



## CASE STUDY

## Chemical Facility Decommissioning

### DESCRIPTION

Ensuring the safe decontamination and demolition and subsequent closure of a chemical manufacturing facility. For 20 years, this site was home to a cleaning product manufacturer who used the facility to mix and store various dry and wet chemicals – an industrial activity that results in a high-risk of chemical reactions due to incompatible chemicals mixing and further site contamination during the decommissioning process.

### MAIN TASKS

- Decontaminate the warehouse, labs, mixing rooms, and tanks across the facility.
- Demo the loading station.
- Demo the wastewater treatment facility and restore it to a parking area.
- Decontaminate and remove all roof structures, scrubbers, process lines, and seal penetrations.
- Remove and recycle all aboveground tanks and mixers.
- Decontaminate and fill all sumps, floor drains, trench drains, etc.

### CHALLENGES

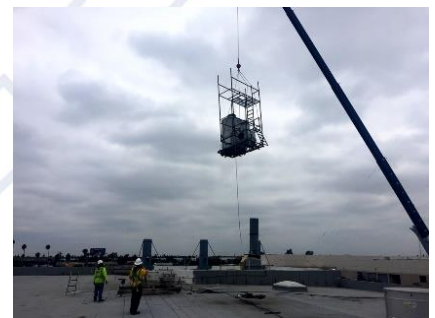
**Client Accessibility** – In addition to the standard challenges related to handling hazardous chemicals, this project faced unique challenges related to client safety and accessibility. During much of the project, several of the company's employees still occupied the office space – tasked with shipping remaining products and selling salvageable equipment. E&E's team maintained a close working relationship with the company and its employees to ensure a safe working space, remain on schedule, and deliver on time.

**COC Containment** – Due to the plethora of in-ground, mid-height, and roof level process lines throughout the facility, many

of which still contained residual manufacturing chemicals, E&E needed to develop effective controls to facilitate their safe decommissioning and eventual removal. The chemical plant had its own wastewater treatment facility situated to the far corner of the premises to which the site-wide wastewater conveyance lines terminated. E&E re-developed its demolition plan in stages to carefully migrate from the furthest point away from, and subsequently toward, the treatment plant, utilizing the pre-existing wastewater conveyance infrastructure to direct all rinse/decon water to the treatment facility where it was subsequently treated accordingly. On completion of the chemical facility decommissioning, E&E obtained permits for the sewer abandonment and subsequent capping and closing of the sewer connection along with the final demolition of the treatment plant.

### INTERESTING POINTS

- Created strategies and schedules to maximize flexible access by company employees with minimal notice requirements.
- Highly detailed Health and Safety procedures to ensure no cross contamination or releases of chemicals during decontamination and demolition phases.
- Established a safe and cooperative relationship with the client's on-site employees.
- Committed to and delivered on a strict project schedule – as missing the project's hard end date wasn't an option.
- Used pre-existing wastewater treatment infrastructure to effectively manage rinse/decon water, improving safety, reducing disposal costs, and increasing overall project efficiency.



**Engineering &  
Environmental**  
CONSTRUCTION

Call +1 714 897 8705

[info@eandeconstruction.com](mailto:info@eandeconstruction.com)

[www.eandeconstruction.com](http://www.eandeconstruction.com)

