

CLARIFICATION NUMBER CAO-00-023, REV. 0
VOC AND SVOC INITIAL CALIBRATION ACCEPTANCE CRITERIA
(TABLE B3-5, B3-7)

ISSUE

1. When should the average response factor (RRF) be used and when should a linear regression be used for calibration?
2. Can a quadratic regression be used instead of a linear regression?

CONCLUSION

1. Use RRF if %RSD is ≤ 15 ; use linear regression if the RRF %RSD is > 15 .
2. The use of a quadratic regression is allowed.

DISCUSSION

The use of RRF is to be determined by the %RSD of the 5 initial calibration analyses. Where the %RSD for an analyte is < 15 , use the RRF. If the %RSD for an analyte is > 15 , then linear regression is to be used. The use of quadratic regression requires that 6 standards be analyzed for the initial calibration. This exceeds the requirements of a 5-pt initial calibration, so it is acceptable.