



DELHI POLLUTION CONTROL COMMITTEE
DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI
5th Floor, ISBT Building Kashmere Gate, Delhi – 110006

No.F.DPCC/(12)(1)(280)/Lab(A)/2020/ 269

Dated: 22-07-21

E-TENDER NOTICE

- A. Tenders are invited through E-Tender platform (<http://govtprocurement.delhi.gov.in>) from recognized Laboratories by Ministry of Environment, Forest & Climate Change (MoEF&CC) for the following work in Delhi:-
1. Ambient Air Quality Monitoring as per National Air Quality Standards (CPCB notification 18th Nov. 2009).
 2. Stack monitoring of waste to energy plants for Dioxins & Furans and TOC as per solid waste management rules 2016.
 3. Stack monitoring of waste to energy plants for all parameter as per solid waste management rules 2016.
 4. Stack monitoring of Bio Medical Waste Incinerator.
 5. Ground Water and treated Leachates sampling analysis as per Solid Waste Management rules 2016.

B. DETAILS OF TENDER

Last Date for Submission of Bid : - 12/08/2021 at 2:30 pm

Date for Opening of Technical Bid : - 12/08/2021 at 3:00 pm

Date for opening of Financial Bid will be decided after opening of Technical bid.

C. ELIGIBILITY CRITERIA

Following essential documents shall be uploaded with Technical Bids

Technical Bid Requirements:

1. The laboratory submit Earnest Money (Rupees Fifty thousand only) in the form of Demand Draft drawn in favour of Delhi Pollution Control Committee and payable at Delhi in original in this office physically and will upload scanned copy of the same with E-Tender Website (<http://govtprocurement.delhi.gov.in>) along with technical quotations.
2. The laboratory have registration certificate of GST
3. The Laboratory is recognized under Environment (Protection) Act, 1986 from Ministry of Environment, Forest and Climate Change, GOI (MoEF&CC).
4. The tenderer have its own laboratories and functional atleast since last 03 financial years having experience in similar work.
 - i. For Ambient Air Quality Monitoring work, submit documents showing expertises and experience for analysis of notified 12 parameters in form of work orders.
 - ii. For Stack Emission Monitoring work, submit documents showing expertises and experience for some critical parameters like Dioxin and Furan in form of work orders.
 - iii. For Water Monitoring, submit documents showing experiences for Analysis of Parameters in form of work orders.
5. Annual turnover / financial status: - To analyse the financial position of the laboratory, condition of annual turnover of the laboratory may be incorporated and a certificate from Chartered Accounts containing details of annual turnover of the firm for last 03 financial years may be submitted.
6. Check List as per Annexure-5 must be submitted with the bid.



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C. ELIGIBILITY CRITERIA

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Technical Bid Requirements:

1. The laboratory submit Earnest Money Deposit (EMD) of Rs. 50000/- (Rupees Fifty thousand only) in the form of Demand Draft drawn in favour of Delhi Pollution Control Committee and payable at Delhi in original in this office physically and will upload scanned copy of the same with E-Tender Website (<http://govtprocurement.delhi.gov.in>) along with technical quotations.
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6. Check List as per Annexure-5 must be submitted with the bid.

D. TWO BID SYSTEM TENDERS

- a) **Technical Bid:-** Technical bids containing mandatory documents as asked under Eligibility criteria should be submitted only online through E-Tender. Only one envelope containing EMD in

original should be submitted physically in the office of Delhi Pollution Control Committee, Enquiry Counter at 6th floor Kashmere Gate ISBT Building, Delhi 110006 latest by 12/08/2021 at 2:30 pm.

- b) **Financial Bid:** - Financial bid shall be submitted only online mode in E-Tender website (<http://govtprocurement.delhi.gov.in>) in prescribed format (Table 1, 2, 3,4&5).

E. SCOPE OF WORK:-

- i. Ambient Air Quality Monitoring as per National Air Quality Standards (CPCB notification 18th Nov. 2009).
- ii. Stack monitoring of waste to energy plants for Dioxins & Furans and TOC as per solid waste management rules 2016.
- iii. Stack monitoring of waste to energy plants for all parameter as per solid waste management rules 2016.
- iv. Stack monitoring of Bio Medical Waste Incinerator.
- v. Ground Water Quality Sampling and Analysis Monitoring within 50 meters of the periphery of Landfill sites and treated Leachates Sampling and Analysis as per Solid Waste Management Rules 2016.
(General Standard and rules for above 5 monitoring is annexed at Annexure 1,2,3&4).

