Queensland recently conducted an Investigation and Consequence Management Exercise (ICMEX) Ex Orchid Alert that included a Chemical Biological and Radiological (CBR) forensics segment to practice operational procedures in response to a CBR contaminated crime scene. The exercise occurred at the Army’s Land Warfare Centre at Canungra Qld, and involved the use of four disused married quarters to portray a series of scenarios. There were over 70 participants in the exercise, involving persons from Queensland Police Forensics, Victoria Police Forensics, NSW Police Forensics, Queensland Fire and Rescue Service, Queensland Chemical Unit, and Queensland Ambulance.

**Scenario**

The activity was based on an incident that initially involved reports of strange smells coming from the disused buildings. This was investigated by Queensland Fire and Rescue Service (QFRS) who identified a number of dead ‘persons’ inside and outside four buildings. They had identified a chemical laboratory where ‘terrorists’ were attempting to make Sarin, Nerve Agent. In making the Sarin, the terrorists had used Phosgene as Sarin precursors. An accidental release of materials had killed the chemist and the other terrorists located in adjacent buildings.

The QFRS crew withdrew upon discovery of the bomb-making facility in one of the buildings.

This was subsequently rendered safe by the Police Bomb unit.

Queensland Police Forensics, with assistance from New South Wales and Victoria Police Forensics personnel, responded to investigate the crime scene.

All forensics team members were initially briefed on the situation at a briefing area adjacent to the crime scene, with the forensics entry team being given a more detailed brief at a command site prior to dressing and entering the buildings. Radio communication was maintained between the team leader and the command site and team members were equipped with still and video cameras.

**NOTES FROM THE FIELD**

**Exercise Orchid Alert CBR Crime Scene**

*by Don Patterson, Assistant Director Special Capabilities, EMA*
Participants operated as four-person crime scene teams and initially operated in Level A personal protective ensembles (PPE) provided by QFRS. This was subsequently revised to Level B slash suits once initial reconnaissance was conducted and hazard levels identified.

Team members remained in the scene for about 20–25 minutes (limit of air supply) then exited and were decontaminated. Team members were then debriefed and visual coverage of the crime scene was downloaded and used in subsequent briefings.

Key observations were:
- CBR crime scene investigations, when conducted over extended periods, will be resource intensive in personal protective equipment;
- teams must have clear objectives as their working time is limited to their air supply;
- CBR crime scene investigation procedures for sampling triage require further refinement and should be agreed nationally; and
- procedures for the handling and recording of contaminated evidence are additional challenges including the need to maintain a chain of custody.

Exercise Orchid Alert provided an opportunity to practice a number of operational CBR forensics procedures and allowed participation of forensics teams from three States. The lessons learned will help improve preparedness to respond to CBR incidents.