

Request for Proposal (RFP)

for

**Carrying out Sector Specific Surveys
(Vehicles, D.G Set) at different locations in
Ludhiana, Punjab**

Under Project

**“Source Apportionment Study to prepare Action
Plan to improve Air Quality of Ludhiana City”**

RFP Document No.: PSCST/CC/RFP/004

September, 2017



**PUNJAB STATE COUNCIL FOR SCIENCE
& TECHNOLOGY, CHANDIGARH**

PUNJAB STATE COUNCIL FOR SCIENCE & TECHNOLOGY
(A State Govt. Undertaking)

1. INTRODUCTION

Punjab State Council for Science & Technology (PSCST) is a State Government Undertaking and a Scientific & Industrial Research Organization approved by DSIR & Central Government under Clause (ii) of Sub-Section (i) of Section 35 of Income Tax Act, 1961. PSCST endeavors to harness the potential of Science and Technology as an instrument of socio-economic change and acts as a catalytic agent for transferring technologies from the laboratory to the field.

Growing air pollution is of concern for many urban cities in India and other developing countries around the world. In India, particulate matter is a pollutant of concern as most of the cities are violating ambient air quality standards for Particulate Matter (PM). Ludhiana is considered to be one of the most polluted cities of Punjab due to industrialization, rapid urbanization, increase in population, vehicles and commercialization of land available within the city.

Considering the deterioration of air quality and its implications over human health, ecology and aesthetics, Punjab Pollution Control Board (PPCB), Patiala has sanctioned a project titled **“Source Apportionment Study to prepare Action Plan to improve Air Quality of Ludhiana City”** to PSCST with an objective to conduct grid-wise emission study for various sources in the Ludhiana city and to conduct source apportionment study of particulate matter w.r.t. PM₁₀ and PM_{2.5}.

The Ludhiana City is spread over an area of 159.37 sq km and accommodates approximately 16.18 lacs population (2011 Census). It is the hub of Indian small scale Industry especially hosiery & Cycle parts, popularly known as “Manchester of India.” Under the Project, one of the activities is to carry out following surveys to estimate emissions from transport sector:

- ❖ Traffic Count Survey
- ❖ Parking Lot Survey
- ❖ DG Sets and Restaurant survey

As part of this endeavor, PSCST invites Request for Proposal (RFP) from the interested Firms/Agencies, for carrying out these surveys at Ludhiana City. The agencies willing to participate in the said assignment are requested to submit the complete proposal/RFP document along with all the supporting documents duly signed and stamped on each page. The format of covering letter in this regard is placed at **Annexure I**.

2. SCOPE OF WORK

A. Traffic Count Survey:

As per the scope of work of the project, 7 ambient air quality monitoring stations (6 within Ludhiana city and 1 outside Ludhiana city) based on land use pattern will be identified for collecting ambient air quality data in 3 seasons of the year. Traffic count survey needs to be carried out to assess the total number of “On road” vehicles and to study the contribution of transport sector in ambient air quality w.r.t. PM₁₀ and PM_{2.5}. Traffic count survey will be carried out for different categories of roads (*namely arterial, sub-arterial and local roads*) surrounding each of the ambient air quality monitoring stations. Thus traffic count survey would be carried out at 21 locations besides 4 major highways leading to Ludhiana city. A total of 25 locations will be identified by PSCST for traffic count survey of 11 different types of vehicles in the study area.

1. **No of locations: 25**
2. No. of days of traffic count in each location: 1 (*both directions on a working day*)
3. Duration of survey in each location: 24 hours (*15 minutes count in each hour*)
4. Minimum number of persons required for traffic count survey:

S. No.	Road Type	Traffic	Minimum No. of Persons required
1	Arterial	Heavy	Four on either side
2	Sub-Arterial	Medium	One or two on either side (depending on traffic volume)
3	Local	Light	One on either side

5. The specimen questionnaire for carrying out the traffic count survey is at **Annexure II**.

B. Parking Lot Survey:

1. The survey is to be carried out for 4000 (four thousand) vehicles of different types selected randomly in Ludhiana city with details as under:

S. No.	Category	Sub Category	Number of vehicles to be surveyed (at 7 locations)
1	2 wheeler	Motor cycle	1160
		Scooter	375
		Moped	80

2.	3 wheeler	Goods	310
		Passenger	310
3.	Cars		1200
4.	Buses	Big	140
		Mini	115
		State	40
5.	Trucks	LCV	155
		Truck	80
6.	Tractor		35
		Total	4000

2. The specimen questionnaire for carrying out the parking lot survey is at **Annexure- III**.

C. DG Set and Restaurant survey:

1. This survey is to be carried out at 7 locations, in an area of 4 km² (2*2 km) per location, surrounding each of the ambient air quality monitoring stations as identified by PSCST.
2. The specimen questionnaire for carrying out the DG set and Restaurant survey is at **Annexure -IV**.

