incinerator is designed to destroy the various agents by combustion at high temperatures. The drained items are then processed through the metal parts furnace, which is used to thermally decontaminate the metal casings.

- c. The projectiles have explosive charges which are removed in the explosives containment room. These explosives are then fed to the deactivation furnace which is designed to incinerate all of explosive material contained in the various munition types. The projectiles (with explosives removed) are then processed in a manner similar to that used for the bulk items. The agent is then drained and destroyed in the liquid incinerator and the munition casings are thermally decontaminated in the metal parts furnace.
- d. In the case of rockets and mines, the agent is first removed by puncturing and draining the agent cavity. Rockets are then cut into several pieces and fed directly to the deactivation furnace. For mines, components of the explosive charge are separated and the mine and its explosives are fed directly to the deactivation furnace. All of these operations take place in the explosives containment room. The drained agent is destroyed in the liquids incinerator.
- e. The third furnace is the dunnage incinerator which is used to burn wooden shipping material, storage boxes, and pallets. The incinerators and furnaces have pollution abatement systems designed to clean the furnace exhaust gases prior to release into the environment. Three of the furnace pollution abatement systems use wet scrubbers. The scrubbers produce a brine solution which is transferred to a brine drying area where the water is evaporated. The resulting solid salts are disposed of in a land fill.

3. Program Cost and Schedule

- a. Construction of the JACADS facility started in October 1985 and extended through April 1989. During this time, a contractor prepared the site; constructed a munitions demilitarization building, a laboratory, a worker change house (termed a personnel support complex), several small support structures; and, finally, utility connections to the Johnston Atoll electrical, fuel, water and sewage systems. Construction costs associated with this phase of the program were approximately \$47 million.
- b. In the later stages of construction, JACADS process equipment was shipped by barge to Johnston Atoll. Process equipment including furnaces, pollution abatement systems, conveyors, disassembly machines and control hardware were purchased from many different subcontractors. Installation occurred from April 1987 to April 1989. The costs of this phase of the program were approximately \$207 million.
- c. By the spring of 1988, equipment installation had progressed to the point where the JACADS operations and maintenance