

GOVERNMENT OF BIHAR
PUBLIC HEALTH ENGINEERING DEPARTMENT
Vishveshwaraiya Bhawan, Bailey Road, Patna-15
Ph.: 0612-2546444

BIDDING DOCUMENT

INDEX

This document is a tender document, wherein general Terms and Conditions of the tender are given. The bidder / bidders are requested to go through the documents before submitting the bid / tender.

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A. Copy of the Notice Inviting Tender is enclosed at **Annexure - I.**

A-1) The bids are invited under two bids system and bidding process will have following stages:

Period of sale (downloading) of tender Bid Document	From 05/06/2017 to 26/06/2017 up till 17:00 Hrs. through www.phed.bih.nic.in/www.bswwmpatna.org .
Date, time & place of pre-bid meeting	16/06/2017 at 15:00 Hrs in the office of the Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
Last date and time of receipt of tender	29/06/2017 at 15:00 Hrs in the office of the Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
Date and time of opening of technical bid	29/06/2017 at 16:00 Hrs in the office of the Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
Date and time of opening of financial bid	To be informed later on after the approval of technical bid.

Each stage will take place on the date and time mentioned against them.

B. Scope of Work

The tender is issued for Empanelment of Agencies and Rate Contract for Supply and Installation of Iron Removal Plant on suitable RCC Foundation, Testing, Commissioning with one week Trial Run and 5 years Operation and Maintenance after successful completion of Trial run period.

The Government of Bihar, in line with its good governance agenda (Sushasan Ke Karyakram), has made Seven Policy Resolutions titled '**Viksit Bihar ke liye Saat Nishchay**', for inclusive development of the State. The resolution includes provision of safe drinking water to all the rural households through one tap house connection within a period of 2015-2020. Keeping in view, iron affected habitations which are located mainly in 9 Districts as mentioned below have been identified. The District wise affected habitations and annual target and scope of work to provide potable drinking water through Rural Piped Water Supply Scheme with Iron Removal Plant to these affected districts are as under:

Approach:

It is to be mentioned here that nine districts of Bihar located in North Eastern part of the State are severely affected with excessive Iron in ground water. These districts are:

1. Araria	2. Begusarai	3. Katihar
4. Khagaria	5. Kishanganj	6. Madhepura
7. Purnea	8. Saharsha	9. Supaul

Suitable Techno Economic and Environment friendly Iron Removal Treatment Units would be installed in Piped Water Supply Scheme to provide potable drinking water to the habitants of 19,919 wards of above mentioned districts. Each household would be connected with one water Tap connection facility. To tackle this, department has comprehensive community awareness and environment plan towards community led water supply system with water quality monitoring and surveillance strategy for implementation of schemes through PRIs and ward members. An extensive process of community mobilization would be carried out with an aim of building Social Capital for O&M of Water Supply Sources and safe drinking water supply. Initial O&M of the plants for five years would be taken care by the suppliers/contractors which has been incorporated in the proposal.

19,919 wards with a population ranging between 700 to 1500 in the affected districts is proposed to be covered through this project.

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Iron Affected Habitation/Annual Target:

Under the Mukhyamantri Gramin Peyjal (Iron affected Kshetra) Nischay Yojana, the PHED will be facilitating Panchayatto provide safe drinking water to all the iron affected rural wards by **2019-20**. The district wise iron affected habitation and year wise target for coverage of 19,919 wads are as under :

Total Target		Year		
		2017-18	2018-19	2019-20
Physical Target (No. of Wards)	19919	7133	8000	4786
District	Iron affected Wards	Target for 2017-18	Target for 2017-18	Target for 2017-18
Begusarai	2240	893	900	447
Khagaria	346	12	150	184
Katihar	2373	316	1100	957
Saharsa	2074	935	800	339
Supaul	2529	1392	700	437
Madhepura	2242	638	950	654
Purnea	3354	1476	1200	678
Kishanganj	1769	639	1000	130
Araria	2992	832	1200	960
Total	19919	7133	8000	4786

Scope of work: The Scope of Work comprises of :

- i.) Supplying, Installation, Testing and Commissioning and Trial run for one week of Iron Removal Plant with all its accessories and allied works, etc. complete job as per specifications and relevant IS Code and direction of E/I.
- ii.) Operation & Maintenance of IRPs for 60 Calendar months from the date of successful completion of Trial Run of one week.

C. Qualification Criteria

Qualification Criteria are given as under :

(C-I) Bidder's Registration Requirement - Annexure – II.

(C-II) Qualification Criteria (Commercial) - Annexure – III.

(C-III) Qualification Criteria (Technical) - Annexure – IV.

D. (D – I) Compliance of Tender (Affidavit) Declaration/ Undertaking - Annexure – V.

(D – II) Bidder Qualification Data - Annexure –VI.

E. Technical Specification of Iron Removal Plant

Technical Specification of Iron Removal Plant - Annexure -VII.

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F. Instructions to Bidders

The tenders are invited from the manufacturers or their authorized distributors (minimum three years old) only. The bidders are required to carefully read the general terms and conditions of the tender, along with special terms and conditions and submit the document in two bid system i.e. technical and financial each in separate envelope super scribed as “Technical Bid” & “Financial Bid” to the O/o Chief Engineer (Mechanical), PHED Patna.