F. GENERAL TERMS AND CONDITIONS

1. The laboratory shall quote the rates separately in the prescribed table (Table 1, 2, 3,4&5 enclosed with the tender) and the quoted rate should not be more than the notified rates of MoEF& CC.
2. The laboratory shall make all arrangement for travel, accommodation, local transportation etc. for its team for monitoring at respective sites. Hence, bidders are advised to quote the rate for transportation etc. in financial bid accordingly.
3. The laboratory can participate in all 5 scopes of works or partial scope of work as per their eligibility.
4. The technical bids will be opened and examined individually for short listing the vendors. The financial bids will be opened and compared for those vendors who have qualified technically.
5. The short listed laboratory may be assigned work at various industrial unit/plants/ locations in Delhi for which dates of sampling will be communicated as and when required in general. However, in emergent situation the monitoring is to be conducted at very short notice of 7- 10 days or earlier.
6. The parameters will be decided on case to case basis as and when required and payment will be made for those parameters only. Any additional parameters if required may also be asked to monitor as per notified rates of MoEF&CC.
7. Results will be submitted as per prescribed standards. Results for all parameter except Dioxins and Furans should be submitted within 10 working days or earlier and for Dioxin & Furan, results should be submitted within 45 working days or earlier.
8. The contract will be valid for a period of one year from the date of award the contract which may be extended (if required) for further two years subject to satisfactory service on the same rates, terms & Conditions.
9. The DPCC is its discretion to assign above said work or may not assign any work during contract period.
10. The successful bidder shall have to deposit the performance security of an amount of Rs. 1,00,000/- (Rupees One Lakh only) valid for 14 months from awarding the contract. If at any stage, the tender deviates from the terms and conditions of such contract agreement or his performance are found to be unsatisfactory, the contract agreement shall be liable to be terminated without any notice and the performance security shall be forfeited.
11. The Executing agency shall co-ordinate with the officers / officials of DPCC for efficient monitoring and sampling works. DPCC may depute officer(s) to verify the progress of monitoring work. Further, DPCC may also depute officers / officials to verify the progress of monitoring work and check the analytical work at the reference laboratory of the Agency(ies) and in the process, may undertake surprise visits to the analytical laboratory of the agency/monitoring locations in any of sites.

12. All the information and data generated or collected during the execution of the work shall be treated as confidential and shall be the sole property of DPCC and the findings of the study shall not be published without prior permission of DPCC.
13. DPCC at its discretion may extend the last date of submission of bids / opening of bids. The final authority for acceptance of bids will rest with Competent Authority (DPCC) who does not bind himself to accept the lowest bids and is vested with the authority to reject any or all the bids without assigning any reason at any stage.
14. It shall be at the sole discretion of the Competent Authority, DPCC either to defer the entire project or part of the project or reject any proposal without assigning reasons thereof.
15. Statutory requirement: - The successful bidder shall be solely responsible for compliance of all statutory obligations under central / Delhi state government enactments from time to time and maintain all related record / returns. DPCC shall, in no way, be responsible for any default / liability for compliance of statutory obligations.

G. ARBITRATION

Any dispute arising out of this purchase shall be referred for settlement through arbitration proceedings. Arbitration procedure will be as per Indian Arbitration and Conciliation Act, 1996. The arbitrator will be appointed by the Secretary Environment Govt. of Delhi.

H. FORCE MAJEURE

- (a) Any delay or failure in the performance by either party hereunder shall be excused if and to the extent caused by the occurrence of a Force Majeure. For purposes of this agreement, Force majeure shall mean a cause or event that is not reasonably foreseeable or otherwise caused by or under the control of the party claiming Force Majeure, including acts of God, fires, floods, explosions, riots, wars, hurricane, sabotage terrorism, vandalism, accident, restraint of government, governmental acts, injunctions, labor strikes, other than those of seller or its supplier, that prevent laboratory from furnishing the information, and other like events that are beyond the reasonable anticipation and control of the party affected thereby, despite such party's reasonable efforts to prevent, avoid, delay, or mitigate the effect of such acts, events or occurrences, and which events or the effects thereof are not attributable to a party's failure to perform its obligations under this agreement.
- (b) If a force majeure situation arises; the laboratory shall promptly notify the DPCC in writing of such conditions and the cause thereof. Unless otherwise directed by the DPCC in writing, the contract as far as reasonably practical, shall seek all reasonable alternatives means for performance not prevented by the force majeure event. Any of the parties may terminate this contract, by giving a written notice of minimum thirty days to the other party if as a result of force majeure, the other party being unable to perform its obligation as per this contract for a period of more than sixty days.

