



Indiana's Auto Salvage Environmental Results Program (ERP)

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Indiana Department of Environmental Management

Office of Land Quality, Compliance and Response Branch

Industrial Waste Section 1

3/23/2011



In Memoriam: Rosemary Cantwell



- IDEM 1986-2010
- Industrial Waste 1 Section Chief
- Lead Auto Salvage Environmental Results Program (ERP)



Presentation Overview

- Auto salvage sector
- How we used ERP
- Our auto salvage results and plans
 - Communication of results within IDEM



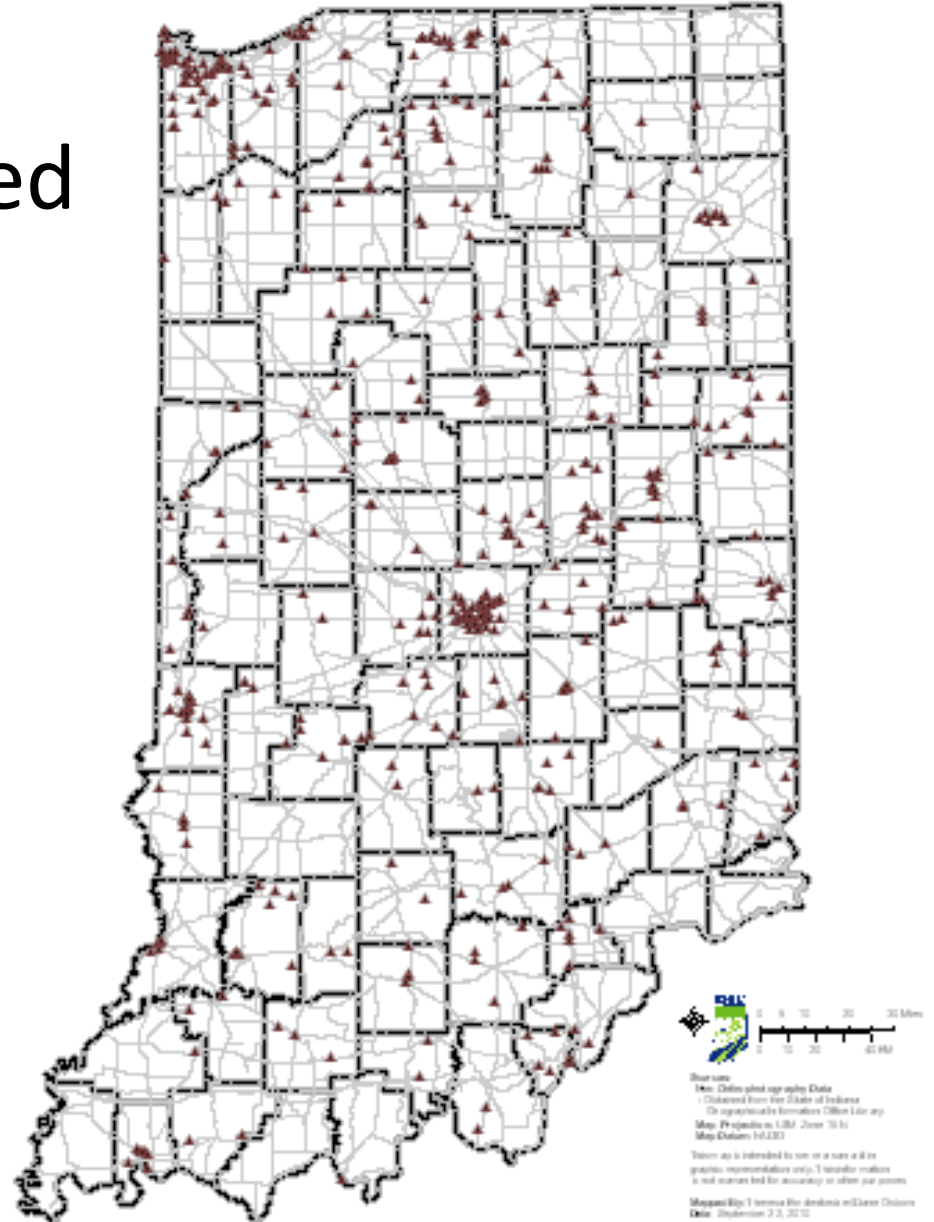
Indiana Auto Salvage Yards: A Persistent Problem

- Auto Salvage Initiative 2000-2004 (Compliance and Enforcement Focus)
 - Environmental violations commonplace: solid waste, storm water, refrigerants, containers, hazardous waste



