ELVS end of life vehicle solutions

P.O. BOX 3282
Farmington Hills, MI. 48333-3292

March 12, 2008

Arkansas Department of Environmental Quality
Attention: Ms. Teresa Marks, Director
Mercury Switch Removal Program
5301 Northshore Drive
North Little Rock, AR 72118

Subject: End of Life Vehicle Solutions Corporation Annual Manufacturers' Implementation Report

Dear Ms. Marks,

Arkansas's Code Title 8, Chapter 9, Subchapter 8-9-607 (Mercury Switch Removal Act of 2005) requires vehicle manufacturers to annually report on the implementation of a mercury minimization plan including:

- the number of mercury-added switches collected
- a description of the mercury switch capture rate achieved
- the number of end-of-life vehicles containing mercury switches
- the number of end-of-life vehicles processed for recycling
- a description of how mercury switches were managed
- a description of additional actions that may be implemented to improve the mercury minimization plans in the event that the required capture rate is not achieved
- a description of the amounts paid to cover the costs of implementing the mercury minimization plan
- steps being taken by manufacturers to design vehicles and components for recycling

This report is provided by End of Life Vehicle Solutions Corporation on behalf of its member automotive companies. The participating members of ELVS are BMW of North America, LLC; Chrysler LLC; Ford Motor Company; General Motors Corporation; International Truck & Engine; Mack Trucks Inc.; Mitsubishi Motors North America, Inc.; Nissan North America, Inc.; Porsche Cars North America, Inc.; Toyota Motor Sales USA, Inc. America; Subaru of America, Inc.; Volkswagen Group of America, Inc.; and Volvo Trucks North America.

Mercury Switches Collected

Through March 4, 2008 a total of 4,153 mercury switches were delivered to the ELVS recycling contractor from Arkansas dismantlers, yielding 9.14 pounds of recovered mercury. There are 205 registered dismantlers in Arkansas, thirteen of which have submitted switches.

Mercury Switch Capture Rate

A total of 3,277 switches were recovered in calendar year 2007. The estimated number of switches available for recovery in Arkansas during 2007 was 46,000, resulting in a capture rate through December 31, 2007 of 7.12%.

Vehicle / Switch Estimates

ELVS uses the National Vehicle Mercury Switch Recovery Program (NVMSRP) Switch Retirement Model (www.elvsolutions.org/model.html) approved by the U.S. EPA and program partners to estimate mercury switch populations. The model was developed to identify switch populations and estimate mercury switch retirement rates through 2017. Therefore the model focuses on mercury switch counts rather than vehicle counts. The model reports that the estimated national total number of mercury switches historically manufactured in vehicles to be 169,185,000. Most of the vehicles containing these switches have already been scrapped, with an estimated 31,115,000 switches remaining in today's national fleet for collection through 2017. Arkansas's portion of these switches remaining for collection through 2017 is estimated at 318,000.

The number of mercury switches that were available nationally for recovery in 2007 is estimated to be 4,569,000 units. In Arkansas, 46,000 switches were available for recovery in 2007.

Information about the number of mercury switches recovered, the total amount of mercury processed, and a listing of participating dismantlers in Iowa is available through the ELVS website, www.elvsolutions.org with linkage to our contractor's website, http://www.eqonline.com/services/ELVS-Mercury-Switch-Recovery-Program/annual-report.asp?year=all. Information is updated daily as additional switches are received by our contractor, and is now available for downloading into Excel for your convenience. As mentioned above, the NVMSRP Switch Retirement Model is available at www.elvsolutions.org/model.html.

These web-based data tracking systems are part of ELVS' commitment to data accessibility, and will be available at least until 2017. ELVS requests that you consider if this data tracking system is sufficient to meet Arkansas's reporting requirements, allowing us in the future to dispense with the formality of written progress reports.

Mercury Switch Management

Mercury switches received by ELVS are generally managed as follows:

- Dismantlers remove the switches, extract and place the mercury pellets in the collection buckets that are provided. ABS assemblies with multiple pellets are returned as units.
- Once the buckets are full, the dismantler contacts EQ who pays for the shipping of the buckets to their facility in Michigan.
- EQ records the number of pellets and enters them into their database. The pellets are then sent to a retorting facility where the mercury is recycled.

