National Vehicle Mercury Switch Recovery Program Annual Report 2006-2007

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What is the National Vehicle Mercury Switch Recovery Program (NVMSRP)?

There has been an increasing awareness that one way to reduce mercury releases to the environment is to remove mercury switches from end-of-life vehicles prior to crushing, shredding, and melting to recycle steel.

Switch removal from these vehicles at their end of life, reduces mercury releases to air, water, and land from electric arc furnaces. Pollution prevention in the form of mercury switch recovery is the most effective way to avoid these releases. Since mercury damages the human nervous system, reducing mercury releases is a high

Examples of Partner Activities

- Participating automobile dismantlers remove mercury-containing switches from whole endof-life vehicles.
- Automakers recruit dismantlers to participate, will provide information on models, switch locations, and removal procedures, and will collect, properly manage, and track the recovered mercury switches.
- The steel industry strongly encourages its suppliers to participate and verifies participation as the program matures.
- ECOS encourages the states to coordinate with the NVMSRP and has joined trade associations, US EPA, environmental groups, and others in assisting with outreach, education, data analysis, performance evaluation, and program improvement.



priority because of the health effects.

In August of 2006, nine organizations partnered to launch a voluntary program to increase the recovery of recover mercury switches from endof-life vehicles. Working with existing State switch recovery efforts, the NVMSRP has the potential to recover 80 to 90 percent of available mercury switches, leading to commensurate reductions in air emissions caused by vehicle switches.

The program is a cooperative effort by auto manufacturers, steelmakers, vehicle dismantlers, vehicle shredders, environmental organizations, the Environmental Council of the States (ECOS) and the Environmental Protection Agency (US EPA).

The NVMSRP is pleased to present the

accomplishments for the first year of program implementation and goals for the upcoming year in this Annual Report. All participants can share the accomplishments achieved in the first year of the program.

Mercury Switch Recovery – The Process



* New vehicles = Some 2002 Model Year and Older Vehicles

Key Benefits of the NVMSRP

Protects public health — working with existing State switch recovery efforts will help to recover 80 to 90 percent of available mercury switches, leading to commensurate reductions in air emissions caused by vehicle switches.

Conserves energy and natural resources — promotes automotive recycling and steel recycling.

Maintains economic competitiveness — supports numerous industries that produce and use scrap metal.

Cost-effective — costs far less per pound of mercury than conventional emission controls **Easy** — automobile recyclers can find and remove most switches within a minute.

Overview of NVMSRP Accomplishments

By looking at program results, it is clear that in the first year of implementation the primary goal of enlisting the States to participate in the NVMSRP has been accomplished ahead of schedule. As of August 2007, mercury switch removal programs were operational in all 50 states¹. This goal was reached because of the hard work done by the partners, especially End of Life Vehicles Solution (ELVS). ELVS is a corporation set up by the auto makers to encourage participation in the program; provide educational materials to scrap processors dismantlers and the public; and to handle the switches collected by the auto dismantlers, ensuring that the mercury is recovered. Also at the forefront of this effort is the Environmental Council of the States (ECOS), which represents the States, that produced outreach materials explaining the NVMSRP and encouraging State participation. The environmental groups and the trade associations also helped by attending the state roll out meetings to support the program.

Another first year goal was to develop a methodology for measuring the percentage of

The Partnership Agreement

The partners to the NVMSRP have -

- Implemented the program at the State level, in consultation with appropriate state entities.
- Formulated a strategy to ensure direct outreach with NVMSRP participants.
- States with existing programs and legislation are allowed to continue their State-specific efforts, however, other States are encouraged to join the NVMSRP rather than create their own State-specific mercury switch removal program.
- Worked together to address program weaknesses and to continuously improve the NVMSRP.

switches that are being captured by the NVMSRP. There are several sources of data from which to draw information on the number of vehicles retired each year, a key factor in determining the switch capture rate. It took time and effort on the part of program partners to decide on a way to measure program success, however, we have accomplished this goal. We are ready to measure the success of the program in future years.

Early results show progress in increasing the number of participants and number of switches recovered. Again this initial roll-out and ramp up has been accomplished through the collaborative spirit of the partners and their collective vision regarding the environmental and public health benefits to be gained. Since August 2006, more than 635,000 mercury switches have been collected by approximately 5,900 participants.

