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**Material Separation Plan 5  
For the Diversion of Mercury  
January 1, 2010 – December 31, 2012**

**SEMASS Resource Recovery Facility –  
Rochester, Massachusetts**

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**August 2009**

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MATERIAL SEPARATION PLAN 5,  
January 1, 2010 – December 31, 2012  
SEMASS Resource Recovery Facility – Rochester, Massachusetts

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## **I. BACKGROUND**

In accordance with the requirements of 310 CMR 7.08, and on behalf of the SEMASS Partnership, attached is the fifth installment of the Material Separation Plan (MSP5) for the diversion of mercury and mercury-containing manufactured articles (MCMAs). MSP5 has been prepared to address the solid waste regulations noted above, guidance and technical comments from the Massachusetts Department of Environmental Protection (Department), and input from Plan stakeholders.

The SEMASS Partnership (SEMASS) owns and operates the SEMASS Resource Recovery Facility (SEMASS RRF) in Rochester, Massachusetts. Covanta Energy Corporation acquired American Ref-Fuel Holdings Corporation, including American Ref-Fuel of SEMASS, in June 2005. American Ref-Fuel of SEMASS is now known as Covanta SEMASS L.P. Covanta SEMASS is the managing general partner of SEMASS.

SEMASS provides solid waste processing and disposal services for more than fifty (50) long-term contracted, residential community customers (SEMASS Communities) located primarily in southeastern Massachusetts, Cape Cod, and the Boston vicinity. The SEMASS RRF receives and processes approximately 1.1 million tons of solid waste annually. Based on data compiled by the Commonwealth (Executive Office of Environmental Affairs, *Solid Waste Master Plan: 2006 Plan Revision*, dated June 2006), the Commonwealth generates 13.9 million tons of solid waste and diverts approximately 7.6 million tons for recycling. The balance or 6.4 million tons is disposed/processed in-state (4.8 million tons) or exported for out-of-state disposal (1.6 million tons). Therefore, the SEMASS Resource Recovery Facility and its associated satellite facilities handle more than one-fifth of all municipal solid waste processed / disposed in the Commonwealth. Electricity created from the processing of solid waste at the SEMASS RRF is sufficient to power more than 75,000 households. Between 45,000 and 50,000 tons of recyclable ferrous and non-ferrous metals are typically reclaimed each year from waste processing at the SEMASS RRF.

The goals of the Material Separation Plan are fourfold: 1) identify products in the solid waste stream that contain significant quantities of mercury, 2) provide the instructional and outreach support necessary to educate the SEMASS communities, their associated businesses, and the general public about the reasons to reduce mercury in the waste stream and how to recover and recycle mercury and mercury-containing manufactured articles (MCMAs) before disposal as solid waste, 3) aid the SEMASS customer base in implementing mercury removal and recycling programs, and 4) effectively manage activities related to these goals to maximize the value of every dollar invested in the program.

It remains Covanta Energy's firm belief that the most efficient method to prevent the disposal of mercury in solid wastes is for the manufacturers of articles containing this compound to modify or substitute other, less toxic compounds that can achieve a comparable function. However, until voluntary efforts by these manufacturers occur and/or further federal and state regulatory requirements are promulgated to achieve this objective, Covanta SEMASS remains dedicated to our continued commitment to the Material Separation Program to reduce the amount of mercury disposed in the solid waste stream.

Preparation of this Plan has been based on input received from the SEMASS communities via the Council of SEMASS Communities (COSC) meetings, stakeholder meetings held during June 2009, the local community Recycling Coordinators, the Department, and/or direct suggestions from community individuals.

## II. APPLICABILITY OF PLAN BENEFITS AND PLAN EXCLUSIONS

This section clarifies who is eligible to receive plan benefits under the MSP Program and areas where Program support is excluded.

**Applicability of Plan Benefits.** SEMASS' long-term contracted communities financially support the MSP program via language in their specific contracts with SEMASS. Therefore, these communities will receive full Plan benefits (Tier 1 categorization). However, the MSP Program needs to address all of the solid waste (both municipal and commercial) in SEMASS' waste shed which can potentially include mercury or mercury-containing articles. Therefore two additional, lesser categories of support have been continued under MSP5 to address this. See Table 1.

**TABLE 1. MSP PROGRAM BENEFIT COVERAGE**

<b>Category</b>	<b>Description</b>	<b>Plan Benefits</b>
Tier 1	<ul style="list-style-type: none"> <li>SEMASS Long-Term Contracted Communities <sup>(1)</sup>; Refer to Attachment A</li> </ul>	Full Plan Benefits
Tier 2	<ul style="list-style-type: none"> <li>Businesses within the SEMASS Tier 1 Long-Term Contracted Communities</li> </ul>	Plan Benefits targeted to Specific businesses under the Program or to general businesses. Refer to Section III
Tier 3	<ul style="list-style-type: none"> <li>Non-SEMASS Long-Term Contract Communities that send significant solid waste volumes to the SEMASS RRF.</li> <li>Businesses in the communities above</li> </ul>	Limited Plan Benefits as determined on a case-by-case basis based on potential mercury amounts. See text discussion.
Not Supported	<ul style="list-style-type: none"> <li>Non-SEMASS Long-Term Contract Communities that don't send significant solid waste volumes to the SEMASS RRF.</li> <li>Businesses in the communities above</li> </ul>	None

Notes:

( 1 ) Includes associated municipally-supported recycling organizations.

Priority of Program Support. To the extent practical, program support will be provided in the order as follows: 1) Tier 1 (long-term SEMASS Communities), Tier 2 (businesses in long-Term SEMASS communities), and, Tier 3 (non-SEMASS communities and/or businesses with large

potential mercury sources). Tier 3 support will be provided (on a limited case-by-case basis) only when funding/resources are available and if the potential sources of mercury are large or significant.

Written requests for Plan Support. In general, requests for Plan benefits and support need to be submitted in writing (letter, FAX, e-mail, etc.) to either the MSP Program Manager or Program Coordinator. This is necessary to fully document the program progress and to accurately track type of mercury articles and how they were reclaimed by Town and task. The Department requires that this information be provided in the annual program reporting issued to the Public.

**Plan Exclusions.** Certain items or activities are not covered under the MSP Program scope.

Wastes Not Accepted. Only quantities of pure elemental mercury or mercury-containing manufactured articles containing elemental mercury will be collected and reclaimed under this program. Organo-mercury compounds and other mercury alloys (i.e. such as dental amalgams) will not normally be eligible for Plan benefits. These compounds will typically have to be disposed of as special and/or hazardous wastes and the usual “Universal Waste” processing means, methods and contractors that SEMASS utilizes on this program cannot reclaim these materials.

Other manufactured articles that do not contain mercury (for example: PCB ballasts for fluorescent light fixtures) will not be eligible for Plan benefits under the MSP program. This may include other household hazardous wastes (paints, solvents, etc.) or other universal wastes (electronic-wastes, electronics, monitors and cathode ray tubes).

Liability of Mercury Spills and/or Releases. Due to the inherent nature of the MSP program, reclamation and recycling of mercury and mercury-containing manufactured articles may result in an accidental release or spill. Covanta SEMASS, Covanta Energy, or the SEMASS Partnership will NOT be held liable for the impacts of such an incident unless directly caused by our activities. Ultimate liability of these materials lies with the generators of these materials/products or the contractors who have been hired to transport and/or recycle them.

