



July 26, 2011

Honourable Terry Lake
Minister of Environment

Honourable Shirley Bond
Minister of Public Safety and Solicitor General

The following is a Cabinet minute excerpt from July 18, 2011 for your attention:

s.12

FOR Elizabeth MacMillan
Deputy Cabinet Secretary

pc: Cairine MacDonald, Deputy Minister
Ministry of Environment

Lori Wanamaker, Deputy Minister
Ministry of Public Safety and Solicitor General

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The following are Cabinet Committee on Families First (CCFF) minute excerpt(s) for the meeting of June 16, 2011:

s.12



Cabinet Decision Summary Sheet

Ministry: Ministry of Environment/Ministry of Public Safety and Solicitor General

Date: 06/06/2011

Title: AirCare Program

s.12

Contact: Glen Okrainetz, Director
(250) 952-3207

Toby Louie, Executive Director
(250) 356-6389

Honourable Terry Lake

Date Signed

Honourable Shirley Bond

Date Signed

Cabinet Submission – Request for Decision

Minister: Terry Lake, Minister of Environment
Shirley Bond, Minister of Public Safety and Solicitor General

Ministry: Ministry of Environment/Ministry of Public Safety and Solicitor General

Date: 07/06/2011 Ministry Document #: CS 11-27.

Title: AirCare Program

s.12

Background / Context:

The Lower Fraser Valley is a sensitive airshed that suffers from poor air quality from time to time. In 1988, the Lower Fraser Valley was designated as one of three ozone management regions in Canada, and light duty vehicles were identified as the major contributors of ozone precursors in the region. The AirCare program, the first vehicle emissions inspection and maintenance program in Canada, was designed to reduce emissions of ozone precursors in the Lower Fraser Valley.

In addition to the two vehicle emissions inspection and maintenance (I/M) programs operating in Canada, (British Columbia and Ontario), there are 49 distinct I/M programs currently operating in 32 states and the District of Columbia.

The Ministry of Public Safety and Solicitor General administers the *Motor Vehicle Act* which provides the statutory authority for the AirCare program. TransLink administers the AirCare program, which operates on a cost-recovery basis. There are 10 inspection centres with 32 inspection lanes. Inspection services are delivered by a private

contractor (Envirotest) via a contract with TransLink. Two inspection centres located outside the TransLink operating area are managed by TransLink under a separate agreement with ICBC. Metro Vancouver, Fraser Valley Regional District and the Province provide policy support to AirCare reflecting their mandates with respect to air quality and its effect on human health and the environment. The Ministry of Environment (MoE) is the government lead for the review of the AirCare program because of its mandate to protect ambient air quality and develop policy to reduce emissions from non-point sources, including transportation.


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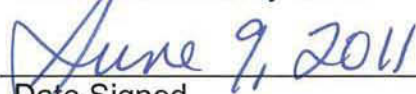
Contact: Glen Okrainetz, Director
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Honourable Terry Lake


Date Signed

Toby Louie, Executive Director
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Honourable Shirley Bond


Date Signed



Cabinet Decision Summary Sheet

Ministry: Ministry of Environment

Date: 06/21/2011

Title: AirCare Program

s.12

Contact: Glen Okrainetz, Director
(250) 952-3207

Honourable Terry Lake

June 27, 2011

Date Signed

Cabinet Submission – Request for Decision

Minister: Terry Lake, Minister of Environment

Ministry: Ministry of Environment

Date: 06/21/2011

Ministry Document #: CS 11-27.

Title: AirCare Program

s.12

Implications and Considerations:

The AirCare program is a vehicle emissions inspection and maintenance program administered by the South Coast British Columbia Transportation Authority (TransLink) as required by the *Motor Vehicle Act* and the *South Coast British Columbia Transportation Authority (SCBCTA) Act*. It is one of 50 distinct vehicle inspection and maintenance programs currently operating in North America; the others are in Ontario, 32 states and the District of Columbia.