The success to date of the national program in collecting switches is based on several factors that make it difficult to compare the performance of individual States or assess long term performance of the national program at this time. Some States had instituted statutorily

¹ The state of Maine has a pre-existing switch removal program that was established by law.

mandated programs prior to the establishment of the national program and, therefore, have been operating for a longer period of time. States that have just joined the national program are clearly in a ramp-up phase. We also note that there will be an initial delay associated with many new programs while individual dismantlers accumulate sufficient switches to make a shipment for recovery. Some switches submitted to the program in the first year came from sources that had been storing them in anticipation of a future opportunity to dispose or recycle them.

During its first, full year the program has made significant progress. The second year of the program will shift from roll-out to ramping up participation and collection rates. We will be in a position to better assess our progress once all the State programs have been in place for at least a year. In the interim, we will monitor state-by-state progress and fine-tune our efforts anywhere that results are not matching our expectations



Partner Accomplishments

Program Partners	
The Ame www.stee	rican Iron and Steel Institute I.org
The Steel www.stee	Manufacturers Association
The Auto www.a-r-a	motive Recyclers Association
The Instit	ute of Scrap Recycling Industries
	of Life Vehicles Corporation
<u>www.crv3</u>	
Environm	nental Defense ronmentaldefense.org
Environm www.envi	

The Environmental Council of the States <u>www.ecos.org</u>

The Environmental Protection Agency www.epa.gov



The following section of the NVMSRP Annual Report contains a summary of goals and accomplishments that were submitted by each program partner. The reports may therefore reflect some variation in style, however, a theme reflected throughout is one of commitment to the long-term success of the program and a desire to continue to collaborate with all of the partners toward achieving both near- and long-term goals.

For additional information about each of the program partners, go to the Web sites provided above in the box. Each reveals a wealth of information that is readily accessible.





Partner Organization: American Iron and Steel Institute (AISI)

AISI speaks out on behalf of the North American steel industry in the public policy arena and advances the case for steel in the marketplace as the preferred material of choice. AISI serves

as the voice of the North American steel industry in the public policy arena and advances the case for steel in the marketplace as the preferred material of choice. AISI also plays a lead role in the development and application of new steels and steelmaking technology. AISI is comprised of 31 member companies, including integrated and electric furnace steelmakers, and 130 associate and affiliate members who are suppliers to or customers of the steel industry. AISI's member companies represent more than 75 percent of both U.S. and North



American steel capacity. For more news about steel and its applications, view AISI's Web site at <u>www.steel.org</u>.

Partner Commitments:

- Publicly endorse the NVMSRP and encourage broad participation.
- Acknowledge and recognize members who are actively participating.
- Assist in outreach and build awareness among the "steel scrap supply chain."
- Work with ISRI regarding scrap work practice standards and pursuing reasonable certification requirements for scrap processors.
- Issue a statement that confirms program involvement.
- Develop a participation plan that demonstrates level of involvement, specifically indicating:
 - Corporate/facility implementation efforts and policies.
 - Participation in Association-led implementation efforts.



- Develop a communications package (standardized forms, letters, press releases, etc.) to coordinate notification efforts and document the guidance offered to staff regarding the announcement (to suppliers) of program implementation. Replicate such efforts when notifying other suppliers in the scrap chain of the developments, specifically providing examples of:
 - Communications materials used to inform suppliers (letters, contract language, purchasing agent correspondence, etc.).
- Encourage suppliers and others in the scrap supply chain to participate in the NVMSRP.
- The possibility of adherence to a compliance option regarding the reduction of mercury in scrap feedstock by developing and implementing scrap work practice standards. Specifically advancing such efforts by:
 - Promoting the program and notifying suppliers of an intention to only use scrap from vehicles that do not contain a mercury switch or have had switches properly removed.
 - Tailor purchasing practices to negotiate exclusively with suppliers that provide such mercury-free (scrap) vehicles.
- Use the ELVS database to demonstrate that suppliers are participating and also conduct spot checks and site visits to confirm that implementation is underway.
- Cooperate with ELVS in the development of education, training materials and outreach.
- Work with ISRI to assure that any implemented scrap work practice standards or programs take into account market and technology factors and do not create unreasonable certification requirements for scrap processors.

Accomplishments in Year One:

Short-term Goals

- Publicly endorse and encourage member participation in the NVMSRP.
- Acknowledge and recognize members who are actively participating in the program.
- Develop a communications package to coordinate notification efforts for members.
- Work with the other partners to create a \$4 million "implementation fund."

Long-term Goals

- Develop a participation plan that demonstrates the level of involvement, including facility-specific implementation elements.
- Use the ELVS database and conduct periodic spot checks and site visits to confirm implementation.

Measures of Progress in Year One:

- 14 member companies have signed on to participate in the NVMSRP.
- The names of all participating member companies are listed on the NVMSRP portion of the AISI Web site.
- A rollout plan has been implemented and is on track for all participating member companies.
- A standardized press release was issued to participating member companies to use in announcing participation.



