

*Summary of September 18-19, 2024 PIRT ESA Compliance Workshop in Philadelphia, PA
October 24, 2024*

Topic 1: Runoff and Erosion Measures

General Observations

- **Inspector Training Needs:**
 - **Challenges:** Inspectors need to be trained on using soil maps, determining slopes, and using tools like clinometers and Web Soil Survey. They also need to understand how to recognize and document various mitigation measures.
 - **Suggested Solutions:** Develop comprehensive training modules that include hands-on practice with these tools. Create job aids and visual guides to help inspectors identify and document mitigation measures accurately.
- **Documentation:**
 - **Challenges:** Accurate documentation is crucial but can be challenging due to the need for detailed observations, photos, and grower statements.
 - Records that belong to NRCS and the grower are not required to be shared with inspectors.
 - Verification of practices may be based on records or statements rather than visual inspection.
 - **Suggested Solutions:** Standardize documentation procedures and provide inspectors with templates and checklists. Encourage the use of digital tools for real-time data collection and photo documentation.
- **Topography Understanding:**
 - **Challenges:** Determining soil composition and slope, verifying subsurface drains, and defining berms.
 - **Suggested Solutions:** Collaborate with local experts and agencies like NRCS for soil composition data, when possible. Use advanced mapping tools and GIS technology to determine slopes. Develop clear definitions and guidelines for identifying and documenting berms.
- **Conservation Program Participation:**
 - **Challenges:** States will need to determine if programs meet the qualifying criteria from EPA. Growers may not want to share that they are participating in these programs. Information may be considered confidential information and if shared may be open to public records requests.
 - **Information Collected by Inspector:** Documentation of program participation provided by growers.

- **Information from Other Sources:** Some programs may be willing to share information on participation or may have publicly available information. Programs should be able to share information on their process and requirements to allow states to determine whether they meet EPA's qualifying criteria.

Specific Measures

- **Contour Farming:**
 - **Challenges:** Requires training to identify and document contour farming practices.
 - **Information Collected by Inspector:** Visual observation of ridges and furrows.
 - **Information from Other Sources:** None specified.
- **Contour Buffer Strips:**
 - **Challenges:** Needs maintenance and accurate observation.
 - **Information Collected by Inspector:** Visual observation, photos, and farmer records.
 - **Information from Other Sources:** Cost-share information from state programs.
- **Vegetative Barriers:**
 - **Challenges:** Identifying and documenting vegetative barriers.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Cover Crops:**
 - **Challenges:** Seasonal observation and need for clear definitions.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** Crop insurance records and definitions from OPP.
- **Filter Strips:**
 - **Challenges:** Varying effectiveness and maintenance requirements.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** Historical imagery and maintenance records.
- **Alley Cropping:**
 - **Challenges:** Identifying and documenting alley cropping practices.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Strip Cropping:**
 - **Challenges:** Identifying and documenting strip cropping practices.
 - **Information Collected by Inspector:** Visual observation.

- **Information from Other Sources:** Historical imagery.
- **Irrigation Management:**
 - **Challenges:** Verifying proper design and operation of irrigation systems.
 - **Information Collected by Inspector:** Visual observation of equipment.
 - **Information from Other Sources:** Soil moisture monitors and management plans.
- **Mulching:**
 - **Challenges:** Maintenance and in-field measurement.
 - **Information Collected by Inspector:** Visual observation and in-field measurement.
 - **Information from Other Sources:** None specified.
- **No/Reduced Tillage:**
 - **Challenges:** Verifying the extent of tillage practices.
 - **Information Collected by Inspector:** Visual observation and statements from growers.
 - **Information from Other Sources:** None specified.
- **Terrace Farming:**
 - **Challenges:** Identifying and documenting terraces.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Reservoir Tillage:**
 - **Challenges:** Identifying and documenting reservoir tillage practices.
 - **Information Collected by Inspector:** Visual observation of equipment.
 - **Information from Other Sources:** None specified.
- **Erosion Barriers:**
 - **Challenges:** Identifying and documenting erosion barriers.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Riparian Buffers:**
 - **Challenges:** Identifying and documenting riparian buffers.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** Definitions and plant identification guides.
- **Field Borders:**
 - **Challenges:** Identifying and documenting field borders.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Grassed Waterways:**

- **Challenges:** Identifying and documenting grassed waterways.
- **Information Collected by Inspector:** Visual observation.
- **Information from Other Sources:** Cost-sharing documents and maintenance records.
- **Vegetative Drainage Ditches:**
 - **Challenges:** Identifying and documenting vegetative drainage ditches.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Water and Sediment Control Basins:**
 - **Challenges:** Identifying and documenting water and sediment control basins.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** Engineering designs and maintenance records.