I. PAYMENT TERMS

- i. Payment shall be made after completion of the monitoring, sampling and analysis work satisfactory and on submission of the bill (induplicate) after completion of work subject to satisfactory reports.
- ii. The project shall be implemented as per the rates finalized and DPCC will not provide any additional fund on account of cost escalation due to delay in project implementation or due to any other reasons whatsoever.
- iii. In case of situation the team reach sites for monitoring and actual monitoring not conducted due to unavoidable circumstances like Shut down of Industry etc., then only transportation will be provided with approval of the competent authority.
- iv. For any delay in submission of the report beyond the specified period, penalty @ Rs. 500/- per week of the project cost shall be charged, maximum upto 15% of the project cost.

This issue with the approval of competent authority.

(S.K. Pal)
DPCC Air Lab

Copy to:-

1. SEE (IT):- with request to upload on DPCC website.
2. Enquiry Counter, DPCC.

Prescribed Format For Financial Bid

TABLE-1. Ambient air quality monitoring and analysis as per National Ambient Air Quality Standard (CPCB notification 18th Nov of 2009).

S.No. A n a	Type of Sampling	Charges (in Rs.)	GST Charges (in Rs.)	Total (in Rs.)
1.	Sampling (24 hrs) for suspended particulate matter and gaseous pollutants			
2.	Analysis charges for Ambient Air/Fugitive Emission samples			
	SO2			
	NO2			
	PM10			
	PM2.5			
	O3			
	Lead			
	CO			
	NH3			
	Benzene			
	Benzo (α) pyrene, particulate phase			
	As			
	Ni			
3.	Transportation and other charges per day			
Total Charges (in Rs.)				

For comparison purpose total charges will be compared.

TABLE-2:-Stack monitoring of waste to energy plants for Dioxins Furans and TOC as per solid waste management rules.

S.No.	Items	Charges (in Rs.)	GST Charges (in Rs.)	Total (inRs.)
1.	Sampling and analysis charges for Dioxins & Furans and TOC			
2.	Transportation and other charges per day			
Total Charges (in Rs.)				

For comparison purpose total charges will be compared

TABLE-3:-Stack monitoring of waste to energy plants for all Parameter as per solid waste management rules.

S.No.	Items	Charges(in Rs.)	GST (in Rs.)	Total (in Rs.)
1.	Sampling Charges			
2.	Analysis charges for Emission samples			
	Particulates			
	HCl			
	SO ₂			
	CO			
	Total Organic Carbon			
	HF			
	NO _x			
	Total Dioxins and Furans			
	Cd+Th+their compounds			
	Hg and its compounds			
	Sb+As+Pb+Cr+Co+Cu+Mn+N i+V+ their compounds			
3.	Transportation and other charges per day			
Total Charges(in Rs.)				

For comparison purpose total charges will be compared.

TABLE-4:-Monitoring of Bio Medical Waste Incinerator

S.No.	Items	Charges(in Rs.)	GST (in Rs.)	Total (in Rs.)
1.	Sampling Charges			
2.	Analysis Charges for parameters			
	Particulate Matter			
	NO _x			
	HCl			
	Total Dioxins and Furans			
	Hg & its compounds			
3.	Transportation and other charges per day			
Total Charges(in Rs.)				

For comparison purpose total charges will be compared.

TABLE 5. (i) Ground Water Quality Sampling and Analysis Monitoring within 50 meters of the periphery of Landfill sites and treated Leachates Sampling and Analysis as per Solid Waste Management Rules 2016.

