Pollution Prevention Lunch and Learn

Spray Paint Transfer Efficiency

Jan.15, 2026

P2 TOOLKIT

Pollution Prevention Team

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Small Business Regulatory Coordinator / CTAP

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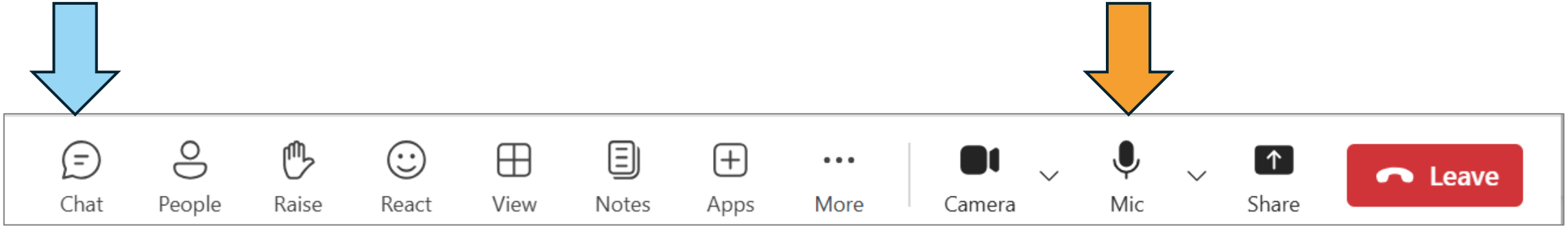
Housekeeping Items

Stay muted throughout the webinar.

Post your questions to the Chat to be answered during Q&A.



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Today's Agenda

- Introductions
- Spray Paint Transfer Efficiency Video
- Information Sheet & Checklist Overview
- Compliance and Technical Assistance Program (CTAP) Presentation
- Q&A Session
- Additional Programs
  - P2 Peers Pilot Program
  - Governor's Awards for Environmental Excellence (GAEE)
- Next Steps

Watch video presentation here...

INDIANA P2 TOOLKIT
Pollution prevention guidance for businesses

Pollution Prevention & Spray Paint Transfer Efficiency

Information Sheet

Background

Transfer efficiency refers to the percentage of how much coating material adheres to a surface compared to how much material is wasted in its application. The material that is wasted or doesn't reach the intended surface is referred to as overspray. Excessive overspray is wasteful and costly as most sprayers fail to reach a transfer efficiency of 50% and usually only reach about 30-40%. Not only is excessive overspray wasteful, but the toxins, solvents, and other ingredients in paints and coatings lead to increased VOCs (volatile organic compounds), air emissions, and potentially hazardous waste. Increasing transfer efficiency will increase productivity and efficiency and reduce purchasing costs, air emissions, toxins, solvents, and other potentially hazardous materials to save your business money and improve its environmental impact.

Best Management Practices

Proper spray training:

The use of proper spray techniques can increase transfer efficiency by reducing overspray. Applying coating materials right the first time with proper techniques will eliminate the need for additional coats and wasted materials. Sprayers should be properly trained and continuously updated on best techniques.

- **Distance:** The sprayer should maintain a certain distance from the intended surface depending on the type of spray applicator being used, coating material, and intended surface. This distance should remain constant throughout the coating process.
- **Arm movement:** The spray applicator should not be arced or tilted while spraying. The applicator should be held perpendicular to its intended surface and at right angles. When spraying smaller surfaces, sprayer should keep arm still and maintain movement in the wrist.
- **Pressure:** Use the lowest pressure applicable to the intended surface and coating materials when spraying. Lower pressures will result in less material rebound off surface and less overspray, increasing transfer efficiency.
- **Trigger:** The spray applicator should be triggered with each stroke. Start each stroke before pulling the trigger and release the trigger before the end of each stroke as the release of material from spray applicator is delayed. This will result in more even coverage, less material buildup, and conserve paint/coating to effectively minimize overspray.
- **Select the right nozzle:** Select the nozzle that is most appropriate for the coating material used and the intended surface. Spray nozzles for wider ranges (like fan nozzles) should not be used on small parts, and spray nozzles with little range should not be used on larger parts. Using the correct nozzle for a specific application will help increase accuracy and reduce overspray.

Image depicts two spray paint guns with two different nozzle sizes.

The actions outlined do not replace or ensure compliance with regulatory standards set by the Indiana Department of Environmental Management (IDEM). If regulatory or compliance assistance is needed, refer to IDEM's **Compliance and Technical Assistance Program (CTAP)**.