To reduce the possibility of these types of incidents, SEMASS has designed this Plan and our MSP Program to reduce the likelihood of such an occurrence. Safeguards include:

- Energy Recovery Council (ERC) education and outreach (known formerly as the Integrated Waste Services Association or IWSA)
- General information flyers, mailings, etc to communities and businesses
- Providing local mercury handling and awareness training events on a periodic basis.
- Furnishing Universal waste sheds & safety signage for temporary storage of MCMAs
- Reimbursement of costs associated with proper secondary containment and packaging (e.g. plastic buckets, plastic bags, etc.)
- Furnishing spill kits and associated training to address small spills
- When necessary, authorizing direct Reclamation Contractor pickup of elemental mercury and large quantities of MCMAs

Should a spill event or release occur, SEMASS may provide advice, recommendations, or other actions (on a case-by-case basis) to assist a long-term community or outside 3<sup>rd</sup> party to safely and properly characterize, address, and mitigate the spill.

### **III. SCOPE OF PLAN ACTIVITIES**

The scope of Material Separation Plan 5 (MSP5) activities are detailed below and broken down into four primary tasks: 1.0 - Energy Recovery Council (ERC) Education and Outreach (known formerly as the Integrated Waste Services Association or IWSA), 2.0 – Local Education and Outreach, 3.0 – Mercury Reduction / Recycling Programs, and 4.0 – Program Administration.

High level advertising and outreach is the focus of Task 1.0 activities. These activities are conducted by ERC on behalf of all facilities in the Commonwealth of Massachusetts who implement the MSP Program. The purpose of Task 1.0 is to promote general awareness of the hazards associated with mercury, identify which products contain mercury, and promote the recycling/reclamation potential offered by the MSP Program through efforts by SEMASS and other Energy-from-Waste (EfW) facilities. Task 2.0 activities are led by SEMASS and directed towards our regional waste shed area. These activities focus and build off Task 1.0 activities by conducting more direct, and localized outreach, awareness, and training activities focused on communities, schools, and businesses. Tasks 1.0 and 2.0 seek to change behaviors of community, business, and educational personnel as well as the general public to become more aware of mercury hazards, recognize products that contain mercury, and learn options to safely reclaim and recycle them. Task 3.0 activities utilize the outreach and awareness accomplished under the prior tasks to target specific sources of mercury and specify the actions to reclaim and recycle those sources of mercury. Task 4.0 involves the administrative effort required to operate, manage and report efforts on the MSP Program.

MSP5 incorporates many of the prior activities from MSP4 but includes a number of changes discussed with Plan stakeholders during outreach meetings conducted in June 2009. These changes include the following:

- Addition of new Plan activity to identify and reclaim mercury containing switches in septic system pumps.
- Addition of a new Plan activity for improved business outreach and mercury reclamation for general businesses with a special focus on tanning salons (high intensity mercury lamps) and hardware stores that collect Compact Fluorescent Lamps (CFL's) from their customers.
- Addition of new Plan activity for the making of a video for distribution at community cable stations explaining the proper handling of CFL's for residents.
- Expansion of medical outreach and reclamation activities to include the addition of language in the permitting process via Boards of Health to include the details of proper disposal of mercury containing items such as blood pressure cuffs and fluorescent bulbs.
- Expansion of the school cleanout activities to include the collection of fluorescent bulbs from school buildings to eliminate the need for unnecessary handling of these bulbs.
- Discontinuation of activities associated with Municipal Water Meter Reclamation as its own task but rather as a function of municipal HHW support.

Covanta SEMASS will continue to adapt and modify Plan activities and consequently shift funds throughout the duration of this Plan in search of this maximum level of efficiency.

MSP5 presents an increased variety of Plan activities so that participating communities and businesses can choose a wide variety of options to implement mercury recovery and recycling in a manner that best suits their needs. SEMASS continues to find that providing participants with a flexible approach has been a key ingredient for continued success of the Plan's implementation.

### **Task 1.0 – ERC Education and Outreach**

The Energy Recovery Council or ERC's (formerly the Integrated Waste Services Association) Education Plan for MSP1 produced a media campaign "Keep Mercury from Rising" including newspaper and radio advertisements, posters, and a brochure for use by the facilities. The "Keep Mercury from Rising" has been continuously in effect through the present day and although it has evolved to increase its effectiveness with its targeted audience.

Each year, ERC conducts polling (field research), which gives important feedback with which the campaign can be modified to ensure that maximum penetration is achieved with the allocated resources. The 2009 ERC survey spoke volumes about the freefalling Massachusetts economy and its corresponding effect on the environmental attitudes and choices of its residents. Although education remained the most important issue, money-related issues like the state budget and unemployment surged from relative obscurity last year to a higher level of importance while social issues like the environment and crime dropped off. Unlike last year, respondents also hit an "affordability limit" for the price at which they would be willing to pay for non-mercury thermostat equivalents.

Unfortunately, consumers preoccupied with household economic struggles coupled with a growing sense that mercury is more of a threat to the environment than one's health has resulted in higher quick-fix solutions to mercury disposal like throwing a broken item containing mercury into the trash. Despite the plight of the stretched consumer, low-cost solutions like higher recycling participation, fish advisory awareness, and willingness to separate/drive mercury items to a collection center all improved over last year. However, the research directs us to reach out to the growing number of people who are less concerned about the threat of mercury to one's family's health.

ERC proposes to maintain and enhance, as necessary, the "Keep Mercury from Rising" campaign. MSP5 will utilize the new print and media materials developed during MSP4 with input from polling data, state officials, local community officials, plant officials and the general public. The MSP5 will build upon the prior program's work by continuing to use targeted advertising to reach communities serviced by energy-from-waste facilities. MSP5 will focus on broadening the outreach of the message using new media, including radio, television, and possibly web-based advertising. The objectives for MSP5 include the following:

- Continue to raise awareness about mercury-containing products in the home and the proper handling and disposal of these products;

- Provide information and promote local recycling events and other facility and community programs aimed at removing mercury from the waste stream;
- Broadly communicate a message which can leverage opportunities for incremental, free media, and works synergistically with the efforts of individual waste-to-energy facilities.

Tactics: ERC will continue targeted advertising to reach communities serviced by the facilities, as well as implement marketing of radio advertisements and live-read script to run as public service announcements. The facilities through their trade association also propose to expand web capabilities to provide additional tools for residents in target communities to participate in recycling of mercury-containing products. ERC also will reach out to the media to generate media coverage of the public education campaign. A great many more pictures of programs being administered and mercury-containing items will be used. The plan will be implemented using the tools discussed below.

**1.1 Advertising.** Radio and cable television advertising will be used. Radio is a targeted medium that provides cost-efficient mass communication and quickly builds frequency of message delivery. Radio added-value programs can provide an opportunity to interact with local communities. Cable television has also proven to be an effective and affordable means to communicate to large numbers of people. By targeting advertising on cable television stations most likely to be watched by our target demographics, we can leverage our resources even further. Print advertising will not be used for the state-wide campaign. Local facilities may publish print ads when announcing specific events, but these ads will be directed by individual facilities as needed.

