The Pa’ina Hawaii
Gray*Star Genesis Underwater Irradiator

Lyle Wong
Pa’ina Hawaii
Genesis II Underwater Irradiator

- Designed by Gray*Star, New Jersey
- Engineered and fabricated by CHL Systems, Pennsylvania
Pa’ina Hawaii, LLC

President
Michael Kohn

NRC Material License - 2007
Cobalt-60 in a Genesis II Underwater Irradiator

Service
Quarantine treatment service for export of fresh fruits and vegetables to U.S. mainland and other markets
Gray*Star Genesis Underwater Cobalt-60 Irradiator

Monorail
Hoist
Diving bell
Surge tank
Pool
Cobalt Source
Commercial Panoramic Cobalt-60 Irradiator
Flowers irradiated and mailed to Japan
MAFF
Pool Arrives
Installation of Genesis II pool at Kunia
Lifting of pool into building
Pool lowering into irradiator room
Pool excavation
Pool installed in excavation
Installed pool
Installation of Monorail for hoists and bells
Monorail
Installing the hoist power cables
Critical alignment of monorail

Laser hits target point
Enclosure of the irradiator room
Renovation of Old Del Monte Packing facility
Engineers preparing for Genesis II Installation
Unloading surge tank
Genesis II component unloading in Kunia
Installing of the surge tank
CHL System Engineers
Engineers installing compressor system
Water purification system
One of three 8,000 lift capacity hoists
Diving Bell hoists
Hoist on monorail
Cobalt – 60 source rack
Installing source rack in pool
Source holder on source racks
Setting source holders on source rack.
Installing the shroud
Shroud in position bottom of pool
Shroud and retaining pipes
Adjusting level of diving bell
Diving bell over pool
Finish pool with required labeling
Cobalt – 60 source arrives
NRC inspectors review records and procedure
Mike Kohn lifting source cask from trailer
Moving cask into facility
Cobalt – 60 Shipping Cast
Lowering shipping cask into pool
Lifting cask into pool to load sources
Lifting Shipping Cast into Pool
Shipping Cast being lowered into pool
NRC Inspector observing loading
Sources in basket on source loading table
Commissioning Inspection
Commissioning Inspection
Renovation of Del Monte Packing facility
Next Steps for Pa’ina Hawaii

- Dosimetry studies

- USDA, APHIS, PPQ Certification as quarantine treatment facility

- Operations October