- **Spray Pattern:** Before spraying, the sprayer should know what pattern they are making or strokes they are using. Use straight, uniform lines, and avoid going over the minimum film thickness needed for the intended surface. This will help prevent uneven coverage of surface that may require more paint/coating to produce desired finish.

Storage temperature:

Sprayers should avoid storing coating materials in low temperatures as the temperature of the materials will affect its viscosity (material's resistance to flow/change shape or thickness). Lower temperatures will result in higher viscosities that require higher pressure to spray which decreases transfer efficiency.

Reduce use of toxins, solvents, and chemicals:

Whenever possible, purchase and use the least amount of toxins, solvents, chemicals, and other potentially hazardous materials necessary. Do not paint or coat parts or surfaces if not necessary and only add additives to coating materials when required. Additionally, do not open new containers of coating materials if one is already open and keep lids sealed on containers to prevent spills and evaporation of materials.

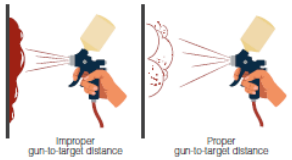
Maintenance:

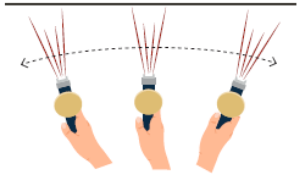
Keep up with regular cleaning and maintenance by inspecting parts, spray applicators, and storage areas for broken parts, leaks, or spills. Maintain good housekeeping measures like grouping light and dark paintings/coatings separately and designating specific spray applicators for specific coating material colors or types.

Rules, regulations and permits may require specific spray gun use and minimum transfer efficiency, as well as require training programs for operators.

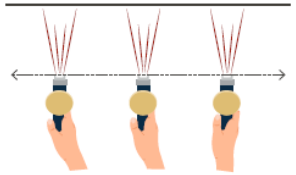
Hazardous waste generator requirements may also apply. Factors like paint characteristics and usage determine unusable status. Using water-based paint can reduce hazardous waste.

Refer to a product's technical datasheet (TDS) for manufacture's recommendations. The TDS provides detailed information on a product's characteristics, how a product performs, and other specifications. A TDS is important to ensure that the spray application product meets the needs of the user and is used correctly and safely.





Improper stroke, fanning



Proper spray stroke

Resources

IDEM's Compliance and Technical Assistance Program (CTAP) is a free and confidential service available to all Indiana businesses and regulated entities for on-site and remote assistance. Contact **CTAP** at **(317) 232-8172** or use the **CTAP online Portal** at https://portal.idem.IN.gov/ctap to submit a request for confidential regulatory and technical assistance. For more information, visit idem.IN.gov/CTAP.

For more information and resources on spray paint transfer efficiency, pollution prevention strategies, visit idem.IN.gov/prevention.

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Pollution prevention guidance for businesses

Pollution Prevention & Spray Paint Transfer Efficiency

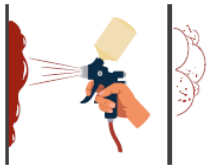
☑ Checklist

This checklist serves as a resource for implementing the best management practices for increasing transfer efficiency. Implementing these management practices will increase productivity and efficiency and reduce purchasing costs, air emissions, toxins, solvents, and other potentially hazardous materials to save your business money and improve its environmental impact.

Provide proper spray training for employees

Distance

- ✓Maintain specified distance from intended surface
- ✓Keep distance constant



Improper gun-to-target distance.

Proper gun-to-target distance.

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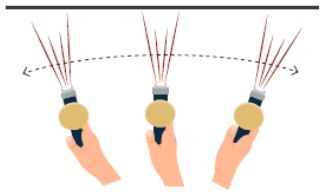
Arm movement

- ✓Hold applicator perpendicular to intended surface
- ✓Hold applicator at the right angles
- ✓For small surfaces: move wrist back and forth



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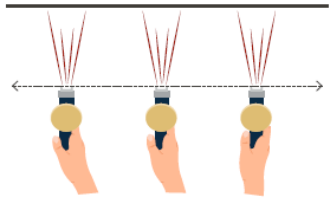

Proper spray stroke.

