



Project Handover Report (May 2015)

Project Title: *Kuwait Integrated Environmental Management System (KIEMS)*

Project Team: *Brian Freeman, and Shah Faisal*

Project Duration: *2010 – 2014 (extended till 31st March 2015 upon KEPA request)*

Project Cost: *\$ 2,060,000 (excluding extension period & Software maintenance cost)*

Project ID: *74036*

Major Accomplishments & outputs:

- **Air Management Review**
 - SWOT Analysis
 - Lack of monitoring on borders
 - No monitors for PM-2.5 or atmospheric pressure at stations
 - Ambiguous and unenforceable regulations
- **New Ambient Air Quality Regulations**
 - Ambient air
 - Stationary point and non point sources
- **Greenhouse Gas Inventory**
 - Sector and Source specific
 - CO₂, N₂O (Nitrous Oxide), and CH₄ (Methane) accountability
 - Other gases available
- **National Emissions Inventory**
 - Captures emitted Criteria Air Pollutants (Sulfur Dioxide, Carbon Monoxide, Nitrogen Oxides, and PM-10) and Hazardous Air Pollutants (Volatile Organic Compounds)
 - KPC companies, Kuwait Industrial Union companies, MEW
 - Minor sources
- **Air Quality Information Management System**
 - Web-based database and air management tool implemented at KEPA premises
 - Permit Tracking
 - Inventory Calculation and Reporting
 - Hot spot/Risk Modeling
- **Air Quality Zones**
 - Identified initial air quality zones for localized air management
 - Coastal/Inland/Production
- **Attainment Classification Methodology**
 - 99% Rule using 3 year trend

- 3-Strike Rule using 1 year
- **Mobile Emission Source Regulations (Draft)**
 - Emission standards for Road/Non-Road Vehicles
 - Establishes Fleet/Fuel Requirements
- **Capacity Building**
 - Trained not only Air Quality Department but Environmental Impact Assessment and Environmental Management Information System of Kuwait (eMISK) in data collection, emissions estimation and atmospheric physics
 - Workshops with regulated community during site surveys and data collection

Table of Contents of KIEMS Deliverables CD (Attached herewith):

- **Reports and Analyses**
- **Databases**
- **Air Quality Management Information System (AQMIS)**
- **White Papers**
- **Regulations**
- **Presentations**
- **Training/Workshop Presentations**
- **Emission Inventories**
- **Miscellaneous Tools**