
TERMS OF REFERENCE FOR THE 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 TWELVE (12) MONTHS

1 BACKGROUND

- 1.1 Section 24 in the Bill of Rights, Constitution of the Republic of South Africa guarantees everyone to an environment that is not harmful to their health or wellbeing, and to have the environment protected, for the benefit of present and future generations, through reasonable legislation and other measures that prevent pollution and ecological degradation. The Constitution directs that National legislation must be enacted to give effect to rights enshrined in the Bill of Rights.
- 1.2 The Department of Energy (DoE) is responsible for ensuring exploration, development, processing, utilisation and management of South Africa's energy sources. As the country's economy continues to grow, energy is increasingly becoming a key focus. In realising the Constitutional imperatives and the role of energy in the development of economy, the Minister of Energy has under sections 2(1)(a) and 12C(1)(a)(vi), (e) and (f) of the Petroleum Products Act, 1977 (Act No. 120 of 1977) ("the PPA"), made Regulations Regarding Petroleum Products Specifications and Standards, No. R 627, of 23 June 2006 ("the Regulations"), to set out minimum specifications and standards for petroleum products that may be sold for consumption in the Republic of South Africa ("RSA").
- 1.3 The purpose of the PPA, *inter alia*, is to increase efficiency, economic viability, accelerate transformation in the South African petroleum industry and to promote the sale of quality petroleum products in an effort to mitigate against harmful effects and pollutants emitted from petroleum products (e.g. high sulphur content in Diesel and Petrol), and to mitigate the effects of global warming, evident from erratic weather patterns and current persistent draughts affecting the country's socio-economic status. Further, to protect the environment, health and protection of private property in the form of motor vehicles, commercial and industrial machinery.

- 1.4 To achieve the above, the DoE issues operating licenses to refiners, wholesalers and retailers of petroleum products, monitors compliance to conditions of licences attached to all the above-mentioned categories of licences, and monitors compliance to legislative requirements applicable in the industry. The DoE has limited information about performance of petroleum operators in terms of compliance to Regulations, R627 of 2006. It is against this backdrop that the DoE undertakes to appoint a suitably qualified service provider to conduct sampling and testing of petroleum products to establish compliance status by operators in the petroleum industry, to check the quality of fuel that circulate or is sold in the RSA, and obtain broader understanding of the challenges confronting operators in terms of compliance to fuel quality.
- 1.5 Fuel quality monitoring programme in the country will deal with challenges regarding identification of fuel that do not meet minimum quality specifications. Failure to monitor fuel quality will result in the influx of fuel that are below the set specifications and standards, and such will, *inter alia*, reduce the country's efforts against global warming and air pollution control. Furthermore, there are unscrupulous petroleum operators in our midst who smuggle petroleum products below the set specifications into the country with the deliberate purpose to evade tax such as custom, excise or import duties. The foregoing has negative impact on revenue collection for the country in general.

2. DISCUSSION

- 2.1 The Petroleum Products Amendments Act, 2003 (PPA), introduced in 2006, regulated certain aspects of transport fuel specifications, with application to the South African National Standards (SANS). These ensure that the consumer has choice and is guaranteed a fit-for-purpose product, while at the same time certain environmental aspects are also addressed in the following manner:

2.1.1 Petrol and diesel must be supplied to regulated specifications;

2.1.2 Suppliers must label fuel dispensers with the mandated label (grade and quality);

2.1.3 The consumer has a right to request information about the product; and

2.1.4 The DoE has the mandate to sample the fuel and check that it meets the regulated specifications (Emphasis).

- 2.2 The Regulations provide buyers of petrol and diesel with an additional layer of protection by ensuring that the fuel consumed anywhere in the country is considered to be "fit for purpose" at the point of sale. Associations such as the Automobile Association (AA) in South Africa also has a key role to play in ensuring that consumers are protected and that their views are heard, in addition to those of the new car and the fuel marketers. The AA, like all other relevant stakeholders, has specific interest in fuel quality and consistency, price and competition within the market.
- 2.3 All fuel is required to meet the regulated quality "ex nozzle", that is, at the point of sale or supply. Some minor changes occur with regard to fuel properties during storage and distribution and such is inevitable. The fuel suppliers/ marketers have therefore developed exchange specifications for refined product. These are more comprehensive and in some cases more stringent than the regulatory requirements. These exchange specifications reflect more specific fit-for-purpose requirements (such as geographical and atmospheric variations) and allow some operating margin for quality changes between storage and sale.
- 2.4 The interaction between transport fuel (petrol and diesel), vehicles and the environment is complex, yet critical. It is important that this interaction is clearly understood within the specific context of the local environment to ensure the achievement of the desired outcome - namely cleaner air – without prejudice to the requirement for affordable transportation. Air pollution continues to affect the quality of air that we breathe and this is attributed to the major sources of urban air pollution – e.g. motor vehicles, commercial industries and domestic fuel use.

- 2.5 Fuel quality monitoring is a key element for consumer protection currently provided for in terms of the Regulations. We acknowledge the critical role played by oil majors in testing all batches of fuel in all critical levels of distribution channels and prior to sale to ensure compliance with the prescribed specifications. However, it is still equally critical for the regulator to provide a measure of protection to all consumers of petroleum products through sampling and testing of products for compliance to minimum specifications in the furtherance of aspirations to the Consumer Protection Act, 2008.
- 2.6 Energy Statistics compiled by Energy Planning Chief Directorate, within the DoE indicates that fuel consumption for quarter 1 and 2 of 2016; **Petrol (All grades) January to March 2016; consumption 2 573 714 846** billion litres and **April to June 2016; consumption 2 549 036 068** billion litres, **Diesel (All grades) January to March 2 672 consumption 264 843** billion litres and **April to June 2016; consumption 2 825 373 083 billion litres**. The reality in the South African context is that local demand exceed supply, hence the shortfall is met through imports. Importation of petroleum products thus presents an opportunity for off specification products to find way into the country hence the importance of fuel quality monitoring.
- 2.7 Fuel quality monitoring is of strategic importance and critical to safeguard the interest of motorists, the environment and public health. Value proposition is that the programme will assure cleaner product, fuel quality compliant industry and transparency of the fuel specification of products consumed in the country. Economic benefits are derived from consumers receiving quality products in areas of fuel quality, vehicle efficiency and vehicle maintenance.
- 2.8 The behavior of petroleum community, whether due to ignorance, weaknesses, recklessness or deliberate non-compliance only means that instances of failure to comply with the law will exist. Hence the need to monitor compliance and to have administrative structures that will enable the Regulator to keep non-compliance with petroleum laws to a minimum. The aim is to ensure that compliance takes place in such a manner that inspires confidence to the regulated community, citizens of the country and business at large.

3. OBJECTIVES OF THE PROJECT

- 3.1 Monitor fuel quality as mandated by Regulations Regarding Petroleum Products Specifications and Standards No. R 627, of 23 June 2006 in the South African Petroleum Industry;
- 3.2 Introduce test elements in the testing of petroleum products to determine extent of non-compliance in petroleum products;
- 3.3 Prioritise high risk areas to establish product sources, extent and/ or magnitude of non-compliance to prescribed fuel specifications and standards;
- 3.4 Advance advocacy on fuel sampling and testing, and engage petroleum industry players to determine the reasons and extent of product failures specifically focusing on retail sites owned by independents; and
- 3.5 Continue building regulatory fuel quality monitoring database in South Africa for future use and referencing.

