

**Client**

Albemarle

Industry

Chemicals

Solution:Equipment and Facility Condition
Assessment

LCE Provides Global Specialty Chemicals Corporation with Robust Equipment and Facility Condition Assessment

Albemarle Corporation is a global specialty chemicals company with leading positions in lithium, bromine, refining catalysts and applied surface treatments. With a history that extends back to 1887, Albemarle is a leading global producer of catalyst solutions and performance chemicals. Albemarle's products are used as additives to, or intermediates for, a wide range of products manufactured by pharmaceutical companies, cleaning product manufacturers, water treatment companies, agricultural companies, electronics goods manufacturers, refineries, and paper and photographic companies. Albemarle operates on a global scale, serving customers around the world.

Improving Operating Reliability Requires an Accurate Assessment of Asset and Facility Health

Albemarle sought to improve reliability within their operations. The 16th Street Zeolite manufacturing line and Bayport facility were aging, creating a need for a robust methodology for rationalizing capital planning for restoration and/or replacement. While Albemarle had always understood how failure of the central plant utilities could potentially affect all site operations, the occurrence component of this risk was increasing as the assets were aging.

Albemarle requested an Equipment and Facility Condition Assessment to collect accurate data about the health of their assets and facilities. Their goal was to objectively identify those assets that required capital funding for replacement based upon organization risk.

"The LCE Facilities Condition Assessment evaluated equipment, systems, and facilities required for safe operations."

The LCE Facilities Condition Assessment evaluated equipment, systems, and facilities required for safe operations. LCE's assessment team conducted specific activities on-site, including:

- Process Information Retrieval, including production process performance data and maintenance activities
- Employee interviews: Operations, Maintenance, Technical Support, Management
- Visual inspections with photo documentation
- Equipment walk-downs
- Critical Equipment Lists review
- Modification reviews and Specification Analysis

Using data that was forwarded to the team before the actual on-site visit, they concluded that the 16th Street Assets were aging and in need of repair or replacement. The actual on-site assessment and ranking of the highest at risk assets showed four assets that would benefit from a complete replacement. The team used the breakdown data of lost hours and lost production to show that the replacement costs would pay for themselves in a short amount of time.

In the final Equipment and Facility Condition Assessment report, LCE provided specific, customized recommendations to mitigate risks and improve reliability within the organization. The report included an evaluation of equipment assets required for the safe operation of the 16th Street production area, including the operability and integrity of mechanical, electrical, and process control systems. LCE's final assessment yielded a clear plan for Albemarle's asset management and financial improvements moving forward.



For more information about LCE's Equipment and Facility Condition Assessments, please visit [our website](#).