

# Active Ventilation System and Off-Gas System



## CLIENT

Cockram (now ICON)

## LOCATION

Lucas Heights, Sydney, Australia

## CAPABILITIES

- Automation, Electrical, and Instrumentation engineering
- Project management
- Detailed design of hardware and software
- Electrical panel build
- Factory acceptance testing
- Site acceptance testing and commissioning

## TECHNOLOGIES

- Rockwell programmable logic controls
- Redlion protocol convertor (Modbus, BACnet)
- Rockwell variable speed drives
- Burkett pneumatics
- CitectSCADA

## PROJECT SUMMARY

The Australian Nuclear Science and Technology Organisation (ANSTO) is one of Australia's largest public research organisations and an international player in the field of nuclear science and technology.

ANSTO's new "SyMo" waste processing facility at the Lucas Heights nuclear reactor plant uses their Synroc technology to immobilise waste from the production of Molybdenum-99, in a global, first-of-a-kind operational Synroc plant.

Synertec was engaged by Cockram (now ICON) to design and implement the integrated control system for the Active Ventilation System (AVS) and the Off-Gas System (OGS) for the SyMo waste processing facility.

## THE CHALLENGE

Cockram was engaged by ANSTO to construct the new SyMo facility at their site in Lucas Heights. Cockram needed to partner with a control systems integrator to design and deliver the AVS and OGS instrumentation and control systems, while ensuring the system integrated with the other control systems and information technology systems in the new facility.

## SYNERTEC'S SOLUTION

Synertec was selected to deliver the project not only because we had experience working with ANSTO on the Lucas Heights site, but also because of our proven track record delivering high quality AVS and OGS solutions.

Synertec engineers worked closely with Cockram and ANSTO to ensure the solution would integrate with the other systems in the new facility.

The contract involved the detailed design and supply, including full testing and commissioning of the following:

- Electrical control cabinets
- Motor control centre panels
- Programmable logic control hardware and software
- Supervisory control and data acquisition (SCADA) system software