4. SCOPE OF WORK

- 4.1 The successful service provider is expected to perform the following functions as a minimum deliverable; all the items referenced in the Scope of Work herein and to adequately address all the listed objectives:
 - 4.1.1 Collect a minimum total of 1080 petrol and diesel annually (540 diesel and 540 petrol) from selected sites, to be conducted monthly in the different provinces (e.g North West, Northern Cape, Western Cape, Eastern Cape, Limpopo, KwaZulu Natal, Mpumalanga, Gauteng and Free State) as informed by risks, provincial dynamics and the prevalence of non-compliance. A total of each specified petroleum product sampled and tested should amount to 1080 units tested for specifications per annum;
 - 4.1.2 Testing properties in ***Petrol must include, octane, aromatics content, benzene, manganese (metal content), sulphur content and distillation;***

- 4.1.3 Testing properties on ***Diesel must include, sulphur content, total contamination, water, flash point, distillation and fuel marking;***
- 4.1.4 Preparation of a report summarizing the results of analytical testing and comparing the results to relevant fuel specifications and standards as per Regulations, R627 of 2006. Monthly report must capture monthly trend analysis per province;
- 4.1.5 2.5 litres of each sample will be collected from each selected site to allow excess sample to be retained for re-sampling, if necessary. Passed samples shall be retained for of three (3 months) after date of analysis and failed samples shall be retained for a period six (6) months after date of analysis for potential future compositional analysis and as evidence in the event of non-compliance prosecution;
- 4.1.6 Use appropriate container compliant to SABS approved methodology and consistent with international best practice;
- 4.1.7 Develop site sampling manual incorporate HSE requirements for use by DoE and service provider;
- 4.1.8 Develop clearly defined dispute resolution procedure in the event of any contestation of samples results;
- 4.1.9 Develop comprehensive sampling schedules and testing criteria (compliant to SABS approved methodology, i.e. ISO 4295). The sampling methods and choice of sample sizes must achieve randomness and representativeness. Proposed sampling schedule and methodologies shall be subject to DoE approval;
- 4.1.10 Develop comprehensive logistical plan for transportation of samples to from source to laboratory to ensure sample integrity is maintained;
- 4.1.11 Develop comprehensive plan/ procedure to deal with any eventuality resulting in sample(s) being compromised in any form or manner; and

- 4.1.12 Service provider will be required to conduct pre-site sampling inspection exercise to determine site sampled and test result, and prepare regionalised trend analysis on quarterly basis.
- 4.2 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.
- 4.3 At the conclusion of the project, the service provider shall make recommendations to the DoE on the sampling and testing project for future policy and regulations design, as well as compliance monitoring and enforcement strategies.
- 4.4 All information generated by the service provider under the fuel quality monitoring project shall be and remains the property of the DoE and any such request for access shall be made directly with the department.

5. REPORTING REQUIREMENT AND PROGRESS MEETINGS

- 5.1 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 and shall be done in the following manner:
- 5.1.1 Executive summary of the report (Word, Excel and/ or PowerPoint);
- 5.1.2 Hard and electronic copies monthly reports including Annexure of laboratory results (e.g Certificates of Analysis);
- 5.1.3 Report on skills transfer (referred to in paragraph 10.6 below) and any other subsequent fuel quality monitoring best practices; and
- 5.1.4 Report on employment creation for the duration of the project and any opportunities beyond the contract.

6. PAYMENTS

- 6.1 The DoE will not make an upfront payment to a successful service provider. Payment will only be made in accordance with payment plan and delivery of service (i.e. consolidated monthly report & certificates of analysis), and upon receipt of an original invoice.

7. COMPLETION DATE

- 7.1 The duration of the project is twelve (12) months after signing of the contract with the successful service provider and may be extended at the sole discretion of the DoE.

8. COMPULSORY INFORMATION SESSION

- 8.1 Briefing session will be held in on **10 APRIL 2017 at 10H00**, at the Department of Energy, 192 Corner Paul Kruger and Visagie Streets.

9. TAX CLEARANCE CERTIFICATE

- 9.1 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.

10. CONFIDENTIALITY OF INFORMATION

- 10.1 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.
- 10.1.1 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.