New Approach Needed

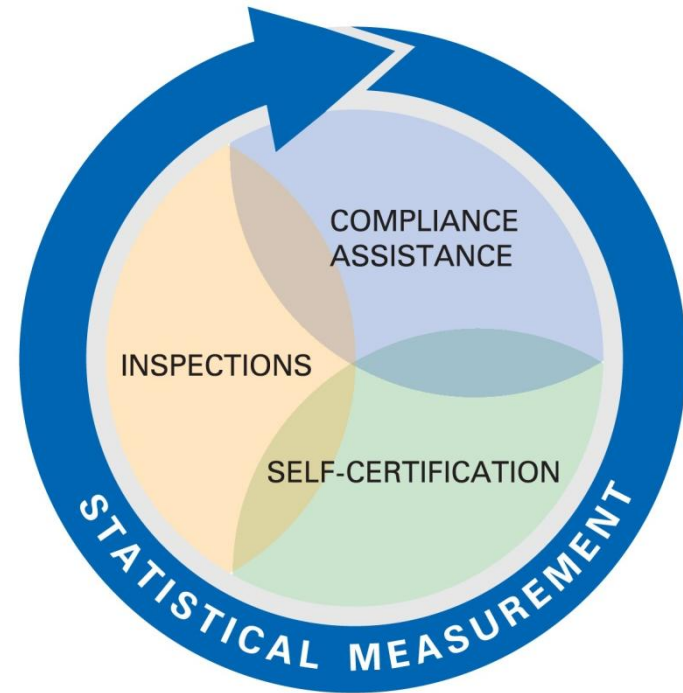
- Need for a holistic approach
- Need approach suitable for size of the universe





Environmental Results Program: Potential Solution?

- ERP integrates tools to affect performance in sectors with large numbers of small sources of pollution
- By 2006, had been associated with progress in several sectors
- Auto salvage yards, traditionally a difficult sector, would be a new challenge





A Typical ERP Cycle





Timeline of Auto Salvage ERP

- **2006:** U.S. EPA State Innovation Grant to implement ERP
 - Auto Salvage Yards an untested sector for ERP
- **2007:** Identified 548 facilities in Bureau of Motor Vehicles' data
 - Random inspections at 48 facilities, to baseline performance
 - Economic downturn begins December 2007
- **2008:** Preparation for certification and recognition program launch
 - IDEM begins to hear of staffing reductions at salvage yards
- **2009:** Deliver workbooks and workshops
 - Launch voluntary certification and recognition programs
 - Conduct random inspections at 50 more facilities
- **2010:** Statistical analysis of performance change, reporting



IDEM Universe Identification

- Typically, identified only in the course of responding to complaints
- In 2007, began thorough identification
- Used BMV list
- Over 600 with BMV permits
- Winnowed to 548





IDEM Baseline

- 48 valid random inspections
- June 2007-September 2007
- 7 different inspectors
- Data collected with tablet PCs (improve the efficiency and quality)
- Training of inspectors beforehand, to improve consistency





IDEM Compliance Assistance

- Distributed multimedia workbooks to all facilities
 - April 2009
- 3 Workshops: May and June 2009
 - Indianapolis, Valparaiso and New Albany
 - Cosponsored by trade association
- Multimedia Focus:
 - Included Air and Water
- Created ERP website for auto salvage yards
 - <http://www.in.gov/idem/4993.htm>
 - Consultant: “[The] IDEM Auto Salvage website is phenomenal.”





IDEM Self-Certification



- Certification was voluntary
- Deadline: July 15, 2009
- Incentive: Possible recognition as Indiana Clean Yard
- Outcome:
 - 45 facilities submitted certifications
 - 26 of those submitted return-to-compliance plans



IDEM Targeted Follow-up

- Phone calls
- Record check (storm water, mercury)
- Assistance
- Begin helping Indiana Clean Yard applicants achieve goals





IDEM Post-Certification Random Inspections

- 50 random site visits
- September 2009-
November 2009
- Conducted by 9 different inspectors
- Inspectors received data quality training to improve consistency in interpretation





A Typical ERP Cycle





Statistical Analysis: Primary Measures

- 10 priority multimedia compliance measures
- 5 observed increases in performance
 - Statistically significant increase in used oil container condition
- 5 observed decreases in performance
 - Statistically significant decreases in 2 storm water measures (planning, sample submission)



Statistical Analysis: All Measures

- All performance measures: voluntary and compliance issues
- 3 statistically significant increases
 - 2 used oil, 1 storm water
- 6 maintained performance at 100%
- 9 statistically significant decreases
 - 6 storm water, 2 refrigerant, 1 floor drain closure



Finding: AS Performance Steady In Bad Economy(Except for Storm Water)

- Removing storm water, we see:
 - 2 statistically significant compliance improvements (used oil)
 - Only statistically significant decreases relate to voluntary practices
 - Statistically significant improvement in percentage of facilities achieving ALL performance measures, including best management practices (BMPs)
 - Overall measures of compliance performance show steady performance at around 75% compliance, both rounds
- Considering economic context, expectation would be overall decrease in performance
- So, this would be a clear success, but for storm water



Storm Water Performance Declined: Why?

