



# **PERFORMANCE BASED REGULATORY STRATEGY IN RHODE ISLAND**

VENTURING INTO THE UNKNOWN



MERCURY SCIENCE AND POLICY CONFERENCE  
WED. APRIL 26, 2006

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# **PERFORMANCE BASED REGULATORY STRATEGY IN RHODE ISLAND**

## **AGENDA**

1. The goals of the strategy
2. The target program for the strategy
3. How we did it !
4. The results to date

# **PERFORMANCE BASED REGULATORY STRATEGY IN RHODE ISLAND**

## **GOALS**

1. Infuse some creativity into the regulatory process
2. Remove the "Command and Control" aspect of policymaking
3. Create an incentive for the regulated universe

# **PERFORMANCE BASED REGULATORY STRATEGY IN RHODE ISLAND**

## **CHOOSING A PROGRAM**

1. New regulatory requirement (auto switch removal and disposal)
2. Required a producer responsibility component
3. Viewed as a great opportunity to allow for performance-based standards as a first effort strategy

# **PERFORMANCE BASED REGULATORY STRATEGY IN RHODE ISLAND**

## **HOW WE DID IT**

### **STEP 1: Estimating the Number of Switches Available for Collection**

The Rhode Island Department of Environmental Management (DEM) estimates that approximately 50,000 Rhode Island vehicles are retired annually.

Based on a model developed by the Maine Department of Environmental Protection with input from industry representatives, DEM projects that approximately 602 lbs. of mercury remains in convenience light switches in vehicles registered in Rhode Island.

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## Step 1: Estimating the Number of Switches Available for Collection (con't)

In addition to this mercury from cars registered in Rhode Island, Metals Recycling processes approximately 60,000 vehicles from out-of-state each year. Of these vehicles, approximately 24,000 are in a condition from which mercury switches could be recovered. Independent auto recyclers also process an unknown number of out-of-state vehicles.

From this pool, it is estimated that 43 pounds of mercury are available per year to feasibly be collected from mercury switches in Rhode Island.

# PERFORMANCE BASED REGULATORY STRATEGY IN RHODE ISLAND

Starting Inventory	750,000 cars (pre-2003 vehicles)
Retirement Rate	6.6% per year- 15 year expected life-linear retirement curve
Switches per Vehicle	0.6
% of Vehicles with Switches	65%

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## **CALCULATION**

750,000 vehicles X 65 % (vehicles with mercury switches) X 6.6% (vehicles retired per year)  
= 32,175 vehicles with mercury retired switches per year

X 0.6 switches/vehicle

= 19,305 switches per year

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## **HOW WE DID IT**

**STEP 2: Establish a capture rate:**

**50% of available switches in first  
year ( 9,650 mercury switches )**

**70% of available switches in the  
second and subsequent years  
through 2017 (13,510 mercury  
switches)**

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## **HOW WE DID IT**

**STEP 3: Establish an approved Automobile Manufacturer-facilitated collection and disposal program:**

Responsibilities include:

Submission of collection plan with defined capture rates

Provide vehicle recyclers and scrap recycling facilities with collection, management and disposal services

Provide public education/outreach efforts on these services

Require reporting mechanism to assure compliance

Set bounty program as a consequence of failure to meet capture rates.

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## RESULTS/NEXT STEPS/LESSONS LEARNED:

Program has been in effect for approx. 4 months

Manufacturers initially seemed eager to have input into the process

Ramp-up time required

Outreach to vehicle recyclers and scrap recyclers is critical, if they do not cooperate, plan will fail

The Automobile Alliance has not yet received approval of their collection plan

Local assistance providers should be employed in order to provide services to local participants

Communication is essential in order to meet performance-based standards (the Alliance, Recyclers/Government).

Since program has not been in effect for 1 year, we do not yet have info on results.....stay tuned.....