All documents submitted must be clear and readable.

- The bidders are advised to visit work sites prior to bidding to get themselves apprised to the local conditions.
- The iron content of water may be upto 10 ppm. The treatment process is to be accomplished in such a manner so that the effluent iron content is reduced to less than 1 ppm. The minimum residual chlorine of 0.2 mg/l shall be maintained in the distribution network..
- The rate and prices shall be quoted both in words as well as in figures. Quoted rates and prices shall include all kinds of supplies, establishment, fitting, fixing including all civil, mechanical and electrical work etc. complete in all respect. There shall be no any ambiguity in quality, rate and price. All Taxes Duties, Cess, etc. of both Central/ GST and State shall be included in the rate and price. No Plea in this respect will be entertained afterwards.
- The rate contract will be for 3 years for supply, installation, testing, commissioning and trial run period of one week. However, the operation and maintenance period will spill over and the empanelled concerned firms shall provide comprehensive operation and maintenance of IRP for full 5 years O & M period. The empanelled firm shall ensure to supply installation, testing and commissioning of the IRP within the stipulated period against the supply/work order.
- The GPs will place the supply/work order to the empanelled firm and the firm will ensure the completion of work as per stipulated time in the work/supply order.
- The empanelled firm will deposit security deposit of requisite amount and prescribed form and same will be retained by ordering authority as per work/supply order. The security amount shall be **5% of the cost of IRP** for which order has been placed and in the form of Bank Guarantee of any schedule/nationalized bank within Bihar State. 5% of the bill amount shall be retained from each running bill including final bill to make the **security amount 10% of the total amount of work/supply order**.
- Successful bidder will be empanelled with PHED, Govt. of Bihar and rate validity period will be for 3 years.
- The empanelled firm shall ensure comprehensive operation and maintenance of the plant for a period of 5 years from the date of successful completion of trial run period. The firm will exhibit and produce satisfactory quantity and quality of effluent water and testing at least twice in a month during 5 years of O & M period to show the desired quality of water is supplied to public.
- The empanelled firm to whom work will be entrusted shall furnish detailed O&M Manual/ Write up about the steps to be followed for proper operation, upkeep and maintenance including Do's and Don't's for each Scheme, so that the GPs or WVS's Staff can arrange required O&M without difficulty after 5 years of O&M period. The above Staffs/ 5 beneficiaries of each plant shall be trained at a convenient time for at least 7 days before expiry of O&M period to ensure smooth Operation & Maintenance of the plant.
- The bidder may note clearly that initial of bidder is required at all pages of Tender Documents including blank pages.
- During the Trial Run, Commissioning and O&M of period, the firm shall provide all Consumables, Chemicals other Media and Materials, as required. The firm shall stand guarantee for all Civil, Mechanical and Electrical Works and equipments for a period of one year from the date of successful completion of Trial Run Period.
- The bidder will submit duly authenticated copies of all the following documents and copies of the said documents shall also be submitted in the Technical Bid.
- Details of experience with the list of Organizations, Name of Work, Value of Work, etc.

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- The Tendering Authority reserves the right to accept or reject any tender or split up the works among the tenderers as deemed fit without assigning any reason.
- All plumbing works shall be done as per ISI standards with quality materials including valves, specials etc.
- The department will not take any responsibility regarding Road Permit. Bidders shall arrange Road Permit at his risk and cost for collecting any materials from outside Bihar State. They are requested to get themselves apprised to Bihar Sale Tax/ Bihar VAT / GST rules etc.
- The firm shall supply one suitable Water Sample Test Kits for each job of IRP & shall keep it at respective site for testing of Salient Chemical parameters including Iron, Chlorine, etc.

G. Bidding System

The tender is invited under two bidding system, i.e. Technical Bid and Price Bid. First of all the EMD will be opened, thereafter the technical bid shall be opened and will be evaluated as per the specifications, terms and conditions. The price bid of only those eligible and successful bidders, who are found to be responsive as per the specifications, terms and conditions will be opened for which separate date will be intimated to the Bidders through website.

G-I) Technical Bid

The technical bid consists of EMD, Qualification Criteria and technical specification of the desired product.

The bidder shall also submit the specification's compliance / deviation report duly filled, signed and clearly brings out the deviation from the specification if any.

G-II) Returns and certificates to be submitted along with technical bid.

Check list of the tender documents

Details of quoted products and its Make & Models without mentioning the price.

If desired document / information are not submitted with the technical bid then tender will be rejected outright and no document / information will be accepted later on.

G-III) Price Bid:-

Quoted price shall be inclusive of Excise Duty, Custom Duty, Transportation, Transit Insurance, Loading-unloading, Packing-Forwarding, Installation, Training, Comprehensive Guarantee and defect and liability period for one year from the date of successful completion of Trial run period of one week, third party inspection charge and all applicable other taxes and charges and for anywhere in Bihar, but exclusive of CST / VAT/GST which should be payable extra. Price Bid Sheet is given at **Annexure - XI** and this is to be submitted with Price Bid.

