

## Jubail Methanol Plant - Chemical Processing

### **CAPACITY: 45 MW**

A Saudi Arabian Methanol Plant owns and operates seven gas-fired boilers in three plants onsite at their facility in Al Jubail, Saudi Arabia. The units are designated 620A, 620B, and 620C for the utility boilers. The site has two boilers designated 3620A and 3620B and two boilers designated 4620A and 4620B. The utility boilers fire fuel gas exclusively and the other boilers fire fuel gas and waste alcohol. The exhaust gas stream is discharged to the atmosphere and emissions are monitored using a statistical hybrid predictive emissions monitoring system (PEMS) and data acquisition system under 40 CFR Part 75, Appendices C, D, E, and F.



\*Not actual site. Source: Trade Arabia

A SmartCEMS™ PEMS was started-up to record the operating and emission data in September of 2008 for all of the units. A data acquisition system was provided by Honeywell Xceed and was started-up to record the operating and emission data in the October of 2008. The DAS collects the process and gas flow data for the compliance monitoring system. The system utilizes the signal from the gas flow monitor and other boiler parameters and the results of test data to calculate emission rates.

The three boilers combust fuel gas or a combination of waste alcohol and fuel gas. The burners minimize the emissions of nitrogen oxides from the boilers. The boilers generate steam for use by the site and for turning a steam generator.

**DAS System:** SmartCEMS® with Data eElements®

#### **History of Project Development:**

**09/15/2008**

Project start date.

**09/20/2008**

Setup and installed hardware.

**10/01/2008 – 11/1/2008**

Performed data collection for initial training dataset.

**10/15/2008 – 11/1/2008**

Model QA was prepared.

**09/20/2008**

Installed software and model.

**10/08/2008 – 10/23/2008**

The initial certification RATA was conducted on all seven boilers.

**PRODUCTS:**

