Measurement Parameter

(E.g., Mass)

Scope/Range and Echelon

Max to Min capacity/ranges. E.g., 1 kg to 1 mg

Echelon level (where available.) E.g., Echelon II

Brief Description of Measurement Assurance Approach

Click here to enter text.

Status of Control Chart Reviews

Please assess the charts for this measurement area based on the following series of questions. These are the kinds of things we would look for during an evaluation. You can tailor this to your own system and approach and format. An "executive summary" in text form would be useful for the annually required Technical Audit and for the Management Review.

1. Provide a list of control charts for this particular parameter and Scope (or Reference a Table that is up to date in your Quality Manual Appendix or reference another table.)
2. Do all of the charts comply with the Control Chart/Range Chart Evaluation Checklist (and SOP 9, 17, 20, or 30?)
3. What was the date of the last review of the control chart for compliance (or include on Table)?
4. What is the review interval and who conducts the review?
5. Questions to consider:
    a. How much data is on the chart? If less than 25 points, please describe how you ensure you have adequate data for valid uncertainty reporting. If limited data is retained from year to year, describe how you determine what historical data "drops off".
    b. Are the observed values "in control"?
    c. Is action needed based on the data in this chart?
    d. Has action been taken already? If yes, what was the impact? If action is needed and has not been taken, why not?
    e. Have you compared past and current data with F-tests or t-tests and if so, what was the status? If not, how often do you assess the reference values and process?
    f. Is there "bias" or deviation from the reference value noted on this chart? (You need a reference value to assess this – if you don't have one, provide an explanation for why not.) Have you assessed the bias against the rest of the combined uncertainty for this measurement process/scope? How is the bias included in your uncertainty tables/calculations? Have you evaluated any observed bias against results from proficiency tests?

   g. Is the data pulled from these charts to update your uncertainties on at least an annual basis?

6. Be sure to include any action items uncovered during this assessment as a part of your annual Technical Audit and Management Review processes!