Inspection services are delivered by a private contractor (Envirotest Canada) under terms of a contractual agreement with TransLink. AirCare is a "centralized" type of program with 10 inspection facilities in total, two of which are located outside of the Translink service delivery area. Via contract, TransLink operates the Abbotsford and Chilliwack AirCare inspection centres on behalf of the Insurance Corporation of British Columbia (ICBC). ICBC's other responsibilities with respect to the AirCare program include administration and certification of AirCare repair centres and technicians (ICBC also contracts repairer certification to TransLink); and use of ICBC's motor vehicle licensing framework and renewal reminders as a compliance and information tool for enforcement of AirCare.

The AirCare program has operated since September 1992. There have been three service contracts issued with terms of seven, seven, and five years, respectively, with the current contract set to expire on December 31, 2011. Under the contract, TransLink must provide notice to the service contractor by July 4, 2011 to allow the contract to expire, to enter into negotiations for a renewed contract or to replace the service provider with another.

AirCare inspections are intended to identify light duty vehicles with excess emissions caused by emissions control component failure or lack of maintenance. Correcting these defects reduces the overall release of vehicle-generated pollutants, leading to improved ambient air quality and reduced health risk. Although vehicle manufacturers have made great strides over the years in reducing emissions from new vehicles and making vehicle engines and emission control systems more durable, the probability of an emissions-related defect developing in *any* vehicle increases with age and mileage. The typical lifespan of a vehicle has now grown to approximately 14 years and more than 250,000 km of use, well beyond the durability requirements required by Environment Canada.

Background / Context:

The Lower Fraser Valley is a sensitive airshed that suffers from poor air quality from time to time. In 1988, the Lower Fraser Valley was designated as one of three ozone management regions in Canada, and light duty vehicles were identified as the major contributors of ozone precursors in the region. The AirCare program, the first vehicle emissions inspection and maintenance program in Canada, was designed to reduce emissions of ozone precursors in the Lower Fraser Valley.

Despite significant population growth in the region since the 1990's, emission reductions across a variety of sectors have brought about improvements for some pollutants, including carbon monoxide, nitrogen dioxide, sulphur dioxide and particulate matter, and short term peak and average concentrations have declined for all these pollutants since the late eighties. Concentrations of volatile organic compounds have also declined. Nitrogen dioxides and volatile organic compounds are key contributors to ozone and smog formation. Improved vehicle emission standards and the AirCare program are largely responsible for lower carbon monoxide and nitrogen dioxide levels.

In 2000, light duty vehicles accounted for 20 percent of the emissions of smog forming pollutants in the Lower Fraser Valley. Although this contribution fell to 17 percent in the 2005 emissions inventory prepared by Metro Vancouver, light duty vehicles remain the single largest sectoral source of smog forming pollutants in the Fraser Valley airshed.

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Vehicles are not tested during their first seven years of operation, so 2011 is the first test year for 2005 models. Vehicles newer than 1992 are tested every two years and the fee is \$45. Vehicles 1991 and older are tested every year and the fee is \$23. Vehicle re-tests after a fail and repair are \$23 for all model years.

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Pages 17 through 20 redacted for the following reasons:

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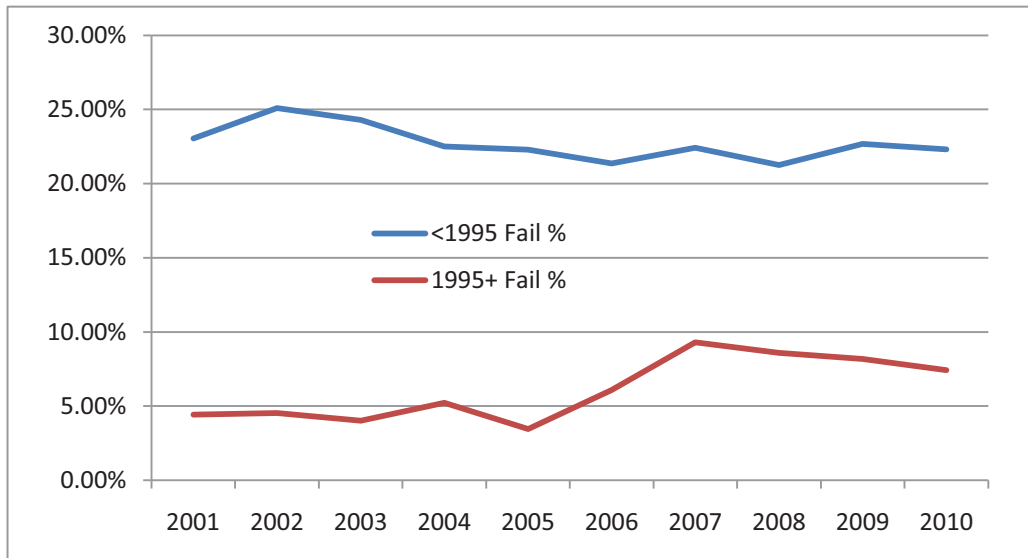
Honourable Terry Lake

