

January 30, 2009

To: Quality Assurance (QA) Sub-Team for Science
From: Greg Bock, Associate Director for Research
Subject: Charge to the QA Sub-Team for Science to Conduct an “As-is” Assessment of QA in Scientific Research

The QA Sub-Team is charged to plan and conduct an “As-Is” baseline assessment of QA implementation in scientific research. The team consists of two Quality Assurance Representatives (QARs), one each from the PPD and CD Divisions and a QA Engineer (QAE) from OQBP. During the assessment, the team will determine the status of implementation of requirements found in the Quality Assurance Guidelines for Scientific Research at Fermilab, *Quality Guidelines for Research* ANSI/ASQ Z1.13, Integrated Quality Assurance (IQA), and Fermilab Integrated Contractor Assurance Program (FICAP). The team will work with process owners of a set of selected research efforts and apply a graded approach when determining the level of rigor the application of requirements must meet prior to assessing implementation in each area.

The team presented to me a plan for the As-Is activity on January 21, 2010. The assessment is being conducted late January 2010 to late February 2010. The QA Sub-Team for Science is specifically charged to:

- Identify scientific processes including R&D activities and experiments associated with the three frontiers of the scientific mission of Fermilab, namely Energy, Intensity and Cosmic Frontiers.
- Prepare a hierarchical list of Fermilab scientific processes, including those owned by single organizations (Division/Section/Center), as well as those cross-cutting processes for which activity occurs in multiple organizations.
- Identify significant sample scientific processes within the Laboratory, based on a definition that is consistent with the IQA and Quality Assurance Guidelines for Scientific Research at Fermilab. Significant scientific processes will be those that have significant risk potential for the Laboratory as discussed with me.
- Submit a suggested prioritized order in which significant scientific processes will be selected for assessment. I will approve the finalized prioritized list before the assessment begins.
- Based on the degree of risk, assist each owner for each selected processes in identifying needed controls from the Quality Assurance Guidelines for Scientific Research at Fermilab document for each process. The results of this activity will constitute the “To-Be” state of these processes.

- The team will perform an assessment of the selected scientific processes against the referenced documents above. The results of this assessment will constitute the “As-Is” state of these scientific processes. Identify current, existing best practices as part of the “As-Is” assessment.
- Identify gaps between the “As-Is” and “To-Be” states for each scientific process and communicate them to each significant scientific process owner. As needed, Corrective Action Plans (CAPs) will be assigned by the Associate Director for Research based on the observations and with the concurrence of a Scientific Review Committee (appointments to this committee will be by the Associate Director for Research). Within two weeks of notification of observations by the Associate Director for Research, scientific process owners will be expected to prepare the corrective action plans to address gaps.
- Assist scientific process owners in the preparation and implementation of the corrective action plans.