
TERMS OF REFERENCE FOR APPOINTMENT OF A SERVICE PROVIDER FOR SAMPLING AND TESTING OF PETROLEUM PRODUCTS IN THE SOUTH AFRICAN PETROLEUM INDUSTRY IN TERMS OF REGULATIONS REGARDING PETROLEUM PRODUCTS SPECIFICATIONS AND STANDARDS NO. R. 627 FOR THE DEPARTMENT OF ENERGY FOR A PERIOD OF TWENTY FOUR (24) MONTHS.

1 BACKGROUND

- 1.1 The Chief Directorate; Petroleum Compliance Monitoring and Enforcement (PCME) is located within the Petroleum and Petroleum Products Regulation Branch at the Department of Energy. The CD; PCME mandate is to ensure that petroleum operators in the South African petroleum industry comply with the Petroleum Products Act, 1977(Act No. 120 of 1977) as amended and its Regulations.
- 1.2 Prior to 2006, South Africa did not have compulsory fuel specifications and standards for all Petroleum Products produced and sold across the country. Oil companies were at a leeway to produce, export and import petroleum products such as petrol and diesel at any level of specifications and standards. When the process of introducing cleaner fuels in the South African petroleum industry began, the focus was on the reduction and complete removal of lead in petrol and reduction of sulphur content in diesel.
- 1.3 During 1920s, lead alkyl has been supplemented to petrol as an octane boost as well as preventing engine knock. Not only did it occur in South Africa, throughout the 1970s, lead alkyl was used globally until such time when its negative health effects were deciphered resulting into a total ban of lead additives in petrol. Nonetheless, South Africa was not leading in pioneering fuel quality improvement in the world; it followed countries such as United States of America, Canada and Japan who began with the removal process in the mid-1970s.

- 1.4 Sixteen years after the inception of removal process in the developed countries, South Africa started by reducing lead levels in petrol from 0.836gPb/l to 0.60gPb/l. Subsequently, lead additive continued to be reduced until complete ban in January 2006.
- 1.5 Post 2006, South Africa began to experience influx of new vehicle technology that uses catalytic converters in order to improve air quality by restraining vehicle exhaust emission to the atmosphere. Lead additive is prone to damaging catalytic converters which then results into substantial vehicle emissions. During this period, the market also experienced reduction of sulphur levels in diesel. For example, diesel sulphur content was reduced from 5 500 ppm to 3 000 ppm in 2001 and further reduced to 500 ppm in 2006, with 50 ppm grade also being introduced in some parts of the country. And sulphur content on unleaded petrol (ULP) was also reduced from 1000 ppm to 500 ppm.
- 1.6 The quality of fuel may result in the improvement of vehicle technology in the country. The following fuel parameters to be of paramount importance; Petrol: to reduce level of benzene in order to reduce carcinogenic emissions, reducing volatility to reduce evaporative emissions, reducing sulphur to improve catalytic converter efficiency and reduce particulate matter (PM); Diesel: to reduce sulphur to improve particulate matter, oxides of sulphur (SO_x), oxides of nitrogen (NO_x) emissions, tightening total aromatics, final boiling point and cetane number.
- 1.7 According to Energy Statistics compiled by Energy Planning Chief Directorate, in the DoE, the annual consumption of petrol, diesel and illuminating paraffin from **January to December 2013** was: **Petrol** 11 152, 866, 181 billion litres, **Diesel** 11, 890,350, 007billion litres and **Paraffin** 529,971, 037 million litres.

1.8 The reality in the South African context is that local demand exceed the supply, hence the shortfall is met through imports. In executing its mandatory responsibilities, the CD; PCME undertakes to appoint a competent and appropriately resourced service provider (with own laboratory) to conduct fuel sampling and testing exercise on behalf of the DoE. The objective of the project is to continue monitoring compliance with regard to fuel specifications and standards and gather further information about compliant and non-compliant status of petroleum products entering the country. The project will provide a clearer compliance picture of what is actually happening in the petroleum industry with regard to production of fuel quality and the entry and exit of such products in the South African market.

1.9 The project further aims to build on the previous sampling and testing conducted which will enable the creation of a compliance database that will inform future policy and regulation formulation in terms of fuel specifications and standards as well as enhance compliance monitoring and enforcement generally. With this objective in mind, it is projected that the fuel sampling and testing project will valuably contribute to future practical interventions by the DoE to assist oil companies in compliance issues and enable them to conduct their operations without contravening the Petroleum Products Act, 1977(Act No. 120 of 1977) as amended and its Regulations.

