ALTERNATIVE FUELS TESTING

SGS is the world's leading inspection, verification, testing and certification company. Our name is synonymous with the very highest levels of integrity, independence, impartiality and accuracy. We operate a network of over 1,500 offices and laboratories around the world providing support to our clients as both a strategic partner and a technical advisor.

Alternative fuels can be a more sustainable, environmentally friendly option, or an economically efficient method of utilizing readily available local fuel sources. Through our global network of operations, SGS can deliver a broad spectrum of independent evaluation services to alternative fuel consumers worldwide, aimed at reducing your risks and maximizing your profits. Through our team of professionally qualified engineers and technicians we can provide you with technical expertise in the areas of:

- Laboratory testing.
- Emissions testing and control solutions.
- Onsite lab services (outsourcing solutions).
- Fuel supply management.
- Sampling, verification of quality (species, granulation, moisture content, ash content, dirt).
- Clean coal services.

LABORATORY TESTING

We provide a complete range of laboratory analysis to help users of alternative fuels meet environmental requirements in accordance with recognized standards such as ASTM, EPA, ISO and JIS. Our expertise includes:

- Analysis of:
 - water (waste water, groundwater, process water, drinking water)
 - soil (soil, sludges and water bottoms)
 - waste (hazardous waste, industrial waste)
 - air samples (gas bags and adsorption tubes)
- Sampling on-site.
- Testing hi-res dioxins and PCBs.
- Examining leachate.
- Microbiology and parasitology testing.
- Identification and reduction toxicity studies.
- Environmental sampling and analysis programs.

EMISSIONS TESTING

To ensure that the emissions from the combustion of your alternative fuels satisfies regulatory limits SGS will conduct air measurements according to the highest globally recognized standards. SGS offers guidance and assistance in complying with environmental regulations and in assessing environmental performance.

Our analytical expertise includes:

- Determining flue gas parameters (O₂, CO, N_xO_y, SO₂, C_xH_y, VOC, CO₂).
- Calibrating and certifying continuous on-line measuring equipment.
- Monitoring fugitive emissions.
- Calculating dispersions (according to recognized international models).
- Measuring:
- Inorganic components from emissions (chlorine, HCI, HF, metal, acid vapors).
- Organic components from emissions (dioxins, furans, solvents, PAH).
- Immissions (air pollution at population level).
- Odors.
- Dust particles (total dust, respirable dust and particle size distribution).
- Moisture level, flow rate and temperature.

FUEL SUPPLY MANAGEMENT

The supply of high quality, consistent feedstock is essential to any alternative fuels user. SGS has extensive experience in reducing risk for customers along the entire supply chain of raw materials (from field to refinery). For those in the energy sector, optimization of the supply chain with agricultural raw materials helps to secure the sustainable production essential in gaining a competitive advantage. Quality and quantity can be guaranteed by SGS, eliminating the risk from your supply chain. By partnering with SGS you will:

- Enjoy peace of mind through effective risk reduction.
- Maximize your efficiency.
- Gain access to SGS supply chain management expertise.



© SGS Group Management SA – 2013 – All rights reserved - SGS is a registered trademark of SGS Group Management SA

CLEAN COAL

Coal-to-Liquid (CTL) and Coal-to-Gas (CTG) technologies are critical strategies should you seek to use alternatives to traditional petroleum derived fuels and natural gas. Understanding and verifying the quality of the feedstocks used in CTL and CTG processes is critical to the financial success of a clean coal project. SGS provides a suite of services that to allow plant operators to predict and monitor fuel quality to the combustion reactor.

- Full chemical and physical testing of the source fuel.
- Verification of quality/quantity at origin for contract enforcement.
- Mechanical sampling systems and on-line analyzers at the combustion reactor.
- On-site laboratories at the plant for rapid analysis.

Contact us today and find out how partnering with the world's leading inspection, verification, testing and certification company can benefit you.

CONTACT INFORMATION

Email us at minerals@sgs.com www.sgs.com/mining