Topic 2: Spray Drift

General Observations

- **Inspector Training Needs:**
 - **Challenges:** Training on buffer distance calculations (this is extensive - see flow chart), weather data analysis, and UAV technology.
 - **Suggested Solutions:** Develop specialized training modules on these topics. Provide detailed overview of UAV application spray patterns and drift potential, provide hands-on practice with UAVs for agencies that use them for compliance, and provide hands-on practice with weather data analysis tools.
- **Documentation:**
 - **Challenges:** Verifying compliance with drift reduction measures using weather data, application records, and interviews.
 - **Suggested Solutions:** Standardize documentation procedures and provide inspectors with templates and checklists. Encourage the use of digital tools for real-time data collection and photo documentation.

Specific Measures

- **Max Windspeed of 15 mph:**
 - **Challenges:** Verifying windspeed at the time of application.
 - **Information Collected by Inspector:** Weather data and anemometer readings.
 - **Information from Other Sources:** Weather station data.

- **Temperature Inversions:**
 - **Challenges:** Verifying the presence of temperature inversions.
 - **Information Collected by Inspector:** Weather data, timing of application, and visual indicators like fog or smoke.
 - **Information from Other Sources:** Weather station data.
- **Boom Length and Swath Displacement:**
 - **Challenges:** Verifying compliance with boom length and swath displacement requirements.
 - **Information Collected by Inspector:** Visual observation, record review, applicator statements, UAV observations, and flight logs as appropriate.
 - **Information from Other Sources:** None specified.
- **Max Release Height:**
 - **Challenges:** Verifying release height during application.
 - **Information Collected by Inspector:** Video recordings and interviews with applicators.
 - **Information from Other Sources:** None specified.
- **Directing Sprays into Canopy:**
 - **Challenges:** Verifying that sprays are directed into the canopy.
 - **Information Collected by Inspector:** Video recordings and interviews with applicators.
 - **Information from Other Sources:** None specified.
- **Reduced Application Rate:**
 - **Challenges:** Verifying reduced application rates.
 - **Information Collected by Inspector:** Application records and interviews with applicators.
 - **Information from Other Sources:** None specified.
- **Downwind Windbreaks:**
 - **Challenges:** Identifying and documenting windbreaks.
 - **Information Collected by Inspector:** Visual observation.
 - **Information from Other Sources:** None specified.
- **Relative Humidity:**
 - **Challenges:** Verifying relative humidity at the time of application.
 - **Information Collected by Inspector:** Weather data.
 - **Information from Other Sources:** Weather station data.

Topic 3: Bulletins Live Two (BLT)

Specific Issues

- **Inspector Training Needs:**
 - **Challenges:** Training on using BLT, documenting bulletin access, and understanding bulletin applicability.
 - **Suggested Solutions:** Develop comprehensive training modules on using the BLT system. Provide hands-on practice with documenting bulletin access and verifying compliance.
- **Documentation:**
 - **Challenges:**
 - Verifying that applicators have accessed the correct bulletins.
 - The BLT system overall is insufficient.
 - **Suggested Solutions:**
 - Standardize documentation procedures and provide inspectors with templates and checklists. Encourage the use of digital tools for real-time data collection and photo documentation. BLT should be improved in a way that allows users to record that they have accessed it (e.g., discussed an optional login system that saves user info).
 - EPA should publish data layers and GIS files to allow third parties to develop their own systems.
- **Digital Access:**
 - **Challenges:**
 - Lack of digital access for decision-makers (landowner, farmer, applicator) to determine label compliance while planning applications.
 - Lack of internet connection in fields during inspections which limits information available to the inspector.
 - BLT does not appear to meet Web Content Accessibility Guidelines for ADA compliance.
 - **Suggested Solutions:**
 - EPA should explore digital access research that has been conducted to determine options for access to the bulletins for those who live with low or no digital access.
 - None identified.
 - EPA should ensure that the BLT system is ADA compliant.
- **Bulletin Applicability:**
 - **Challenges:** Verifying that applicators have accessed the correct bulletins.

- **Information Collected by Inspector:** Statements from applicators, screenshots, and email records.
 - **Information from Other Sources:** None specified.
- **Revised Bulletins:**
 - **Challenges:** Ensuring applicators use the most recent bulletins.
 - **Information Collected by Inspector:** Statements from applicators and email records.
 - **Information from Other Sources:** None specified.
- **Notification to SLAs:**
 - **Challenges:** SLAs need timely notifications of bulletin updates and PULA changes.