



NATIONAL ALLIANCE OF INDEPENDENT CROP CONSULTANTS

WHAT EPA WANTS FIELD QUALITY ASSURANCE TO KNOW

Memphis, Tennessee

January 30, 2009

Francisca E. Liem

U.S. Environmental Protection Agency



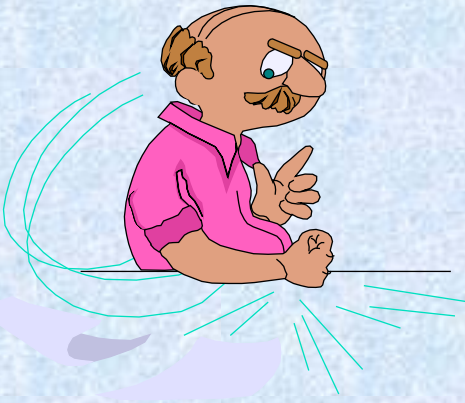
WHERE HAS THE TIME GONE?

- **May 2, 1984 EPA GLP Regulations 40CFR160**
 - Health effects studies
- **October 16, 1989 EPA GLP regulations 40CFR160 amended**
 - All studies (Including field trials)

20th Anniversary of GLP in Field Trials – QA Inspections

GLP IN FIELD TRIALS

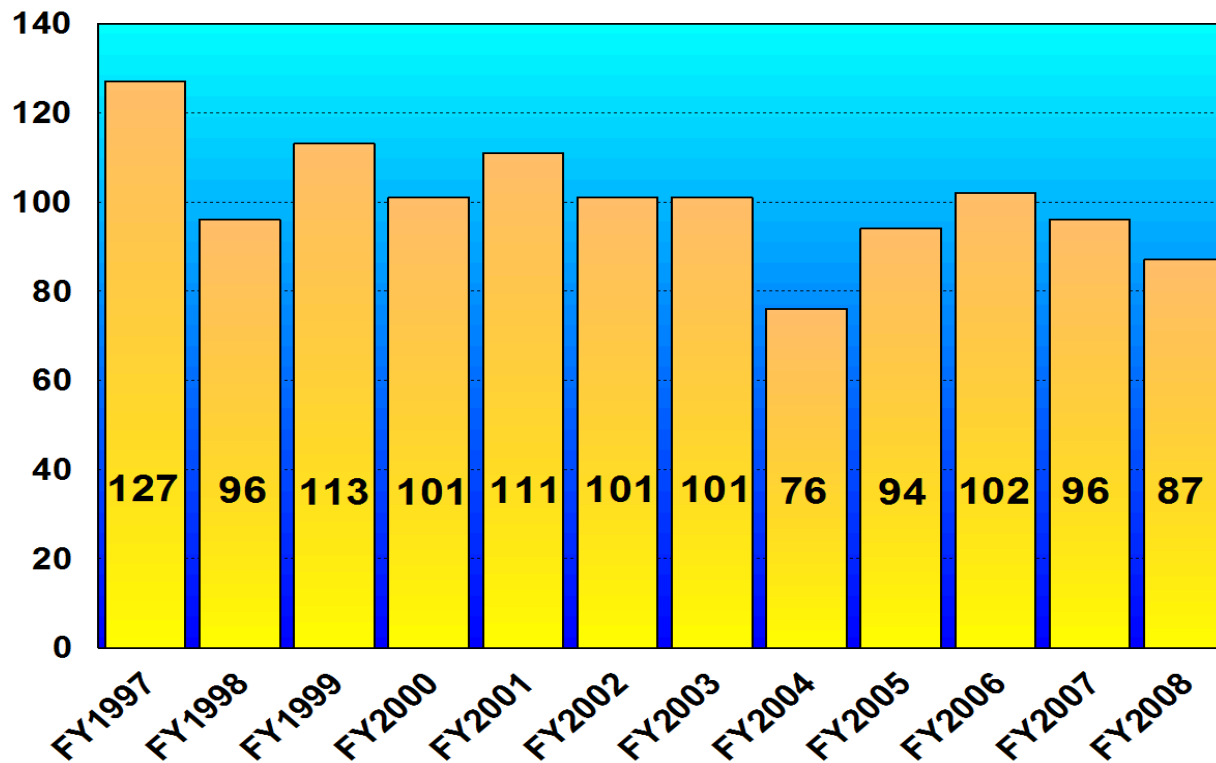
- **Five stages of grief**
 - Denial
 - Anger
 - Bargaining
 - Depression
 - Acceptance





GLP INSPECTIONS

FY1997 - FY 2008





CASE STUDY #1 – FIELD TRAIL

- Residue study consisting of 20 trials
- One trial – phytotoxicity – not reported in final report
- GLP violation referred to OPP
- OPP decision
 - Phytotoxicity should have been reported
 - The deficient trial was part of a 20 trial study
 - The deficient trail was not used in the decision making
 - Study survived because of the other 19 non-deficient trials



CASE STUDY #2 – FIELD TRIAL

- Electronic data in Field Notes were not recorded directly, promptly – up to 6 months later





CASE STUDY #3 - CHEMSITRY

- **Chromatograms stored electronically**
- **The best peak is printed out**
- **All other e-data (chromatograms) are deleted**



GLP ALERT #1

- **Sponsor must notify a contractor that the study must be conducted in compliance with FIFRA GLP**





GLP ALERT #2

- **Good Agriculture Practices are not GLP requirements, but EPA encourages researchers to follow**



GLP ALERT #3

- **Contract archives**
 - **Must be GLP compliant**
 - **Will be inspected by EPA**





GLP ALERT #4

- **GLP compliance statement vs. QA statement**
 - **No compliance status on QA statement !!**





GLP ALERT #5

- **Pathology report must be reviewed by QA**
- **Peer review of Pathology report must be reviewed by QA**
- **Peer review of Pathology report must be included with the study final report**



GLP ALERT #6

- **Memoranda, e-mail (printout), notes of study must be signed and dated and kept with the study records**



GLP ALERT #7

- QA reports to study director and management must not be delayed



GLP ALERT #8

- **QA must not:**
 - **Write laboratory's final study report**
 - **Write laboratory's SOPs**



GLP ALERT #9

- **Translated final report must include signature of**
 - **Study Director**
 - **Translator (notarized)**