- The \$4 million "implementation fund" was created.
- An audit to suppliers' registration to ELVS and on-site audits of suppliers are being done on a continuous basis.

Goals for Year Two:

Short-term Goals

- Periodic review with suppliers to improve awareness and participation.
- Post individual company member success stories on the association Web site and recognize those accomplishments at appropriate member meetings.

Long-term Goals

- Work with NVMSRP partners to maximize participation.
- Work with partners to identify areas of weakness over which our industry has control and take steps to correct.

Measures of Progress in Year Two:

• We will monitor progress and assess measurements at the end of year two.





Partner Organization: Steel Manufacturers Association (SMA)

SMA consists of 36 North American steel producers, six international steel companies and 121 Associate Member companies. SMA member companies are geographically dispersed across the continent, with 30 headquartered in the U.S., four in Canada, and two in Mexico. The SMA's U.S. members now account for over 70% of domestic steel production. The SMA membership represents a growing and dynamic segment of North America's steel industry. Most of SMA's members are electric arc furnace (EAF) steel producers, and are among the most competitive steelmakers in the world. They use a feedstock of virtually 100% recycled steel scrap to make new steel. SMA's presence on the web provides announcement. links to other steel-related websites, along with a directory of equipment suppliers, materials and services to the steel industry. The address of the SMA web site is www.steelnet.org.



Partner Commitments:

- Publicly endorse the NVMSRP and encourage broad participation.
- Acknowledge and recognize members who are actively participating.
- Assist in outreach and build awareness among the "steel scrap supply chain."
- Work with ISRI regarding scrap work practice standards and pursuing reasonable certification requirements for scrap processors.
- Issue a statement that confirms program involvement.
- Develop a participation plan that demonstrates level of involvement, specifically indicating:
 - Corporate/facility implementation efforts and policies.
 - Participation in Association-led implementation efforts.
- Develop a communications package (standardized forms, letters, press releases, etc.) to coordinate notification efforts and document the guidance offered to staff regarding the announcement (to suppliers) of program implementation. Replicate such efforts when notifying other suppliers in the scrap chain of the developments, specifically providing examples of:
 - Communications materials used to inform suppliers (letters, contract language, purchasing agent correspondence, etc.)



- Encourage suppliers and others in the scrap supply chain to participate in the NVMSRP.
- The possibility of adherence to a compliance option regarding the reduction of mercury in scrap feedstock by developing and implementing scrap work practice standards. Specifically advancing such efforts by:
 - Promoting the program and notifying suppliers of an intention to only use scrap from vehicles that do not contain a mercury switch or have had switches properly removed.
 - Tailor purchasing practices to negotiate exclusively with suppliers that provide such mercury-free (scrap) vehicles.
- Use the ELVS database to demonstrate that suppliers are participating and also conduct spot checks and site visits to confirm that implementation is underway.
- Cooperate with ELVS in the development of education, training materials and outreach.
- Work with ISRI to assure that any implemented scrap work practice standards or programs take into account market and technology factors and do not create unreasonable certification requirements for scrap processors.

Accomplishments in Year One:

Short-term Goals

- Publicly endorse and encourage member participation in the NVMSRP.
- Acknowledge and recognize members who are actively participating in the program.
- Develop a communications package to coordinate notification efforts for members.
- Work with the other partners to create a \$4 million "implementation fund."

Long-term Goals

- Develop a participation plan that demonstrates the level of involvement, including facility-specific implementation elements.
- Use the ELVS database and conduct periodic spot checks and site visits to confirm implementation.

Measures of Progress in Year One:

- 20 member and other EAF steel companies have signed on to participate in the NVMSRP through the auspices of SMA.
- Rollout plans have been implemented and are on track for all participating member companies.
- A press release template was issued to participating member companies to customize for use in announcing participation.
- The iron & steel industry's commitment of half of the \$4 million "implementation fund" was agreed to be compiled, and is supplied with the first years' commitment of funds.





Partner Organization: Automotive Recyclers Association

The Automotive Recyclers Association (ARA) is an international trade association founded in 1943 and based in Fairfax, VA that represents an industry dedicated to the efficient removal and reuse of automotive parts, and the safe disposal of inoperable motor vehicles. The Association is committed to fostering awareness of the automotive recycling industry's value as a high quality, low cost alternative for the automotive consumer. ARA aims to further the automotive recycling industry by offering various services and programs designed to increase public awareness of automotive recycling and the industry's role in conserving the future. As such, ARA encourages aggressive environmental management programs to assist member facilities in maintaining proper management techniques for fluid and solid waste materials generated from the disposal of motor vehicles.