Rates should be filled-in prescribed price schedule. **In hard copy price Performa should be given duly signed with showing only the quoted make/ model but otherwise tender shall be rejected.**

- i. The price quoted /accepted will be binding till the complete job against the work order. Any increase in the price will not be entertained till the completion of the tender period.
- ii. It will also be the responsibility of the Vendor to inform and pass on the benefits due to Statutory / Budgetary reduction or waiver in Excise and Custom duty as per existing rules or amendments if any, immediately after its publication in the Gazette. After one week of publication of Gazette the PHED shall be free to inform about such waiver (s) and the Vendor will be bound to accept the revised price applicable from the date of Notification in the Gazette, else their EMD/Security/ Performance Guarantee shall be forfeited and action for black listing/debarring the Vendor / Company may also be taken.

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H. Special terms & conditions:

Compliance of Special Terms & Conditions are to be given in the format attached at Annexure VIII.

- i. PHED reserve the right to reject any or all of the Bids submitted in response to this tender at any stage without assigning any reasons whatsoever.
- ii. PHED reserves the right to change any or all of the provisions of this tender. Such changes would be intimated to all parties procuring this tender document.
- iii. Bidders are expected to examine and go through all terms and condition and instructions contained in these documents, and ensure that all the information is furnished in the desired manner.
- iv. The Hard copies of complete technical bid including qualification criteria and related documents/technical literature/brochure duly signed shall also be submitted in the tender box kept in the office on or before due date and time of the tender.
- v. All technically qualified bidder shall be allowed to execute rate contract at L1 rate considering its consent to supply at L1 rate as per its capacity, location past performance and pending orders.
- vi Rates should be quoted in prescribed Proforma with numerical & words.
- vii. **Placement of order-**
 - i) The Firm/ Bidder which offers the lowest rates (L-1) will be given preference in placing the order maximum upto 50% of the requirement considering its capacity, location, past performance, pending orders etc.
 - ii) All remaining successful bidders will be placed order for equal quantity of remaining 50% of the requirement considering their capacity, location past performance and pending orders.
- viii. The rates shall be applicable for three year from the date of issue of RATE CONTRACT unless revoked may be extended for further period of maximum two years on annual basis as mutually agreed upon.
- ix. If any bidders has been penalized or debarred by any Government Department or Government Undertaking or their marketing assistance has been stopped / withheld, such bidders will not be eligible to participate in the tender during the period of such penalty. In case, where no period of penalty has been mentioned, in such cases, period of penalty will be treated as two years from the date of such penalty/debarment.
- xi. The above details are merely for the information of the bidders and the quantum of business for the forthcoming years, rate contract shall depend upon the requirement from GPs/Ward Vikas Samiti.
- xii Legal disputes, if any will be subject to PATNA jurisdiction only.

I. Inspection:

The Iron Removal Plant will be inspected before delivery by the third party inspecting agency e.g. SGS/CROWN/DGS & D/Rites or any other empanelled agency by the department and inspection reports along with test report will be submitted along with bill for payment. The IRP will be checked at consignee end also by the Engineer in charge.

J. After Sales Services:-

The bidder should have service centre / dealers in Bihar, with a team of trained service engineer/technical staff the details in this regard shall be submitted. In case at the time of tender service center is not available in Bihar then he shall submit an undertaking to establish the service center before the award

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of contract. The bidder should also submit list of dealers at district headquarter level. Details of Service Centre/ Dealers shall be given in the format attached at Annexure IX.

K. Demonstration:-

Whenever desired, the Bidders are required to demonstrate the IRP on receipt of information / date. The expenditure regarding demonstration and testing (if any) of IRP shall be borne by the bidders.

L. Competitive prices & fall clause:-

The rates submitted should be supported with the prevailing market rates of specified specifications. It is to be noted that as per tender condition the Fall Clause will be used if it comes to the knowledge that product has been supplied at lower price than what has been quoted to PHED. In case this condition is not fulfilled, the tender will be liable to be rejected.

M. Affidavit :-

The bidders shall furnish a notarized affidavit in the format declaring that the bidder accepts all terms & conditions and specification of the tender.

N. Packing:-

The supplier shall provide such packing of the Goods as required to prevent their damage or deterioration during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures and precipitation during transit and open storage.

O. Accessories:-

Bidders should give guarantee for availability of spare parts and consumables for a period of minimum 05 years from the date of successful completion of trial run period.

P. Operational Training:-

The bidders shall also arrange operational help/training at consignee place, for user whenever desired by the indenter/consignee free of cost.

Q. Bid Preparation :-

During preparation of the Technical Bid & Price Bid (Financial Proposal). Bidders must give particular attention to the following:

- (i) The each page of the documents including specifications must be signature of an authorized signatory.
- (ii) The Price bid of only those tendering units will be opened who meet qualification criteria and found eligible in the tech. evaluation.
- (iii) Under this system of bidding the bidders is to qualify for each stage before the next stage takes place.
- (iv) Public Health Engineering Department Govt. of Bihar reserve the right to inspect any tendering unit at any time during working hours, as and when required.