June 27, 2011

Date Signed

AirCare Failure Rates

	<1995	1995+	<1995		1995+	
	Fail %	Fail %	Fail	Pass	Fail	Pass
2001	23.04%	4.42%	144938	484185	9874	213624
2002	25.10%	4.54%	168219	502016	10756	226401
2003	24.29%	4.00%	125076	389875	10809	259097
2004	22.51%	5.22%	114967	395853	12177	221060
2005	22.28%	3.46%	87524	305315	12051	336265
2006	21.37%	6.08%	78960	290519	14204	219577
2007	22.42%	9.31%	64929	224694	17033	165961
2008	21.26%	8.58%	53840	199423	23150	246755
2009	22.67%	8.18%	45857	156403	22101	248218
2010	22.32%	7.41%	38499	134008	24624	307546





Cabinet Decision Summary Sheet

Ministry: Ministry of Environment

Date: 07/11/2011

Title: AirCare Program

s.12

Contact: Glen Okrainetz, Manager
(250) 953-3417

Honourable Terry Lake

July 11, 2011

Date Signed

Cabinet Submission – Request for Decision

Minister: Terry Lake, Minister of Environment

Ministry: Ministry of Environment

Date: 07/11/2011

Ministry Document #: CS 11-27.

Title: AirCare Program

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Implications and Considerations:

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Inspection services are delivered by a private contractor (Envirotest Canada) under terms of a contractual agreement with TransLink. AirCare is a "centralized" type of program with 10 inspection facilities in total, two of which are located outside of the Translink service delivery area. Via contract, TransLink operates the Abbotsford and Chilliwack AirCare inspection centres on behalf of the Insurance Corporation of British Columbia (ICBC). ICBC's other responsibilities with respect to the AirCare program include administration and certification of AirCare repair centres and technicians (ICBC also contracts repairer certification to TransLink); and use of ICBC's motor vehicle licensing framework and renewal reminders as a compliance and information tool for enforcement of AirCare.

The AirCare program has operated since September 1992. There have been three service contracts issued with terms of seven, seven, and five years, respectively, with the current contract set to expire on December 31, 2011. Under the contract, TransLink must provide notice to the service contractor by July 4, 2011 to allow the contract to expire, to enter into negotiations for a renewed contract or to replace the service provider with another.

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Background / Context:

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Despite significant population growth in the region since the 1990's, emission reductions across a variety of sectors have brought about improvements for some pollutants,

including carbon monoxide, nitrogen dioxide, sulphur dioxide and particulate matter, and short term peak and average concentrations have declined for all these pollutants since the late eighties. Concentrations of volatile organic compounds have also declined. Nitrogen dioxides and volatile organic compounds are key contributors to ozone and smog formation. Improved vehicle emission standards and the AirCare program are largely responsible for lower carbon monoxide and nitrogen dioxide levels.

