



CASE STUDY

Heat Treatment Facility Demo

DESCRIPTION

E&E was contracted to safely decontaminate and demolish an abandoned heat treatment and manufacturing site. The contract required the site, which spanned many acres, be cleared of all contaminants, all existing equipment, and any related structures in order to prepare the property for redevelopment.

MAIN TASKS

- Decontamination of surfaces and disposal of hazardous chemicals using Level B & C Personal Protective Equipment (PPE).
- Countless apparatus and process lines needed to be carefully removed, while avoiding chemical reactions and clearing the way for the demolition of the main structures.
- Hot work and use of large excavators with shears inside buildings to deconstruct and demolish manufacturing equipment.
- Safely remove over 200 tons of solidified Sodium Nitrate.
- Contain and dispose of thousands of gallons of hazardous rinseate.
- Ensure concrete pad was entirely free of equipment, and contamination.

CHALLENGES

The Unknowns – Many chemicals in use on the facility were unidentified when E&E mobilized. Extensive testing and continual monitoring activities were employed to ensure correct handling protocols were being followed at all times and mitigate risks of chemical interaction. Additionally, no site plans or as-builts were available during deconstruction. Continual assessment of the structures was necessary. The ability to remain malleable and respond to ongoing 'curve-balls' was of paramount importance as E&E discovered new obstacles,

situations, utilities, and new chemicals of concern.

INTERESTING POINTS

During the project, E&E discovered over 200 tons of solidified Sodium Nitrate. This was used in two large dip tanks as part of the heat treatment process but was missed during the Phase I and Phase II evaluations due to it being totally hidden within the equipment structure. The cost of disposing of this material was extremely high and was immediately identified as a major financial burden to the client. With the client's permission, E&E researched the material and also tested its purity, and it was surprisingly clean. After exhaustive research, E&E located a manufacturer in Illinois who could recycle and use the material. E&E arranged for the owner of the Illinois manufacturer to fly into California where E&E subsequently negotiated a deal to load the material into super sacks and onto trucks provided by the Illinois purchaser, consequently converting the waste to a product, and saving the client from a huge, unexpected cost!



**Engineering &
Environmental**
CONSTRUCTION

Call +1 714 897 8705

info@eandeconstruction.com

www.eandeconstruction.com

