Automating Environmental Monitoring Program (EMP)

How one of the largest tree fruit producers automated their EMP to innovate at new facility

One of the largest tree fruit producers in the U.S. has established a unique mix of family farming history and a forward-looking commitment to innovation into the future. The roots of the business can be traced to 1912 when the original family-run farm was established. The small beginnings of a 20-acre piece of farmland has blossomed into one of the largest single growers of apples, pears, and cherries in the United States. Each generation dedicated to cultivating success through hard work and family values, a true story of the American dream.

Today, the organization is fueled by a desire to grow, pack, and ship high-quality fruit that will provide the freshest, most flavorful eating experience possible.

The Challenge

As one of the largest fruit growers and a supplier to some of the largest retailers around the country, they understand how reputation, quality product, and cutting-edge technology all go hand-in-hand.

When the head of food safety and compliance started with the company eight years ago, he saw an opportunity to increase structure based on his previous experience. He had a strong background in quality assurance and environmental programs so he was eager to bring this knowledge along with the latest technology to develop an effective food safety program.

Before overhauling what was in place, he needed to first observe how the facility functioned, as well as the operations of the 12,000-acre farmland the company owned and operated.

As a fresh produce company, there were no "kill steps" (cooking and heating processes) in place. Most processed foods go through a series of cooking steps as they are manufactured. The “kill steps” ensure that any pathogens, bacteria, or other organisms and contaminants are killed as part of the manufacturing process. Without these steps, it becomes increasingly important to have a rigorous and well-organized EMP to ensure that the machinery, equipment, and processing plant is tested and verified as being free of any harmful organisms.

When analyzing their current program, they found that:

- The old EMP, built on paper and manual spreadsheet records, did not have much structure.
- There was little record and no rationale for how much they were spending on their testing program.
- It was difficult to access, correlate, and understand records of tests that were being performed.
- Equipment was being maintained with incomplete record-keeping and testing procedures.

To help the team restructure their current program, create automated reports that track spending and food testing, and streamline their maintenance process, the company needed a unified technology solution. With a properly structured program, automated reporting, and a more efficient maintenance process, the team could spend more time on the analysis of data, and making improvements to their processes instead of spending time manually managing data entry into spreadsheets.

The Approach

Once the company replaced its old, paper-based folder system with the EMP automation software, they were able to get more insights and data to help make educated decisions on testing.

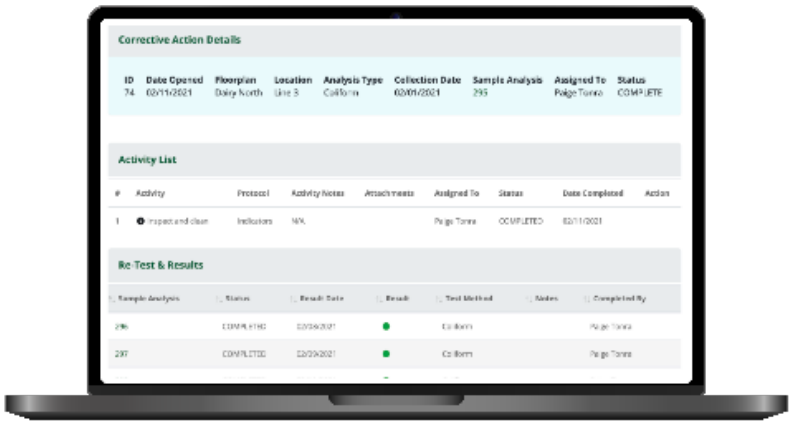
The software empowered the food safety team to confirm each corrective action step by defining a very clear and precise remediation process. Knowing that all test results and remediations are managed in one place better prepares the team for unexpected administrative and third-party audits. New innovation has resulted. Access to improved information about repeating problem areas has been one of the biggest gains of using EMP automation technology. For example, the old brush beds for fruit cleaning steps were replaced with new units made with antimicrobial material, and are now easily cleaned in-place during shifts. This has met the goal of increasing production up-time while preventing pathogens from building up in the older brushes and growing into larger issues.

The Outcome

Since implementing a structured and automated food safety program with clearly defined steps, the company is now using fewer chemicals and labor per shift to complete the food safety process steps. This has resulted in better product quality, longer shelf life, and less rot.

The food safety team is now also better managing the budget for their sanitation program. The EMP software has allowed the company to access a visual means of seeing what they are doing in real-time, alleviating delays in the information that caused issues to exist for days or weeks in the past.

“For many of our employees it was their first time thinking about monitoring pathogen testing data. The software helped them understand what to do, where to do it, why they were doing it, and outlined remediation steps,” said the head of food safety and compliance. “Having complete control of our Sanitation and Pathogen testing programs gives us more confidence in the entire process and our product. By knowing more about what is going on with our product, we can better tackle the problem,” he added.



Learn how to better manage your food safety program!

Now's your chance to gain control with powerful scheduling, visual monitoring, accurate analysis, automated reporting, and more.

Connect with Us

Neogen Australasia, 14 Hume Drive, Bundamba, Qld 4304 Australia.
© Neogen Corporation 2023. All rights reserved. Neogen is a trademark of Neogen Corporation.