2 OBJECTIVES OF THE PROJECT

2.1 To continue monitoring compliance to fuel specifications and standards regulations by the South African Petroleum Industry;

2.2 To determine the magnitude of petroleum products below minimum standards;

2.3 Identifying challenges confronting the operators with regard to compliance and make policy recommendations based on the findings of the project; and

2.4 To continue building fuel specification and standards compliance data in South Africa for future use and referencing.

3 SCOPE OF WORK

The successful service provider is expected to perform the following functions as a minimum deliverable; all the items referenced in the Scope of Work below and to adequately address all the listed objectives:

- 3.1. Collect a minimum of 18 samples of petrol and diesel (combined) per province every month of the selected sites in a particular financial year and conduct laboratory analysis (testing) of all samples. A total minimum of each specified petroleum product sampled and tested should amount to 1892 units per annum;
- 3.2 Testing properties in Petrol must include appearance, octane, aromatics content, benzene, manganese (metal content) and sulphur content;
- 3.3 Testing properties on Diesel must include appearance, CFPP (cold filter plugging point), sulphur content, total contamination and water;
- 3.4 Preparation of a report summarizing the results of analytical testing and comparing the results to relevant fuel specifications and standards as per Regulations;
- 3.5 5 litres of each sample will be collected from each selected site to allow excess sample to be retained by the service provider for a period of two (2) years after the end of the financial year under review for potential future compositional analysis;
- 3.6 Develop comprehensive sampling plans and methodology designed to represent specified populations of service stations. The sampling methods and choice of sample sizes must achieve adequate randomness and representativeness. Proposed sampling plans and methodologies shall be submitted to DoE for approval;

3.7 In consultation with the Project Manager, the service provider shall handle testing results in accordance with applicable confidentiality and law. The service provider shall adhere to the same confidentiality level that DoE personnel are required to maintain, and shall take steps through which all persons employed by the service provider and any sub-contractors will be made aware of the service provider's obligations for protection of confidentiality; and

3.8 At the end of the contract the service provider will make, if any, recommendations to the DoE for future policies and regulations design as well as compliance monitoring and enforcement strategies.

4 REPORTING REQUIREMENT AND PROGRESS MEETINGS

4.1 It is envisaged that the DoE will require an initial meeting with the successful bidder(s) to agree on the project process and options to be investigated. Reporting to DoE will be through the Project Manager: Deputy Director: Petroleum Inspectorate, and shall be done in the following manner:

4.1.1 Executive summary of the report (Word and PowerPoint);

4.1.2 Hard and electronic copies monthly reports including annexure of laboratory results;

4.1.3 Report on inspectors skills transfer (referred to in paragraph 10.6 below) on the sampling method used;

4.1.4 The service successful service provider and the DoE will have monthly meetings;

5 PAYMENTS

5.1 The DoE will not make an upfront payment to a successful service provider. Payment will only be made in accordance to the delivery of service that will be agreed upon by both parties and upon receipt of an original invoice.

6 COMPLETION DATE

6.1 The duration of the project is twenty four (24) months after signing of the contract with the successful service provider.

7 COMPULSORY INFORMATION SESSION

7.1 Briefing session will be held in on **05 December 2014** at **10H00**, at the Department of Energy, at 192 Corner Paul Kruger and Visagie Streets (Matimba Building)

8 TAX CLEARANCE CERTIFICATE

8.1 The bidder is required to submit an original and valid Tax Clearance Certificate issued by the South African Revenue Services together with the bid documents before the closing date and time of the bid. Failure to comply with this condition will invalidate the bid

9 CONFIDENTIALITY OF INFORMATION

9.1 The names of all the members of the team must be disclosed for the project prior approval of DoE. Any changes, replacements and/or additions should be submitted for prior approval of DoE.

9.1.1 A bidder must disclose if affiliated with a firm or entity that has been hired (or is proposed to be hired) by DoE or the lender.

