

EFCOG Best Practice #88

Best Practice Title: Radiation Protection Technology Training Fast-Track

Facility: Savannah River Site

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Brief Description of Best Practice:

Savannah River Nuclear Solutions (SRNS) established a collaborative partnership with Aiken Technical College (ATC) to develop curriculum, perform classroom instruction, and teach radiation protection laboratories to accelerate graduation of Radiological Control Inspector candidates enrolled in the certificate and associate degree programs at Aiken Technical College.

This program was in response to the significant national shortage of qualified Radiological Control Technicians (RCTs), which has limited the RadCon resource support function at the Savannah River Site. SRS management recognized the need to establish a RCT training program in the Central Savannah River Area (CSRA) and proceeded to work with ATC to establish an educational program. As a result of this collaboration ATC started classes in an accredited program leading to a Certificate in Radiological Control Technology and an Associate in Applied Science degree in Radiation Protection Technology (AAS-RPT). Some of the courses in the curriculum include the following:

- Radiation Protection
- Radiation Fundamentals
- Radiation Dosimetry
- Radiological Safety and Response
- Hazardous Waste Operations & Emergency Response

In the first year, approximately eighty students enrolled in the programs (40 per semester). In the 2009-2010 year, enrollment in the fall semester rose to about 130 students with a peak program enrollment of approximately 170 students in the spring semester of the 2009-2010 school year. The availability of ARRA funds during the 2009-2011 school years propelled this program into the largest program of its kind in the country. A majority of these students would graduate and fill the need SRNS had anticipated for 132 Radiological Control Technicians to support ARRA scope. Current enrollment at ATC is about 140 students for the 2010-2011 school year.

Why the Best Practice was used:

There is a national shortage of Radiological Control Technicians and immediate project need for trained staff.

What are the benefits of the Best Practice:

The accelerated training provides a greater supply of Radiological Control Technicians to help support ARRA scope as well as future missions for the Savannah River Site.

What problems/issues were associated with the Best Practice:

Communication and coordination regarding DOE site needs and ATC capabilities prevented problems/issues.

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How the success of the Best Practice was measured:

There was an agreement between Savannah River Nuclear Solutions and Aiken Technical College to “fast-track” four groups of students:

- December 2009 – Approximately 10-12 students
- August 2010 - Approximately 10-12 students
- December 2010 - Approximately 10-15 students
- January 2011 - Approximately 10-15 students

To date the program has exceeded the benchmarks stated above and has led to >90% employment.

Description of process experience using the Best Practice:

The typically 5 semester long program had 4 of 8 RPT core courses modified to be taught in 2 month “minimesters” vs. the standard 4 months. In general, twice as much material was taught in half the time so that the quality and content of the curriculum was not affected. This was accomplished by lengthening the laboratory and class times as well as making some work available on-line. This allowed for completion of the program in less time and facilitated filling the urgent need for Radiological Control Technicians (RCTs) at SRS.

Students with prior AS or BS degrees in related technical fields finished the program within 3 semesters.

Greater than 90% of those students enrolled in fast-track courses have been placed in jobs within 6 months of graduation.