

EFCOG Best Practice #79

Best Practice Title: Safeguards and Security Tracking, Analysis and Reporting System (SSTARS)

Facility: B&W Y-12

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Brief Description of Best Practice: SSTARS is a multi-user, classified web application developed by Y-12 to support the Issues Management Program in accordance with requirements specified in the site's quality program document and the Issues Management program document. SSTARS captures data about management issues and facilitates the evaluation, resolution, trending, and reporting of those issues. The application has intuitive user interfaces, uses role-based user access, and includes data validation and data integrity controls.

Why the best practice was used: The current Issues Management System (IMS) for the site does not have classified information capability, nor does it have the capability for trending analysis and reporting. SSTARS is a complete issues management process that includes the issue data; compensatory measures; causal analysis; corrective actions; extent of conditions; lessons learned; and issue reports. There are enhanced tracking and trending capabilities along with many trending variables, that include security areas, key words, topical/subtopical codes, causal codes, and locations or buildings. In addition to the multi-faceted issue management capabilities, SSTARS includes a screening tool to review and document potential 10 CFR 824 noncompliances. Future tools scheduled to be implemented include a Requirements Compliance Assurance Matrix (RCAM) tool and an Assessments/Performance Testing module to assist in scheduling, report generation, and links for automated issue processing and RCAM.

What are the benefits of the best practice: SSTARS is approved for classified data and allows simultaneous data entry by multiple users and departments. In addition, it provides many possible combinations of reporting variables for trending purposes. Users can better identify security trends occurring within their own area of responsibility, as well as across the Y-12 site. The system allows issues to be sorted broadly or specifically by date range, functional area, keywords and security areas for trending purposes. It provides on-line access to safeguards and security issue data according to the designated user role.

What problems/issues were associated with the best practice: This activity involved the development of a web-based application. Using proper development techniques, testing, and configuration management practices eliminated problems with deployment. There are no issues for improvement identified.

How the success of the Best Practice was measured: SSTARS was demonstrated during the recent B&W Y-12 safeguards and security assist visit conducted by the Office of Health, Safety and Security Office of Security Enforcement October 5 – 8, 2009. As a result of the demonstration, the Office of Security Enforcement has noted SSTARS as the example for other contractors to emulate. To date, five contractors have benchmarked the process here at Y-12 since October 2009.

Description of process experience using the Best Practice: The application was developed using in-house programmers, knowledge, and skills. Using proven programming techniques, testing, and applying basic principles of software quality assurance, made the deployment successful for the end user. When the application was put into production, all testing had been completed and there were no areas of the application that did not function as designed. The end user was able to focus on suggestions for possible future enhancements rather than documenting and/or troubleshooting errors. When fully deployed, this application will support the foundational elements of contractor assurance for risk management, assessments, event reporting, feedback, issues management, lessons learned, performance metrics, and the Requirements Compliance Assurance Matrix (RCAM).