

University of Minnesota

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Project Abstract - Sappi



INTERN

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PROJECT FOCUS

Waste

ADVISOR

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COMPANY

Sappi



COMPANY DESCRIPTION

Sappi is an international pulp and paper company, with the Cloquet mill opening in 1898. They produce kraft pulp for their graphic paper products and dissolving pulp which they sell as a raw material for the textile industry.

INCENTIVE

Sappi has seen a reduction in the savings reported by their annual compressed air leak assessment due to turnover in the contractor conducting the assessment and the lack of a standardized monitoring procedure. With an extensive compressed air system, opportunity for energy savings is apparent, but in-depth procedures are needed to

realize this opportunity yearly. Sappi also has many waste streams some of which go off site for disposal and some that stay on site for reuse or landfilling. An opportunity exists to divert some of the waste that leaves the site to be internally reused or eliminated entirely which would save in off-site disposal costs.

GENERAL APPROACH

To provide a clearer process for future compressed air assessments, the facility's compressed air system was mapped and walking routes were established. These routes are designed to keep the auditor walking through areas of high density compressed air lines, ensuring that a thorough assessment is completed. These maps and walking routes were then compiled into standard operating procedures for easy reference. For waste segregation and reduction, dumpsters around the facility were monitored for compliance and contents, and conclusions were drawn on how to best handle each waste stream to reduce each.

FOCUS OF RESEARCH / RECOMMENDATIONS

Research on the compressed air project focused on the standard operating procedures and applying these where applicable with self-completed assessments. Efficient compressor operation was also investigated to reduce the overall energy use of the compressed air system. Novel ways to encourage correct waste segregation was a primary focus with source reduction considered throughout.