**Timeline:** A two-week radio buy in May and September each year during MSP5. In addition, a slate of television advertisements will be run twice per year (along the same schedule as radio advertising) during each year of the MSP5.

**Activity: Radio and TV:** ERC proposes to implement a two-week radio buy in May and September of each year with cable television advertising running concurrently. The buys would be scheduled to encourage mercury recycling activities and added-value opportunities (e.g., sponsorship of special broadcasts, contests, and free spots stations provide) will be considered in development and negotiation of the buy.

**1.2 Web-based Tools:** This internet-based community information resource is available at [www.keepmercuryfromrising.org](http://www.keepmercuryfromrising.org). The website has been revised to reflect the new theme/campaign style and focus more on facility programs and the mercury-containing items in trash including information regarding where you might find the products in your home and where the products should go for proper disposal. ERC will ensure the material is fresh and easy to download, and provides data on which we can target informational resources.

**Timeline:** January, 2010 and ongoing.

**Activity:** Continue to build upon web-based capabilities for dissemination of information on local programs and recycling events.

**1.3 Print Materials:** After development of a new campaign theme and layout for print materials, two types of posters have been developed and introduced with great success. The posters can be individualized by users to convey important event information. In addition, graphically-oriented flyers (pamphlets) provide educational messages in an eye-catching manner. ERC will continue to revise and improve the print materials, as necessary, and will continue to make the print materials available.

**Timeline:** Printing as needed: continuous.

**Activity:** Support facilities as needed with additional print materials.

**1.4 Evaluation Tool:** The effectiveness of all activities will be measured by a research survey. Annual surveys will be completed in the first half of the year shortly after placement of paid media and compared with earlier polls to better define the audience and the effectiveness of the message and media. The polls will be designed to measure positive changes in public attitudes and behaviors, as well as the receptiveness of the message.

**Timeline:** The surveys are expected to go into the field in May, shortly after completion of publication of print and airing of radio media.

**Activity:** The surveys will include 400 completed interviews with Massachusetts residents. Each interview timed out at approximately twelve minutes. There is a 95% confidence level that the margin of error is within +/- 5% given the universe of respondents.

## **Task 2.0 – Local Education and Outreach**

In addition to the campaign conducted by ERC, SEMASS will continue to implement a program that supplements education and outreach with additional mailings and messages designed to meet the needs of the SEMASS communities and customers.

**Objectives.** A key objective during MSP5 will be to continue to explain that certain products contain mercury and have hazards as well as the opportunity for reclamation of these products to communities and local businesses within the Plan geographic area. The goal will be to expand knowledge of the Plan activities to these targeted sectors while maintaining the momentum of education and outreach accomplished with SEMASS customers during MSP4.

**Approach.** New efforts will be devised to reach additional customers and local businesses including some of the following:

- Continue to improve feedback/communications with the SEMASS long-term communities
- Working with local Chambers of Commerce for business outreach
- The MSP Program Coordinator will continue to give presentations and program updates at any Council of SEMASS Community (COSC) meetings, to explain the opportunities of the MSP program and to encourage participation
- SEMASS will also send a direct mail postcard to each of the contacts within SEMASS' geographic area, making them aware of the activities available with the MSP5 (once approved by MassDEP), as well directing them to web-sites that they may download a copy of the entire Plan

Efforts for local education and outreach will involve similar activities that were conducted during MSP4. These include: financial support of mailings/flyers brochures initiated by those communities/organizations, and in-person visits by the MSP Program Coordinator.

**2.1 Community and School Outreach.** SEMASS will conduct activities to support the communities, other municipal recycling organizations, and schools in the goals of education, outreach, and removal of mercury-containing products. The primary purpose of this subtask will be to assist each community in their preferred methods of information dispersal. In addition, the MSP Program Coordinator will offer guidance along with the proper tools (e.g., training sessions, supplies) and advertising to conduct outreach on the Plan in an attempt to ensure successful mercury-reclamation programs.

Activity Scope. SEMASS will assist in the development and funding of customized, direct mail pieces and/or posters that address diversion of mercury-containing articles in support of community and school education and outreach. In addition, SEMASS will assist communities or school organizations with requests for creation and/or funding of other local print advertising in support of education and outreach activities. These activities will be evaluated on a case-by-case basis with regards to the applicability to the diversion of mercury or mercury-containing products from the waste stream as well as the anticipated degree of enhancement for a particular targeted activity. These supplemental advertising efforts will be conducted, to the extent practical, to complement efforts conducted by the ERC under Task 1.0. For example, SEMASS will emphasize the use of ERC's website [www.keepmercuryfromrising.org](http://www.keepmercuryfromrising.org) on direct mail pamphlets, advertising, and other potential media.

SEMASS will promote the distribution of outreach materials developed as part of ERC's Task 1.0 activities including general mercury flyers, posters, banners, and other print materials, videos or DVDs, website links and the results of annual mercury/public awareness surveys. A general mailing will be conducted annually to the distribution list program distribution list offering these materials as well as other opportunities associated with MSP5.

SEMASS will strive to improve communications with our municipal contacts on the program. The key component of this is maintenance of the master mailing/distribution list which details municipal contacts in all of our Program communities. Key activities related to this will include:

- Issue annual requests for updates/changes to the master mailing list (names, addresses, e-mail address, etc.)

- Add e-mail distribution of documents & mailings in addition to paper (.e.g hardcopy) distribution for mass mailings on the program.
- Develop and improve web site links to the ERC website ([www.keepmercuryfromrising.org](http://www.keepmercuryfromrising.org)) and the MassDEP web site detailing drop off locations across the state for mercury containing products ([www.mass.gov/dep/recycle/hgmap.htm](http://www.mass.gov/dep/recycle/hgmap.htm)).

SEMASS will continue to work with schools or educational organizations in the Plan service area to promote mercury awareness and reclamation/recycling to conduct mercury awareness presentations. SEMASS may generate interest in these outreach activities through a combination of phone calls, letters, or in-person visits. Should opportunities present themselves, SEMASS may also award grants and other funding so that mercury awareness and education are incorporated into their school curricula. When appropriate, tours of the SEMASS RRF or its auxiliary facilities (landfill, transfer stations, convenience drop-off centers, etc.) will be conducted on behalf of these groups to educate the public on the combined roles of the Energy-from-Waste (EfW) facilities and the MSP program in diverting mercury-containing products from the solid waste stream.

The MSP Program Coordinator will attend meetings with the Council of SEMASS Communities (COSC) to discuss and present the results of the program-to-date, encourage feedback and comments, and, if necessary, to modify the program to better customize it to community needs and requests. Program updates will be provided to discuss the current status. The frequency of COSC meetings can vary between zero, one, two or more times per year depending on community issues of concern. For the purposes of the MSP5 Plan, SEMASS will provide MSP program updates a minimum of two (2) times per year, if COSC meetings are not held. These updates will take the form of a program summary update document sent via mass-mailing (electronic + regular mail) to the in-house mailing list of contacts.