- Our theory:
 - Salvage yards reported staffing reductions related to changes in scrap metal prices and the overall economic downturn
 - Storm water requirements already confusing for yards
 - We noted accuracy issues on storm water self certification
 - Storm water requirements require active attention and maintenance (e.g., regular checks, sampling)
 - Yards consciously or subconsciously let these things slip



Direct Comparison: RI Auto Salvage ERP

- U. S. EPA SIG-Funded in 2005
- Prior experience with ERP implementation
- Timeline:
 - Early 2006: baseline visits
 - Mid-2007: certification deadline
 - First-half 2008: post-certification random visits
- Only 59 active auto salvage yards statewide
- Over 50% of salvage yards attended 3 workshops
- 37 yards (>60%) certified



RI Auto Salvage ERP Results

- 6 comparable indicators
 - Relating to storm water, mercury, used oil, fluids, and refrigerants
- Comparison:
 - RI, 6 significant increases
 - IN, no change or decrease
- RI also saw substantial increase in switch recycling (IN non significant increase)
- Consider project differences:
 - RI Project wrapping up before full impact of downturn?
 - Small RI universe and geographic size of RI
 - RI Past experience with ERP
 - RIDEM Partnership/Coordination: Narragansett Bay Commission, URI, ELVS



Beyond Statistics: Other Signs of Progress

- Increased interest in compliance assistance
- Increased trust/partnership with industry
- Increased environmental leadership within the sector



Increased Interest in Compliance Assistance

- 70 businesses attended workshops
 - >12% of all auto salvage yards
- After workshops began, 50% increase in confidential assistance visits:
 - 5/2008-4/2009 = 18
 - 5/2009-4/2010 = 27



Increased Trust/Partnership with Industry

- “This is the first time I have seen a government regulatory agency work with business in a cooperative nature ... thank you for starting the Clean Yard Program.”
 - Marty Hollingshead, Northlake Auto Recyclers, Oct 2009
- Active Participation by Pull-A-Part
- Active Participation of Automotive Recyclers of Indiana
 - Materials development and outreach
 - Unfortunately, limited membership (<10% universe)
 - IDEM at semi-annual meetings



Increased Environmental Leadership within the Sector

- Improved auto salvage yard presence in their communities
- 12 Indiana Clean Yards (7 Gold)



Indiana Clean Yards Recognition Program

- Voluntary self-certification
- Two levels of recognition:
 - Indiana Clean Yard and Indiana Clean Yard-Gold
- Rewards: certificate, counter mats, logo, press release
- Gold level presented by Commissioner and/or AC
- Intangibles: good neighbor, environmental steward



Adkins Auto Parts

- Adkins Auto Parts
- Indiana Clean Yard-Gold
 - 9/15/2010
 - Community support
- Positive press coverage

D Section **BUSINESS**

THE MOORESVILLE-DECATUR TIMES SATURDAY, SEPTEMBER 18, 2010

Keeping things 'clean'

Adkins Auto Parts receives Indiana Clean Yard award

By Aleasha Sandley
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MARTINSVILLE

Clean might be the last thing you think of when you picture a salvage yard, with beat-up cars and twisted scraps of metal lining the lot. But Adkins Auto Parts is beyond clean by Indiana Department of Environmental Management standards.

The business at 1010 N. Main St., Martinsville, was inducted into IDEM's Indiana Clean Yard environmental recognition program Wednesday and given the program's Gold designation for going above and beyond clean yard requirements and implementing best management practices in the yard.

The designation makes Adkins the sixth salvage yard in the state to be inducted into the program's gold level and the first yard in the program that does both auto salvaging and recycling of other metals.

"It's naturally a dirty business," co-owner Jim Adkins said of the auto- and metal-salvaging industry. "It's hard to make it a clean business and keep it a clean business."

Theresa Bordenkocher, the IDEM section chief for industrial waste, said Adkins Auto Parts received a 79 percent on an inspection checklist. To be eligible for the gold level, yards must achieve at least a 75 percent.

City officials, as well as members from the Morgan County Solid Waste Man-



Indiana Department of Environmental Management Commissioner Thomas Easterly (far left) presents Adkins Auto Parts co-owners Mark Kendall and Jim Adkins with an Indiana Clean Yard - Gold Level certificate as community members, including Martinsville Mayor Phil Deckard celebrate the achievement. Photo by Keith Rhoades.

agement District Board, attended the event Wednesday in which Adkins received its honor.

"I have never seen so many portions of the community show up for the announcement," Bordenkocher said.

