

SOUTH CAROLINA MANUFACTURING PLANT FIRE

Case Study

Incident

A manufacturing plant in South Carolina experienced a fire in one of its two large production lines. The plant, which specializes in hygiene products, had to resume production as quickly as possible in an effort to fulfill open orders. Missed shipment deadlines would result in product shortages on client retail shelves.

AREPA was asked to formulate a call-to-action project plan that would minimize production delays. AREPA had to identify all available technical resources that could work simultaneously and ensure that decontamination, testing and repairs could be employed safely with a large number of equipment specialists. The initial estimated recovery timeframe was 14 consecutive days utilizing 19 AREPA specialists and 30 facility restoration personnel.



▲ Square D disconnect switch before decontamination



▲ Square D disconnect switch after decontamination

Challenges & Logistics

The affected production lines represent one of two sets globally that can manufacture such hygiene products. Knowing this elevated the clients sense of urgency – so much so that they considered the idea of forgoing the technical recovery altogether and take their chances powering on the compromised equipment. Additionally, the client's vendor that maintains the production lines, was skeptical that the equipment could withstand the decontamination process due to age and existence of brittle wiring.

The highly customized nature of this equipment would result in prolonged procurement lead times if wholesale replacement was considered. The client elected to manage their risk of potential repairs should they power the equipment before technical reconditioning was completed. AREPA was to deploy all available specialists to address the affected equipment.

Highlights

- A manufacturing plant in South Carolina experienced a fire in one of two large production lines.
- The affected production lines represent one of two sets globally that can manufacture these particular hygiene products.
- The plant had to resume production as quickly as possible in an effort to fulfill open orders. Missed shipment deadlines would result in product shortages on client retail shelves.
- AREPA was asked to formulate a call-to-action project plan that would minimize production delays.
- The initial estimated recovery timeframe was 14 consecutive days.
- During the decontamination process, AREPA discovered a live transformer that was slowly burning operational debris (cotton) trapped inside the unit. AREPA's discovery prevented another fire.
- AREPA completed the decontamination within the 14day timeframe, which allowed the client to resume production in a fraction of the time that replacement would have taken.



Outcome

During the decontamination process, AREPA discovered a live transformer that was slowly burning operational debris (cotton) trapped inside the unit. AREPA's discovery prevented another fire. AREPA completed the decontamination within the 14-day timeframe, which allowed the client to resume production in a fraction of the time that replacement would have taken.



▲ Control panel before decontamination



 Motor control center (MCC) circuit breaker panel before decontamination



 Backside of line R-4 operator's station before decontamination



 Backside of line R-4 operator's station before decontamination



Transformer with the burnt cotton before decontamination



Control panel after decontamination



 Motor control center (MCC) circuit breaker panel after decontamination



 Backside of line R-4 operator's station after decontamination



 Backside of line R-4 operator's station after decontamination



 Transformer with the burnt cotton after decontamination

AREPA In Action



- Motor control center (MCC) transformer before decontamination
- Motor control center (MCC) transformer after decontamination

