Sandy Point Refinery

Biodiesel Unit - Work Order

Work Order No.: 2024-09-18-001

Requestor: Night Shift Supervisor

Department: Biodiesel Production

Date Requested: September 18, 2024

Equipment Information:

Equipment Name: Triglyceride Tank K-901

Equipment Type: Storage Tank

Equipment Location: Biodiesel Processing Unit

Reported Issue:

On September 18th, during the night shift, a clog was detected in the Triglyceride Tank K-901. The clog was caused by solidified fatty acids near the outlet valve, leading to inconsistent tank level readings.

Work Performed:

A maintenance team was scheduled to clear the clog at 0900 hours on September 18th. The maintenance team arrived on-site and proceeded to inspect the Triglyceride Tank K-901 and the associated piping. They found that the solidified fatty acids had accumulated near the outlet valve, restricting the flow and causing the inconsistent tank level readings.

The maintenance team took the following steps to resolve the issue:

1. Isolated the Triglyceride Tank K-901 from the rest of the system.

2. Drained the tank to a safe level to allow for safe access and inspection.

3. Manually removed the solidified fatty acids from the outlet valve and surrounding area using specialized tools and high-pressure water cleaning.

4. Cleaned and inspected the tank and piping to ensure no other obstructions were present.

5. Tested the tank level monitoring system to verify proper operation.

6. Refilled the tank to the appropriate level and restored the system to normal operation.

The issue was resolved at 11:00 am on September 18th.

Parts and Materials Used:

- N/A (No parts or materials were required for this repair)

Labor:

- Maintenance Technician (2 hours)

- Maintenance Supervisor (0.5 hours)

Total Labor Hours: 2.5 hours

Recommendations and Comments:

The maintenance team recommends implementing a preventive maintenance program to regularly inspect the Triglyceride Tank K-901 and associated piping for potential clogs or buildup of fatty acids. This will help to prevent similar issues from occurring in the future and ensure the reliable operation of the biodiesel production process. Additionally, the team suggests considering the installation of an automated cleaning system or heat tracing to mitigate the risk of fatty acid solidification.

Completed By:

Keith Richards, Maintenance Technician, Nine Lives Industrial

Steven Tyler, Maintenance Supervisor, JPP Refining Services

Completion Date: September 18, 2024