Pollution Prevention & Spray Paint Transfer Efficiency Checklist

Pressure

- ✓Use lowest pressure applicable

Trigger

- ✓Trigger spray applicator with each stroke
- ✓Start each stroke before pulling the trigger
- ✓Release the trigger before the end of each stroke

Select the right nozzle

- ✓Use the most appropriate nozzle for application
- ✓Use large-range nozzles for larger surfaces
- ✓Use small-range nozzles for smaller surfaces

Spray pattern

- ✓Know pattern before spraying
- ✓Use straight, uniform lines
- ✓Avoid going over minimum film thickness required

Storage temperature

- ✓Don't store in low temperatures
- ✓Store paints and coating at manufacturer's recommended temperatures

Regular maintenance

- ✓Inspect parts and spray applicators regularly
- ✓Check for leaks and spills
- ✓Group light and dark coating materials separately
- ✓Designate specific spray applicators for specific coating material colors or types

Reduce use of toxins, solvents, and chemicals

- ✓Purchase and use least amount of material necessary
- ✓Don't add additives when not required
- ✓Don't open new containers when one is already open
- ✓Keep lids on containers sealed

Rules, regulations and permits may require specific spray gun use and minimum transfer efficiency, as well as require training programs for operators. Hazardous waste generator requirements may also apply. Factors like paint characteristics and usage determine unusable status. Using water-based paint can reduce hazardous waste.

Resources

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IDEM

Small Business Regulatory Coordinator

Indiana Department of Environmental Management
Office of Program Support
Pollution Prevention and Compliance Assistance Section

CTAP

Compliance and Technical Assistance Program

Indiana Department of Environmental Management

Helping Indiana businesses one step at a time

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Free and Confidential

CTAP services are available to all sectors of Indiana's regulated community at **NO COST!**

CTAP offers environmental regulatory assistance to Indiana businesses and organizations of **ALL** sizes and types including:

- Existing facilities with legacy issues.
- New companies looking to locate in Indiana.
- Government agencies.
- Trade associations, industry groups, environmental consultants, and other interested stakeholders.

Non-Regulatory

CTAP staff are **NOT** regulators and do not have regulatory authority to issue violations, permits, fees, fines, or take enforcement actions.

Those who receive CTAP services will **NOT** be penalized for reporting relevant environmental information to CTAP when requesting assistance.

CTAP Services

CTAP Hotline and Online Portal | Site Assessments | Training | Online Resources

Contact CTAP to:

- Receive timely assistance with interpreting a rule or permit requirement.
- Determine what steps are needed to obtain a permit to operate or modify processes.
- Ask general environmental regulatory or compliance questions
- Request a site assessment.

Submit a confidential request via CTAP's online portal:

portal.idem.IN.gov.