11. TERMS AND CONDITIONS

- 11.1 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;
- 11.2 The DoE reserves the right to appoint more than one service provider for the project;
- 11.3 The DoE reserves the right to instruct the service provider to sample and test petroleum products and have results available within 24 hours for as and when required and/ or in an emergency situation;
- 11.4 The successful service provider must have own laboratory for testing to ensure the integrity of samples tested is maintained;
- 11.5 The successful service provider must develop detailed project schedule/ plan for the sampling and testing project;
- 11.6 The successful service provider must create a database on the work performed under the contract and create a link for DoE use for ease retrieval of documents;
- 11.7 The successful service provider must develop a detailed disposal process/ procedure for both passed and failed samples. The disposal process will be subject to DoE approval;
- 11.8 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;

- 11.9 The successful service provider must transfer skills in the field of fuel quality monitoring and compliance enforcement during the duration of the contract through targeted training provided by accredited institution of higher learning and/ or relevant SITA. Further, such training shall be conducted in line with Skills Development Act 2008, as amended;
- 11.10 The successful service provider must conduct quarterly audit of retained samples and provide report of same to the Project Manager for further verification;
- 11.11 The successful service provider must create meaningful employment opportunities within the duration of the contract and submit proof of such to the DoE within the first three months of assuming work under the contract;
- 11.12 All fuel sampling and testing to be in line with International Best Practice and SABS petroleum / fuel industry standard; and
- 1.13 The service provider will be required to strictly adhere to DoE sampling and testing Standard Operating Procedure.

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 and such should include travelling and accommodation cost;
- 12.1.2 The quotation value must present clear indication of budget allocated for the duration of the project which will be payable by the DoE to the service provider upon satisfactory work delivery, provision of monthly report and certificates of analysis;

- 12.1.3 The total cost of the project must include **costs for buying of fuel (Diesel and Petrol)** at all service stations for sampling and testing purposes which will be remunerated in accordance with the regulated prices;
- 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; and
- 12.1.5 The proposed payment schedule that does not match the quantity and quality of work done will work against the proposal.
- 12.1.6 A plan on how the minimum of 25 + 1 % of BBBEE ownership will be achieved.

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. In a case of Exempted Micro Enterprise, the following documents **MUST** be:
Submitted
- (a) Verification agencies accredited by SANAS; and
 - (b) Registered auditors approved by IRBA.

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, industry best practices and legislations. Demonstrate capability of analysing fuel samples using internationally accepted best 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 three (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 a minimum of five (5) 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 time frames / 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 DoE petroleum inspectorate team 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"> (i) 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. (ii) Demonstrate capability of analysing fuel samples using internationally accepted methods, good ability to collate and interpret data and make recommendations thereof. (iii) Demonstrate skills in project management, communication, writing and presentation skills. (iv) Proof from 3 contactable referees indicating that similar project was executed should be attached. 	<p>30</p> <p>10</p> <p>10</p> <p>5</p> <p>5</p>
2	<p>Team leader and team members:</p> <ul style="list-style-type: none"> (i) 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 	<p>25</p> <p>10</p>

	<p>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.</p> <p>(ii) Individual team members must have at least five (5) 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.</p> <p>(iii) CV's must be attached as proof.</p>	<p>10</p> <p>5</p>
3.	<p>Qualifications:</p> <p>(i) Team leader and team members must possess a minimum of a bachelor's degree in the relevant discipline (i.e. Chemistry or Petrochemical engineer).</p> <p>(ii) Proof of certified certificates must be attached.</p>	<p>15</p> <p>10</p> <p>5</p>
4	<p>Project Plan: Detailed Project/ Execution Plan and Management should be attached.</p> <p>(i) Project plan with intermediate and final outputs and identified timeframes/milestones;</p> <p>(ii) Proposed Methodology; and</p> <p>(iii) Management of the project.</p>	<p>30</p> <p>10</p> <p>10</p> <p>10</p>
Total		100

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

1=	Very poor	Will not be able to fulfil the requirements
2=	Poor	Will partially fulfil the requirements
3=	Average	Will be able to fulfil the requirements
4=	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 **20 APRIL 2017 at 11H00**, at Department of Energy, 192 Corner Visagie and Paul Kruger Streets, Pretoria 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. Daisy Maraba

Tel: 012 406 7748

Email: daisy.maraba@energy.gov.za

Ms. Leah Mnguni

Tel: 012 406 7703

Email: Leah.mnguni@energy.gov.za