For ozone, the same improvements seen for other pollutants have not been observed. In contrast, while average regional ozone levels decreased slightly in the early 1990's, they have generally shown an upward trend since that time. Regionally averaged short-term peak ozone trends have been mainly unchanged during the last ten to fifteen years, despite large reductions in emissions of pollutants that contribute to ozone formation. The Metro Vancouver ozone objective was exceeded at 11 monitoring stations during a summertime smog event extending over three days at the end of July, 2009. In addition, Hope exceeded Metro Vancouver's 8-hour objective at the beginning of July and Hope, Chilliwack and Abbotsford exceeded this objective for at the beginning of June. Two air quality advisories for ozone were issued during 2009. At the beginning of June an advisory was issued for three days and at the end of July an advisory was in place for seven days.

In 2005, the most recent year for which emission inventory data is available, light duty vehicles accounted for 20 percent of the emissions of smog forming pollutants in the Lower Fraser Valley. Vehicles registered in Metro Vancouver accounted for 77 percent of those emissions and Fraser Valley Regional District the balance of 23 percent. Light duty vehicles remain the single largest sectoral source of smog forming pollutants in the Fraser Valley airshed.

The principal "smog-forming pollutants" are nitrogen oxides, volatile organic compounds, fine particulate matter, sulphur oxides and ammonia. These are the major contributors to the formation of ground-level ozone and to the degradation of visibility. Table 1 provides the relative contribution of these pollutants for sources sectors in the

Lower Fraser Valley according to the 2005 emission inventory done by Metro Vancouver.

Table 1: Sources of Smog Forming Emissions in the Lower Fraser Valley

Sector	Percent Contribution
Light Duty Vehicles	17
Natural Sources	17
Non-road (e.g. rail, construction)	12
Agriculture	11
Solvent Evaporation	11
Marine	7
All Other Sources	25

and newer vehicles over the past 10 years are provided in Appendix 1.

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Vehicles are not tested during their first seven years of operation, so 2011 is the first test year for 2005 models. The seven year exemption for new cars exempts 45 percent of the vehicle fleet from being tested. Vehicles newer than 1992 are tested every two years and the fee is \$45. Vehicles 1991 and older are tested every year and the fee is \$23. Vehicle re-tests after a fail and repair are \$23 for all model years.

An independent review in 2004 concluded that overall, the analysis shows one cycle of the current program reduces hydrocarbons by 25%, carbon monoxide by 24% and nitrogen oxides by 11%. At these levels, AirCare remains one of the most effective programs in North America. The emission reductions from AirCare are close to the maximum estimated to be achievable by prevention of excess vehicle emissions.

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Pages 31 through 36 redacted for the following reasons:

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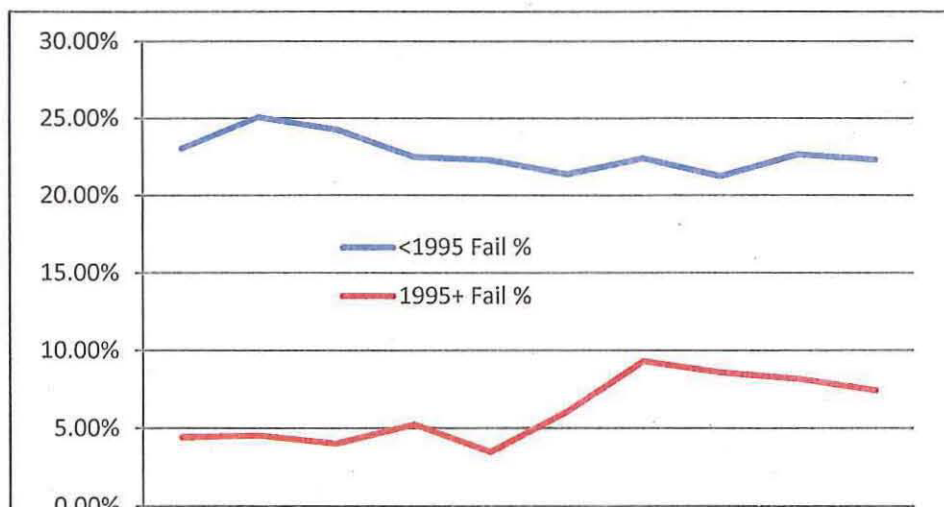
Honourable Terry Lake

July 11, 2011

Date Signed

Appendix 1 – AirCare Failure Rates

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