITORING AND LABORATORY TESTING

PREPARATION OF WESTERN GREATER PESHAWAR SPATIAL MASTER PLAN UNDER KHYBER PASS ECONOMIC CORRIDOR DEVELOPMENT PLAN (KPEC) PROJECT

National Engineering Services Pakistan (Pvt.) Limited (NESPAK), invites sealed bids (Technical and Financial in separate sealed envelopes) from KP-EPA Certified Environmental Monitoring Laboratories, registered with Income Tax and Sales Tax Departments and who are on active Taxpayers list of Federal board of Revenue and Provincial Revenue Authority, for carrying out the monitoring of ambient air & noise, sampling, testing & analysis of waste/surface water and ground/drinking water as per National Environmental Quality Standards (NEQS), 2010 on the subject Project.

Bidding documents (i.e. Bid Invitation Letter, BOQ & Qualification Criteria) containing detailed terms and conditions, etc. can be downloaded from NESPAK (www.nespak.com.pk) and PPRA (www.ppra.org.pk) websites or can be obtained on submission of a written application from the address mentioned below.

Financial proposal must be accompanied by a bid bond of not less than 2% of the total bid value; the bid bond must be submitted in the shape of bank / demand draft OR pay order only in favor of M/s NESPAK (Pvt.) Limited. Bids submitted without the 2% bid bond shall not be considered

Laboratories/Firms capable of carrying out subject work are requested to furnish complete information in accordance with the requirement of bidding document. Sealed bids (inclusive of all taxes) prepared in accordance with the instructions in the bidding document, must be submitted on or before **May 17, 2024** up to **1100 hours** at the address mentioned below. The sealed bids shall bear the Name of the Project, and clearly write **“TO BE OPENED BY BID OPENING COMMITTEE ONLY.”**

Technical Bids would be opened on the same day at **1130 hours** after their receipt in the presence of those bidders who wish to be present. Financial bids would be opened after evaluation of technical bids, at a time, date and venue announced and communicated to the technically responsive bidders in advance. NESPAK reserves the right to accept or reject any/ all bids according to provisions of Public Procurement Rules 2004.

General Manager/ Head

Geotechnical & Geoenvironmental Engineering Division

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NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED

NESPAK HOUSE: 1-C, Block-N, Model Town Extension, Lahore - 54700, Pakistan



Ref: 4509/023/KY/01/1987

Date: May 03, 2024

PREPARATION OF WESTERN GREATER PESHAWAR SPATIAL MASTER PLAN UNDER KHYBER PASS ECONOMIC CORRIDOR DEVELOPMENT PLAN (KPEC) PROJECT

Invitation of Bids for Environmental Monitoring and Laboratory Testing

Dear Sir(s)/Madam(s),

The sealed bids (Technical and Financial in separate sealed envelopes) are invited in accordance with the attached BOQ and qualification criteria from KP-EPA Certified Environmental Monitoring Laboratories for carrying out the monitoring of ambient air & noise, sampling, testing & analysis of waste/surface water and ground/drinking water as per National Environmental Quality Standards (NEQS), 2010 on the subject Project.

The companies capable of carrying out subject work are requested to provide their Company's Profile and the following documents along with their sealed bids:

1. KP-EPA Registration Certificates
2. FBR & KPRA/PRA Registration Certificates
3. List of Similar Projects completed during last three years
4. Financial Capability
5. Equipment Capability
6. Personnel Capability
7. Litigation History
8. HSE Policies

The work comprises; environmental monitoring of ambient air and noise level and sampling and waste/surface water and ground/drinking water along KPEC in Peshawar and Khyber District. The field and laboratory work shall have to be completed according to the following time schedule:

Sr. No.	Time for Completion of Field Investigations	Time for Completion of Laboratory Testing	Total Time for Completion of Field & Laboratory Investigations
1	18 Days	10 Days	28 Days

Your bid shall be valid for a time period of ninety (90) days after the bid opening. The work shall be executed under the instructions and full-time supervision of NESPAK environmental engineers/scientists and the successful bidder shall mobilize to the site on three (03) days' notice after issuance of Letter of Award/Acceptance.

The successful bidder shall be responsible for providing the field and detailed laboratory test results to NESPAK, within the contract period. **The coordinates and exact location of the monitoring points shall have to be provided to NESPAK before conduction of monitoring at site by the Laboratory, if there is any deviation from the provided monitoring points mentioned in Terms of Reference (TOR).**

The bidders shall submit a bid security amounting to 2% of the total bid value at the time of submission of bids in the form of pay order or bank draft in favor of M/s NESPAK (Pvt.) Limited

Your **most competitive** sealed bids (**inclusive of all taxes**) in accordance with the BOQ and qualification criteria, should reach the office of the undersigned by 1100 hours on or before **May 17, 2024**. Technical bids would be opened on the same day at 1130 hours after their receipt in the presence of those bidders who wish to be present.