Additional Actions

ELVS and the NVMSRP have taken a variety of additional actions to increase the number of participants in the program and the number of switches recovered. In December 2007, ELVS mailed reminder cards to all participants in the program to encourage the timely submittal of recovered switches.

For 2008, ELVS is producing a laminated reference card that contains detailed photos of mercury switches that should be collected in order to assist dismantler identification of mercury switches. The laminate card has been well received and will be sent to all dismantlers in the first quarter of 2008. ELVS, along with the Arkansas Department of Environmental Quality recently participated in a very successful seminar in Arkansas sponsored by Nucor Steel. The workshop was designed to familiarize dismantlers with the Arkansas program and related aspects of the NVMSRP program and encourage participation and switch collection.

More broadly, the NVMSRP member organizations continue to focus the second year of the program on ways to grow participation and switch collection. Among the actions being considered for application across the states are:

- NVMSRP members such as the Ecology Center are exploring the use of one-on-one contact programs for increasing active participants and achieving higher switch collection rates. One-on-one contact may include phone calls, workshops, compliance assistance, mailings, and site visits. This type of contact is expected to provide the most direct encouragement to dismantlers to join the program.

- Active participation in advocating the program by industry champions (steel, shredders, dismantler associations, or some combination) is under way. Each of these groups is active in designing advocacy plans focused on increased participation and mercury switch recovery by their constituencies. The relationship between associations and their members will be a key to helping to achieve program success in all states.

- Steelmakers will take steps to minimize the presence of mercury in auto shred by working with their suppliers and others in the supply chain to assure participation with ELVS in state mercury switch collection efforts. Additionally, EPA will consider participation in the NVMSRP as a potential means of compliance with the upcoming Electric Arc Furnace rules, and in proposing revisions to regulations involving sources producing steel from auto scrap (Iron and Steel MACT).

Participation of suppliers is tracked through the ELVS database, and as such, the collection program becomes part of the EAF compliance process. We believe that this market mechanism will drive participation in the ELVS program, resulting in switch removal becoming a standard business practice along with the draining of fluids, battery removal, and the many other tasks completed to properly prepare a vehicle hulk prior to crushing. The steel industry is developing these market mechanisms which will soon begin to flow through the supply chain.

The goal of both ELVS and NVMSRP is to maximize the participation rate, monitor results, and make on-going program improvements as needed to increase the number of switches returned to ELVS.

As the market mechanisms which are part of the national agreement take effect, we expect switch collection in Arkansas to increase.

Program Costs

- Bucket Shipment $11,225
- Program Mailing $ 1,916
- Bounty $19,794
- State Fees $ 3,821
- Website/Educational Material $ 1,177
- Travel/Personnel/Overhead $11,392

Design for Recyclability

Over the upcoming calendar year, select ELVS member companies will be launching new vehicles with mercury free versions of high intensity discharge headlamps and navigation system screens. All ELVS members are working with suppliers to develop mercury free components and will implement them as alternative technologies become feasible.

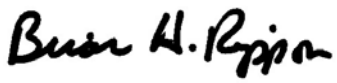
The policies being implemented are described in Attachment A, "Automotive Recycling: Your Car's Afterlife" as well as in Attachment B, "Vehicle Recycling Partnership Milestones." Additionally, the participating members of ELVS manage restricted substances through the International Material Database System (IMDS). Information concerning this system can be viewed at: http://www.mdsystem.com/html/en/home_en.htm.

Conclusion

Going forward, NVMSRP member organizations will continue to develop additional outreach efforts to scrap recycling facilities and vehicle recyclers in Arkansas and provide them with the necessary materials to remove mercury switches. The new picture-based mercury switch reference chart being sent to all dismantlers in the state, along with the steel industry's efforts to increase its outreach efforts to dismantlers encouraging them to ship reduced-mercury scrap steel are important near-term steps. We believe that these efforts will increase the number of dismantlers recovering and submitting mercury switches to ELVS for recycling.

If you have any questions or comments regarding this report, please contact me at brelvs@yahoo.com or 248-477-7357.

Sincerely,



Brian Rippon
End of Life Vehicle Solutions
Project Manager

Attachments