

## EXECUTIVE SUMMARY

The objective of this study funded by the Texas Environmental Research Consortium (TERC) was to collect the technical information required by the Texas Commission on Environmental Quality (TCEQ) to estimate the distribution of compressor engines associated with natural gas production, processing and transportation in the eastern portion of Texas. This study is a follow-up to a previous TERC effort, published in HARC Report: *H40, Natural Gas Compressor Engine Survey and Engine NO<sub>x</sub> Emissions at Gas Production Facilities*.

The first two tasks conducted under this study revised the previous inventory developed for the H40 study by inventorying engines greater than 500 hp, separating engines less than 50 hp from the engines between 50 and 499 HP in the previous inventory, and adding the year 2000 to the previous inventory. The second task under this study contributed to the updating of TCEQ's State of Texas Air Reporting System (STARS) inventory by collecting information from 26 of the 58 facilities suspected of having reciprocating engines, but not included in STARS.

Some of the findings of this H68 study include:

1. Generally, less than 1% of the well-head engine capacity is comprised by engines smaller than 50 hp.
2. Generally, 50 to 73% of the well-head engine capacity is comprised by engines greater than 500 hp, depending on the region.
3. Of 26 facilities identified as missing from the STARS inventory, only three had reciprocating engines. A total of 5 engines were at the 3 facilities.
4. If the trend observed at facilities contacted were to hold for the remainder of the 58 facilities flagged by TCEQ as being of interest, then 2 additional sites would have 2 reciprocating engines, each, for a total of 4 additional engines, as yet missing from the STARS inventory.

A primary recommendation arising from this study is that the remaining compressor facilities possibly omitted from the STARS inventory be contacted to determine if they use reciprocating engines to drive their compressors and the technical specifications of any such engines.