Financial bids would be opened after evaluation of Technical bids, at a time, date and venue announced and communicated to the technically responsive bidders in advance. However, the final decision to accept/reject any or all the bids as per PPRA rules solely lies with the undersigned. The entire work shall be carried out in accordance with the requirements of the General Bidding Documents for Environmental Monitoring and Laboratory Testing available at NESPAK website (www.nespak.com.pk).

for National Engineering Services Pakistan (Pvt.) Limited



(Kamran Yousaf)

General Manager/ Head

Geotechnical & Geoenvironmental Engineering Division

INVITATION OF BIDS FOR ENVIRONMENTAL MONITORING AND LABORATORY TESTING

PREPARATION OF WESTERN GREATER PESHAWAR SPATIAL MASTER PLAN UNDER KHYBER PASS ECONOMIC CORRIDOR DEVELOPMENT PLAN (KPEC) PROJECT

Terms of Reference (TOR) of Environmental Monitoring, Sampling & Testing

1. INTRODUCTION

PMU-Khyber Pass Economic Corridor (KPEC) entered into an Agreement with National Engineering Services Pakistan (Pvt.) Limited (NESPAK) for Component-II of KPEC Project. Component-II has (02) two Sections i.e.: (i) Khyber Pass Economic Corridor Development Plan, based on a combined spatial and cluster competitiveness assessment in Western Greater Peshawar and (ii) Detailed Masterplan for the Development of the Urban Centers of Jamrud and Landi Kotal in Western Greater Peshawar respectively.

2. SCOPE OF WORK

To evaluate the existing physical environmental condition along KPEC and in Jamrud and Landi Kotal, a KP EPA-certified laboratory is required to undertake environmental monitoring of ambient air and background noise and sampling and testing of surface water, wastewater, and drinking water at the Project sites.

The scope of work consists of but is not limited to the following activities/requirements:

- a) National / Provincial and internationally accepted code of practices will be used for surface water/wastewater and drinking water sampling (collection method, precautions/instructions for sampler, sample preservation before delivered to laboratory for analysis, etc.).
- b) Air and noise quality assessment will be carried out to analyze the existing ambient air quality and noise levels at the Project sites.
- c) The laboratory will undertake the required testing/monitoring for the following parameters and the number of samples.

Sr. No.	Parameters	Sampling Duration/Type	Quantity
1	Drinking / Ground Water Quality (As per NEQS)	Grab Sampling	16
2	Surface Water/Wastewater Quality (As per NEQS)	Grab Sampling	08

Sr. No.	Parameters		Sampling Duration/Type	Quantity
		Compounds), Cyanide (CN-), Anionic Detergents as MBAS, Sulfate (SO ₄ ⁻²), Sulfide (S), Ammonia NH ₃ , Cadmium (Cd), Chromium (Cr) as Hexavalent & Trivalent, Copper (Cu), Lead (Pb), Nickel (Ni), Zinc (Zn), Iron (Fe), Manganese (Mn), Selenium (Se), Silver (Ag), Arsenic (As), Barium (Ba), Boron (B), Mercury (Hg), Chlorine (Cl), Total Toxic Metals and Pesticides.		
3	Ambient Air Quality Monitoring (As per NEQS)	NO, NO ₂ , SO ₂ , Lead, SPM, PM _{2.5} , PM ₁₀	Averaging Period: 24 Hours	16
		CO	Averaging Period: 1 hour & 8 hours	
		O ₃	Averaging Period: 1 hour	
4	Noise (As per NEQS)	Continuous 24-hour monitoring of Noise - dB(A) L _{eq}	Day and Night Time	16

- d) Sampling methodology shall be as per National Environmental Quality Standards (NEQS) 2010, Environmental Sample Rules, 2001 Statuary Notification S.R.O.527 (1)/2001 and USEPA.
- e) Monitoring methodology for all the parameters will be in accordance with the requirements of NEQS and USEPA.
- f) Analytical procedures shall be according to USEPA methods. The results of the analysis will be compared with NEQS, 2010 limits. However, where these standards do not provide limits for certain parameters, other appropriate national and international standards will be used for comparison.
- g) Error-free and up-to-date equipment should be used for air, noise, surface water, wastewater, and drinking water sampling and testing.
- h) The laboratory will provide a comprehensive report on air, noise, surface water, wastewater, and drinking water, which will include, but not be limited to the following:
- General;
 - Sampling and monitoring methodology and locations; and
 - Analysis of results with seasonal variation, remarks/comments/justification for the anomaly (if any), and mitigation for the anomaly.
- i) The laboratory will ensure the availability of valid and updated calibration certificates before mobilization with the monitoring and sampling team at the site. The laboratory must bring a calibration certificate of field equipment with them to the site. The sampling, monitoring methodology, and instrumental specification will be ensured at the site.
- j) The laboratory team shall ensure the fulfillment of all the sampling and monitoring activities protocols along with all the requirements for the chain of custody for the safe and secure transportation of samples to the testing points.
- k) The security arrangement for sampling shall be the responsibility of the lab.

