State of Louisiana

Louisiana Department of Transportation and Development

Request for Information (RFI)

For

Fluid Analysis for Ferry Operation Predictive/Preventative Maintenance

RFI # 30000544

Proposal Submission Deadline: Thursday July 12, 2012 by 3:00 p.m. CST <u>NOTE:</u> This Request for Information (RFI) is solely for information and planning purposes and does not constitute a solicitation. This information will be reviewed and discussed by the Department of Transportation and Development (DOTD) and may result in the advertisement of a formal and competitive Request for Proposal for any or all of the services included in the RFI.

Only information which is in the nature of legitimate trade secrets or non-published financial data may be deemed proprietary or confidential. Any material within a response to this RFI identified as such must be clearly marked and will be handled in accordance with the Louisiana Public Records Act. R.S. 44:1-44 and applicable rules and regulations. Any response marked as confidential or proprietary in its entirety may be rejected without further consideration or recourse.

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1.0 GENERAL INFORMATION

1.1 Background

The Louisiana Department of Transportation and Development (DOTD) currently operates a total of fourteen (18) vessels at eight (8) different ferry crossings and in other miscellaneous capacities statewide. All of these boats operate with diesel engines and generators. The DOTD wishes to monitor various oil, fuel, and coolant samples as a component of their predictive/preventative maintenance for the ferry system.

1.2 Purpose of RFI

This Request for Information (RFI) is issued for the purpose of gathering information and cost information from an ISO 9002 certified laboratory to provide fluids analysis, field support training and data reporting and evaluation in an effort to reduce maintenance costs, make cost effective decisions, support equipment warranties, ensure fluid quality, and enhance preventative and predictive maintenance.

1.3 Project Overview

Attachment I details the overview of the project requirements inclusive of deliverables and/or desired results that the DOTD is considering.

2.0 ADMINISTRATIVE INFORMATION

2.1 RFI Coordinator

In response to this Request for Information, please send response via hard copy to the RFI coordinator listed below. Please direct any questions regarding this Request for Information to the point of contact below by **3 PM CST June 19, 2012**:

Mr. Alan Dale, P.E. Consultant Contract Services Administrator 1201 Capitol Access Road, Room 405-T Baton Rouge, LA 70802 4438 or Post Office Box 94245 Baton Rouge, Louisiana 70804 9245 Telephone: (225) 379 1989 Fax: 225-379-1859 contractservices@la.gov

2.2 Schedule of Events

The following table designates the target dates for the request for Information (RFI) process. Please note that this RFI does not constitute a solicitation of offers from private providers or other entities. The dates listed below are target dates, and subject to change without notification.

Activity/Event	Date	
Public notice of RFI	June 12, 2012	
Deadline for receipt of written inquiries	June 19, 2012	
Response to written inquiries	June 25, 2012	
Deadline for receipt of RFI	July 12, 2012, 3:00PM CST	

(NOTE: DOTD reserves the right to amend and/or change this schedule of RFP activities, as it deems necessary.

3.0 RESPONSE CONTENT

3.1 Executive Summary

This section should serve to introduce the scope of the response. It should include administrative information including, at a minimum, responder's contact name and phone number, email address and any other pertinent contact information. This section should also include a summary of the responder's qualifications and ability and willingness to comply with the DOTD's requirements.

3.2 Corporate Background and Experience

The responder should give a brief description of the company including a brief history, corporate structure and organization and number of years in business. Responders should also describe their experience with projects of this type with other states or corporate/governmental entities of comparable size and diversity.

3.3 Approach and Methodology

The responder should provide approach and methodology recommended to accomplish the scope of services described. Best practices garnered from previous experience with this scope of services should be described. Provide a list of issues/concerns that were not taken into consideration in the Scope of Services described herein that you think is important for the agency to consider. Provide alternative solutions for accomplishing the project objectives, if applicable, and any other additional pertinent information.

3.4 Cost Estimate

Provide an estimate of total cost (inclusive of travel and all project expenses). For information purposes, provide the total estimated number of hours, by classification, for project staff, the billing rate by classification, and an estimated percentage of the effort that will be completed by a subcontractor (if applicable).