R. The onsite comprehensive guarantee and defect and liability period shall be one year from the date of successful completing of trial run period of IRP plant.

sd/-
Chief Engineer (Mechanical)
PHED, Govt. of Bihar

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Annexure -I

Government of Bihar
Public Health Engineering Department
NIT No –01/2017-18

National Competitive Bidding for Empanelment of
Agency and Rate Contract for Iron Removal Plant

1	Designation and Address of Advertiser	Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
2	Date of issue of Tender Notice	26.05.2017
3	Period of sale (downloading) of tender Bid Document	From 05/06/2017 to 26/06/2017 up till 17:00 Hrs. through www.phed.bih.nic.in/www.bswsmpatna.org .
4	Date, time & place of pre-bid meeting	16/06/2017 at 15:00 Hrs in the office of the Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
5	Last date and time of receipt of tender	29/06/2017 at 15:00 Hrs in the office of the Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
6	Date and time of opening of technical bid	29/06/2017 at 16:00 Hrs in the office of the Chief Engineer (Mechanical), PHED, Vishveshwaraiya Bhawan Campus, Bailey Road, Patna-15
7	Date and time of opening of financial bid	To be informed later on after the approval of technical bid.

9. Details of works:

Name of Work	Amount of Earnest Money (in Lakh)	Cost of tender document (non-refundable) (in RS.)
<p>Empanelment of agencies and rate contract for Supply and installation of Iron Removal Plant on suitable RCC foundation, testing, commissioning with one week trial run and 5 years operation and maintenance after successful completion of trial run period with following details:</p> <ul style="list-style-type: none"> • Consignee: GPs/Ward Vikas Samiti of mainly nine districts i.e. Supaul, Madhepura, Purnea, Begusarai, Katihar, Araria, Kishanganj, Sahrsa, Khagaria & other districts of Bihar. • PHED will act as facilitator. • Technology: Comprising of aeration, coagulation, Dual Media filtration, Granulated activated carbon filtration, chemical disinfection or any other suitable technology having low capital and O & M cost with back wash water/waste water/spent media and sludge handling system. • Raw Water Iron Concentration: May vary from place to place upto 10 ppm • Treated water concentration: less than 1 ppm as per IS:10500 (latest revision) • Treated Water Discharge point: IRP to be connected to overhead water tank with 8M staging • Plant capacity: 8KLPH to 12KLPH 	25.00	10000.00

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10. Bidders can access the tender documents on the website www.phed.bih.nic.in/www.bswsmpatna.org, fill them and submit the completed tender document in two bids system i.e. technical and financial and each in separate sealed envelope super scribed as 'Technical Bid' and 'Financial Bid'. The bids to be submitted in the O/o Chief Engineer (Mechanical), PHED, Bihar, Patna upto the 15.00 Hrs of the date shown above, failing which their tender will not be accepted.
11. Bidder must qualify following Eligibility Criteria:
- (i) The bidders must be registered manufacturing firm/company with BIS/ISO certification for the tendered items or its authorized distributor (minimum 3 years old) having technology from CSIR or certified by CSIR or by any other concerned reputed central Govt. authority/institution.
 - (ii) Achieved in any one year during the last five years, a minimum annual financial turnover (Water treatment plants including IRP/Fluoride Arsenic removal Plants) of Rs.10 (Ten) Crores. The turnover will be indexed at the rate of 8% for a year.
 - (iii) Satisfactorily completed the supply, installation, testing and commissioning of water treatment plants including Iron/Fluoride/Arsenic removal plants of with value of at least Rs. 5 (Five) Crores during last 5 years.
12. Earnest Money should be in shape of Bank Guarantee issued from any Schedule Bank/Nationalised Bank within the state in favor of Executive Engineer, P.H. Division, Patna East, Patna and valid up to 7½ months after the date of receipt of tender. Bank Guarantee shall be kept in Technical Bid envelope.
13. The cost of tender document is non-refundable and is mandatory to be paid through demand draft of any scheduled/nationalized bank in favor of Executive Engineer, P.H. Division, Patna East, Patna. The demand draft shall be kept in Technical Bid envelope
14. Detailed terms and conditions of tender will be enclosed along with the Bidding Document, and will be binding on the bidders.
15. The bidders must submit an affidavit separately with the bid document that they are not liable for disqualification as per the Bid Document.
16. Corrigendum/ Addendum/ Corrections, if any, will be published on the website mentioned above.
17. The bidders are advised to visit work sites before submission of tender to study local conditions, availability of labor and material etc.
18. The undersigned has the right to extend, accept or reject the tender without assigning any reason thereof.
19. For further details, bidders may contact the undersigned on any working day or see the notice board or contact on 0612-2546444.

sd/-
Chief Engineer (Mechanical)
PHED, Govt. of Bihar

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Annexure -II

(C-I)- BIDDERS REGISTRATION REQUIREMENT

Any Contractor registered with Central Government/ any State Government, any PSU, or an agency of international or national repute may give the tender but registration with the Public Health Engineering Department, Bihar will be essential after issue of LoA

(Information to be submitted by the Manufacturer with Technical Bid)

Name of Proprietor / Partners / Directors				
Designation of Concern Person				
Name of the Firm / Unit / Company				
Manufacture/ Authorized Distributors (Minimum three years old)				
Legal Status of the Firm / Unit / Company				
Type of Business				
Office Address				
Factory Address				
Office Phone No.				
Mobile No.				
E-mail ID				
Gross Annual Sales / Revenue				
Details of Products for which Enrolment is desired	Sl. No	Name of Products(s)	Date of Commencement of Production	Registered Capacity
	1			
	2			
	3			
	4			
Industry's Registration Details	Permanent Registration no. of SSI/ NSIC OR Entrepreneur's Memorandum No. Issued by SSI/ NSIC Registration.		Date	
Turnover : Last Three Years	Year		Turnover	
	Year		Turnover	
	Year		Turnover	
Quality Certification)	BIS License No.		Date	
	ISO Certification No.		Date	
	CSIR Certification No. for Technology of IRP		Date	
	Any other license No.		Date	

DECLARATION

I hereby declare that information submitted in the prescribed format is true and correct. If PHED finds any information false or we unable to submit original document on demand, the PHED has full right to take appropriate/legal action against us.