Partner Commitments:

- Mercury switch removal is a requirement for ARA's CAR program.
- Push dismantlers to fill out their W-9 and return it to ELVS.
- Make sure that dismantlers are sending in mercury switches, not ball bearing switches.
- Assist dismantlers in obtaining information on mercury program.

Accomplishments in Year One:

Short-term Goals

- MoU signing event and honorary switch pull was done at BIONIC Auto Parts (ARA member).
- In order to be a CAR member you must be participating in the mercury program.
- Regular updates are being provided to recyclers on their States' participation in the national program.

Long-term Goals

ARA continues to provide ARA members with the information they need to begin
participating in the national program with the goal of having all ARA members in
the program or a State-run program.

Measures of Progress in Year One:

- ARA has received reports from recyclers who have collected thousands of dollars worth of switches in the national program.
- ARA state affiliates have reported significant efforts and cooperation with ELVS and their respective State governments to ensure the states' participation in the national program.

Goals for Year Two:

Short-term Goals

- Continue to provide recyclers with updates and assistance with the national program.
- Ensure all new CAR participants are actively involved with the national program or a State-run alternative.

Long-term Goals

• Have all CAR program members participating in the national program or a Staterun alternative.

Measures of Progress in Year Two:

• Review of CAR applications to determine number of program participants.





Partner Organization: The Institute of Scrap Recycling Industries

The Institute of Scrap Recycling Industries, Inc. (ISRI) is the "Voice of the Recycling Industry." With 21 chapters nationwide and headquarters in Washington, D.C., ISRI represents over 1,450 companies that process, broker, and consume scrap commodities, including metals, paper, plastics, glass, rubber, electronics, and textiles. The Institute provides education, advocacy, and compliance training, and promotes public awareness of the value and importance of recycling to the U.S. economy, global trade and



environment. For more information about ISRI, please visit our website at www.ISRI.org.

Partner Commitments:

- Publicly endorse the NVMSRP and encourage ISRI members and other scrap recyclers to participate in the program.
- Pursue opportunities to acknowledge and recognize members who are participating in the NVMSRP.
- Assist in developing potential program participants and providing names and contact information to ELVS.
- Assist with outreach and build awareness among scrap processing facilities and their supply chain.
- Participate and co-direct the Implementation Fund Coordination Committee.
- Work collaboratively with NVMSRP members and EPA to address weaknesses in the program and work to continuously improve the performance of the NVMSRP.
- Work collaboratively with NVMSRP members to formulate a strategy to ensure direct outreach programs with program participants.
- Support existing state programs.
- Support the national program in any new State that considers legislation and agree not to initiate legislative action to eliminate any existing State vehicle mercury recovery program.



Accomplishments in Year One:

ISRI has made progress in meeting these commitments by:

- ISRI worked with the Environmental Protection Agency's air policy team in their development of Maximum Achievable Control Technology for Electric Arc Furnaces to ensure that the rule was consistent with the NVMSRP as it pertained to the scrap recycling industry.
- ISRI dedicated a web page for NVMSRP MOU implementation to help shredders, processors, crushers and brokers begin to understand what their, and ISRI's, program responsibilities are, how to sign up for the program and what other parties' responsibilities are, as well.
- ISRI published information concerning the NVMSRP and how to participate in the program in FOCUS, ISRI's bi-monthly newsletter that is mailed to all ISRI members.
- ISRI developed a list of shredders in participating states to help ELVS contact and educate potential ISRI members that may chose to participate in the program.
- ISRI sent a letter to eligible member companies to encourage their participation in the program.
- ISRI presented a mercury switch removal presentation and provided updates during its quarterly Board meetings throughout the year and for the Northern Ohio and Pittsburgh chapter meeting in Youngstown, Ohio and for the Gulf Coast chapter meeting in Baton Rouge, LA.
- ISRI participated in the Implementation Fund Coordinating Committee (IFCC). The IFCC conducted several meetings to determine Fund eligibility and payment guidelines. The IFCC responded to state requests for eligibility.
- ISRI participated in monthly NVMSRP Steering Committee meetings. ISRI worked with members to respond to state participation requests.
- ISRI helped develop program documents that are dispersed in the bucket sent to eligible participants from ELVS, for example a letter from NVMSRP members that explains the program.
- ISRI continues to outreach and respond to member inquires to encourage program participation.
- ISRI participated in the NVMSRP Communications Committee to develop a communications strategy for the program.

