

GWF Fluidized Bed Petroleum Coke Plant.

Hanford LP has one (1) facility in Kings County, California. This facility consists of a single fluidized bed boiler providing steam to a single steam turbine generator. Facility names and location

Hanford LP – a 5.5 acre site located at 10596 Idaho Ave. Hanford, Ca.

The facilities include:

- 320 mmBTU/hr Fines circulating fluidized bed boiler, manufactured by Combustion Power Company
 - Distributed Control System
 - HMI - Conductor NT 5.0.9
 - Bailey infi90
 - NOx abatement via a SNCR system using ammonia injection
 - 11,000 gallon tank
 - SO2 abatement via limestone injection
 - 60 ton silo
 - 2 Simon MacCawber injection feeders
 - Particulate abatement via a six module Cantech pulse jet baghouse
 - Forced circulation Steam Drum circulation loop
 - 3 Boiler Circulating water pumps
 - Union Pump, model 8x8x18 HTS
 - 200 hp
 - 3050 gpm @ 70 psid
 - Fuel feed system
 - 1200 ton silo
 - 150 ton fuel surge bin
 - Williams model DFM-52 fuel processing crusher/dryer
 - 5 - Simon MacCawber injection feeders
 - One Forced Draft Fan, Howden Fans
 - 1500 HP
 - 67500 acfm
 - One Induced Draft fan, Chicago Blower
 - 500 hp
 - 108193 acfm
 - One 50 mmBTU/Hr Air preheat burner used for start-up
 - Natural Gas
 - One diesel storage tank – 50,000 gallons
- One ABB VAX steam turbine with steam bypass
 - Steam turbine operates at a nominal 1474 psia, 951°F, 231 klb/hr

- Steam Turbine Auxiliaries
 - Lube oil system
 - Hydraulic Oil system
 - Controls
 - Extraction Steam
- One ABB 31.9 MVA generator w/ PMG
- One GSU transformer
 - ABB 26.9 MVA ,13.8/73kv
- 4.16kv Station transformer
 - RTE
- 480 v station transformer
 - RTE
- One Holtec condenser – titanium tubes
- One wet 3 cell cooling tower, Marley
 - 1 two speed fan per cell
 - 40 hp / 10 hp
 - 3 circulating water pumps, Goulds
 - Two in operation, one in standby
 - 125 Hp
 - 7733 gpm @ 39.2 ft
 - Water
 - Supply – on site well
 - Supply – City of Hanford
 - Discharge – City of Hanford
 - Reverse Osmosis Unit and a 70,000 gallon de-mineralized water tank.
- 2 Boiler feed water pumps (one operational / one stand-by)
 - Sulzer Bingham, 3x6x9 MSD, 14 stage
 - 800 hp
 - 504 gpm / 4516 TDH
- One 750 hp Emergency Diesel Generator
- Additional Storage
 - Silo -1600 cubic feet capacity
 - Silo - 1600 cubic feet capacity
 - Silo – 19000 cubic feet capacity
 - Silo – 6050 cubic feet capacity
 - Warehouse/Maintenance building