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Annexure -III

[C-II] QUALIFICATION CRITERIA (Commercial) (To be submitted with Technical Bid)

Sr. No.	Criteria	Compliance Yes/No	Page No. of the related document
1	EMD must be dropped in the E Tender drop box placed at O/o Engineer in Chief, Public Health Engineering department Vishwasariya Bhawan, Baily Road, Patna-25	BG No. / Date -----	
2	VAT/CST No./ GST No. (with document)		
3	PAN No. (with document)		
4	Affidavit for Compliance of Tender Conditions: Affidavit on Stamp Paper regarding compliance to tender specification and Terms & Conditions (as per proforma D-I, Annexure – V)		
5	(iv) The bidders must be registered manufacturing firm/company with ISO certification for the tendered items or its authorized distributor (minimum 3 years old) having technology from CSIR or certified by CSIR or by any other concerned reputed central Govt. authority/institution. (v) Achieved in any one year during the last five years, a minimum annual financial turnover (Water treatment plants including IRP/Fluoride Arsenic removal Plants) of Rs.10 Crores. The turnover will be indexed at the rate of 8% for a year. (Annexure – X) (vi) Satisfactorily completed the supply, installation, testing and commissioning of water treatment plants including Iron/Fluoride/Arsenic removal plants of with value of at least Rs. 5 Crores during last 5 years.		

Note: The Bid not fulfilling the above criteria may be rejected.

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Annexure -IV

[C-III] QUALIFICATION CRITERIA (Technical) Documents on e-portal
(To be submitted with Technical Bid)

S. No.	<u>CRITERIA</u>
1.	The bidders must be registered manufacturer or its authorized distributors (minimum 3 years old) having technology from CSIR or certified by CSIR or by any other concerned reputed Central Govt. Authority/ Institution for participating in this Tender.
2.	The bidders shall submit technology transfer certificate /agreement for IRP from CSIR [NEERI] or the technology duly certification by CSIR or other reputed central authority/institute.
3.	Satisfactorily completed the supply, installation, testing and commissioning of water treatment plants including Iron/Fluoride/Arsenic Removal Plants with value of at least 5 crores during last 5 years.

IMPORTANT INFORMATION FOR BIDDER:

1. Documents required at must be clearly readable.
2. **List of documents to be submitted as hard copy too:**
 - i) Duly signed documents desired at C-I (Bidders Registration Requirement).
 - ii) Duly signed photo copy of documents desired at C-II (Qualification Criteria -Commercial).
 - iii) Duly signed photo copy of documents desired at C-III (Qualification Criteria -Technical).
 - iv) Duly signed tender documents, Terms and Condition and Specification etc.
3. PHED reserves the right to verify the unit before execution of rate contract.

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Annexure -V

(D-I) COMPLIANCE OF TENDER (AFFIDAVIT)
DECLARATION/UNDERTAKING

(To be submitted on Non Judicial Stamp Paper of Rs. 100/- duly notarizes)
(Submitted with Technical Bid)

I / We, M/s. _____ represented by its Proprietor / Managing Partner / Managing Director having as Registered Office at _____ and its factory premises at _____ do declare that I / We have carefully read all the terms & conditions, specifications of tender in Ref. No. for supply of **Iron Removal Plant (IRP)** floated by the Public Health Engineering Department, Vishveshwaraiya Bhawan, Bailey Road, Patna-15 and accepts all conditions of tender.

I/We hereby extend our full guarantee and warrantee as per terms & conditions of the above tender for goods & services offered by us against this tender. We hereby declare that we will be held fully responsible for any mischief/misconduct or supply of any substandard items. We also confirm to provide the spares for at least five years from the date of supply/installation of Iron Removal plant as per CSIR technology or CSIR certified technology or by any other concerned reputed Central Govt. Authority/ Institution. We reiterate that goods ordered to my firm shall be supplied in due time.

I / We agree that the PHED can take action as per tender conditions to forfeiting the bid security and or Performance Security Deposit and debarring from marketing assistance to me / us for a period of 3 years, if any information furnished by us proved to be found false, misleading, malafide at any time or during inspection and not complying the tender conditions in all respect.