4.0 **RESPONSE INSTRUCTIONS**

4.1 Response Submittal

Responders interested in providing information requested by this RFI must submit responses containing the information specified no later than the deadline for response to RFI as stated in the Schedule of Events. Responders mailing their responses should allow sufficient mail delivery time to ensure receipt of their response by the time specified. The response package must be delivered at the responder's expense to the RFI coordinator contract and address provided in section 2.1 of the RFI.

For courier delivery, the street address and phone number is as provided in 2.1 of the RFI. It is solely the responsibility of each responder to ensure that their response is delivered at the specified place and prior to the deadline for submission. Responses misdirected or otherwise received late may not be considered.

The DOTD requests that **five copies** of the responses be submitted to the RFI coordinator by the means and at the address specified. At least one copy of the response shall contain original signatures of those company officials or agents duly authorized to sign proposals or contracts on behalf of the organization. A certified copy of a board resolution granting such authority should be submitted if responder is a corporation.

2.5 Additional Instructions and Notifications to Responders

2.6 RFI Addenda/Cancellation

The DOTD reserves the right to revise any part of the RFI by issuing an addendum to the RFI at any time. Issuance of this RFI, or subsequent addendum, (if any) does not constitute a commitment by the DOTD to issue an RFP or any other process resulting in award of a contract of any type or form. In addition, the DOTD may cancel this informal process at any time, without penalty.

2.7 Ownership of Response

The materials submitted in response to this request shall become the property of the DOTD.

2.8 Cost of Preparation

The DOTD shall not be liable for any costs incurred by responders associated with developing the response, preparing for discussions (if any) or any other costs, incurred by the responder associated with this RFI.

ATTACHMENT I Scope of Services

Summary:

Professional services from a ISO 9002 certified laboratory to assist the Louisiana Department of Transportation in fluids analysis, field support training and data reporting and evaluation in an effort to reduce maintenance cost, make cost effective decisions, support equipment warranties, ensure fluid quality, and enhance preventative and predictive maintenance. The Department of Transportation and Development (DOTD), Section 51 & CCCD, operates eighteen (18) vessels which will participate in this program.

Scope of Services:

1. <u>Test Procedures for Routine Applications.</u> The selected laboratory shall identify trace elements (spectra-analysis in ppm, parts per million) to include iron, tin, sodium, chromium, silver, boron, molybdenum, nickel, magnesium, aluminum, vanadium, calcium, copper, titanium, barium, lead, silicon, phosphorus, zinc, manganese and potassium.

The selected laboratory shall not use spot batch checking or screening. The Louisiana Department of Transportation and Development may randomly re-test any samples to ensure test standards are maintained.

- A. Test Packages
 - A. Engine, Generator Oil Analysis
 - a. Spectrochemical (22 element) particle count w/ISO code
 - b. Fuel dilution
 - c. Glycol
 - d. Soot/insolubles % by weight, (TGA or LEM), %volume
 - e. Water %volume
 - f. Viscosity @ 100 degC, CST
 - g. Total Base number
 - B. Gear Oil Analysis
 - a. Spectrochemical (22 element) particle count w/ISO code
 - b. Viscosity @ 100 degC, CST
 - c. Total Acid Number
 - d. Water, % volume
 - e. Oxidation
 - f. Nitration.
 - C. Hydraulic Oil Analysis
 - a. Spectrochemical (22 element) particle count w/ISO code
 - b. Viscosity @ 100 degC, CST
 - c. Total Acid Number

- d. Water
- e. Particle count
- D. Coolant Analysis
 - a. Spectrochemical
 - b. Freeze point
 - c. Specific gravity
 - d. % Antifreeze
 - e. Nitrate
 - f. Appearance
 - g. Chlorides
 - h. Ph
 - i. Reserve alkalinity
 - j. Solids
 - k. Hardness
- E. Fuel Analysis Quick Test
 - a. Spectrochemical (12 elements, Fe, Ni, Pb, Cu, Si, Ph, Zn, Ca, Mg, Vn)
 - b. Sulfur Content % weight
 - c. Water contamination
- F. Fuel Analysis, 16oz Sampling
 - a. Cetane Index
 - b. Cloud Point
 - c. Algae & Bacteria (48 hr culture)
 - d. Distillation
 - e. Flash Point
 - f. B,S&W- sediment and water (centrifuge)
 - g. Sulfur Content
 - h. API Gravity
- 2. <u>Training.</u> The selected laboratory shall provide orientation and training for the Louisiana Department of Transportation's personnel within forty-five (90) days after award of contract, expenses paid by selected vendor. The laboratory shall provide personnel to meet with the Louisiana Department of Transportation officials to review the program in the event of problems and inefficiencies. The laboratory shall provide technical publication & materials needed to interpret the individual reports and provide technical assistance upon request when special problems are experienced with the analysis program.
- 3. <u>Supplies.</u> All sampling apparatus are subject to inspection, examination and test by the state. The type and size of sampling containers will not be changed without prior approval of the Louisiana Department of Transportation. The selected vendor shall be required to warehouse a complete stock of sampling containers at all times from which deliveries can be made. The state may perform testing to determine conformance with the requirements. The right is reserved to reject items which do not fully comply with the minimum requirements and require replacement of rejects at the laboratories expense.