SEMASS may attend and/or sponsor booths at local (Massachusetts or New England) environmental conferences and/or organizational meetings for the purpose of further extending the efforts by ERC detailed in Task 1.0 as well as the program opportunities offered by the Plan. Some of the potential local conferences or organizational meetings include the following:

- Northeast Resource Recovery Association
- Massachusetts Municipal Association
- Solid Waste Association of North America: Regional & Local Chapter Meetings
- Waste Expo
- MassRecycle conferences or Expos
- MassDEP Environmentally Preferable Products (EPP) Conference

Timeline. Efforts for this activity will be ongoing throughout the period of the Plan. Annual requests for updates of the master mailing list will be conducted during the 1<sup>st</sup> quarter of each year. Distribution of the mailing identifying ERC outreach materials will be conducted during the 2<sup>nd</sup> quarter to coincide with spring household hazardous waste events.

**2.2 Business Outreach.** The primary purpose of this subtask will be to conduct several means of outreach to local businesses, to notify these facilities of the Plan, identify those facilities with significant potential for mercury and/or mercury-manufactured articles, and encourage these companies to join in implementing some of the mercury reclamation tasks detailed in Task 3.0.

Activity Scope. SEMASS will conduct the following various outreach aspects:

- SEMASS will use their in-house mailing list to ensure that all long-term SEMASS communities receive notification of reimbursement opportunities for businesses that operate within their boundaries.
- SEMASS will provide each of our long-term communities with this information to distribute via the town's website, the Chambers-of-Commerce, local cable television access, or other means to increase recycling and reclamation of mercury containing products within the business community utilizing existing transfer stations or recycling centers within the town. If requested, SEMASS will conduct presentations/meetings to assist with this process. If towns are unable to accommodate business needs for recycling and reclamation of mercury containing items (such as CFL's and other fluorescent bulbs) at their transfer or recycling centers, SEMASS will reimburse the businesses for up to 50% of the cost of proper disposal.
- SEMASS will conduct a separate, direct-mailing to tanning salons operating within the SEMASS service area and seek to coordinate outreach efforts for fluorescent light bulbs used in the tanning beds for mercury reclamation. Due to their intensity, these bulbs contain higher amounts of mercury than normal fluorescent lights. SEMASS will work with the Department and the Northeast Waste Management Officials' Association (NEWMOA) to determine unit quantities of mercury per tanning bulb. Quantities of these bulbs reclaimed will be tracked differently in the annual reports to appropriately quantify the amounts of mercury reclaimed.
- SEMASS will work with the Boards of Health in each of our long-term communities to provide assistance to them in their efforts to educate the business community through mass mailings and permit procedure modifications to ensure the proper recycling and reclamation of mercury containing items through the existing transfer or recycling centers.
- SEMASS will work with local hardware stores (e.g., Aubuchon, TruValue, and Ace Hardware) to facilitate the collection of compact fluorescent bulbs (CFL's) and other MCMA.

Via new subtask 3.8, all registered businesses will be eligible to submit claims to SEMASS for reimbursement of eligible costs incurred in the collection, reclamation, and recycling of mercury and mercury-containing products. Other than the additional, specific outreach efforts targeted to them, tanning salons will follow the same reimbursement process as all other businesses in our long-term SEMASS communities.

Timeline. Efforts for this activity will initiate beginning in January 2010 and continue through the end of the MSP5 period.

**2.3 Mercury Handling and Awareness Training.** The primary purpose of this subtask is to ensure that the long-term SEMASS communities and businesses have available to them proper training by a third party vendor. This training has been a key component to ensure that those people that come into contact with the mercury-containing products understand the importance of proper handling, labeling and storage of the devices, and potential accidental spillage.

Activity Scope. SEMASS will work with and support MassRecycle's efforts to provide training sessions for communities and registered businesses by utilizing SEMASS' in-house mailing list for a direct mailer to advise communities when and where these sessions shall be occurring. The training sessions will also be open to other groups including municipal and regional recycling organizations, school educators and school support staff (such as janitors). Training sessions will be scheduled and organized by MassRecycle to ensure a uniform training message throughout the Commonwealth. SEMASS may augment MassRecycle's efforts with additional training support. Up to six (6) training sessions will be conducted as part of MSP5 activities and held at mutually agreeable locations within the Plan geographic area. The objective will be to vary the training locations by geography to promote increased participation.

Timeline. Efforts for this activity will be ongoing throughout the period of the Plan but primarily focused during Spring and Fall periods.

### **Task 3.0 - Mercury Reduction / Recycling Programs**

**Objectives.** Task 3.0 involves direct activities that result in identification, location, separation, handling, transportation and recycling of elemental mercury or mercury-containing products. Subtasks are targeted to particular areas where further sources of mercury or mercury-containing products may be found.

**Approach.** In accordance with directives issued by the Department during MSP4, measurement and reporting of elemental sources of mercury will be conducted by a) obtaining direct weights of the quantity of mercury itself, when at all possible or b) counting the mercury-containing articles and applying standard conversion factors. In order to minimize the exposure risk to reclamation personnel and others, mercury-containing containers and products will not be opened. Tare weights of the containers or products holding the elemental mercury will be estimated to the degree practical.

Unless otherwise noted, SEMASS will utilize the standard conversion factors for mercury-containing products developed by the Northeast Waste Management Officials' Association (NEWMOA) and detailed in Table 2, below.

Please note that the Department and NEWMOA have not yet agreed upon standard conversion factors for the some of the mercury-containing products that SEMASS may encounter during MSP5 (for example, high intensity tanning salon fluorescent lights). SEMASS will assume conversion factors based on best available technical information or utilize direct measurements, if possible. These factors are detailed below and will be listed on annual report tables to clarify the assumptions used.

**TABLE 2. CONVERSION FACTORS FOR MERCURY-CONTAINING MANUFACTURED ARTICLES**

<b>Name of Mercury-Containing Product:</b>	<b>Quantity of Mercury: <sup>(a)</sup></b>
Fluorescent Lamps (straight)	0.005 grams (5 mg) per Linear Foot of Lamp
Glass Fever Thermometers	1 gram per unit
Laboratory Thermometers	3 grams per unit
Blood Pressure Cuffs	110 grams per unit
Barometers	500 grams per unit
Tanning Bed Bulb	0.030 6 grams per unit (per 6-ft bulb)
Thermostats (Residential & Commercial)	4.5 grams per unit
Mercury Switches	8 grams per unit <sup>(2)</sup>
Float Switches	4.5 grams per unit <sup>(2)</sup>
Mercury Button Cell Batteries	0.009 grams (9 mg) per unit
U-Tube Fluorescent Lamps	0.0175 grams (17.5 mg) per unit <sup>(b)</sup>
Circular Bulb Fluorescent Lamps	0.0175 grams (17.5 mg) per unit <sup>(b)</sup>
Compact Lights	0.0175 grams (17.5 mg) per unit <sup>(b)</sup>
HID Lamps	0.035 grams (35 mg) per unit <sup>(b)</sup>

Notes:

- a. Source of factors: NEWMOA factors contained in MADEP letter to SEMASS dated 2/18/04.
- b. Assumed factors utilized during MSP2 by SEMASS.

