

**NB Mercury Action Plan - Progress Report
Under the NEG/ECP**

Initiative & Objective	Progress to Date	Notes
<p>1. EMISSIONS REDUCTION - at least 50 percent reduction within the NEG/ECP region by 2003</p> <p>a) Medical Waste Incinerators - meet NEG/ECP limit of 0.055 mg/dscm (milligrams per dry standard cubic metre) by December 2003</p> <ul style="list-style-type: none"> • Future approvals will require annual mercury stack testing as well as meeting NEG/ECP limit. • Work with facilities to remove mercury containing products from waste prior to incineration, and on replacing equipment containing mercury with alternatives. <p>b) Industrial Sources - Maximum achievable reductions in shortest feasible timeframe</p> <p>c) Coal-Fired Utility Boilers - Promote national and international strategies to reduce emissions; develop/implement regional strategies by 2003.</p> <p>Note: Canada-Wide Standard for mercury emission from coal-fired power plants was endorsed by Environment Ministers in October 2006.</p> <ul style="list-style-type: none"> • Grand Lake Station anticipated to be retired prior to 2010, or will be refurbished with appropriate pollution control equipment. 	<p>Medical Waste Incinerator:</p> <ul style="list-style-type: none"> • Stericycle, Inc., formerly Mr. Shredding Waste Management has pollution control equipment in place and has conducted mercury stack testing. • Since 2001, average mercury concentrations at Stericycle were well below limit. • Operating approvals will continue to be mechanism to control mercury emissions at this facility. <p>Industrial Sources:</p> <ul style="list-style-type: none"> • Air and water operating approvals amended to include stricter mercury limits on air emissions and effluent discharges. • Plant is required through its operating approval to conduct quarterly source testing on the primary mercury point sources. • An ambient Mercury Monitoring Study was completed in 2003. The study results identified a fugitive source of mercury that has since been rectified. <p>Coal-Fired Utility Boilers:</p> <ul style="list-style-type: none"> • Operating approvals amended to require mercury stack testing. • Testing done at Grand Lake in Fall 2000 and 2003; testing at Belledune in December 2000 and Summer 2004. • Canada-Wide Standard will see New Brunswick's mercury emissions from coal-fired power plants reduced by 80% by 2010. 	<p>Medical Waste Incinerators: There is now one medical waste incineration facility in NB: Stericycle Inc. (Moncton).</p> <p>Edmundston Regional Hospital incinerator closed in July 2005. Dr. Everett Chalmers Hospital (DECH) incinerator closed in July 2002.</p> <p>Industrial Sources: PCI Chemicals Canada Inc., Dalhousie</p> <p>Coal-Fired Utility Boilers: Grand Lake and Belledune Generating Stations are power plants which use coal to generate electricity. Coal is known to contain mercury.</p> <p>Grand Lake Station: Decision pending.</p>

**NB Mercury Action Plan - Progress Report
Under the NEG/ECP**

Initiative & Objective	Progress to Date	Notes
<ul style="list-style-type: none"> • Belledune Station stopped using NB coal in January 2002. This reduces by half the NB coal used for power generation in the Province. 		
<p>2. <u>SOURCE REDUCTION AND SAFE WASTE MANAGEMENT</u> Identify and Implement Source Reduction Programs - By 2003, reduce the overall amount of mercury-containing waste, where feasible, from household, commercial and industrial sources, through source reduction, segregation, and safe waste management, including recycling.</p> <ul style="list-style-type: none"> • Explore the potential for the recycling of fluorescent light bulbs and mercury separation unit. <p>Target audiences include:</p> <p>a) <u>Provincial Government Departments</u></p>	<p><u>Provincial Government:</u></p> <ul style="list-style-type: none"> • Developed Mercury Action Plan for NB. • Continued participation on Canada-Wide Standards development committee for mercury. • Letter from Deputy Minister of ELG to other Deputy Ministers recommending that future purchases of fluorescent lights, which can contain mercury, should be low mercury/energy-efficient lights, has been sent. • Dept. of Supply and Services has developed a policy for acquisition of low-mercury/energyefficient fluorescent lighting for government buildings. • Preparing communication to large property owners encouraging use of lowmercury/energy-efficient fluorescent light bulbs. 	