- l) Unit rates quoted for testing/monitoring shall include all taxes and other costs including the cost of collection, preservation, and transportation of samples to the laboratory, security (if required during fieldwork), accommodation, traveling, mobilization, etc.
- m) The Consultant has the authority to direct the laboratory to repeat the sampling/monitoring if the results found misleading.
- n) The quantity of sampling and monitoring may increase or decrease and the payment shall be based on the actual quantity of sample/monitoring points.
- o) Consultant has a liability to require supplementary documents from the laboratory during the evaluation of technical quotation.
- p) The mobilization time will be within three (03) working days after the award of work or as mutually decided by both parties.
- q) Payment of the entire work shall be made after the receipt of final reports from the laboratory as per the Client's satisfaction and/or receipt of the work fee from the Client accordingly.
- r) The Consultant / Client has the authority to supervise the field activities of the laboratory.

3. MONITORING REPORT

After completion of monitoring and testing, results will be compared with NEQS, and a comprehensive report on the baseline of air, noise, surface water, wastewater, and drinking water quality will be prepared and submitted by the monitoring laboratory within ten (10) working days after completion of monitoring.

Reports will cover the introductory part, complete sampling and monitoring methodology for each parameter of air, noise, surface water, wastewater, and drinking water quality, locations with GPS coordinates, complete data log of monitoring and sampling results, analysis of results/remarks along with remarks/comments/justification/reason for the anomaly (if any) and mitigation for the anomaly, photolog and supported annexes.

4. QUALIFICATION CRITERIA

Qualification will be based on the criteria given in the following paras regarding the Applicant's experience, personnel and equipment capabilities, financial position and litigation history, as demonstrated by the Applicant's responses in the Forms attached as Annex-A to this Document. The Employer reserves the right to waive minor deviations, if these do not materially affect the capability of an Applicant to perform the contract by the Applicant.

Experience and resources of the Company intended to be employed as sub-contractor shall not be taken into account in determining the Applicant's compliance with the qualifying criteria. However, for joint venture, collective experience, resources and financial soundness of all partners shall be considered.

a. MANDATORY QUALIFICATION CRITERIA

- FBR and KPRA/PRA certificates showing the active tax payer status of the Laboratory/Firm;
- The Laboratories will be selected with maximum approved parameters of testing;
- Technical details of the equipment along with specification and calibration certificates; and
- Valid KP-EPA Certificates for the subject activity along with annexures and/or Latest Application of renewal and application receiving/response of KP-EPA (not more than six months old), in case of expired validity for the subject activity.

b. GENERAL INFORMATION

The Applicant shall provide general information of their Laboratory/Firm as per the format specified in the Application Form A-1 attached in Annex-A.

c. EXPERIENCE OF THE FIRM

The Applicant shall meet the following minimum criteria:

- 1) Successful experience as a Laboratory/Firm in the execution of at least five (5) projects involving environmental monitoring of ambient air and noise level and sampling and testing of surface water, wastewater and groundwater within the last five (05) years in KP especially in Peshawar and Khyber Districts. This experience should specifically be of environmental monitoring and sampling and testing of similar nature projects. The Applicant will supply information as per the format specified in the Application Form A-2 attached in Annex-A.

d. PERSONNEL CAPABILITIES

The Applicant must have in his employment, suitably qualified and relevant experience personnel to fulfill the positions tabulated below. The Applicant will supply information as per the format specified in the Application Form A-3 attached in Annex-A.

Sr. No.	Position	Qualification*	No.	Minimum Relevant Experience (Years)
1	Air & Noise Quality Expert	Bachelor/Master's Degree in Environmental Sciences/ Environmental Management with experience of conducting air quality and noise level monitoring and assessments.	01	07
2	Water Quality Expert	Bachelor/Master's Degree in Environmental Sciences/ Chemical Engineering / Chemistry with experience of conducting water quality sampling, testing and analysis.	02	07
3	HSE Supervisor	HSE Certification course	01	03

e. FINANCIAL CAPABILITIES

The Applicant shall meet the following minimum criteria:

- 1) Average annual turnover which is also termed as income from contracting for procurement of environmental monitoring and assessment and is defined as billing for works completed during the last three (3) years of at least Rs. 1.0 million or the said figure has been achieved in any year during the last three (3) years.

