

Customer Profile

ALLETE (NYSE: ALE) is well positioned as a reliable provider of competitively priced energy in the upper Midwest, and invests in transmission infrastructure and other energy-centric businesses. ALLETE's Minnesota Power electric utility serves 144,000 residents, 16 municipalities and some of the nation's largest industrial customers. Other businesses include BNI Coal in North Dakota; ALLETE Clean Energy, a developer of energy projects; US Water Services, which provides integrated water services for industry; Superior Water, Light & Power in Superior, Wisconsin; ALLETE Renewable Resources, which operates and maintains wind generation facilities in North Dakota; and ALLETE Properties, which owns real estate in Florida.

Challenges

Before implementing the Perillon solution, ALLETE managed its Environmental and Safety program manually. This meant scanning paper data from operator rounds, extracting data from multiple databases, emailing Excel spreadsheets, and re-entering into an Access database. Inefficiencies in data collection and report generation and time-consuming QA/QC of the information resulted in long prep times for required submittals. Other key issues included inconsistency of compliance task management and high staff turnover, which amounted to 90% over an eight-year period. With increased regulations and rapid expansion underway from acquisitions, ALLETE management identified a clear need to establish a modern, centralized EHS system to meet its challenges.

Business Objectives

ALLETE has a consistent compliance record, which the company needed to maintain in the wake of recently increased regulations. Driven by a continuous-improvement culture, management wanted to mature its Environmental and Safety data programs and capture institutional knowledge centrally, lowering risks of non-compliance. ALLETE's management needed a comprehensive view of compliance across their facilities and locations for both environmental and safety data. Efficiency was the primary objective; rather than arranging costly travel of corporate staff to remote locations, which created risks of data double-entry errors and time-consuming report preparation, ALLETE sought an "eyes in the field" system, looking to assign inspections at the site level. ALLETE also required robust dashboards to quickly analyze trends and make strategic decisions on changes needed to calibrate and standardize efforts across sites. Furthermore, the new solution had to be affordable, as ALLETE did not have the time nor budget to customize a system from scratch. Finally, ALLETE desired a system that could be easily implemented across the entire company, rather than be used only by the environmental and safety teams.

Solution

Given ALLETE's intention to implement a new system in stages, a key decision factor in choosing Perillon was its ability to deliver an integrated and comprehensive Environmental and Safety solution, affordably. Perillon's modular system allowed ALLETE to roll out the solution in phases, aligning with the company's available in-house resources.

First, ALLETE and Perillon collaborated to develop a Solution Configuration Document that established the "blueprint" for the implementation. ALLETE started with Environmental, due to the complexity and volume of data. This

AT A GLANCE

CHALLENGES

- Manual Excel spreadsheets and scanned data emailed and input into Access DB
- Inefficient reporting process
- 90% turnover in environmental department
- New regulations adding layers of complexities to compliance activities

SOLUTION

- Perillon WorkSpace system implemented in phases across ALLETE enterprise
- Centralized EMIS system, streamlining data output and reporting
- Standardized audits and inspections across all sites, expandable to other functions
- Mobile, offline data capture
- Comprehensive Environmental and Safety functionality in one system

RESULTS

- All objectives met, within budget
- Reports created in minutes versus weeks.
- Data captured at the source, standardized (no data double-entry)
- Immediate management visibility across sites
- Reduced risk previously due to turnover
- Enterprise-wide engagement and connectivity



included extensive air emissions data (such as Title V and GHG reporting), water compliance (including complex NPDES permits and DMR reporting), as well as audits and inspections of hazardous waste sites.

The following two schematics highlight the inefficiency of ALLETE's previous data management process, relative to the new Perillon approach. The initial process for generating an environmental report took an unnecessary amount of time and manual effort, involving the scanning of paper records, emailing spreadsheets and manual reporting.



With the Perillon system, environmental data management for air, water and waste is streamlined and centralized. Generating a report takes minutes versus days/weeks, and management has instant visibility of trends across locations to help them make better decisions.







The second phase of the Perillon implementation was focused on audits and inspections. A key objective was to outfit local staff at remote sites with pre-built assessment questionnaires, and in some cases mobile devices, to ensure consistency and enable data capture at the source. With Perillon's GOpak mobile app, ALLETE's users can now complete audits and inspections, corrective actions and capture images, even while offline, then instantly sync with the central database for immediate corporate visibility. ALLETE's entire corporate auditing program is now in Perillon across all facilities. Subject matter experts gather in roundtables to define standardized assessment templates, creating tools available to many other functions, such as logistics and maintenance. The third phase of the implementation was aimed at incident management, including spills, releases and other hazardous materials events.

The following dashboards provide a snapshot view of how management can now view assessment data captured remotely in the field and obtain an immediate status.

Assessments, by Assessor	8 XL % 🗟 🗕 🗖	Assessment Status, by Location	
Greg Prom Jjtroumbly Jsemler Kanderson Mhuska Mweglarz Nwooner Rannin Rpeterson Witaundor	Due Late On-Time	Island La Little Falls Mississip Northerm Pillager Dam Rice Lak Storage T Thornson Waste Ma Water Ma	Open Alert Complete

Results

The Perillon system proved to be a highly efficient solution for ALLETE, meeting all company objectives within budget. All goals established by the initial implementation timeline were reached. For the first time, ALLETE has a centralized document storage system, standardized audits and inspections, mobile data capture at the source, centralized environmental data, and instant reporting and dashboard trending information. The new system has freed up a significant amount of time for ALLETE corporate staff to focus on more strategic activities, eliminating time wasted searching for information and manual report creation.

What ALLETE users like most about the Perillon system is its maturity and ease of use. Corporate staff appreciate how simple it is to incorporate new acquisitions and new functional organizations. Perillon has evolved into the central nerve system for all of ALLETE's compliance activities, and the company expects widespread user adoption across the entire enterprise.

Key success factors and lessons learned included establishing a dedicated team of diverse experts up front to document details early, and not wait to evolve requirements during the implementation process. ALLETE rolled out the solution in phases, concentrating first on the most important areas commensurate with effort and staying focused on the benefits. ALLETE would also advise not to overreach on requirements, and compromise on specialized features; the focus should be on the 'must-haves' in evaluation of different approaches. It is important to note that the system will not be perfect for everyone in the company, yet it must be highly functional enterprise-wide. Finally, building effective employee relationships is critical to establishing trust in a new system. Standardizing our compliance audits and inspections across our sites has been one of the most exciting developments in our evolution to a more modern, interactive compliance program. We are reducing administrative and travel time significantly, because now data can be captured remotely, accurately, and analyzed efficiently.

> Kurt Anderson Manager Environmental and Land Management ALLETE





Perillon WorkSpace Integrated Modules



For more information on Perillon solutions, visit <u>www.perillon.com</u>, follow @PerillonSoft on Twitter, or contact the Perillon team at +1 (978)2263-0412.