Or call our hotline: 317-232-8172 or 800-988-7901

CTAP Services

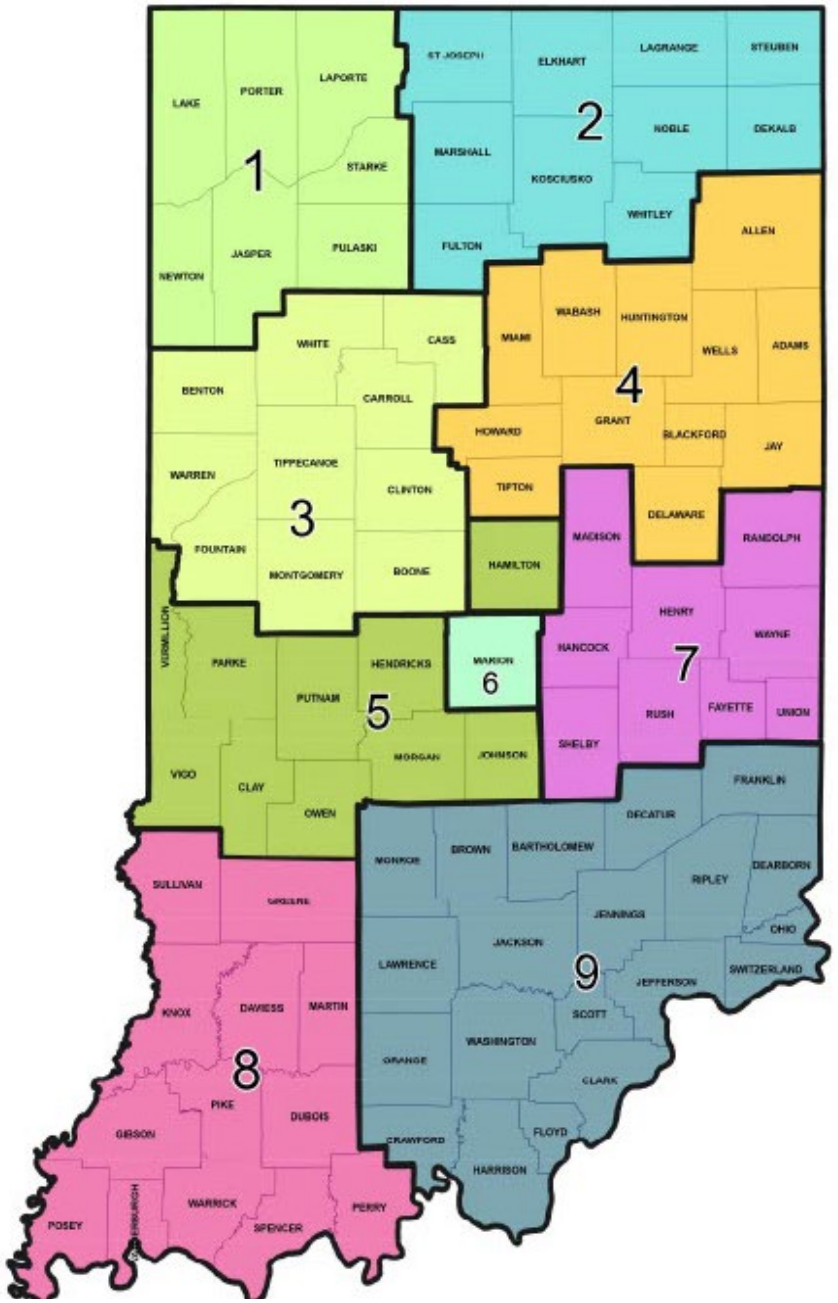
Site assessments

A site assessment is a free on-site consultation to observe and evaluate operations and determine environmental regulatory obligations, current compliance status, and identify potential pollution prevention opportunities.

CTAP staff can help troubleshoot a particular process or regulation or conduct an entire facility review. CTAP site assessments may be in-person or virtual.

CTAP Staff

- **Northwest Regional Office**:
  - 1 - Malorie Medellin
- **Northern Regional Office**:
  - 2 – Hannah Hack
- **Indianapolis Central Office**:
  - 3 – Mark Stoddard
  - 4 – Leigh Anne Harvey
  - 5 – Chrystal Wagner
  - 6 – Hani Sharaya
- **CTAP Small Business Regulatory Coordinator**
  - 7 - Samantha Nunnery
- **Southwest Regional Office**:
  - 8 - Tammy Haug
- **Southeast Regional Office**:
  - 9 - Susan Raisor



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How to Contact

- **Confidential online portal:**
  portal.idem.IN.gov

- **Toll-free hotline:**
  - **800-988-7901**
  - **317-232-8172**

- **Website:**
  - **idem.IN.gov/ctap**

- **Email:**
  - **ctap@idem.IN.gov**

SCAN CODE for Confidential Online Portal

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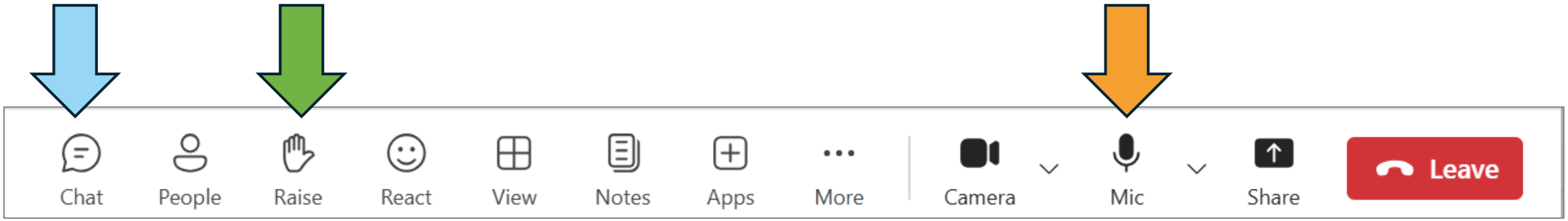
Q&A Session

Please ask any questions about detecting and fixing air compressor leaks in the Chat.

If you want to unmute and ask a question, raise your hand and unmute your mic when called on.



**Confidential compliance questions should be sent privately to our CTAP representative.*

P2 Peers Pilot Program

- Goals
  - Pilot Program
  - Collaborative effort between Partners and external businesses
  - To assist external business in pollution prevention/sustainability efforts
- Next Steps
  - Katya Drake at p2@idem.IN.gov

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Indiana Partners for Sustainability

Governor's Awards for Environmental Excellence (GAEE)

- We are accepting nominations!
- The deadline to submit a nomination is **March 6, 2026**
- Visit this webpage for more information
  - on.in.gov/GAEE-nominations

Please give us feedback!

https://forms.office.com/g/yP85v17hCk

Pollution Prevention Questions:

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Thank you for joining us for our P2 Lunch and Learn!

Additional materials to be added to the P2 Toolkit website and emailed to you by Jan.16, 2026
https://www.in.gov/idem/prevention/pollution-prevention-toolkit/

Be on the lookout for addition P2 Lunch and Learns:

Parts Washers

Wednesday, March 4, 2026