3. ELIGIBILITY CRITERIA

- a. The agency should be proprietary/ partnership/private limited/ limited firm.
- b. The agency should have carried out minimum 3 surveys of similar nature during the last 3 financial years. The agency is required to submit the details in this regard to PSCST with satisfactory completion report.
- c. The agency should have cumulative turnover of minimum 50 lakhs during the last 3 financial years.

4. TIME DURATION: Three months from the date of award of work.

5. DELIVERABLES

- ❖ Agencies are required to submit the soft copy of survey report (in excel format) along with original copy of the forms (questionnaires) filled up during the field survey.

6. PAYMENT SCHEDULE

- ❖ 50% advance with work order against submission of bank guarantee of equivalent amount by the selected agency. The bank guarantee would be released within one month after the satisfactory completion of survey work.
- ❖ 50% on submission and acceptance of final report by PSCST.

7. SUBMISSION OF RFP

The agency is required to submit the complete proposal/RFP document along with **all the supporting documents duly signed and stamped on each page** along with covering letter (refer Annexure I) at the following address by the due date and time in a sealed envelope superscribing RFP No., Agency's name, Address and due date/time:

**Joint Director (Consultancy Cell),
Punjab State Council for Science and Technology,
MGSIPA Complex, Adjacent Sacred Heart School,
Sector 26, Chandigarh -160019**

Applications complete in all respect shall be submitted on or before 25.09.17 and shall be opened on the same date at 3:30 pm at the above address. PSCST shall not be responsible for any postal delay. RFP received through Fax / E-mail shall not be accepted.

Clarification (if any) can be obtained from Sh. Mandeep Singh, Assistant Process Engineer, PSCST through e-mail: stcouncilpb@gmail.com or Mobile: [+91-98882-76948](tel:+91-98882-76948).

8. GENERAL TERMS & CONDITIONS

- a. Requisite permissions from the concerned Departments to carry out the surveys will be arranged by PSCST.
- b. Agencies are required to submit their time schedule for carrying out the surveys well in advance to PSCST.
- c. Applicants must acquaint themselves fully about the project before submitting the RFP.
- d. The RFP must be complete in all respect leaving no scope for ambiguity. It is in the interest of the applicant to submit complete and comprehensive proposal leaving no scope for PSCST to raise any further questionnaire. PSCST may evaluate the agency on the basis of documents submitted in the first instance in order to adhere with project schedule requirement.
- e. PSCST reserves the right to call for original documents submitted for verification, if required and also to cross check any details as furnished by the applicant from their previous clients/consultants.
- f. The agency shall submit copy of their GST, PAN and EPF Number.**
- g. PSCST reserves the right to assess agency's capabilities and capacity to execute the work and by taking into account other aspects such as concurrent commitments and past performance.
- h. PSCST will not be responsible for any cost or expenses incurred by the agency in connection with preparation or delivery of RFP or any other expenses during evaluation

of RFP.

- i. PSCST reserves the right to revise the questionnaire format before the start of work. However, the sample size of survey would remain the same.
- j. PSCST shall not be liable for any damage, loss or maintenance or upkeep of equipments or any other claim due to death or injury which may occur to or be caused to agency or its assignees / officers during the course of the execution of this assignment.
- k. If any dispute or difference of any kind whatsoever shall arise between the PSCST and the successful bidder in connection with or arising out of this contract or the execution of work there under, it shall be referred for settlement to Secretary to Govt. of Punjab, Department of Science, Technology & Environment or his nominee whose decision would be final and binding to both the parties. The arbitration will be held as per the Arbitration & Conciliation Act, 1996. All disputes shall be subject to the jurisdiction of courts at Chandigarh alone. However, before undertaking any legal steps, the parties hereby reiterate and agree to mobilize all efforts and to enter into discussions / negotiations in order to find out mutually acceptable settlement of such a dispute.
- l. The bid shall remain valid for a period of 45 days from the date of opening of bid.**
- m. PSCST reserves the right to reject any or all RFP's received without assigning any reason.
- n. All revisions, clarifications, corrigenda, addenda, time extensions etc., to the RFP will be hoisted on www.pscst.gov.in. The agency should regularly visit this website to keep themselves updated.**

9. CHECKLIST (Please tick mark)

The following documents must be attached:

Sr. No.	Description	Attached/ Not Attached	Reference page no.(as per proposal)
1.	Covering letter on letter head of agency as per the prescribed format mentioned at Annexure-I	Yes/No	
2	Copy of RFP document duly signed and stamped in token of acceptance of terms and conditions	Yes/No	
3.	Financial bid in the prescribed Performa	Yes/No	
4.	Proof of proprietary/ partnership /private limited/ limited firm.	Yes/No	
5.	<ul style="list-style-type: none">• Proof of having experience for carrying out minimum 3 surveys of similar nature during the last 3 financial years• Letter of satisfactory completion reports from clients.	Yes/No Yes/No	
6.	ITR details for the last three financial years (2013-14, 2014-15& 2015-16)	Yes/No	
7.	Audited balance sheet for the last three financial years (2013-14, 2014-15& 2015-16).	Yes/No	
8.	Copy of GST, PAN and EPF Number	Yes/No	
9	Any other, Pl specify		
	Total no of pages		

Format for Covering Letter

(on letterhead of interested party, willing to carry out sector specific surveys at Ludhiana City)

To,

The Joint Director,
Consultancy Cell,
Punjab State Council for Science and Technology,
MGSIPA Complex, Adjacent Sacred Heart School,
Sector 26, Chandigarh -160019.

Subject:Request for proposal(RFP)for carrying out sector specific surveys at Ludhiana City.

Sir,

Being duly authorized to represent and act on behalf of M/s.
(hereinafter referred to as “the Applicant”) has reviewed and fully understood the eligibility criteria and information provided. The undersigned hereby apply in response to the RFP document No. PSCST/CC/RFP /004 dated 07.09.17 for carrying out sector specific surveys at Ludhiana City.

We are enclosing our Request for Proposal with the details as per the requirements of the RFP document, for your evaluation.

Yours faithfully,

(Signature of Authorized Signatory with seal)
(Name, Title and Address)

Enclosures: As per Checklist at sr. no. 9

Traffic Count Survey Form

Place:

Date:

Road Name:

Direction:

Time	Scooter	Motor-cycle	Moped	Car	3-wheeler (Passenger)	3-wheeler (Goods)	Truck	LCV	Minibus	Bus	Tractor
0800 hrs to 0815 hrs											
0900 hrs to 0915 hrs											
1000 hrs to 1015 hrs											
1100 hrs to 1115 hrs											
1200 hrs to 1215 hrs											
1300 hrs to 1315 hrs											
1400 hrs to 1415 hrs											
1500 hrs to 1515 hrs											
1600 hrs to 1615 hrs											
1700 hrs to 1715 hrs											
1800 hrs to 1815 hrs											
1900 hrs to 1915 hrs											
2000 hrs to 2015 hrs											

Time	Scooter	Motor-cycle	Moped	Car	3-wheeler (Passenger)	3-wheeler (Goods)	Truck	LCV	Minibus	Bus	Tractor
2100 hrs to 2115 hrs											
2200 hrs to 2215 hrs											
2300 hrs to 2315 hrs											
2400 hrs to 2415 hrs											
0100 hrs to 0115 hrs											
0200 hrs to 0215 hrs											
0300 hrs to 0315 hrs											
0400 hrs to 0415 hrs											
0500 hrs to 0515 hrs											
0600 hrs to 0615 hrs											
0700 hrs to 0715 hrs											

Parking Lot Survey Form

Place:

Date:

Codes	Questions	Response																																
A1	Vehicle Type	<input type="checkbox"/> Private <input type="checkbox"/> Commercial																																
A2	Vehicle Type	<table border="0" style="width: 100%; text-align: center;"> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Car</td> <td>Scooter</td> <td>Motor Cycle</td> <td>Moped</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Passenger Auto</td> <td>Goods Auto</td> <td>Mini Bus</td> <td>Big Bus</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>State Bus</td> <td>Tractor</td> <td>Trailer</td> <td>Truck</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>LCV</td> <td>Any other</td> <td></td> <td></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Car	Scooter	Motor Cycle	Moped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Passenger Auto	Goods Auto	Mini Bus	Big Bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	State Bus	Tractor	Trailer	Truck	<input type="checkbox"/>	<input type="checkbox"/>			LCV	Any other		
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State Bus	Tractor	Trailer	Truck																															
<input type="checkbox"/>	<input type="checkbox"/>																																	
LCV	Any other																																	
A3	Year of Registration																																	
A4	Two wheeler/ Three wheeler engine:	<table border="0" style="width: 100%; text-align: center;"> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>2-Stroke</td> <td>4-Stroke</td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	2-Stroke	4-Stroke																												
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2-Stroke	4-Stroke																																	
A5	Vehicle Manufacturer	<table border="0" style="width: 100%; text-align: center;"> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Ashok Leyland</td> <td>Tata</td> <td>Maruti Suzuki</td> <td>Hero Honda</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Hyundai</td> <td>Yamaha</td> <td>Volvo</td> <td>Toyota</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Honda</td> <td>Volkswagen</td> <td>Fiat</td> <td>TVS Motor</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>M&M</td> <td>Bajaj</td> <td>Nissan</td> <td>Any other</td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ashok Leyland	Tata	Maruti Suzuki	Hero Honda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hyundai	Yamaha	Volvo	Toyota	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Honda	Volkswagen	Fiat	TVS Motor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M&M	Bajaj	Nissan	Any other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
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Hyundai	Yamaha	Volvo	Toyota																															
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Honda	Volkswagen	Fiat	TVS Motor																															
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
M&M	Bajaj	Nissan	Any other																															

