

US EPA ARCHIVE DOCUMENT

# Impaired Water Body Data in Registration Review: Update on Pilot

Pesticide Program Dialogue  
Committee  
November 8, 2006

# Goal of Pilot

- Establish process for voluntary submission of CWA 303(d), 305(b), & other state/tribal water quality data for consideration in risk assessments (RAs) & decisions for pesticide registration review
- This will ensure OPP can consider water quality data developed for other programs

# Update on Pilot

- OPP, OW, 4 EPA Regions & 7 States tested a process for gathering state water quality (WQ) data
- Pilot:
  - determined data location & accessibility
  - gathered targeted WQ data
  - determined extent data could be used in RAs &
  - resulted in revised draft SOP to identify EPA, state & tribal roles in gathering the data
- Pilot has helped establish process for routinely considering state/tribal WQ data in exposure characterization for ecological risk assessment in registration review

# Focus of Pilot

- Pilot gathered data related to waters listed under CWA 303(d) as impaired by malathion or chlorpyrifos
  - Pesticides chosen for multiple 303(d) listings in regions & states
    - 35 chlorpyrifos impairments, 2 malathion impairments, plus additional data on waterbodies in Region 5
    - Intent was not to second-guess basis for listings
  - Regions worked with States & sent data or data links to OPP
    - Time was limited; may be more data out there
  - OPP has checked data & provided feedback on our ability to use data in RAs



# OPP Questions on Data

OPP checked each data set for:

- Data format
- Ease of accessing specific chemical data
- Ease of correlating data to specific 303(d) listings
- Ability to cite and use the fundamental data in exposure assessments
- Summary report describing study design and analytical results
- Adequate metadata for interpretation
- Characterization of exposure using metadata in summary report (e.g., info on pesticide usage)

# Challenges using some Pilot data in Risk Assessments

- Many submissions did not include the kinds of data needed to use the data quantitatively in pesticide exposure assessments
  - Pilot recognizes that impairment data were not collected for purposes of pesticide risk assessments
  - Some of these could be used qualitatively where references were provided.
- In majority of cases, not able to determine readily which data sets related to specific 303(d) listings
- In some cases, underlying data were not accessible
- When data were accessible, submissions often lacked one or more of the following important elements:

bibliographic citations

location information

sample type

concentrations

date/time of sample

study duration

analytical method

# More considerations on use of some pilot data in RAs

- Summary reports describing study design, results, or metadata often not available (not unusual for earlier monitoring data)
- Chemical-specific data often could not be queried & extracted for target chemical, or
- Time consuming to locate potentially useful data sources.



# Potentially a lot of useful data

4 States had submissions OPP could use qualitatively and possibly quantitatively in exposure assessments

e.g., 1 State sent links to sites with data on monitoring program design and annual data reports, including

- Full bibliographic citations
- Location information, as well as sampling types, dates, concentrations, analytical method, detection limits)
- Summary report describing the monitoring study design & results
- Metadata, including: pesticide usage & land use

Data appear useful for exposure characterization, at least qualitatively and possibly quantitatively

In other submissions, additional work needed to link pesticide use & land use (pesticide source) in study area before using the data in risk assessments

# Conclusions from Pilot

- Data was of varying utility for use in pesticide RAs
- A few data sets met most data elements identified by OPP → useful in pesticide risk assessments
- Several other submissions had potential to be useful
- Providing data links minimized regional & state time but often led to lengthy searches & follow up
- Newer data more likely to include elements needed for quantitative risk assessment purposes
- SOP should help in voluntary submission of WQ data
- SOP will give advance notice of data elements needed
- Focus on near-term cases on Reg Review schedule
- OPP encourages states & tribes to submit WQ data
- Submit data in time for OPP consideration

# Draft SOP – proposed region/state/tribal roles

- Goal: voluntary submission of high quality state/tribal data for Reg Review
- Regions review schedule for 2 years
- Identify 303(d), 305(b) & other WQ concerns
- Mine existing data
- Submit data links & data on specific pesticides for docket or as comments



# Draft SOP: proposed OPP role – in consultation & collaboration with OW regions states tribes

- Consider data in characterization of ecological risks when RA needed
- Seek public comment on PRA & RM
- Develop appropriate RM & monitoring options
- Issue proposed decision for comment  
→ final decision → implement



# Conclusion

- Findings will help in gathering useful WQ data for registration review
- Draft SOP establishes process & provides guidance on desired data elements
- New process will be used in FY '07 to extent data is available & is submitted