- A. Sample Kits
 - a. Sample mailing container, preprinted prepaid postage
 - b. Sample bottles
 - c. Preprinted sample information form/sticker
- B. Extraction Device
 - a. Hand operated pumping device used to draw sample from equipment without equipment shutdown.
- 4. Reporting and Invoicing. The selected laboratory shall provide printed reports mailed with the invoice for payment purposes once monthly. The vendor must provide an internet service which allow viewing and printing, exporting data in Microsoft Excel and downloading reports in Word, PDF and bitmap formats. The online service must also allow graphing data trends between selected dates and must provide tools for processing management reports. Every report shall be clear & legible & will be completed and posted via internet service within 48 hours of sample receipt (post, fax and telephone critical results). Every report shall include an analysis, maintenance recommendations for each abnormal report item. The reporting system shall have a method for determining the urgency (severity status) of each individual recommendation. Top ranges must allow differentiation by unit type, manufacturer, and model, application usage, lube manufacturer and type, viscosity, filter configuration and vessel. The analysis report shall include the current along with the last six (6) previous reviews. All abnormal and critical reports must be faxed and followed up by phone, to the Louisiana Department of Transportation's within 72 hours of the analysis results. The selected laboratory shall provide all software and execute procedures to digitally transmit the data to the Department of Transportation via internet. The Department of Transportation will provide a list of personnel, their email addresses, and phone numbers for reporting purposes.
- 5. <u>Equipment Registration</u>. The selected laboratory will register, on vendor provided registration forms, all Louisiana Department of Transportation equipment by unit id numbers and vessel codes plus other required data. Subsequent sampling need only show id number, date, hours on unit and hours on the oil. All other data is to be constant and changed only when requested by the Louisiana Department of Transportation.
- 6. <u>Testing for Engine Coolant to include the following:</u> Freeze Point- ASTM D1177
 % Antifreeze- Calculated
 Nitrate- Hack or Titration
 Appearance- visual inspection
 Reserve Alkalinity- ASTM D1121
- <u>Testing for Diesel Fuel to include the following:</u> Sulfur (% by weight)-ASTM D1552 Water (% by volume)-ASTM D1796 Flash Point- ASTM 3828

Appearance- visual inspection Distillation- ASTM D86 Algae & Bacteria- 48 hour AGAR Culture

 Testing for Marine Diesel Engine Oil test to include the following: Water Contamination- crackle method, ASTM D95 or %by weight ASTM D4928 SAE Grade-viscosity equivalent Viscosity at 100 degC in centistokes- ASTM D445 Fuel Dilution (% by volume- ASTM D3524 Fuel Soot (% by volume) - ASTM 1131 Total Base Number, TBN- ASTM D2896, D4739 Total Acid Number, TAN- ASTM D644, D974 Particle Count- ISO 4406 Spectrographic Metal Scan- ASTM D6595, D5185

Qualification of Consultant:

The laboratory must be ISO 9002 certified for all fluid sampling analysis. The laboratory shall use a department of defense (DOD) approved emission spectrometer, such as a braid model fas-2, or devices approved by DOD as equal in efficiency and dependability to perform emission spectrographic testing, ASTM 5185. The organization shall be capable of providing the described services within the specified timeframes.

The laboratory must have a table of standards capable of automatically highlighting abnormal values based on established top range. The laboratory must calculate a percent of change from sample to sample, and graphically display the history of the data.

Anticipated Term of Contract:

Three (3) years.

Estimated Quantities:

- 500 samples processed annually
 - o 400 oil samples
 - o 60 fuel samples
 - o 30 coolant samples
 - o 10 water samples