Long-term Goals

 ISRI has successfully accomplished its long-term goal for year one which was to meet commitments set out in the Memorandum of Understanding, primarily to encourage participation in the NVMSRP.

Measures of Progress in Year One:

- There are over 100 scrap recycling facilities participating in the NVMSRP.
- The ELVS roll-out initiative has been communicated to ISRI members.



• The IFCC approved an incentive payment for eligible NVMSRP participants.

Goals for Year Two:

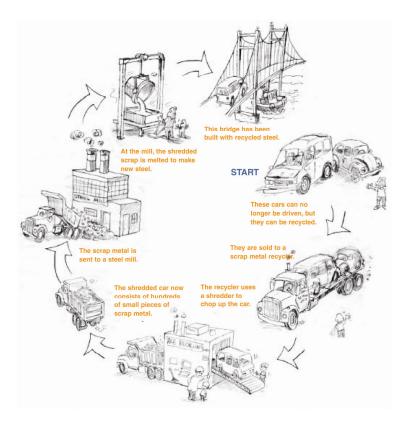
To continue to meet ISRI's commitments set out in the Memorandum of Understanding and to work with NVMSRP partners.

Long-term Goals

To meet commitments set out in the Memorandum of Understanding and promote the NVMSRP and encourage ISRI member participation in an effort to develop a sustainable voluntary mercury switch removal program.

Measures of Progress in Year Two:

- Review levels of ISRI member program participation
- Review of commitments set out in Memorandum of Understanding







Partner Organization: End-of-Life Vehicle Solutions Corporation (ELVS)

The purpose of End-of-Life Vehicle Solutions Corporation ("ELVS") is to enhance vehicle recyclability by managing, on behalf of participating vehicle manufacturers, all programs to collect and recycle mercury switches on a nationwide basis.

ELVS' members include BMW of North America, LLC; DaimlerChrysler Corporation; 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; Subaru of America, Inc.; Toyota Motor Sales USA, Inc.; Volkswagen of America, Inc.; and Volvo Trucks North America.

Since 2000, the automotive industry has been working with various states to provide educational outreach on best practices for the removal of Hg automotive switches by dismantlers.

It is our belief that the most important step that can be taken to reduce the amount of mercury entering the environment from motor vehicles is to have the mercury switches removed by the recycling/dismantling industry at the vehicle's end-of-life.

ELVS has contracted with The Environmental Quality Company (EQ) an environmental services company with nationwide capabilities and 50 years of experience, to facilitate dismantlers'/recyclers' removal of automotive mercury switches prior to a vehicle being scrapped.

ELVS manages, on a nationwide basis, programs to collect, transport, retort, recycle, or dispose of elemental mercury from automotive switches. We also provide educational outreach and promote vehicle recycling and proper management of substances of concern.

Partner Commitments:

ELVS has the lead responsibility for providing information, education and outreach regarding mercury switch removal. We are responsible for funding and ensuring collection of mercury switches from dismantlers, transportation of the mercury switches to retorters, and proper recycling or disposal of the switches. In addition we:

- Initiate and coordinate the identification and recruitment of vehicle dismantlers, scrap
 processing facilities, and vehicle crushers into the national program utilizing information
 provided by ARA, ISRI, State authorities and others that can assist in identifying vehicle
 recyclers, scrap processing facilities and vehicle crushers.
- Provide program participants with educational materials regarding mercury switch removal, guidance on which vehicles contain mercury switches (including types and



locations in vehicles), instructions on how to locate, identify and remove mercury switches.

- Follow applicable federal and State requirements, arrange and pay for transportation of the mercury switches in a timely fashion from the vehicle dismantlers, scrap processing facilities or vehicle crushers to a qualified retorter that has the RCRA permits that will allow for managing the various shipments of mercury switches collected through the program. Accept mercury switches from any participant so long as that participant complies with applicable State and federal laws relative to the handling of mercury switches and adheres to the ELVS program protocols.
- Arranged and pay for the proper recycling of the mercury switches by a qualified retorter.
- Established a process for participants to enroll in the program and clearly identify individual participants in the NVMSRP and strive to minimize the paperwork required of the participants.
- Develop and maintain a website for communication of State-by-State programs, participants, requirements and status.
- Develop and maintain a transparent database of participants and switch deliveries.
- Ensure that the information in the database will be available to the parties to this agreement or their designee and US EPA and the States.
- Report quarterly (every 3 months) during the first year of the program, every six months in the second and third year of the program and annually thereafter, to the parties on overall program implementation progress results, including, but not limited to vehicle dismantler or others' participation.
- Lead in the development and implementation of appropriate and effective state level and nationwide marketing and outreach effort in consultation with the other parties.
- Established and maintain a system for disbursement of funds from the Implementation Fund described.