**NB Mercury Action Plan - Progress Report
Under the NEG/ECP**

Initiative & Objective	Progress to Date	Notes
<p>b) <u>Hydrometric stations</u></p>	<p><u>Hydrometric stations:</u></p> <ul style="list-style-type: none"> • All mercury manometers installed at hydrometric stations have been replaced with mercury-free waterlevel monitoring devices. A complete modernization of the network has been completed. 	<p><u>Hydrometric stations:</u> Manometers measure the water level in rivers and lakes and are housed in small sheds on banks of rivers of lakes.</p>
<p>c) <u>Schools</u></p>	<p><u>Schools:</u></p> <ul style="list-style-type: none"> • Following communication at Deputy Minister's level concerning use of mercury in schools, Dept. of Education reported that liquid mercury is no longer used in school science labs, and that fluorescent lights are being replaced with low mercury/energy-efficient models. 	
<p>d) <u>Hospitals</u></p>	<p><u>Hospitals:</u></p> <ul style="list-style-type: none"> • Communications underway with hospital corporations to inventory mercury-containing products in use. • Awarded ETF grant to a hospital corporation to conduct an inventory of mercury products and to replace mercury manometers. • Continuing to work with hospital corporations to identify mercury-free products. 	
<p>e) <u>Dental Offices</u> -</p> <ul style="list-style-type: none"> • Develop document co-signed by Minister and executive director of NB Dental Society (NBDS) advising dentists of mercury reduction initiatives Canada-Wide Standards - Fall 2002. • Develop Letter of Understanding with NBDS - December 2001. 	<p><u>Dental Offices:</u></p> <ul style="list-style-type: none"> • Environment Canada has a Memorandum of Understanding with Canadian Dental Association to promote best management practices and collection and recycling of dental amalgam waste. • Letter of Understanding between NBDS and DELG to promote better management of amalgam signed. • To date, approximately 80% of the 280 dental practices in New Brunswick have installed amalgam separators. 	<p><u>Dental Offices:</u> Mercury is a component of amalgam dentists use to fill teeth. There is a resulting waste management issue when amalgam is removed at dentists' offices.</p> <p>Amalgam separators prevent mercury from entering the sewer system.</p>

**NB Mercury Action Plan - Progress Report
Under the NEG/ECP**

Initiative & Objective	Progress to Date	Notes
<p>3. <u>OUTREACH AND EDUCATION</u> - Educate the public about adverse environmental and health effects of mercury and ways to reduce the risk of exposure</p> <p>a) <u>General Public:</u></p> <ul style="list-style-type: none"> • Develop a summary and progress report of NB's Mercury Action Plan - Winter 2002. • Prepare an introductory publication on the presence, sources and management of mercury in NB - Spring 2002. • To complement fish consumption advisories issued by Dept. of Health & Wellness, produce feature article on health implications of fish consumption - Spring 2002. • Continue to evaluate mercury education needs. <p>b) <u>Dentists:</u></p> <ul style="list-style-type: none"> • Produce and distribute a brochure for dentists on best management practices for mercury waste recycling - Fall 2002. 	<p><u>General Public:</u></p> <ul style="list-style-type: none"> • A summary of NB's Mercury Action Plan, and 1st edition of Progress Report, produced and available publicly (print and web formats) as of March 2002. Editions produced to date: Summer/Fall 2002; Winter/Spring 2002/2003; September 2004; and December 2006. • First draft completed. • NB residents can refer to the General Information section in FISH 2004, a document published by the Department of Natural Resources (DNR), which contains fish consumption guidelines. <p><u>Dentists:</u></p> <ul style="list-style-type: none"> • Research for publication continues. 	<p><u>Fish Consumption Advisories:</u> Annual DNR FISH guidebook contains recommendations concerning fish consumption in the Province.</p> <p>Environment Canada and the Canadian Dental Association developed best management practices for mercury waste recycling.</p>
<p>4. <u>RESEARCH, ANALYSIS AND STRATEGIC MONITORING</u></p> <p>a) <u>Fish and Wildlife Tissue Sampling:</u></p> <ul style="list-style-type: none"> • Support and expand research and analysis to improve our understanding of mercury sources, impacts and cycles in the environment. • Carry out fish sampling program to monitor mercury levels - Summer 2003. <p>b) <u>Regional Mercury Indicators:</u></p> <ul style="list-style-type: none"> • Support and expand strategic monitoring of mercury emissions, deposition and fish tissue levels and develop meaningful environmental indicators to measure and track progress. • Collect data identified through indicator development process and publish annual status report 	<p><u>Fish and Wildlife Tissue Sampling / Regional Mercury Indicators:</u></p> <ul style="list-style-type: none"> • The NB Department of Environment continues to work in partnership with Environment Canada, Health and Wellness and Natural Resources, as well as University of New Brunswick participants in COMERN (Collaborative Mercury Research Network). • NB Department of Environment collaborated with Environment Canada in the sampling of lakes for mercury. In 2005, thirty lakes were sampled province wide; 19 lakes sampled in 2006. • UNB researchers and Department of Environment staff studied mercury in mining areas at a mine site in northern NB. Work was completed during 2004-05 and a scientific paper was published in 2006. • Vapour-phase mercury in air monitoring continues at St. Andrews in collaboration with Environment Canada and Huntsman Marine Science Centre. • DELG's annual Air Quality Report includes results of mercury concentration in air and wet deposition. 	<p>The northern NB mine site study was partially funded through the Environmental Trust Fund.</p>