**3.1 Medical, Dental & Veterinarian Facilities.** The primary focus for this task will be to continue to reclaim mercury-containing blood pressure cuff units (sphygmomanometers) from medical, dental or veterinarian facilities that have not switched to non-mercury, aneroid units. Additional activity on this task will include identification and reclamation of other MCMA such as CFL's, thermostats, and other fluorescent bulbs used by these facilities on a daily basis.

Activity Scope. Funds are included in the budget for packaging, reclamation, and recycling of up to forty (40) blood pressure cuff units with replacement by new, non-mercury, aneroid units per year. It is assumed that these activities may require periodic collection by the mercury reclamation contractor. Funding for replacement of non-mercury, aneroid blood pressure cuff units represents a substantial fraction of the total costs and, therefore, will be evaluated on a case-by-case basis. Scope and funding is also included in this Plan for up to ten (10) pickups per year of miscellaneous mercury devices at medical, dental or veterinarian facilities.

Timeline. The timeline for this activity will be ongoing throughout the period of this Plan.

**3.2 Thermometer Exchange Programs.** Due to the continuing, steady popularity of this activity, this task will continue to be implemented in a manner similar to prior Plan years. As noted in past ERC surveys, thermometers remain one of the most recognizable mercury-

containing devices to the Public. Residents, schools and health care facilities can continue to be invited to bring glass fever thermometers to a convenient (usually municipal) location and exchange them for new, digital, non-mercury thermometers. During MSP4, many points of exchange occurred during community household hazardous waste collection events. SEMASS will continue to support this approach for thermometer exchange events as part of MSP5 by furnishing communities with replacement, non-mercury digital thermometers.

Activity Scope. Funding and scope are included in this Plan for purchase of up to one-thousand (1,000) digital, non-mercury replacement thermometers per year. In addition, this task scope includes purchase of logistical materials (e.g., buckets, flyers, mercury spill kits).

Timeline. The timeline for this activity will be ongoing throughout the period of this Plan. However, most thermometer exchange activity is expected to concur with community HHW events that occur during the spring-summer-fall periods.

**3.3 Community Reimbursement & HHW Support.** This task details activities associated with municipal household hazardous waste (HHW) collection events. SEMASS will reimburse communities for the costs associated with the reclamation of mercury-containing articles, elemental mercury, contractor costs for “counting” devices, transportation fees and reasonable costs for secondary containment (plastic buckets & bags) and packaging.

SEMASS may also provide supplemental funding for appropriate newsletter and/or pamphlet distributions or other forms of advertising such as local print ads, sandwich boards, etc. In the past, communities have requested funding for direct mail pieces, locals ads and/or signage that have provided notice for Household Hazardous Waste (HHW) or other specialized collection events (e.g. thermometer exchanges, etc.). SEMASS will continue this activity during MSP5. Residential participation at HHW events has been shown to be a successful tool in diverting mercury from the waste stream as well as other potentially harmful items and products. The funding of these direct mail distributions has been an important component towards the success of the HHW events.

Activity Scope. Eligible SEMASS communities (as defined in Section II of this Plan) can either submit claims to SEMASS for reimbursement of those costs incurred in the collection, reclamation, and recycling of mercury and mercury-containing articles or they may contract directly with a SEMASS approved vendor to have the items collected and invoiced directly to SEMASS. Claims for reimbursement will be evaluated and processed by SEMASS on an ongoing basis. SEMASS will send out annual letters to eligible communities identifying the parameters and means by which they may apply for support under this task. Scope is included in this Plan based on past, historical reimbursement amounts as well as past requests for HHW event advertising and support.

Timeline. The timeline for this activity will be ongoing throughout the period of the Plan but typically coincide with spring or fall HHW events.

**3.4 Municipal and Commercial Thermostat Program.** This task has been substantially upgraded from MSP4 and will focus on two sources of thermostats: Primary Source – residential thermostats collected from municipal locations (town halls, DPW garages, BOH), and Secondary Source - thermostats recycled/reclaimed at Commercial HVAC supplier locations.

**Municipal Sources.** SEMASS will continue to support efforts to identify, remove and replace mercury-containing thermostats with non-digital units in municipal buildings (town halls, senior centers, DPW garages, schools) within our Plan geographic area. In addition, SEMASS will continue to provide on a limited basis, a number of non-mercury containing programmable and non-programmable thermostats for residents to exchange for their mercury containing thermostats at eligible BOH offices and DPW's in the SEMASS communities.

Activity Scope. This plan includes scope for exchanging thermostats throughout the SEMASS region during the Plan period (average 250 per year). For Plan budgeting purposes, each building location assumes the following:

- Two hundred (200) programmable, non-mercury digital thermostats
- Fifty (50) non- programmable, non-mercury digital thermostats
- Installation incentive allowance up \$200.00 per municipal building (approximately 3 hours service time)
- Collection of mercury-thermostats and reclamation/recycling using one (1) 5-gallon pre-paid bucket

Timeline. The mass-mailing effort will be conducted at the start of the Plan period. It is assumed that most thermostat conversion activity will take place during spring-summer-fall periods when heating/cooling requirements are less critical.

**Commercial/HVAC Sources.** This portion of the task will continue efforts from MSP4. This task will target mercury-containing thermostats by working with those commercial distributors (e.g., HVAC suppliers, etc.) that have a desire to remove mercury from the waste stream.

Activity Scope. SEMASS will work with regional recycling groups (such as Cape Cod Cooperative Extension and South Shore Recycling Cooperative), to conduct outreach to HVAC suppliers/wholesalers within our Plan geographic area to promote recycling efforts for thermostats and encourage development of a recycling program at their facility. SEMASS will provide logistical support to facilitate reclamation of thermostats (e.g., buckets, packaging, flyers, mercury spill kits, etc) as well as a \$5 per thermostat rebate to be paid to the regional recycling group.

Scope is included in this Plan to conduct outreach and sponsor collection buckets at sixty (60) HVAC supplier locations (20 per year).

Timeline. The timeline for this activity will be ongoing throughout the period of the Plan.

**3.5 School Clean-Outs.** SEMASS will conduct cleanouts for schools or other educational institutions identified as part of Task 2.1 outreach activities that may have a significant quantity of mercury and/or mercury-containing articles. Clean-ups would include set-up and coordination of the appropriate event, and collection, packaging, transport, and recycling of these products. Based on past clean-out activities, it is expected that a variety of mercury-containing articles may be encountered including fluorescent lights, mercury thermostats, switches, blood pressure cuffs, laboratory instruments, and elemental sources.

SEMASS will send a mass-mailing to each school district within our Plan geographic area that will detail the clean-out activities. Schools will also be given the opportunity to have their fluorescent bulbs picked up at the school by an approved vendor (such as Veolia or Complete Recycling Services). Any responses will be followed up by the MSP Program Coordinator via letters, telephone calls and/or in-person visits as necessary to gain interest in the activity.

Activity Scope. Funding is included in this Plan budget for implementation of up to twelve (12) school cleanout events (average 4 per year) and the ongoing reclamation of fluorescent bulbs. Costs of cleanouts are based on past expenditures and include funding reimbursement for the removal of mercury, as well as the costs involved for furnishing some degree of replacement units (i.e. thermometers, barometers, etc.). SEMASS may work closely with NEWMOA in conducting clean-out activities, as well as working with a licensed third party reclamation vendor to retrieve mercury from those schools where clean outs are implemented.