"End-of-Life Vehicle Solutions Corporation (ELVS) efforts to implement mercury switch collection programs nationwide are off to a promising start. Thanks to the cooperation of all the partners to the NVMSRP, ELVS completed our goals for program roll out ahead of schedule. The NVMSRP partnership is a great asset in focusing the efforts of the partners of the collection and recycling of automotive mercury switches."

- Rich Bell, President, ELVS

Accomplishments in Year One:

Short-term Goals

- Roll-out switch collection program to dismantlers and recyclers across the country.
- Institute continuous improvements to ELVS program.
- Develop effective collection program with EQ.



Long-term Goals

- Develop effective partnerships with participants in every state.
- Divert mercury switches from the recycled material stream.
- Continue to improve ELVS program.

Measures of Progress in Year One:

- Program rolled out to 49 states and the District of Columbia ahead of schedule
- As of August, 2007, there are 5,900 participants who have turned in 635,000 mercury switches totaling 1, 400 pounds.

Goals for Year Two:

Short-term Goals

- Work with NVMSRP partners to maximize participation.
- Work with participants to maximize the number of switches collected.

Long-term Goals

• Continue to grow program to collect maximum number of switches.

Measures of Progress in Year Two:

- Increased number of individual participants.
- Optimization of our switch collection efforts.





Partner Organization: Environmental Defense

Environmental Defense is a leading national nonprofit organization representing more than 500,000 members. Since 1967, we have linked science, economics and law to create innovative, equitable and cost-effective solutions to society's most urgent environmental problems.

Environmental Defense is dedicated to protecting the environmental rights of all people, including future generations. Among these rights are access to clean air and water, healthy and nourishing food, and a flourishing ecosystem.

Guided by science, Environmental Defense evaluates environmental problems and works to create and advocate solutions that win lasting political, economic and social support because they are nonpartisan, cost-efficient and fair.

Partner Commitments:

- Publicly endorse and demonstrate support for the NVMSRP.
- Strongly encourage local and state-based environmental groups and other entities to support the NVMSRP.
- Support the outreach, education and oversight activities of the program.
- Participate in the collaborative development of estimates of mercury switches contained in vehicles and capture rates and in the improvement of data management, analysis, and reporting.
- Participate in evaluation of the program.

Accomplishments in Year One:

Short-term Goals

- Participated in the project Steering Committee, as well as various committees including the IFCC.
- On the IFCC, we worked with committee members to develop guidelines for disbursement of the funds to be used as incentives to dismantlers for participating in the program and turning in their switches. Key decisions included the amount of the incentive to be paid and which States to include in the incentive program (since some States already had incentive programs in place or under development).



Measures of Progress in Year One:

• Difficult to measure our activities.

Goals for Year Two:

• Support the launch of the outreach program for increasing dismantler participation.





Partner Organization: Ecology Center

The Ecology Center is a non profit environmental advocacy organization that works for safe and healthy communities where people live, work and play.

Partner Commitments:

- Support NVMSRP.
- Encourage local and state-based groups to support.
- Support outreach, education and oversight activities of the program.
- Participate in the development mercury switch estimates, and in data analysis and reporting.
- Participate in evaluation of the program.

Accomplishments in Year One:

Short-term Goals

- The Ecology Center actively participated in the project Steering Committee, as well as various committees (Communications, Measurement), including the IFCC.
- On the IFCC, we worked with committee members to develop guidelines for disbursement of the funds to be used as incentives to dismantlers for participating in the program and turning in their switches. Key decisions included the amount of the incentive to be paid and which states to include in the incentive program (since some states already had incentive programs in place or under development).
- On the measurement committee, we helped to evaluate available data and methods for estimating the number of switches in the vehicle population, as well as potential capture rates as vehicles are retired from service.

Long-term Goals

 We had hoped to initiate a program designed to increase outreach to dismantlers but were unable to secure funding in the first year of the program. We have now secured funding from the U.S. EPA's Great Lakes National Program Office (GLNPO) to launch this effort in year two, with the goal of identifying model methods for increasing dismantler participation in the program.

Measures of Progress in Year One:

It was difficult to measure our first year activities.



Measures of Progress in Year Two:

 We will measure results from our outreach efforts, and recommend opportunities for others.