S.No.	Items	Charges (in Rs.)	GST Charges (in Rs.)
1.	Sampling and Analysis Charges for Ground Water for the parameters As, Cd, Chromium (as Cr6+), Cu, Cyanid, Pb, Hg, Ni, Nitrate (as NO3), pH, Fe, total hardness (as CaCO3), Chloride, dissolve solid, Phenolic Compounds (as C6H5OH), Zn, Sulphate (as SO4).		
2.	Sampling and Analysis of treated Leachates for the parameters (1) TSS, (2) Dissolve solid (inorganic), (3) pH (4) Ammonia Cal Nitrogen (5) TKN (6) BOD (7) COD (8) As (9) Hg (10) Pb (11) Cd (12) Total Chromium (as Cr), (13) Cu (14) Zn (15) Ni (16) CN (17) Cl (18) F (19) Phenolic Compounds (as C6H5OH)		
3.	Transportation and other charges per day		
Total Charges			

For comparison purpose total charges will be compared.

NATIONAL AMBIENT AIR QUALITY STANDARDS CENTRAL POLLUTION CONTROL BOARD NOTIFICATION

New Delhi, the 18th November, 2009

No.B-29016/20/90/PCI-L—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No. 14 of 1981), and in super session of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted average	Concentration in Ambient Air		Methods of Measurement
			Industrial, Residential, Rural and Other Area	Ecologically sensitive area (notified by Central Govt.)	
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20	<ul style="list-style-type: none"> • Improved West and Geake • Ultraviolet fluorescence
		24 hours**	80	80	
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual*	40	30	<ul style="list-style-type: none"> • Modified Jacob & Hochheiser (Na-Arsenite) • Chemiluminescence
		24 hours**	80	80	
3	Particulate Matter (size less than 10 µm) or PM ₁₀ µg/m ³	Annual*	60	60	<ul style="list-style-type: none"> • Gravimetric • TOEM • Beta attenuation
		24 hours**	100	100	
4	Particulate Matter (size less than 2.5 microns) or PM _{2.5} µg/m ³	Annual*	40	40	<ul style="list-style-type: none"> • Gravimetric • TOEM • Beta attenuation
		24 hours**	60	60	
5	Ozone (O ₃) µg/m ³	8 hours **	100	100	<ul style="list-style-type: none"> • UV photometric • Chemiluminescence • Chemical method
		1 hour **	180	180	
6	Lead (Pb) µg/m ³	Annual*	0.5	0.5	<ul style="list-style-type: none"> • ASS / ICP method after sampling on EPM 2000 or equivalent filterpaper • ED – XRF using Teflon filter
		24 hours**	1.0	1.0	

(1)	(2)	(3)	(4)	(5)	(6)
7	Carbon Monoxide (CO) mg/m ³	8 hours**	2	2	Non Dispersive Infra RED (NDIR) Spectroscopy
		1 hour**	4	4	
8	Ammonia (NH ₃) μg/m ³	Annual*	100	100	<ul style="list-style-type: none"> • Chemiluminescence • Indophenol blue method
		24 hours**	400	400	
9	Benzene (C ₆ H ₆) μg/m ³	Annual*	5	5	<ul style="list-style-type: none"> • Gas chromatography based continuous analyser • Adsorption and desorption followed by GC analysis
10	Benzo (a) Pyrene (BaP) – particulate phase only ng/m ³	Annual*	1	1	Solvent extraction followed by HPLC / GC analysis
11	Arsenic (As) ng/m ³	Annual*	6	6	AAS / ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni) ng/m ³	Annual*	20	20	AAS / ICP method after sampling on EPM 2000 or equivalent filterpaper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

A. Standards for incineration: The Emission from incinerators /thermal technologies in Solid Waste treatment/disposal facility shall meet the following standards,namely:-

Parameter	Emission standard	
(1)	(2)	(3)
Particulates	50 mg/Nm ³	Standard refers to half hourly average value
HCl	50 mg/Nm ³	Standard refers to half hourly average value
SO₂	200 mg/Nm ³	Standard refers to half hourly average value
CO	100 mg/Nm ³	Standard refers to half hourly average value
	50 mg/Nm ³	Standard refers to daily average value
Total Organic Carbon	20 mg/Nm ³	Standard refers to half hourly average value
HF	4 mg/Nm ³	Standard refers to half hourly average value
NO_x (NO and NO₂ expressed as NO₂)	400 mg/Nm ³	Standard refers to half hourly average value
Total dioxins and furans	0.1 ng TEQ/Nm ³	Standard refers to 6-8 hours sampling. Please refer guidelines for 17 concerned congeners for toxic equivalence values to arrive at total toxic equivalence.
Cd + Th + their compounds	0.05 mg/Nm ³	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
Hg and its compounds	0.05 mg/Nm ³	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds	0.5 mg/Nm ³	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
<i>Note.-All values corrected to 11% oxygen on a dry basis.</i>		