Timeline. The timeline for this activity will be ongoing throughout the period of this Plan. However, clean-out activity is usually limited to the duration of the active school year (fall-winter-spring periods).

**3.6 Universal Waste Sheds.** SEMASS will continue to offer sheds to eligible communities or to those communities who show a true need for the use of additional sheds to be placed at schools and/or municipal buildings for the proper reclamation of mercury-containing articles or to replace a prior shed which is no longer functional. The placement of sheds in additional, key areas could potentially assist some of the larger communities in the collection and temporary storage of mercury-containing products.

Additional efforts for various shed maintenance support including: additional hazard communication signage, replacement spill kits, and testing materials to confirm/deny if a mercury spill has occurred. SEMASS will continue this support during MSP5.

Activity Scope. Scope is included in this Plan for SEMASS to purchase and place up to ten (10) Universal Waste Sheds per year. In addition, additional scope is provided in this Plan to provide signage, replacement spill kits, and mercury spill testing materials to those participants who request them.

Timeline. This activity will be ongoing throughout the period of this Plan.

**3.7 Boatyards, Marinas & Marine Facilities.** As a result of requests by one of SEMASS' stakeholders, SEMASS will continue Plan activity begun during MSP5 for reclamation of mercury-containing products from boatyards, marinas and other marine repair and/or maintenance facilities. It is our understanding that boat bilge pumps are commonly used on boats of all sizes and that these pumps typically have mercury-containing electrical switches. Replacement of these pumps occurs on a routine basis as part of normal repairs and maintenance. The demographic layout of many SEMASS communities near the ocean and the degree of boating that occurs within these communities makes this a significant source of mercury for diversion/reclamation.

Activity Scope. SEMASS will continue to contact boatyards, marinas, marine facilities and municipal harbor masters in an effort to establish programs to collect marine bilge pumps. SEMASS will employ similar techniques for outreach and recycling employed for business outreach (Task 2.2) and thermostat reclamation (Task 3.4). These approaches may include some or all of the following:

- Preparation of outreach posters, flyers and literature for marina users,
- Advertisement in local marina newsletters
- Meetings with marina or other marine-facility personnel
- Coordinate and support efforts by the Cape Cod Cooperative Extension's (CCCE) outreach to marina/boatyard facilities on Cape Cod and the Islands
- Conduct outreach to marinas/boatyards along the South Coast and other non-cape coastal areas; SEMASS may coordinate outreach efforts with the commonwealth's Coastal Zone Management agency
- Assist with the cost of printing and distribution of advertising such as flyers, posters, and newspaper advertisements
- Provide containment buckets, packaging, and labels for proper packaging of mercury-containing materials
- Provide collection sites with mercury spill kits
- Reimbursement of the costs of a third-party, mercury collection contractor for pick-up and proper recycling of mercury-containing products
- Emphasis on the use and availability of municipal Universal Waste Sheds

Scope is included in this Plan for outreach activities detailed above plus placement and collection of devices from up to ten (10) marine or boatyard locations per year.

Timeline. The timeline for this activity will be ongoing throughout the period of this Plan. However, clean-out activity will likely happen after Labor Day when the bulk of boat winterization occurs.

**3.8 Business Reimbursement.** SEMASS will reimburse eligible businesses on a first come-first served basis for a portion of the costs associated with the reclamation of mercury and MCMA.

Activity Scope. All eligible businesses in the SEMASS communities (as defined in Section II of this Plan) can register and submit claims to SEMASS for reimbursement of the costs incurred in the collection, reclamation, and recycling of mercury and mercury-containing articles. For

budgetary purposes during MSP5, reimbursement is based on 50% of eligible costs with a maximum annual reimbursement by SEMASS of \$500.00 per business. Claims for reimbursement will be evaluated and processed by SEMASS on a first come-first served basis on an annual basis. .

As with all tasks with the MSP program, funding is finite for outreach and reclamation of mercury and mercury-containing manufactured articles. Therefore, the total funds available for reimbursement of business-related mercury reclamation costs are detailed in Section VI of this Plan. Should the response from businesses exceed this amount, SEMASS will seek to meet obligations to registered businesses by a combination of the following: a) utilization of existing town programs such as a Universal Waste Shed at Transfer Station or Recycling Center, b) pursuit of manufacturer reclamation and recycling of mercury-containing items such as tanning bed bulbs, or c) distribution of funding based on date of registration (first come, first-served) and/or date of reimbursement request.

Scope and budget is included with this Plan for reclamation of one-hundred twenty (120) businesses using an average of \$150.00 per business (average 40 per year). This assumes that pre-packaged material buckets or boxes can be used and that a single pickup can be conducted at each location.

Timeline. The timeline for this activity will be conducted throughout the year.

#### **Task 4.0 - Program Administration**

Activity Scope. General administrative activities required to operate the MSP5 program activities will be conducted as part of Task 4.0. Activities include:

- Tracking of program costs
- Review of reclamation records and preparation of estimates for mercury reclaimed
- Processing of funding requests
- Routine copying, filing & recordkeeping
- Sub-contractor management
- Processing billing for accounts receivable and accounts payable
- Periodic internal program meetings, management oversight and status reporting.
- Meetings with the Department
- Preparation of the MSP Program Annual Report
- Preparation of letter(s) & responses to Department technical comments or program information requests
- Preparation of the MSP6 Plan (if required)

Timeline. The timeline for this activity will be ongoing throughout the period of the Plan.

#### IV. PROGRAM REPORTING AND SCHEDULE

**Program Reporting.** SEMASS will prepare and submit annual reports to the Department summarizing the results of the Material Separation Plan Program. These annual reports will be based on a calendar year basis (January through December) and be submitted by February 15<sup>th</sup> of the year following or by an alternate schedule approved by the Department. Reports will include a description of activities completed by task, mercury amounts reclaimed on the program and costs expended. Mercury amounts will be broken down by type of mercury articles and elemental mercury in two matrices: 1) mercury devices/amounts by long-term SEMASS community and 2) mercury devices/amounts by Plan Task. Costs expended will be compared versus costs budgeted and significant differences will be detailed in the annual report text.

**Program Schedule.** Activities related to MSP5 will be three (3) years in duration and will begin on January 1, 2010 and continue through December 31, 2012.

#### V. PERSONNEL

Implementation of the Material Separation Plan requires the efforts of a variety of professional, contractor and supporting organization personnel. Key Parties include the following:

##### SEMASS

- MSP Program Coordinator. SEMASS will continue to provide a Material Separation Plan (MSP) Program Coordinator to oversee and administer the activities described within this Plan. SEMASS will also provide support to the MSP Program Coordinator in the form of office space, administrative support, and administrative logistics (e.g., telephone, copiers, printers, computer, IS Support, fax machine, etc.) necessary to execute this Plan.
- Technical & Management Program Oversight. Technical and management program oversight will be provided on a periodic basis by Covanta Energy and SEMASS personnel to monitor and guide successful implementation of the MSP Program. This oversight support may include personnel with managerial, technical, environmental, legal, and financial backgrounds.

