



Kapstone

Longview, WA

Challenge:

Engineer, design and supply on an EPC basis a new fan, VFD, duct, pipe, HVAC, structure, foundations and motor control center for one of the facility's recovery boiler exhaust systems. The project was planned to accommodate a one-week outage. Foundation engineering was a unique challenge in that the 100 year old facility had numerous interferences to equipment placement both below and above grade. Commissioning of the new system occurred eight months after initial release for engineering.

Southern Environmental's Solution:

Abandoned the old duct in place, redesigning the exit configuration from the ESP to exhaust through an abandoned scrubber stack. The reroute required a new fan which was placed at grade to eliminate vibration challenges that were present with the existing fan.

In addition to the duct project, SEI retrofitted its proprietary ELEX two-piece electrodes into the ESP in order to improve long-term reliability of the ESP by replacing the existing pipe and spike discharge electrodes.

Project Duration:

- PO Received: August 2016
- Materials delivered to site: January 2017
- Start up: April 2017

Detailed Engineering in the following disciplines:

- Structural
- Mechanical
- Electrical
- Civil
- 1/12 Physical Scale Model Study

Scope of Work:

EPC execution of a new outlet duct exhaust system from one of the facilities recovery boiler systems. The project included new duct, pipe, fan, HVAC, structure, access, foundations, and motor control center.

Performance Guarantee:

SEI guaranteed that the project would be completed on time while maintaining current ESP performance and anticipated boiler draft.