Note:

- Suitably designed pollution control devices shall be installed or retrofitted with the incinerator to achieve the above emissionlimits..
- Waste to be incinerated shall not be chemically treated with any chlorinateddisinfectants.
- Incineration of chlorinated plastics shall be phased out within twoyears.
- if the concentration of toxic metals in incineration ash exceeds the limits specified in the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008, as amended from time to time, the ash shall be sent to the hazardous waste treatment, storage and disposal facility.
- Only low sulphur fuel like LDO, LSHS, Diesel, bio-mass, coal, LNG, CNG, RDF and bio-gas shall be used as fuel in theincinerator.
- The CO₂ concentration in tail gas shall not be more than7%.
- All the facilities in twin chamber incinerators shall be designed to achieve a minimum temperature of 950⁰C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two)seconds.
- Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve total Organic Carbon (TOC) content in the slag and bottom ash less than 3%, or the loss on ignition is less than 5% of the dry weight.
- Odour from sites shall be managed as per guidelines of CPCB issued from time totime

STANDARDS FOR TREATMENT AND DISPOSAL OF BIO-MEDICAL WASTES**1. STANDARDS FOR INCINERATION.-**

All incinerators shall meet the following operating and emission standards-

A. Operating Standards

- 1). Combustion efficiency (CE) shall be at least 99.00%. 2). The Combustion efficiency is computed as follows:

$$\text{C.E.} = \frac{\% \text{CO}_2}{\% \text{CO}_2 + \% \text{CO}} \times 100$$

- 2). The temperature of the primary chamber shall be a minimum of 800 °C and the secondary chamber shall be minimum of 1050°C + or -50°C.
- 3). The secondary chamber gas residence time shall be at least two seconds.

B. Emission Standards

1. No.	Parameter	Standards	
(1)	(2)	(3)	(4)
		Limiting concentration in mg Nm³ unless stated	Sampling Duration in minutes, unless stated
1.	Particulate matter	50	30 or 1Nm ³ of sample volume, whichever is more
2.	Nitrogen Oxides NO and NO ₂ expressed as NO ₂	400	30 for online sampling or grab sample
3.	HCl	50	30 or 1Nm ³ of sample volume, whichever is more
4.	Total Dioxins and Furans	0.1ngTEQ/Nm ³ (at 11% O ₂)	8 hours or 5Nm ³ of sample volume, whichever is more
5.	Hg and its compounds	0.05	2 hours or 1Nm ³ of sample volume, whichever is more

C. Stack Height: Minimum stack height shall be 30 meters above the ground and shall be attached with the necessary monitoring facilities as per requirement of monitoring of 'general parameters' as notified under the Environment (Protection) Act, 1986 and in accordance with the Central Pollution Control Board Guidelines of Emission Regulation Part-III.

Note:

- The existing incinerators shall comply with the above within a period of two years from the date of the notification.
- The existing incinerators shall comply with the standards for Dioxins and Furans of 0.1ngTEQ/Nm³, as given below within two years from the date of commencement of these rules.
- All upcoming common bio-medical waste treatment facilities having incineration facility or captive incinerator shall comply with standards for Dioxins and Furans.
- The existing secondary combustion chambers of the incinerator and the pollution control devices shall be suitably retrofitted, if necessary, to achieve the emission limits.
- Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.

- (f) Ash from incineration of biomedical waste shall be disposed of at common hazardous waste treatment and disposal facility. However, it may be disposed of in municipal landfill, if the toxic metals in incineration ash are within the regulatory quantities as defined under the Hazardous Waste (Management and Handling and Transboundary Movement) Rules, 2008 as amended from time to time.
- (g) Only low Sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, Compressed Natural Gas, Liquefied Natural Gas or Liquefied Petroleum Gas shall be used as fuel in the incinerator.
- (h) The occupier or operator of a common bio-medical waste treatment facility shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) once in three months through a laboratory approved under the Environment (Protection) Act, 1986 and record of such analysis results shall be maintained and submitted to the prescribed authority. In case of dioxins and furans, monitoring should be done once in a year.
- (i) The occupier or operator of the common bio-medical waste treatment facility shall install continuous emission monitoring system for the parameters as stipulated by State Pollution Control Board or Pollution Control Committees in authorisation and transmit the data real time to the servers at State Pollution Control Board or Pollution Control Committees and Central Pollution Control Board.
- (j) All monitored values shall be corrected to 11% Oxygen on dry basis.
- (k) Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon content in the slag and bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.
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B. Standard for treated Leachates .- The disposal of treated leachates shall meet the following standards, namely:

S. No	Parameter	Standards (Mode of Disposal)		
		Inland surface water	Public sewers	Land disposal
(1)	(2)	(3)	(4)	(5)
1.	Suspended solids, mg/l, max	100	600	200
2.	Dissolved solids (inorganic) mg/l, max.	2100	2100	2100
3	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
4	Ammonical nitrogen (as N), mg/l, max.	50	50	-
5	Total Kjeldahl nitrogen (as N), mg/l, max.	100	-	-
6	Biochemical oxygen demand (3 days at 27 ^o C) max.(mg/l)	30	350	100
7	Chemical oxygen demand, mg/l, max.	250	-	-
8	Arsenic (as As), mg/l, max	0.2	0.2	0.2
9	Mercury (as Hg), mg/l, max	0.01	0.01	-
10	Lead (as Pb), mg/l, max	0.1	1.0	-
11	Cadmium (as Cd), mg/l, max	2.0	1.0	-
12	Total Chromium (as Cr), mg/l, max.	2.0	2.0	-
13	Copper (as Cu), mg/l, max.	3.0	3.0	-
14	Zinc (as Zn), mg/l, max.	5.0	15	-
15	Nickel (as Ni), mg/l, max	3.0	3.0	-
16	Cyanide (as CN), mg/l, max.	0.2	2.0	0.2
17	Chloride (as Cl), mg/l, max.	1000	1000	600
18	Fluoride (as F), mg/l, max	2.0	1.5	-
19	Phenolic compounds (as C ₆ H ₅ OH) mg/l, max.	1.0	5.0	-

Note : While discharging treated leachates into inland surface waters, quantity of leachates being discharged and the quantity of dilution water available in the receiving water body shall be given due consideration.

Criteria for water quality monitoring.-

Before establishing any landfill site, baseline data of ground water quality in the area shall be collected and kept in record for future reference. The ground water quality within 50 meter of the periphery of landfill site shall be periodically monitored covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated.


Usage of groundwater in and around landfill sites for any purpose (including drinking and irrigation) shall be considered only after ensuring its quality. The following specifications for drinking water quality shall apply for monitoring purpose, namely :-

S. No.	Parameters	IS 10500:2012, Edition 2.2(2003-09) Desirable limit (mg/l except for pH)
(1)	(2)	(3)
	Arsenic	0.01
	Cadmium	0.01
	Chromium(as Cr ⁶⁺)	0.05
	Copper	0.05
	Cyanide	0.05
	Lead	0.05
	Mercury	0.001
	Nickel	-
	Nitrate as NO ₃	45.0
	pH	6.5-8.5
	Iron	0.3
	Total hardness (as CaCO ₃)	300.0
	Chlorides	250
	Dissolved solids	500
	Phenolic compounds (as C ₆ H ₅ OH)	0.001
	Zinc	5.0
	Sulphate (as SO ₄)	200

CHECK LIST
(FOR SUBMISSION OF DOCUMENTS)

Annexure- 5

S.No.	Documents to be submitted as per eligibility criteria	Documents submitted (Yes/ No)	Remarks. In case documents not attached.
1.	Earnest Money Deposit (EMD):- The laboratory shall submitted EMD of Rs.50,000/- (Rupees Fifty thousand only) in the form of Demand Draft drawn in favour of Delhi Pollution Control Committee and payable at Delhi and upload scanned copy of the same with E-Tender Website (http://govtprocurement.delhi.gov.in). Original EMD must be submitted physically in the office of DPCC at 6 th floor, ISBT Bldg., Kashmere Gate, Delhi before last date for submission of bid.		
2.	GST registration certificate		
3.	The Laboratory is recognized under Environment (Protection) Act, 1986 from Ministry of Environment, Forest and Climate Change, GOI (MoEF&CC).		
4.	The tenderer have its own laboratories and functional atleast last 03 years		
5.	Annual turnover / financial status: - Copy of Annual turnover duly certified and authenticated by Chartered Accounts for last 03 financial years submitted		
Copy of the work experience in similar work. (The laboratories are advised to participate only for those work in which they have sufficient experience in similar work)			
6.	For Ambient Air Quality Monitoring work. Submit at least 01 work order regarding work done for notified all 12 parameters during last 03 years.		
7.	For Stack Emission Monitoring work, Submit at least 01 work order regarding work done for critical parameters like Dioxin and Furan.		
8.	For Water Monitoring submit at least 01 work order regarding work done for relevant parameters.		