Seal & Signature:

Name & designation of signatory

Address:

Mob. No.

e-mail :

website :

To be attested by the Notary:

GOVERNMENT OF BIHAR
PUBLIC HEALTH ENGINEERING DEPARTMENT
Vishveshwaraiya Bhawan, Bailey Road, Patna-15
Ph.: 0612-2546444

Annexure -VI

[D-II] BIDDER QUALIFICATION DATA
Supply, Installation and successful commissioning, operation, maintenance and
functioning of Iron Removal Plant

1. Name of the Firm:
2. Address Head Office:
3. Address of Manufacturing/Assembly Premises:
4. Telephone Nos. :
5. Fax No. :
6. E-mail:
7. Status (Attach documentation / tick mark and initial):
 - (a) Individual
 - (b) Partnership firm
 - (c) Private Limited Company
 - (d) Limited Company
8. Date of Company's Incorporation:
9. Company's PAN No. :
10. Services Tax Registration No. :
11. P. F. Registration No.:
12. Date of starting business:
13. Fields of professional expertise:
14. Total Experience in establishing IRP systems/plant in the govt. projects- _____ Yrs..
15. Total Nos. of IRP system/plant completed in last five years – _____ nos.
16. Total Nos. of key personnel:
 - a) Executives – senior level (more than 10 years experience): _____ nos.
 - b) Executives – middle level (more than 05 years experience): _____ nos.
 - c) Executives – junior level (less than 03 years experience): _____ nos.

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17. Annual Financial Turnover (Rs. In lacs):

- i. 2012 - 13 : Rs. _____ Lacs
- ii. 2013 - 14 : Rs. _____ Lacs
- iii. 2014 - 15 : Rs. _____ Lacs
- iv. 2015- 16 : Rs. _____ Lacs
- v. 2016-17 : Rs. _____ Lacs

18. Total no of **IRP**/systems based on CSIR technology or CSIR or the technology duly certified by CSIR or BY ANY OTHER CONCERNED REPUTED Central Govt. Authority/ Institution certified technology, Manufactured / assembled and commissioned:

_____ nos.

19. Capacity to manufacture and assemble plants and pre-Dispatch inspection at a time: _____ nos.

20. No of Service centres in Bihar (List with complete address, Contact person, contact nos. is to be attached separately on letter head) _____ nos.

21. Whether the company is currently possessing: ISO-9001:2000 and if so certification no. : Y/N
Certificate No.:

22. CSIR Certification for Technology of IRP.

23. Whether the company is SSI unit:

SSI Registration No. Y/N Certificate No.:

24. Whether company is registered with NSIC: Y/N

NSIC Registration No. and Valid till date:

Company Rubber Seal and Sign Date:
Name & designation of signatory

[E] TECHNICAL SPECIFICATION OF IRON REMOVAL PLANT

The work comprises of supply, providing, fitting, fixing etc. of 8000 liter/Hrs to 12000 liter/hrs iron removal plant along with contractor's own operation, upkeep and maintenance for 5 years from the date of successful commissioning of each job of IRP, raw water connection from deep tube well which will be provided within the vicinity of each work of clear water pipe line to main delivery connection at around 15 M from the boundary.

A.) Process Description and Salient Specifications for each job of above mentioned Capacity Package Type Iron Removal Plant :-

1(a). Oxidation Chamber

The mixture is now allowed to enter into the oxidation chamber in which Manganese-dioxide minimum 75% shall be sand-witched between 2 (two) M.S. circular perforated plates. The oxidation chamber shall be fitted with hand hold cover on each side for cleaning and charging/charging of media. The chamber shall be placed on civil foundation and the inside shall be coated with epoxy paint. There shall be 1 no. 18" dia. M.S. manhole at top.

1(b). Iron Removal Filter

Anthracite coal on top and sand-gravel at the botton. The size of the coal shall be within 3mm to 6mm. The silica content of filter sand shall be around 98 percent and size shall be within 0.5mm to 1.0mm. The specific gravity of coal and silica sand should be 1.4 and 2.65 respectively. The size of gravel shall be from 3mm to 25mm. The depth of anthracite coal, sand and gravel shall be around 30 cm, 60 cm and 35 cm respectively. Uniformity co-efficient of sand shall be maintained between 1.3 to 1.7. The under drainage shall consist of polypropylene double hexagonal nut umbrella shaped strainer of 10mm to 12mm size which are to be fitted. The number of strainer shall be around 100 Nos. per sqm. Cross sectional area of filter sand. No other alternative strainer will be incorporated by the tenderer. The rate of air agitation shall be around 50 M³ per hour/sqm. for 15 to 20 minutes. The back washing item i/c air agitation shall be within 15 to 30 minutes. In general IS:2825 (latest) Class- III unfired pressure vessel, IS: 4049 (latest) Part- II are to be followed while designing the pressure vessel and M.S. IS: 2062 Gr. "A" are to be used while manufacturing the vessel. The valves in general shall be of C.I. Butterfly valve of required sizes & quantities as per direction of the Engg.-in-Charge for successful completion of the process flow. The connecting pipe from inlet of raw water to outlet be of 150mm M.S. There shall be 1 no. 18" dia. manhole at filter inside bed plate. The filter shall have provision of MS manhole of 450mm size and hand hole of 150mm size, vent pipe of 25mm with the gate valve etc. The internal surface of the filter shall be painted with epoxy paint. The filter shall be supported on required civil foundation.

1(c). Disinfection

For the purpose of disinfection sodium hypochlorite solution of minimum 10% available strength shall be mixed in a solution tank and shall be dosed online after iron filtration.

