## **Scope Brief**

### **Abu Dhabi Odorous Gases Monitoring Network**



#### INTRODUCTION

Environment Agency – Abu Dhabi's (EAD) requires the services of a consultant to create an "Abu Dhabi Odorous Gases Monitoring Network". This consultant is expected to install operate and maintain fixed and mobile odorous gases detecting devices to provide continuous real-time monitoring data and odorous gases tracking in areas near odor-generating facilities and activities.

### The expected outcomes of this project are:

- Propose an innovative ideas, technologies and technique to measure, monitor and manage odour in Abu Dhabi Emirate.
- Purchase, install, operate and maintain EAD fixed and mobile odorous gases detecting devices network, these devices should be accurate odour monitoring equipment specially developed to monitor critical toxic and hazardous odour parameters;
- Develop a comprehensive odour management and information dissemination solution (system) for use in supporting EAD's environmental regulatory compliance and emergency response programs;
- Provide EAD and the government with continuous, accurate and reliable "real-time" odour and meteorological monitoring data at a high capture rate;
- Provide EAD and the government with a monitoring system can act as an alarm system in cases of accidental releases of odour pollutants;
- Measure and report odourful parameters like Sulfur Dioxide (SO<sub>2</sub>), Hydrogen sulphide (H<sub>2</sub>S), Ammonia (NH<sub>3</sub>), Methyl Mercaptan, TVOC (Benzene, Toluene, Xylene), Formaldehyde (CH<sub>2</sub>O), Nitrogen Dioxide (NO<sub>2</sub>), Chlorine (Cl<sub>2</sub>)..etc.
- Measure meteorological parameters like wind speed, wind direction, temperature and humidity to serve the monitoring network;
- Proper identification of odour sources and the implementation of appropriate mitigation control strategies as part of EAD's regulatory compliance program to reduce the impacts from these sources:
  - Landfills;
  - Waste Transfer Stations;
  - Sewage Treatment Plant;
  - Agriculture;
  - Animal By-Products Processing and livestock farms;
  - Composting Facilities;
  - Food and Drink Industry;
  - Oil and Gas Activities;

مفتوح - Classification: Open

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- Chemical Facilities;
- > Others.
- reduce nuisance complaints from the public;
- · assess and evaluate the effectiveness of odour abatement;
- conduct a measurement of odour emissions across all types of industry;
- conduct an odour plume dispersion and odour source backtrack when will be requested;
- assist EAD to set an odour standard that comply with the national and international technical and quality standards;
- visit the key polluting facilities in Abu Dhabi Emirate to assess the current satiation and plan for needed action plan;
- establish odour monitoring and management framework;
- develop technical resources related to odour monitoring and management (SOP, guidelines, protocols, training material, etc.);
- · training and capacity building of staff;
- develop, enhance and adapt core odour input datasets;
- develop professional reports monitoring outputs; status reports; progress reports, etc.;
- perform continuous QA/QC at the different stages and processes.

### **IMPLEMENTATION**

For the successful implementation of this scope of work, the following requirements should be considered:

- The company/consultant should have 10 years' experience in similar projects;
- The company/consultant have previous experience with similar projects for a minimum of 10 projects;
- Individual experts in the company/ consultant should have experience of 10 years or more;
- The company/consultant should have sufficient manpower and resources available to carry out this work.

### **TIME FRAME**

The duration of this project will be 5 years

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