Delhi Tenders		eTendering System Government of NCT of Delhi		
Tender Details		Date : 22-Jul-2021 02:19 PM		
 Print				
Basic Details				
Organisation Chain	Delhi Pollution Control Committee			
Tender Reference Number	F.DPCC/(12)(1)(280)/A/2020/269			
Tender ID	2021_DPCC_206062_1			
Tender Type	Open Tender	Form of contract	Works	
Tender Category	Services	No. of Covers	2	
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No	
Payment Mode	Offline	Is Multi Currency Allowed For BOQ	No	
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No	
Payment Instruments		Cover Details, No. Of Covers - 2		
Offline	S.No	Instrument Type	Cover No	
	1	Demand Draft		
			Cover	
			Document Type	
			Description	
	1	Fee/PreQual/Technical	.pdf	Scan Copy of Earnest Money Deposit
			.pdf	Scan Copy Of GST registration certificate
			.pdf	Scan Copy of The Laboratory is recognized under Environment (Protection) Act GOI (MoEF and CC).
			.pdf	Scan Copy of the tenderer have its own laboratories and functional atleast last 03 years.
			.pdf	Scan Copy of Annual turnover duly certified and authenticated by CA for last 03 f.Y. Submitted
			.pdf	Scan Copy of Check List as

			per Annexure-5
		.pdf	Scan Copy of the work experience in similar work as per tender document.
2	Finance	.xls	Checklist
		.pdf	Price Bid

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No		

EMD Fee Details

EMD Amount in ₹	50,000	EMD through BG/ST or EMD Exemption Allowed	No
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Delhi Pollution Control Committee	EMD Payable At	Delhi

[Click to view modification history](#)

Work / Item(s)

Title	Ambient Air Quality Monitoring, Stack monitoring of waste to energy plants for Dioxins and Furans and TOC and other parameters, Bio Medical Waste Incinerator, Ground Water and treated Leachates sampling analysis as per Solid Waste Management.				
Work Description	Ambient Air Quality Monitoring, Stack monitoring of waste to energy plants for Dioxins and Furans and TOC and other parameters, Bio Medical Waste Incinerator, Ground Water and treated Leachates sampling analysis as per Solid Waste Management.				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	NA				
Show Tender Value in Public Domain	No				
Tender Value in ₹	0.00	Product Category	Miscellaneous Services	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	90	Period Of Work(Days)	365
Location	Various location in Delhi	Pincode	110006	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	DPCC, 5th Floor, ISBT, Kashmere Gate, Delhi
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

Critical Dates

Publish Date	22-Jul-2021 04:00 PM	Bid Opening Date	12-Aug-2021 03:00 PM
Document Download / Sale Start Date	22-Jul-2021 04:00 PM	Document Download / Sale End Date	12-Aug-2021 02:30 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	22-Jul-2021 04:00 PM	Bid Submission End Date	12-Aug-2021 02:30 PM

Tender Documents

S.No	Document Name	Description
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NIT Document				Document Size (in KB)
1	Tendernotice_1.pdf	NIT		46.99

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	Additional Documents	Pricebid.pdf	Price Bid Performa	37.05
	2	Additional Documents	checklist.xls	Checklist	20.00
	3	Tender Documents	TenderDoc.pdf	Tender Document	465.24

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	m.k.ranga69@gmail.com	MANOJ KUMAR RANGA	MANOJ KUMAR RANGA
2.	sujitdpcc@yahoo.co.in	SUJIT KUMAR PAL	SUJIT KUMAR PAL
3.	envarvind@gmail.com	ARVIND KUMAR	ARVIND KUMAR

Tender Properties

Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Show Bids Details	Yes
BoQ Comparative Chart model	NIL	BoQ Compative chart decimal places	2
BoQ Comparative Chart Rank Type	NIL	Form Based BoQ	No

Tender Inviting Authority

Name	S.K. Pal, DPCC Air Lab
Address	DPCC, 5th Floor, ISBT, Kashmere Gate, Delhi

Tender Creator Details

Created By	SUJIT KUMAR PAL
Designation	SSA
Created Date	22-Jul-2021 01:59 PM

Prescribed Format For Financial Bid

TABLE-1.Ambient air quality monitoring and analysis as per National Ambient Air Quality Standard (CPCB notification 18th Nov of 2009).