2. All the outside surface of plumbing arrangements, mixing chamber, oxidation chamber, iron removal filter etc. doors, windows, etc. shall be painted with two or more coats of synthetic enamel paint over necessary priming coat of approved brand and shade as will be approved by the Engineer-in-Charge.
3. Suitable Back Wash Water/ Waste Water/ Spent Media and Sludge handling System.
4. Any other suitable technology having low capital and O&M cost with Back Wash Water/ Waste Water/ Spent Media and Sludge handling System.

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[E] Technical Specifications

Operation & Maintenance of plant including monthly testing as per specification mentioned as under.

- Deployment of manpower for checking of status of supply in the command area.
- Repairing of leakage and backwash
- Ensuring that the unit is running properly.
- Maintaining log book, data compilation, submission of monthly and yearly report of both raw and treated water quality and test reports shall be submitted to the department. The bidder shall be responsible for timely communication with the department.
- Getting endorsed/tested by District laboratory once in every month.
- Regular supply of Iron free water to villagers
- Replacing the filter media/damaged or defective parts of any machinery/the machinery as a whole.

NOTE:

PENALTY CLAUSE: In case of break down, the agency has to ensure that the breakdown is attended within 48 hours and ensure water supply to the consumers failing which there shall be a penalty of **Rs.500/-** per day on the agency.

MODE OF PAYMENT:

For Item No. 1:

The breakup of payment admissible for the work done shall be as under:

- (i) 80% after installation of all equipment in position complete.
- (ii) 20% on testing and commissioning and satisfactory trial run for one week.

For Item No. 3:

The payment towards operation & maintenance shall be made on quarterly basis (25% every quarter).

Other Important points:

1. **SLUDGE-** During trial period, the sludge produced will be collected in the presence of departmental officer, sealed and will be sent to lab for testing of fluoride content. The iron should be within permissible limit of 1.0 mg/l. If found more, then the bidder is responsible in making necessary correction in the process.
2. **OTHER PARAMETER-** Shall remain as per norms of potable water.

Note:-

- 1 **The entire IRP plant shall carry One year guarantee.**
- 2 **The bidders shall quote the rate inclusive of packing, forwarding transportation on Door delivery as site, installation, commissioning testing @2%, inspection charges @ 0.5% applicable service tax on both, Excise/custom duty etc., but exclusive of VAT.**
- 3 **IRP Plant shall be inspected by Indenting Department.**
- 4 **May be feasibility be carried out by the Technical Dept. of PHED of successful bidders to ensure their production process, quality, capabilities and capacity etc. and inspection be done on completion of plant at site or during.**

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[E] (To be submitted in technical Bid)

Testing and inspection:

Sl. No.	Requirements
1	Pre dispatch inspection:
1.1	The IRP plant/system shall be subjected to a pre dispatch inspection. The pre dispatch inspection will be carried out by tech. dept. of PHED or in Tendering Agency..
1.2	During inspection the Bidders/supplier should produce all the documentary evidences having procured and used new and quality components which go in to the IRP plant/system to be supplied. These document including guarantees / warrantees / test certificate of the component manufacturer will be verified and authenticated by the inspection agencies. Such authenticated document should form a part of the total document required for claiming the bill for payment as per the schedule of payment.
1.3	The supplier should offer total facility for pre dispatch inspection.
1.4	After erection at site, all components, equipment as described under different category shall be checked to prove satisfactory performance and/ or fulfilment of functional requirements without showing any sign of defect as individual equipment and as well as a system.
1.5	During the functioning all the components shall function smoothly without any under deflection; unbalance vibration, flutter, slipping or sticky motion, excessive play & overheating at bearing parts, sparking etc.

Erection and Commissioning (E&C):

Sl. No.	Requirements
1.	The supplier shall be responsible for satisfying himself and local authorities deputed to this job, as to the correctness of the electrical and mechanical connections between all equipment in his supply. For installation of entire Iron Removal plant, the supplier shall furnish the required services of erection superintended and other skilled and unskilled labour, erection tools, tackles and other required equipment. These materials shall be taken back by the supplier after the erection is complete.

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ANNEXURE- VIII

[F] SPECIAL TERMS & CONDITIONS
(To be submitted with Technical Bid)

Sl. No	Detail	Compliance Yes/No
1	Bidders should give guarantee for availability of spare parts and consumables for a period of minimum five years from the date of installation.	
2	As per guideline of Central Govt. the supplier shall arrange product liability insurance for each product installed against improper functioning/improper maintenance and its subsequent adverse effect on health of the public, so that its compensation can be made from the insurance.	
3	The bidders shall also quote charges for On site Comprehensive annual Operation & Maintenance Service contract for post guarantee/warranty, which shall be applicable only after expiry of the guarantee/warranty period. The bid without quoting for this service contract shall not be considered for finalization.	
4	Deviation from tender specification, tender conditions etc. must be clearly mentioned and should be indicated wherever applicable against the tender specification.	
5	All specifications should be mentioned in catalog of manufacturer. If any specification is not mentioned it should be mentioned in operational manual, which need to be provided with the tender.	
6	Bidders shall furnish original technical literature with Compliance Statement of specification of respective Item in the Technical Bid.	
7	The system should function on appropriate & proven technology & should be capable to work/operate by ground water pump or gravity when water source is made available at the place. Bidders should clearly specify whether system is capable of operation without electricity (includes other mode of power like Generator/Inventor/Solar system etc.) or not.	
8	Bidders should submit a checklist indicating the matching of specification of quoted model with the tender specification, failing which their offer shall be liable for rejection. Any deviation from the specification must be clearly indicated against respective parameter/requirement of specification.	
9	The machine(s) shall be supplied with all standard accessories which needed to perform complete function of IRP.	
10	Bidders those are having Rate Contract with DGS&D or any other Government Department are required to submit copy of the same with this tender offer.	
11	All the specification should be filled in format provided in Technical specification.	
12	The bidders shall submit technology transfer certificate /agreement for IRP from CSIR along with training certificate.	
13	In one category the Bidders must quote only one best suitable mode. Durability: All material used in Manufacturing and fabrication shall be unbreakable & resistant to fire.	
14	Precautions: All the tendering units must provide literature containing all precautions related with safety measures during operation, at least in two languages Hindi & English.	
15	Marking: a- Manufacturers name and trade mark b- Supplied through PHED	