Partner Organization: ECOS and Quicksilver Caucus

The Quicksilver Caucus, formed in May 2001 by a coalition of State environmental association leaders, works collaboratively to develop and support holistic approaches for reducing mercury in the environment. Caucus members who share mercury-related technical and policy information include the Environmental Council of the States (ECOS), the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the National Association of Clean Air Agencies (NACAA), the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), the Association of State Drinking Water Administrators (ASDWA) and the National Pollution Prevention Roundtable (NPPR). The Quicksilver Caucus' long-term goal is that State, Federal, and International actions result in net mercury reductions to the environment. ECOS served as representative of the states in negotiation of the NVMSRP and is a party to the NVSMRP MOU. Implementation of the NVMSRP is promoted and supported by the Quicksilver Caucus, which includes ECOS as a member organization.

Partner Commitments:

- Publicly support the NVMSRP and encourage individual states to do so also as appropriate.
- Review existing state programs, including State specific incentives and provide to the parties a list of lessons learned from existing programs to consider for potential future modifications of the national program.
- Provide ELVS with information regarding State programs, including State-specific requirements.
- Identify and provide contact information of an appropriate individual(s) in each State government who would serve as the contact person for providing or coordinating assistance in implementing the NVMSRP.
- Encourage their members to support implementation of the NVMSRP in States where there is no existing program and in States where there is an existing program, explore how that program can be coordinated with the NVMSRP.
- Encourage their members to, where possible, provide ELVS with an accurate list (regularly updated) of licensed vehicle recyclers, vehicle crushers and scrap shredding facilities handling end-of-life vehicles in the state and assist in the ongoing identification of such facilities. Where possible, assist by providing information on the number of cars processed (see V1(C)(10)(a)(iv).
- Encourage their members, as necessary and appropriate, to monitor the effectiveness of the program in their State.



- Communicate the importance of this program to affected entities, in partnership with US EPA and individual States and all interested and affected parties and explore opportunities (where appropriate) to provide recognition for performance and incentives for entities to participate.
- Participate in the collaborative development of estimates of mercury switches contained in vehicles and capture rates and improving data management, analysis, and reporting.
- Participate in evaluation of the program.

Accomplishments in Year One:

• All states are participating in one year.

Measures of Progress in Year One:

- Network and Forum Established [e.g., states identified responsible staff and management contacts, held monthly state conference calls starting Nov. 2006, facilitated communication among states to share experience and improve implementation process, reported to states on national performance, implementation fund, and other issues addressed by national steering committee and its subcommittees].
- Educated State staff on program and process (e.g., what is the NVMSRP and what are the roles and responsibilities of the parties, key steps for State engagement and implementation, guidelines and eligibility for early state rollout, model letters to participants, Implementation Fund Eligibility, Universal Waste Clarified, etc.).
- ECOS/QSC staff responded individually to State concerns and questions regarding program rollout and implementation and communicated those issues with national steering committee members as needed.
- Exchanged Ideas on Electric Arc Furnace Area Source Rule.
- Maintained Forum for Resolving Issues and Exchanging Ideas among states and between states and parties to the national agreement (mentioned above also).
- All states were prepared for implementation of program in cooperation with ELVS and other parties.
- Many Wave 3 and Wave 4 states were implemented 2-3 months ahead of schedule.
- Wave 4 states were implemented almost 2 months ahead of schedule.

Goals for Year Two:

Short-term Goals

- Increased collection and participation to ensure year three switch collection goal is achieved (Build NVMSRP momentum at State level with continuing outreach to participants and continuing efforts to identify and enroll all eligible participants).
- Build and maintain bridges between States and steel to ensure success of program.
- Build and maintain bridges between states and participants/associations to ensure success of program.



 Work with states and others to identify and address weaknesses or gaps in program implementation.

Long-term Goals

- Four million switches collected in the first three years of the program [VII.2.A.1.d., MOU page 11].
- On track to achieve NVMSRP Long-Term Recovery Rates as estimated by consensus of the Measurement Subcommittee and accepted by the national Steering Committee [VII.2.A.1.d.-e., MOU page 11].
- Lessons learned from voluntary and collaborative approach documented and shared (some noted some above).

Measures of Progress in Year Two:

 Assess state progress in year two and thereafter for recovery and capture rates [MOU VII.2.A.1.e., MOU page 11].





Partner Organization: The Environmental Protection Agency (EPA)

In an effort to avoid the release of mercury from the vehicle recycling chain, especially when shredded scrap is melted in electric arc furnaces, EPA initiated discussions with stakeholders on how to maximize the removal of mercury switches from scrap vehicles prior to recycling. In forging the NVMSRP, we are working together to achieve common goals. We have created new institutions and established extensive procedures that ensure accountability and predictability. EPA Administrator, Stephen L. Johnson, signed a Memorandum of Understanding (MOU) along with all the stakeholders in August 2006, launching the National Vehicle Mercury Switch Recovery Program (NVMSRP).

