QUALITY ASSURANCE LESSONS LEARNED

There were some areas of improvement that were recommended to universities in order to ensure the QA requirements are successfully implemented. These are listed below:

- ♦ Documentation of research should be copied/backed-up on a more frequent basis to ensure the data is maintained and protected.
- ♦ Some procedures are verbal and would benefit l from a more formal and structured documentation process in some instances to perform work.
- ♦ Faculty and students in many cases were not aware of the QA requirements and had not seen them.
- ♦ Although being performed, departmental or program specific training (or training specific to instrumentation, processes or procedures), were not well documented to provide evidence of training completion.
- ♦ Peer reviews are being performed and documentation should be consistently maintained to provide documentation of the project history.
- ♦ Software verification and validation (V&V) were being performed but the V&V processes could be better documented to provide the objective evidence of the V&V and testing. Much of this occurs in the software development itself but the documentation could be improved.
- ♦ Better communication of the QA requirements needs to occur with the students and anyone working on the NEUP scope of work at the time work starts.
- ♦ Although test/research planning is being performed, there was little evidence of consistently documented tests or research documents or implementing procedures in some areas.
- ♦ Calibration of equipment was being performed for the most part; however, the documentation of calibration could be improved and better maintained to prove calibration had been performed.
- ♦ Better engagement with TPOCs to get them integrated into the work activities.
- ♦ Lack of communication between university departments/faculty that have NEUP projects. Improved communications could add efficiency and better quality of work products by interfacing with each other to look for areas to emulate or improve.
- ♦ Quarterly reports should contain updates on how QA requirements for each project are being met. This would allow the TPOC and the QA representative to assist the university as early as possible to ensure QA requirements are met.
- ♦ Material control and labeling could be improved to ensure traceability of the material if the material/item is necessary for the experiment results.
- ♦ Flow down of requirements to sub-tier collaborators/subcontractors could be improved.
- ♦ Procurement documentation necessary for materials/items/services should contain necessary specifications and acceptance criteria.
- ♦ Self assessment activities could be instituted to evaluate whether QA requirements are being met.
- ♦ Presentations should have the NEUP logo as well as the acknowledgement.