**Covanta Energy.** SEMASS personnel may work co-operatively with other Covanta Energy EfW facilities in Massachusetts. SEMASS may team up to sponsor joint outreach activities or combine on other program tasks if co-operative efforts make sense.

**Contractor Support.** SEMASS will employ outside consultants/contractors in the implementation and other facets of the activities associated with MSP5, as indicated in the Plan. A listing of major contractors is provided below that SEMASS may employ. SEMASS reserves the right to change, add or eliminate contractors, as required, for successful implementation of the MSP Program.

- Mercury Handling, Pick-Up, Packaging & Disposal. SEMASS will utilize multiple contractors to conduct the field activities associated with pick-up, packaging, transport and reclamation/recycling of mercury and mercury-containing articles. Two contractors that have been used in the past include: 1) Complete Recycling Solutions (CRS) of Fall River, MA and 2) Veolia Environmental Services of Stoughton, MA.
- Mercury Handling and Awareness Training. In instances where supplemental training is conducted under the MSP Program, MassRecycle will be utilized. This firm specializes in conducting training for proper hazard recognition, handling, packaging and transport of mercury and mercury-containing products.
- Thermostat Recovery Corporation (TRC). SEMASS will support any municipalities who opt to use TRC for thermostat recovery. Support is contingent upon timely receipt by SEMASS of reportable thermostat quantities.

**Supporting Organizations.** SEMASS may work in conjunction with the following supporting organizations to help co-operatively accomplish Plan activities.

- School Clean-Out Assistance. SEMASS will continue to work with staff from the Northeast Waste Management Officials' Association (NEWMOA) of Boston, MA for assistance with conducting school cleanout activities.
- Regional Recycling Coordinators/Organizations. SEMASS will continue to work with Municipal Recycling Coordinators in each of our long-term communities as well as regional recycling organizations. Examples of these include:
  - South Shore Recycling Cooperative (SSRC) of Dover, MA representing several SEMASS south shore communities
  - University of Massachusetts Cape Cod Cooperative Extension (CCCE) of Hyannis, MA representing SEMASS communities on Cape Cod and Martha's Vineyard
  - Cape Light Compact of Barnstable, MA for fluorescent & compact fluorescent bulb recycling.
  - DEP Municipal Assistance Coordinators for the Northeast 1 District (NE1) which encompasses the South Shore/Plymouth County communities, Southeast 2 District (SE2) which includes the South Coast and Bristol County communities, and the Southeast 1 District (SE1) which encompasses the Cape Cod & Islands communities plus Carver, Marion, Wareham, Mattapoisett and Rochester.
- Thermostat Recycling. SEMASS will expand co-operative efforts with the Thermostat Recycling Corporation (TRC) of Rosslyn, VA for assistance with municipal and commercial, thermostat reclamation and recycling.

## VI. PROJECTED PLAN BUDGET

The projected budget based on the scope set forth for the three (3) year period of this Plan (2010-2012) is detailed in Table 3, below.

**TABLE 3. PROJECTED MSP5 BUDGET BY TASK**

<b>Task No.</b>	<b>Plan Activity:</b>	<b>Average Yearly Expenditures</b>	<b>Projected Plan Expenditures (2010-2012)</b>
<b>1.0</b>	<b>ERC Education and Outreach</b>	<b>\$50,000</b>	<b>\$150,000</b>
1.1	Advertising	\$ 39,193	\$117,581
1.2	Web-Based Tools	\$1,352	\$ 4,055
1.3	Print Materials	\$ 4,055	\$ 12,164
1.4	Evaluation Tool	\$ 5,400	\$ 16,200
<b>2.0</b>	<b>Local Education and Outreach</b>	<b>\$93,989</b>	<b>\$ 281,967</b>
2.1	Community and School Outreach	\$51,901	\$155,703
2.2	Business Outreach	\$27,310	\$81,930
2.3	Mercury Handling and Awareness Training	\$14,778	\$44,334
<b>3.0</b>	<b>Mercury Reduction / Recycling Programs</b>	<b>\$205,650</b>	<b>\$616,950</b>
3.1	Medical, Dental & Veterinarian Facilities	\$17,252	\$51,756
3.2	Thermometer Exchange Programs	\$33,408	\$100,224
3.3	Community Reimbursement & HHW Support	\$79,434	\$238,302
3.4	Municipal and Commercial Thermostat Program	\$25,095	\$75,285
3.5	School Clean-Outs	\$12,675	\$38,025
3.6	Universal Waste Sheds	\$15,084	\$45,252
3.7	Boatyards, Marinas & Marine Facilities	\$5,984	\$17,952
3.8	Business Reimbursement	\$16,718	\$50,154
<b>4.0</b>	<b>Program Administration</b>	<b>\$35,189</b>	<b>\$105,567</b>
<b>Grand Total:</b>		<b>\$ 384,828</b>	<b>\$1,154,484</b>

This budget includes payments to ERC, direct reimbursement costs for municipalities, supporting organizations, and businesses, payments to contractors, purchase of supplies and materials, travel and outreach activity costs, local advertising, mailing, postage, copy costs, and internal labor.

Internal labor primarily includes the MSP Program Coordinator, MSP Program Manager, Administrative Support, other Environmental Dept. support, plus a limited amount of SEMASS Facility Management time. Internal labor is not allocated to any single task but rather allocated to each of the tasks as necessary to conduct the work. Similar to any professional consultant, SEMASS personnel associated with the Program track their labor time and allocate it to the appropriate tasks or subtasks (e.g. 2.1, 3.3, 3.8, or 4.0, etc.). No internal labor tasks are allocated to Task 1.0 (ERC Education and Outreach). Internal labor costs associated with the MSP

Program Coordinator (a full-time employee) are directly factored into the MSP5 budget but include the appropriate multipliers for overhead & benefits. Internal labor costs for other personnel who support the program on a part-time basis are allocated using comparable consultant rates commensurate with their experience and job description. SEMASS uses labor rates comparable to those used by our facility consultants.

The budget estimates above do not include costs associated with office space costs, rental or overhead nor do they include any internal labor that is not directly required on the program. For example, the costs associated with Accounts Payable staff, Procurement Department Staff, Human Resources personnel, Corporate Management, etc. are not allocated to the program. The costs for these services, again similar to a professional consultant, are considering “included” with the equivalent consultant rates used when allocating internal labor to the program.

