

processed through a separate metal parts furnace (MPF) for thermal decontamination. The throughput rates of this furnace are a function of the munition types. This roller hearth type furnace is designed to process metal parts through the furnace in reusable 3 feet X 10 feet trays with a residence time of approximately 60 minutes. In addition to the decontamination of metal parts, this furnace has been designed to incinerate a residual agent "heel" of 5% by weight of the agent fill of each munition. Exhaust gases from the MPF are incinerated in an afterburner.

#### Dunnage Incinerator (DUN)

The fourth furnace system within the JACADS facility is the dunnage incinerator (DUN). This incinerator is designed to burn all process dunnage, including agent contaminated wood, wooden pallets impregnated with PCP preservatives, contaminated protective clothing, and other packaging materials. In addition, the DUN thermally decontaminates mine drums. The primary chamber is a refractory lined furnace operated at approximately 1,600°F when processing combustibles in the starved air mode. A ram feeder pushes materials into the furnace, simultaneously discharging ash from the opposite end. An afterburner assures complete incineration of all hydrocarbons. The incinerator has a throughput rate of approximately 1,000 lbs/hour of combustible damage.

#### Pollution Abatement Systems

Each furnace system has an independent pollution abatement system designed to scrub the products of combustion. In addition, impurities in the agents result in trace quantities of heavy metals in the furnace exhaust.

Figure 2 illustrates the basic pollution abatement system; similar systems are utilized for three of the four process furnaces (DPS, LIC, and MPF). The incinerators were designed for compliance with applicable environmental requirements. The