



**ENTERPRISE
AUTOMATION**
A TETRA TECH COMPANY

PROJECT PROFILE

Ammonia Offloading Facility *JR Simplot Helm Fertilizer Plant*

Client background

JR Simplot Company, one of the oldest agribusinesses in the U.S., benefits from a high-quality fertilizer plant located in California's Central Valley. Operating since the 1950s and under JR Simplot's management since the 1990s, this aging facility has undergone numerous control system retrofits and expansions. Enterprise Automation (EA) has served as the plant's controls integrator since 2006, providing ongoing expertise through multiple operator transitions.

Project background

A key facility expansion introduced a new ammonia offloading plant designed to handle multiple daily tanker deliveries. This plant stores liquid ammonia in large tanks where it naturally vaporizes at low pressure. Redundant screw compressors then increase the vapor to high pressure, enabling it to push liquid ammonia from the offloading trucks into storage. Pumps subsequently transfer the ammonia from storage to the fertilizer production areas, ensuring seamless operation throughout the process.

EA solution

Enterprise Automation designed and delivered the control panel that connected the control system with field devices such as valves, transmitters, and pumps. Working alongside JR Simplot engineers, EA developed the control narrative that informed the programming of system logic using Allen-Bradley PLC and HMI equipment. Operators controlled and monitored the ammonia offloading process through Citect SCADA, which integrated commands from SCADA and HMI and provided real-time data as well as historical reports. This setup gave operators clear visibility and precise control over the entire operation.

Project Manager



Joe
Assio

Project Technical Lead



Ben
Seidl

Key Insights:

- Installed Citect SCADA and FactoryTalk View ME HMIs
- Redesigned plant PLC Ethernet backbone

Key Technologies:

- Citect SCADA
- Virtualized SCADA Platform
- Wonderware Historian
- Allen-Bradley ControlLogix
- Allen-Bradley Intellicenter 580