**ATTACHMENT A**

**LIST OF LONG-TERM SEMASS COMMUNITIES**

### List of Long-Term SEMASS Communities

No.	Community
1	Abington
2	Acushnet
3	Avon
4	Barnstable
5	Bellingham
6	Berkley
7	Braintree
8	Brewster
9	Canton
10	Carver
11	Chatham
12	Cohasset
13	Dennis
14	Dighton
15	Duxbury
16	East Bridgewater
17	Eastham
18	Fairhaven
19	Falmouth
20	Freetown
21	Halifax
22	Hanson
23	Harwich
24	Hingham
25	Kingston
26	Lakeville
27	Marion
28	Martha's Vineyard
29	Mashpee
30	Mattapoisett
31	Middleborough
32	Norwell
33	Orleans
34	Otis Air Nat'l Guard Base/ Massachusetts Military Reservation.
35	Pembroke
36	Plymouth
37	Plympton
38	Provincetown
39	Quincy
40	
	Randolph
41	Rochester



**ATTACHMENT B**  
**MSP5 STAKEHOLDER MEETINGS SUMMARY**  
**JUNE 2009**

Covanta SEMASS:  
Material Separation Plan (MSP) Program for the Diversion of Mercury

**STAKEHOLDER MEETINGS SUMMARY (MSP5)**

**Sessions.** Three meetings with Stakeholders were sponsored during June 2009 by Covanta SEMASS (SEMASS) to discuss the MSP Program and the new plan going forward. Notice of the meetings was sent out to one-hundred and ninety two (192) persons on the program contact list on June 12<sup>th</sup>. Meetings were held in different geographic areas to promote attendance:

- Dennis – Tuesday, June 23<sup>rd</sup>
- Canton – Wednesday, June 24<sup>th</sup>
- Lakeville – Monday, June 29<sup>th</sup>

**Attendees.** A total number of thirteen (13) people attended the stakeholder meetings from ten (10) organizations and/or municipalities as well as MASS DEP Boston and Lakeville.

**Stakeholder Meetings Discussion and Feedback.** SEMASS presented a summary of program results from 2008 and the MSP4 task list as a basis for expanding and amending MSP5 going forward. Feedback from earlier stakeholder sessions were posted at later sessions. Discussion points included:

Task Name	Things That Are Working	Areas to Improve / Expand / Amend
Task 1.0 – Integrated Waste Services Association	<ul style="list-style-type: none"> <li>• Good use of advertising; communities have heard Comcast ads</li> <li>• Radio ads have been heard (“Don’t Throw Mercury in the Trash”)</li> <li>• Towns liked hearing radio ads on local stations</li> <li>• Weblinks were found useful</li> <li>• Outreach support such as flyers, radio and television ads are popular for educating the public about the existence of mercury containing products in their home</li> </ul>	<ul style="list-style-type: none"> <li>• Video to teach residents about handling procedures for mercury containing products in the home</li> <li>• Radio ads that target contractors such as HVAC and home remodelers to educate them about the need to recycle mercury containing thermostats and switches</li> <li>• Magnets and other popular forms of advertising for residents in replace of “trash-can” flyers; flyers were popular, but were never taken home by residents</li> </ul>
Task 2.1 – School Outreach	<ul style="list-style-type: none"> <li>• Tours have been successful (15-20 people max, small children discouraged because of safety hazards)</li> </ul>	<ul style="list-style-type: none"> <li>• More school outreach-focus in on CFL’s (growing area)</li> <li>• Tour video/new video needed</li> </ul>

Task Name	Things That Are Working	Areas to Improve / Expand / Amend
Task 2.2 – Business Outreach		<ul style="list-style-type: none"> <li>• CFL’s outreach</li> <li>• Special focus on Tanning Salons</li> <li>• Outreach to septic system repair companies for reclamation of pump switches that contain mercury</li> <li>• Work directly with Boards of Health for mass mailings- SEMASS will provide a template for annual mailings</li> <li>• Work with smaller businesses/ manufacture take-back programs</li> </ul>
Task 2.3 – Mercury Handling and Training	<ul style="list-style-type: none"> <li>• Cape Cod Cooperative Extension help provided</li> <li>• Still demand for training by Boards of Health and DPW’s</li> </ul>	<ul style="list-style-type: none"> <li>• Need a Cape location</li> <li>• Work with Mass Recycles for training</li> </ul>
Task 3.1 – Medical, Dental, and Vet Facilities	<ul style="list-style-type: none"> <li>• Most materials cleaned out</li> </ul>	<ul style="list-style-type: none"> <li>• Mailing from BOH (pay print/mail)- SEMASS can help with template</li> <li>• No interactions with BOH/DPW- towns don’t see much feedback</li> </ul>
Task 3.2 – Thermometer Exchange	<ul style="list-style-type: none"> <li>• Non-mercury thermometers still work as incentive</li> <li>• Good inventory on hand</li> </ul>	<ul style="list-style-type: none"> <li>• Less funding / people don’t need replacements</li> </ul>
Task 3.3 – Community Reimbursement / HHW Support	<ul style="list-style-type: none"> <li>• Take advantage of direct pay to contractors by SEMASS (can’t pay for non-mercury)</li> <li>• Direct pay in ’08 has worked well</li> </ul>	<ul style="list-style-type: none"> <li>• Include PPE/packaging/bags (reimburse or SEMASS can provide)</li> </ul>

Task Name	Things That Are Working	Areas to Improve / Expand / Amend
Task 3.4 - Thermostats	<ul style="list-style-type: none"> <li>• Thermostat exchanges have worked (esp. Cape Cod)</li> <li>• Big growth area- town building/school areas</li> </ul>	<ul style="list-style-type: none"> <li>• Home Depot gift cards in the amount of \$5 for residents bringing mercury containing thermostats to HHW collections and/or Board of Health offices</li> <li>• For towns or organizations that implement a collection of mercury containing thermostats from businesses, there will be a \$5/thermostat rebate paid to the town or organization.</li> <li>• Keep options open to municipalities- rebate vs. exchange</li> </ul>
Task 3.5 – School Cleanouts	<ul style="list-style-type: none"> <li>• One time source is pretty well cleaned out</li> <li>• Lots of mass mailing efforts</li> </ul>	<ul style="list-style-type: none"> <li>• Target custodial staff- Mercury training &amp; awareness</li> <li>• CFL disposal will be a growing problem; need more education</li> <li>• Include the collection of fluorescent bulbs and other mercury containing items directly from the school buildings- eliminate the need for janitorial staff to transport bulbs</li> </ul>
Task 3.6 – Universal Wastesheds	<ul style="list-style-type: none"> <li>• Continued popularity</li> <li>• Strong support continues</li> <li>• Universal Waste Sheds continue to be used; utilizing multiple sheds have been useful to some communities</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to meet demand as needed</li> </ul>
Task 3.7 – Boatyards and Marinas	<ul style="list-style-type: none"> <li>• Continue boatyard posters</li> <li>• Popular in Cape Cod and south coast</li> <li>• Still continue; target harbormasters in the fall</li> </ul>	<ul style="list-style-type: none"> <li>• Work with manufacture take-backs</li> <li>• Harbormaster outreach- fall is best</li> <li>• CCCE mass mailing and boatyard visits</li> </ul>

<b>Task Name</b>	<b>Things That Are Working</b>	<b>Areas to Improve / Expand / Amend</b>
Task 3.8 – Municipal Water Meters	<ul style="list-style-type: none"> <li>• No activity</li> </ul>	<ul style="list-style-type: none"> <li>• Discontinue Task 3.8 Municipal Water Meter Reclamation. There has been no activity on this task. If an opportunity arises it could be handled under MSP5 Task 3.3 Community Reimbursement and HHW Support</li> </ul>
Task 3.9 – Business Reimbursement	<ul style="list-style-type: none"> <li>• Continue with tanning salons- high potential for disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Hardware stores (still difficult to convince)</li> <li>• Tanning salons- work with towns (permitted by state now)</li> <li>• Work with manufacture take-backs</li> <li>• Work with smaller businesses (ACE hardware)</li> </ul>