The Applicant will supply annual turnover information as per the format specified in the Application Form A-4 attached in Annex-A.

f. LITIGATION HISTORY

The Applicant should provide accurate information on any litigation or arbitration resulting from Contracts completed or under execution over the last three (03) years. The Applicant will supply information as per the format specified in the Application Form A-5 attached in Annex-A. A consistent/ overwhelming history of litigation against the Applicant may result in rejection of the application. In case an Applicant claims Nil litigation, he shall submit the same statement on the letter head of his company.

g. APPLICATION OF HEALTH, SAFETY AND ENVIRONMENTAL STANDARDS

The Applicant should provide the HSE Policies and supporting documentary evidence for the following:

- i) First Aid Box
- ii) Personnel Protective Equipments (PPEs)
- iii) Health, Safety and Environmental (HSE) Policies
- iv) HSE staff

The Applicant will supply information as per the format specified in the Application Form A-6 attached in Annex-A.

h. QUALIFICATION SCORE

Sr. No.	Description of Evaluation Criteria	Total Points
i)	Firm / Laboratory Profile / Experience	40
ii)	Approach and Methodology	10
iii)	Personnel Capabilities	40
iv)	Financial Capabilities	05
v)	Health, Safety and Environmental (HSE) Policies	05

Application Form A-1

Page ___ of ___ Pages

General Information

All individual Applicants applying for qualification are requested to complete the information in this form.

1.	Name of Firm	
2.	Head Office Address	
3.	Telephone	Contact Person: Name: Title: Cell No.
4.	Fax	E-mail
5.	Place of Incorporation/Registration Certificates of the firm*	Year of incorporation/registration

*** Registration certificates must include:**

- Valid registration with Federal Board of Revenue (FBR)
- Valid registration with concerned Provincial Revenue Authority (PRA)
- Proof of active taxpayer of FBR & PRA

Financial Capabilities

Name of Applicant: _____

Year	Annual Turnover (in PKR)
2022 – 2023	
2021 – 2022	
2020 – 2021	

Summary of Cost

Sr. No	Parameters	Sampling Duration/Type	Quantity	Rate (PKR)	Total (PKR)
1	Drinking Ground Water Quality (As per NEQS)	Color, pH, Turbidity, Total Hardness, Total Dissolved Solid (TDS), Aluminum (Al), Antimony (Sb), Barium (Ba), Boron (B), Cadmium (Cd), Chloride (Cl ⁻), Chromium (Cr), Copper (Cu), Cyanide (CN), Fluoride (F), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), Nitrate (NO ₃ ⁻), Nitrite (NO ₂), Selenium (Se), Residual Chlorine, Odor, Taste, Arsenic (As), Zinc (Zn ²⁺), Pesticides, Phenols (Total Phenolic Compounds), Total Coli forms and Fecal Coli forms (E.Coli).	Grab Sampling	16	
2	Surface Water/Waste water Quality (As per NEQS)	Temperature, pH, COD, BOD ₅ , Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Chloride, Fluoride (F-), Oil & grease, Phenols (Total Phenolic Compounds), Cyanide (CN-), Anionic Detergents as MBAS, Sulfate (SO ₄ ⁻²), Sulfide (S), Ammonia NH ₃ , Cadmium (Cd), Chromium (Cr) as Hexavalent & Trivalent, Copper (Cu), Lead (Pb), Nickel (Ni), Zinc (Zn), Iron (Fe), Manganese (Mn), Selenium (Se), Silver (Ag), Arsenic (As), Barium	Grab Sampling	08	

Sr. No	Parameters	Sampling Duration/Type	Quantity	Rate (PKR)	Total (PKR)	
	(Ba), Boron (B), Mercury (Hg), Chlorine (Cl), Total Toxic Metals and Pesticides.					
3	Ambient Air Quality Monitoring (As per NEQS)	NO, NO ₂ , SO ₂ , Lead, SPM, PM _{2.5} , PM ₁₀	16			
		CO				Averaging Period: 24 Hours
		O ₃				Averaging Period: 1 hour & 8 hours
4	Noise (As per NEQS)	Continuous 24-hour monitoring of Noise - dB(A) L _{eq}	Day and Night Time	16		
5	Mobilization/Generator Charges =					
6	All applicable taxes as imposed by the Provincial Government or GST =					
7	Grand Total =					