EPA is playing an active role in implementing the program. In addition, EPA will soon promulgate rules establishing standards for hazardous air pollutants, including mercury, emitted by electric arc furnaces and small iron and steel foundries. Because pollution prevention is the best approach for reducing mercury emissions at these facilities, EPA currently intends to incorporate the removal of mercury switches through the NVMSRP (or a similar state program) as a management practice to reduce mercury emissions. EPA expects the rules to be final in December, 2007.

Partner Commitments:

The MOU includes the following commitments:

- Take the NVMSRP into serious consideration when drafting and soliciting comments on an area source NESHAP regulation for Electric Arc Furnaces.
- To the extent consistent with the Agency's grants policies and procedures, make known opportunities for grants, cooperative agreements and other relevant assistance.
- Communicate the importance of this program and explore opportunities to provide recognition for performance and incentives for entities to participate.
- Participate, as appropriate, in the evaluation of program effectiveness and progress through data analysis, program assessment and review of barriers to better results (e.g., assess funding needs, regulatory issues).
- Explore ways in which this program can provide opportunities to gain a greater understanding of the environmental and economic effects of product design choices.

Accomplishments in Year One:

Short-term Goals

 To meet EPA's MOU commitments as fully as possible during the first year of implementation.



Long-term Goals

 To assist the partners in developing a mature, sustainable collaborative national mercury switch removal program.

Measures of Progress in Year One:

- Developing two proposed "area source" rules that include the NVMSRP as an allowable management practice for mercury control;
- Regularly providing information about the program to states, media outlets, and the public, which includes collaborating with state partners to promote the program by producing two detailed articles for state policymakers;
- Participating in several conference calls to coordinate with partners on a communications strategy to best use the program's anniversary and other milestones to promote and expand the program;
- Identifying MOU implementation issues and suggesting possible solutions;
- Supporting MOU implementation by providing meeting planning and support to the Steering Committee and various subcommittees;
- Recognizing partners who include mandatory mercury switch removal in their environmental leadership programs;
- Helping partners identify EPA grant opportunities to support activities that will result in expanded participation in the NVMSRP; and,
- Using the experiences gained through the collaborative NVMSRP effort to inform development of additional efforts aimed at reducing or eliminating other priority chemicals from products and wastes.

Goals for Year Two:

Short-term Goals

- To continue to meet or exceed EPA's commitments set out in the MOU and to provide the logistical support needed by the Steering Committee and the various Subcommittees in expanding the program.
- To prepare an event to celebrate the collection of one million switches.

Long-term Goals

- To continue to promote and improve the NVMSRP and assist its members to develop a mature, sustainable, collaborative mercury switch removal program that succeeds in capturing the MOU-targeted percentage of the available mercury switches.
 - This will include continuing to coordinate internally as an Agency in order to best promote, recognize, and support the goals of this program.
 - This may include:



- Improving the data gathering, metrics, and analysis used to determine program success;
- Transferring "lessons learned" from successful state efforts to other states;
- Modifying other rules to encourage participation by consumers of scrap, and
- Sponsoring periodic program evaluations by partners to develop innovative improvements to the program.

Measures of Progress in Year Two:

EPA progress will be measured in year two by:

- Increasing the number of outreach opportunities to promote the program;
- Developing recognition opportunities for additional program partners;
- Helping partners identify additional grant opportunities for membership expansion activities;
- Promulgating the EAF and small iron and steel foundries "area source" rules and initiating any needed compliance assurance activities for participants that chose not to participate in the NVMSRP;
- Developing two proposed amendments to the existing rules for larger foundry and integrated iron and steel facilities that include the NVMSRP as an allowable management practice for mercury control.

Our Vision Looking Ahead

The first year of this collaborative program has demonstrated that the participating groups have established a good working relationship with each other. In forging the NVMSRP, we are collaborating to achieve common goals. We have created new institutions and established extensive procedures that ensure accountability and predictability. As a result, we approach any bumps in the road with flexibility and a collaborative spirit.

Finally, we set up the program to give every participant, and the public at large, a tremendous amount of information about how the program is really working, giving everyone the opportunity to verify results and weigh in on how to improve them.

We are confident that continued open dialogue among the



National Vehicle Mercury Switch Recovery Program Signing Ceremony August 11, 2006

partners will ensure that we make necessary adjustments toward achieving our goal, which is further reduction of mercury emissions from the recycling of end-of-life vehicles in all 50 states.