IDEM Commissioner Thomas Easterly called Adkins' environmental protection measures "excellent."

"They're doing it more than properly," Easterly said. "When I see their tire management all inside a barn, that's excellent. Doing all these good environmental things helps their

business get more efficient."

Adkins co-owner Mark Kendall said he asked environmental engineer Blake Wilson about five years ago to begin looking into the cost associated with creating an environmental plan. One of the final necessary steps to Adkins fulfilling the Indiana Clean Yard requirements was when it built a dam to contain runoff from the scraping process, Kendall said.

"When we thought we were close, we asked (IDEM) to come see," he said. "I think it would have been a terrible disappointment if we didn't get it."

The business also purchased a machine that can drill holes in vehicles' gas tanks and radiators, seal them and suck the fluids out, as opposed to simply draining the fluids and leaving some of it behind. The co-owners also put in

a system for making sure the yard regularly is cleaned, and employee Jay Steinway, who oversees the environmental compliance effort, checks the yard every week and writes notes to employees on how to maintain the environmental standards.

"We want to figure out a way to keep it (clean) and we're working on it and the folks who work here are committed to keeping it that way," Kendall said. "I don't think Jim or I was particularly anxious about causing trouble, and we wanted to follow the rules. It's made our business more efficient, safer."

Warren Waymire, of the county's solid waste management district, said Adkins Auto Parts was the largest recycler in Morgan County.

See CLEAN on page D2 ▶

Business

Chaplin I Gary Chaplin Martinsville, will with a Social 6 p.m. Oct. 2 Martinsville, the Social 56 Melissa Schil tion, call 765

Chambe The Greater I a drawing for Houston 10a p.m. Nov. 1 a package also for dinner at ing, purchase Chamber box E. Morgan St at the Cham will be ann meeting.

Core Fitr Core Fitness the annual 5 Sept. 25 at 8 from 8:30 to Cost is \$25 f all proceeds rial Scholand Morgan Coua calling Core

IU to hos Indiana Univ Liberty will v Thomas E. W Auditoria economic cr of Wood's What Now? will be follow

Leadersl class to The Morgan is Phyllis Hal Dungan, Sh lyn Holland, Joy McCarth from the acc lessional's be more inform the MCLA w call 317-374-



Wright's Auto Parts: Started As a Laggard

- Located in Brown County, typical auto salvage yard
- Variety of violations noted at baseline: storm water, oil/fluids, mercury, refrigerants



Wright's Auto Parts: Finished As a Leader



- Mr. Wright reacted proactively
- Attended workshop and made positive, public comments
- Submitted self-certification
- Resolved violations and implemented voluntary BMPs
- Became Gold-level Clean Yard in March 2010



Additional Benefits for IDEM

- Improved capacity for evidence-based decision-making
 - Collecting quality data
 - Conduct straightforward statistical analysis
 - Interpret results
- Easy Excel-based tool to help with exploratory data analysis
- Long-lasting compliance assistance materials
- Repeatable self-certification process
- Ongoing Indiana Clean Yards program



Lessons Learned

- New program required reasonable investment
 - Expenditures: ~\$61,000 annually (84% grant money)
- Multimedia initiatives continue to create challenges
- You can lead a horse to water...
- Issues with certification accuracy with regard to water, refrigerants, mercury
 - Issues generally confusing for shops?



What's Next for Auto Salvage Yards?

- Yards need to work on key issues:
 - Storm water; refrigerant management; fluid spills; mercury management, floor drain closure
- Current plans:
 - 2-year renewal cycle for Indiana Clean Yard award winners
 - Compliance assistance materials (workbook, DVD) to all new BMV auto salvage license holders
 - Continue compliance assistance, workshops
 - Continue to respond to complaints



What's Next: Additional AS Options

Other options could be considered by themselves or combined:

- Occasional sector-wide re-certification process
 - Statistical measurement is optional; could do occasionally
- Ongoing compliance assistance: materials, more workshops
 - Targeted at just subset of facilities, or not
- Streamlined focus just on biggest problem areas identified
 - Focuses facility attention and IDEM resources
 - Maybe partner with key media program(s)
- Lessons from RI Auto Salvage ERP
 - Partner with organizations outside of IDEM?
- Potential to target efforts based on GIS analysis?



Communication of results within IDEM

- Presentation to management September 2010
- Auto salvage ERP results and other potential avenues for IDEM



Potential ERP Avenues for IDEM

- Integrated ERP Approaches
 - More collaborations with Region 5 and States
 - Integrate ERP approaches into core programs
 - Business partnerships
- ERP-Style Measurement Approaches
 - Statistical snapshots
 - Performance benchmarking



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- U.S. EPA SIG Program
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- IDEM OAQ
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