





CASE STUDY

DESIGN VERIFICATION OF LIQUEFIED NATURAL GAS TANKS IN CANADA

Canaport LNG in Saint John, is a consortium between Irwing Oil, New Brunswick and Repsol, Spain, constructing the first LNG receiving and regasification terminal in Canada. After four years under construction, the Canaport LNG terminal should begin operations in the second guarter of 2009 and supply natural gas to the Canadian and American markets.

With its three large LNG cryogenic tanks, the first Canadian LNG terminal has a capacity of 1 billion cubic feet or 28 million cubic meters of natural gas per day and represents a capital investment of CAD 750 million. A project of this magnitude requires a strong international team in order for it to be completed in such a tight timescale.

SGS Canada contributed to this great success story with its very experienced team of engineers and professionals. In only four months, SGS succeeded in reviewing all tank design plans and verified them in accordance with CSA Z276-01, a code set up by the Canadian Standard Association concerning the production, storage and handling of liquid natural gas. This CSA standard sets a range of 426 requirements and such a design verification project can generate around 40,000 pages of documents and drawings.

Within three months, all the 426 requirements were matched with the concepts and drawings, calculations were verified as correct and the LNG tank design was confirmed as complying with the Canadian CSA standard. The final report was issued to the satisfaction of the customer, on time and on budget.

With the completely independent certification from SGS, Canaport LNG can be sure that the new facility will operate as intended, using the latest technology, to the highest safety levels, and meeting all the relevant environmental standards and regulations.

SGS Industrial Services provides not only design verification of LNG tanks but also offers support services related to mechanical, piping, and electrical systems design, such as mechanical and process design review, fire and safety systems analysis, and instrumentation and automation analysis and review.

Our teams of engineers and technicians provide independent inspection, testing, verification and specialised technical services, helping to maintain our client's reputation for high quality products as well as effectively managing the various risks associated with the production and transport of LNG in any country in the world.

SGS IS THE GLOBAL LEADER AND INNOVATOR IN INSPECTION, VERIFICATION, TESTING AND CERTIFICATION SERVICES. FOUNDED IN 1878, SGS IS RECOGNIZED AS THE GLOBAL BENCHMARK IN QUALITY AND INTEGRITY. WITH OVER 59,000 EMPLOYEES, SGS OPERATES A NETWORK OF OVER 1,000 OFFICES AND LABORATORIES AROUND THE WORLD.