10. TERMS AND CONDITIONS

10.1 A service level agreement will be entered into with the successful service provider which will include, inter alia, obligations of the DoE and the successful service provider;

10.2 The DoE reserves the right to appoint more than one service provider for the project;

- 10.3 The DoE reserve the right to instruct the service provider to sample and test petrol or diesel within 24 hours as and when necessary and/ or in an emergency situation;
- 10.4 The successful service provider must have own laboratory for testing to ensure the integrity of samples tested;
- 10.5 The DoE Project Manager will from time to time randomly choose any tested samples for re-testing and conduct physical inspection at the service provider's laboratory where samples are being tested;
- 10.6 The successful service provider must transfer skills in sampling and testing area through targeted training provided by accredited institution of higher learning and/ or relevant SITA.
- 10.7 The successful service provider must create employment opportunities within the duration of the contract.

12. EVALUATION METHODOLOGY

12.1 Cost

- 12.1.1 The service provider will be requested to provide a quote regarding the work to be undertaken for this project;
- 12.1.2 The quotation value must present the total cost on the project which will be payable by the DoE to the service provider upon satisfactory work delivery, and as per the agreed payment schedule;
- 12.1.3 The total cost must include contingencies for ***re-sampling and testing of petroleum product, as and when required, and costs for buying of product*** at a service station for sampling and testing purposes which will be remunerated in accordance with the regulated prices; and
- 12.1.4 The total cost must be VAT inclusive and should be quoted in South African Rands. This should include payment schedules linked to deliverables. Disbursements will be in equal payments according to set milestones.

12.1.5 The proposed payment schedule that does not match the quantity and quality of work done will work against the proposal.

12.2 Broad-Based Black Economic Empowerment

12.2.1 Provisions of the Preferential Procurement Policy Framework Act (PPPFA) 2011 and its Regulation will apply in terms of awarding points.

12.2.2 Bidders are required to submit original and valid B-BBEE Status Level Verification Certificates or certified copies thereof together with their bids, to substantiate their B-BBEE rating claims.

12.2.3 Bidders who do not submit their B-BBEE status level verification certificates or are non-compliant contributors to B-BBEE will not qualify for preference points for B-BBEE.

12.2.4. A trust, consortium or joint venture must submit a consolidated B-BBEE status level verification certificate for every separate bid.

12.2.5 Accounting Officers must ensure that the B-BBEE Status level Verification Certificates submitted are issued by the following agencies:

12.2.5.1 Bidders other than EMEs

- (a) Verification agencies accredited by ECSA
- (b) Registered auditors approved by IRBA

12.2.5.1 Bidders who qualify as EMEs

- (a) Accounting officers as contemplated in the CCA; or
- (b) Verification agencies accredited by SANAS; or
- (c) Registered auditors (Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates).

12.3. The table below depicts the B-BBEE status level of contribution:

B-BBEE Status Level of Contributor	Number of points (90/10 system)
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

12.4 Company Experience

12.4.1 Service providers should at least have ten (10) years' experience in the fuel testing, sampling and analysis, deep knowledge of the South African petroleum industry, industry trends and related policies and legislations. Demonstrate capability of analysing fuel samples using internationally accepted methods, good ability to collate and interpret data and make recommendations thereof, demonstrate skills in project management, demonstrate communication, writing and presentation skills.

12.4.2 Content supported by proof from 3 contactable referees indicating that similar project was executed should be attached. Failure to attach proof will result in the service provider forfeiting points.

12.5 Team leader and team members experience

12.5.1 Team Leader must have at least seven (7) years experience and individual team members must have at least three (3) years experience in the fuel testing, sampling and analysis, deep knowledge of the South African

petroleum industry, industry trends and related policies and legislations, demonstrate capability of analysing fuel samples using internationally accepted methods, good ability to collate and interpret data and make recommendations thereof, demonstrate skills in project management, demonstrate communication, writing and presentation skills.

12.5.2 CV's of the team leader and team members must be attached to the technical proposal as proof.

12.6 Qualification

12.6.1 Team leader and team members must possess a minimum of a bachelor's degree in the relevant discipline (i.e Chemistry or Petrochemical engineer). Copy of certified certificates of the team leader and team members must be attached to the technical proposal as proof. **Failure to attach proof, bidders will forfeit functionality points.**

12.7 Project Plan

12.7.1 Project plan with intermediate and final outputs and identified timeframes / milestones;

12.7.2 Proposed Methodology;

12.7.3 Management of the project; and

12.7.4 The successful service provider will be required to present their Project Execution Plan.

12.8 Skills Transfer Plan

12.8.1 Service providers are required to demonstrate how they will transfer skills to internal officials regarding the project.