A6	Engine Capacity(CC)	<input type="text"/> 100	<input type="text"/> 125	<input type="text"/> 150	<input type="text"/> 200
		<input type="text"/> 800	<input type="text"/> 1000	<input type="text"/> 1200	<input type="text"/> Any other
A7	Fuel Type	<input type="text"/> Petrol	<input type="text"/> Diesel	<input type="text"/> CNG	<input type="text"/> LPG
A8	In case CNG / LPG was installed later: Year of CNG / LPG kit fixation				
A9	How much mileage does your vehicle give on an average (in Kms/litre or km/kg)?				
A10	How many people normally travel in your vehicle?				
A11	<ul style="list-style-type: none"> Fuel Consumption : Fuel bill per month: 				
A12	After how many kms do you get your vehicle serviced?				
A13	After how many months do you get your vehicle serviced?				
A14	On a weekday how many kms you travel within the Ludhiana city limits (per day)				
A15	On a weekend how many kms you travel within the Ludhiana city limits (per day)				
A16	What is the origin of your current trip?	<input type="text"/> Ludhiana	<input type="text"/> Outside Ludhiana		
A17	What is the destination of your current trip?	<input type="text"/> Ludhiana	<input type="text"/> Outside Ludhiana		

DG Set Survey Form

Survey Date: ____/____/____

Name of the District: **Ludhiana**

WardNo.: _____

Name of the respondent: _____

Commercial/house/hotel/restaurant/Hospital/Mall/Construction site/anyother (please specify)?

1. Do you use any power back-up at your home/shops/hotel/restaurant/Hospital/Mall/Construction site etc.?

- A. Yes
- B. No

2. If yes to Q1, what are you using?

- A. Generator B. Inverter C. Common generator D. Any other (please specify) _____

3. How many hours per day do you generally require power back-up?

Summer Hours

Winter hours

Monsoon hours

4. If answer to Q2 is 'A', Name and make of the generator:

.....

5. What is the capacity of the generator that you are using?

.....

6. What is the type of fuel used for your generator?

- A. Diesel B. Kerosene C. Any other _____

7. What is the average monthly consumption of fuel for your generator?

Summer Litres

Winter Litres

Restaurant Survey Form

Survey Date: ____/____/____

Location:

Ward Number:

Sr. No.	Description	Details
1	Name and Address of Restaurant	
2	Fuel Used	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Wood Coal Charcoal Agro-residue
3	Rate of Fuel (in Rs.)	
4	Quantity of fuel used/month (kg/month)	<input type="text"/> <input type="text"/> Summer Winter

Financial Proposal Submission Form

Name of Work: Sector Specific Surveys (Vehicles, D.G Set) at different locations in Ludhiana, Punjab

Name of Agency: M/s _____

S. No.	Description	Qty	Unit	Unit Rate	Amount	
				(in Rs)	(Rs. in figures)	(Rs. in words)
1.	Charges for Traffic count survey as per details mentioned at Sr. no. 2 (A)	25	Location			
2.	Charges for Parking lot survey as per details mentioned at Sr. no. 2 (B)	Lumpsum (for 4000 vehicles)				
3.	Charges for DG set & Restaurant survey as per details mentioned at Sr. no. 2 (C)	7	Location			
	Total					
	Taxes(Pl. specify)					
	Grand Total					

(Signature of Authorized Signatory with seal)
(Name, Title and Address)

NOTE:

- In case of any ambiguity in quoted price, the amount quoted in words shall be considered.
- The financial bid submitted by the agency would be evaluated for the total price (including taxes) quoted for all the three surveys i.e. traffic count survey, parking lot survey and DG set & Restaurant survey.