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ANNEXURE- IX

DETAILS OF SERVICE CENTRE / DEALERS IN BIHAR

S. No.	Name & Place of Service Center/ Dealers	Address , Telephone / Fax & e-mail	No. of Service Engineer(s) with Name	Remark

Name & designation of the authorized signatory

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ANNEXURE- X

ANNUAL TURNOVER STATEMENT

The Annual Turnover of M/s. _____(Bidders) for the past three years are given below and certified that the Statement is true and correct.

Sl.No.	Year	Turnover in Crore (Rs.)
1.	2012-13	_____
2.	2013-14	_____
3.	2014-15	_____
4.	2015-16	_____
5.	2016-17	_____

Date:

Signature of Auditor /
Chartered Accountant

Seal:

(Name in capital)

Annexure - XI

Price Bid Sheet (To be submitted in Price Bid)

NAME OF WORK:- Empanelment of agencies and rate contract for Supply and installation of Iron Removal Plant on suitable RCC foundation, testing, commissioning with one week trial run and 5 years operation and maintenance after successful completion of trial run period

Date of Tender :-	29.06.2017
Earnest Money :-	Rs. 25,00,000.00
Cost of BOQ :-	Rs. 10,000.00

Sl. No.	Particulars	Name and Address of the Bidder			Rate in Rs.	Qty.	Unit	Amount in Rs
		Rate in Rs.						
1	Empanelment of agencies and rate contract for Supply and installation of Iron Removal Plant on suitable RCC foundation, testing, commissioning with one week trial run and 5 years operation and maintenance after successful completion of trial run period in the Iron affected habitations of nine districts viz Araria, Begusarai, Khagaria, Katihar Kishanganj, Madhepura, Purnea, Saharsa & Supaul:					1	nos	
	8 KLPH Capacity					1	Each	
	10 KLPH Capacity					1	Each	
	12 KLPH Capacity					1	Each	
	ITEM WISE COST BREAKUP							
Sl. No.	Item				Rate	Qty.	Unit	Amount (Rs)
1	2				3	4	5	6
	Supplying, installation and commissioning of fully tested and successfully well operated Standard type Iron Removal Plant with treatment comprising of aeration, coagulation, Dual Media Filtration, Granulated activated carbon filtration, chemical disinfection or any other suitable technology having low Capital and O&M Cost with back wash water/ waste water/ spent media and sludge handling system. The technology shall be from CSIR or certified by CSIR or by any other concerned reputed Central Govt. Authority/ Institution. The IRP shall be suitable for designed flow of capacity given below to deliver the Treated Water Quality with Iron concentration less than 1 ppm, pipeline, valve and specials all complete job as per requirement and demand of the E/I. The FRP (Fibre Reinforced Plastic pressure tank) and other materials should have not less than as per the specification so as to sustain the design pressure with due factor of safety. It should be duly painted with two coats of anticorrosive paints over a coat of red oxide primer. The materials should be as per respective Indian standard and should be manufactured from ISO : 9001 company including delivery charges and all taxes & duties complete including all civil works all complete as per standard specification and Terms & Conditions of the Bid documents and direction of E/I.							

	8 KLPH Capacity	1	Each
	10 KLPH Capacity	1	Each
	12 KLPH Capacity	1	Each
	TOTAL -A		
	SECTION - B : OPERATION AND MAINTENANCE PART		
2	Deployment of manpower, repairing of leakages, backwash, maintaining log book , data compilation, submission of fortnightly / monthly and yearly report of both Raw and Treated water quality , getting endorsed / tested by District laboratories once in every month, replacing the filter media/damaged parts of any machinery / the machinery as a whole, annual / bi-annual maintenance of all installed units related to Iron removal Plant, safe disposal of spent media, back wash waste water including round-the clock watch & ward to ensure potable water to the beneficiaries of the scheme for 60 calendar months from the date of completion of trial run of one week.	1	Each
	8 KLPH Capacity	1	Each
	10 KLPH Capacity	1	Each
	12 KLPH Capacity	1	Each
	TOTAL - B		
	Total Cost of one Unit (A+B)		
	TOTAL IN WORD:-		

Bidders are required to give yearwise cost breakup for O&M.

sd/-

Chief Engineer (Mechanical)
PHED, Govt. of Bihar