13. EVALUATION CRITERIA

13.1 Bids will be evaluated on 90/10 point system as outlined in the PPPFA of 2011.

The proposals will be evaluated in two phases:

Phase 1: Bidders will be evaluated based on functionality. The minimum threshold for functionality is **70 out of 100 points**. Bidders who fail to meet minimum threshold will be disqualified and will not be evaluated further for price points.

No	Criteria	Weights
1	<p>Company Experience:</p> <ul style="list-style-type: none"> ❖ Service providers should at least have ten (10) years experience in the fuel testing, sampling and analysis, deep knowledge of the South African petroleum industry, industry trends and related policies and legislations. ❖ Demonstrate capability of analysing fuel samples using internationally accepted methods, good ability to collate and interpret data and make recommendations thereof. ❖ Demonstrate skills in project management, communication, writing and presentation skills. ❖ Proof from 3 contactable referees indicating that similar project was executed should be attached. 	<p>25</p> <p>10</p> <p>5</p> <p>5</p> <p>5</p>
2	<p>Team leader and team members:</p> <ul style="list-style-type: none"> ❖ Team Leader must have at least seven (7) years experience in fuel testing, sampling and analysis, deep knowledge of the South African petroleum industry, industry trends and related policies and legislations, demonstrate capability of analysing fuel samples using internationally accepted methods, good ability to collate and interpret data and make recommendations thereof, demonstrate skills in project management, demonstrate communication, writing and presentation skills. ❖ Individual team members must have at least three (3) years experience in fuel testing, sampling and analysis, deep knowledge of the South African petroleum industry, industry trends and related policies and legislations, demonstrate capability of analysing fuel samples using internationally accepted methods, good ability to collate and interpret data and make recommendations thereof, 	<p>20</p> <p>10</p> <p>5</p>

	demonstrate skills in project management, demonstrate communication, writing and presentation skills. ❖ CV's must be attached as proof.	5
3.	Qualifications: ❖ Team leader must possess a minimum of a bachelor's degree in the relevant discipline (i.e. Chemistry or Petrochemical engineer). ❖ Team members must possess a minimum of a bachelor's degree in the relevant discipline (i.e. Chemistry or Petrochemical engineer). ❖ Proof of certified certificates must be attached.	15 8 5 2
4	Project Plan: ❖ Detailed Project/ Execution Plan and Management should be attached. ❖ Project plan with intermediate and final outputs and identified timeframes/milestones; ❖ Proposed Methodology ❖ Management of the project	30 10 10 5 5
5	Skills Transfer ❖ Service providers are required to demonstrate how they will transfer skills to internal officials regarding the project.	10
Total		100

For purpose of evaluating functionality, the following values will be applicable:

0=	Very Poor	Do not meet the requirements
1=	Poor	Will not be able to fulfil the requirements
2=	Average	Will partially fulfil the requirements
3=	Good	Will be able to fulfil the requirements
4=	Very Good	Will be able to fulfil better in terms of the requirements adequately
5=	Excellent	Will fulfil the requirements exceptionally

Phase 2:

Price	90
B-BBEE compliance	10

14. FORMAT AND SUBMISSION OF THE PROPOSAL

14.1 All the standard bidding documents (SBD) must be completed in all respects by bidders. Failure to comply will invalidate a bid.

14.2 Bidders are requested to submit two (2) copies: 1 original plus copy of the proposal and bid documents.

15. CLOSING DATE

15.1 Proposals must be submitted on or before **11 December 2014 at 11H00**, at Department of Energy, 192 Corner Visagie and Paul Kruger Streets, Pretoria (Matimba Building) in the bid box marked Department of Energy. **No late bids will be accepted.**

16 ENQUIRIES

16.1 All technical enquiries to be directed in writing to:

Mr Letshego Mabena

Tel: 012- 406 7579

Email: Letshego.Mabena@energy.gov.za

Mr Ngwako Kekana

Tel: 012 406 7583

Email: Ngwako.kekana@energy.gov.za

16.2 All bid enquiries should be directed to:

Ms Rachel Moerane

Tel: 012- 406 7747

Email: Rachel.Moerane@energy.gov.za

Ms Daisy Maraba

Tel: 012 406 7748

Email: daisy.maraba@energy.gov.za