S.No.	A n a	Type of Sampling	Charges (in Rs.)	GST Charges (in Rs.)	Total (in Rs.)
1.		Sampling (24 hrs) for suspended particulate matter and gaseous pollutants			
2.		Analysis charges for Ambient Air/Fugitive Emission samples			
		SO2			
		NO2			
		PM10			
		PM2.5			
		O3			
		Lead			
		CO			
		NH3			
		Benzene			
		Benzo (α) pyrene, particulate phase			
		As			
		Ni			
3.		Transportation and other charges per day			
Total Charges (in Rs.)					

For comparison purpose total charges will be compared.

TABLE-2:-Stack monitoring of waste to energy plants for Dioxins Furans and TOC as per solid waste management rules.

S.No.	Items	Charges (in Rs.)	GST Charges (in Rs.)	Total (inRs.)
1.	Sampling and analysis charges for Dioxins & Furans and TOC			
2.	Transportation and other charges per day			
Total Charges (in Rs.)				

For comparison purpose total charges will be compared

TABLE-3:-Stack monitoring of waste to energy plants for all Parameter as per solid waste management rules.

S.No.	Items	Charges(in Rs.)	GST (in Rs.)	Total (in Rs.)
1.	Sampling Charges			
2.	Analysis charges for Emission samples			
	Particulates			
	HCl			
	SO ₂			
	CO			
	Total Organic Carbon			
	HF			
	NO _x			
	Total Dioxins and Furans			
	Cd+Th+their compounds			
	Hg and its compounds			
	Sb+As+Pb+Cr+Co+Cu+Mn+N i+V+ their compounds			
3.	Transportation and other charges per day			
Total Charges(in Rs.)				

For comparison purpose total charges will be compared.

TABLE-4:-Monitoring of Bio Medical Waste Incinerator

S.No.	Items	Charges(in Rs.)	GST (in Rs.)	Total (in Rs.)
1.	Sampling Charges			
2.	Analysis Charges for parameters			
	Particulate Matter			
	NO _x			
	HCl			
	Total Dioxins and Furans			
	Hg & its compounds			
3.	Transportation and other charges per day			
Total Charges(in Rs.)				

For comparison purpose total charges will be compared.

TABLE 5. (i) Ground Water Quality Sampling and Analysis Monitoring within 50 meters of the periphery of Landfill sites and treated Leachates Sampling and Analysis as per Solid Waste Management Rules 2016.

S.No.	Items	Charges (in Rs.)	GST Charges (in Rs.)
1.	Sampling and Analysis Charges for Ground Water for the parameters As, Cd, Chromium (as Cr6+), Cu, Cyanid, Pb, Hg, Ni, Nitrate (as NO3), pH, Fe, total hardness (as CaCO3), Chloride, dissolve solid, Phenolic Compounds (as C6H5OH), Zn, Sulphate (as SO4).		
2.	Sampling and Analysis of treated Leachates for the parameters (1) TSS, (2) Dissolve solid (inorganic), (3) pH (4) Ammonia Cal Nitrogen (5) TKN (6) BOD (7) COD (8) As (9) Hg (10) Pb (11) Cd (12) Total Chromium (as Cr), (13) Cu (14) Zn (15) Ni (16) CN (17) Cl (18) F (19) Phenolic Compounds (as C6H5OH)		
3.	Transportation and other charges per day		
Total Charges			

For comparison purpose total charges will be compared.

Check List

DELHI POLLUTION CONTROL COMMITTEE
DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI
5th Floor, ISBT Building Kashmere Gate, Delhi – 110006

PRICE BID

Ambient Air Quality Monitoring, Stack monitoring of waste to energy plants for Dioxins and Furans and TOC and other parameters, Bio Medical Waste Incinerator, Ground Water and treated Leachates sampling analysis as per Solid Waste Management.

Tender ID	2021_DPCC_206062_1	
Bidder/ Firm name		
S.No	Particulars	Yes/ No
1	Price Bid Submitted as Per tender document	