

Edmonton Trolley Coalition

Sustainable Transit for Liveable Communities



April 10, 2006

Mr. Bill Chahal, President
Amalgamated Transit Union Local 569
10540 108 Street
Edmonton, AB T5H 2Z9

Dear Mr. Chahal,

As you are aware, our group had planned to have a member from the ATU 569 attend either our April or May meeting to discuss the issue of diesel exhaust levels in the various transit garages.

In light of the deaths of maintenance personnel known to us over the past months in which diesel exhaust exposure may have been a contributing factor, we want you to know that our group is still very concerned about this issue and interested in investigating some means to see that it is addressed. However, in recent months, we have had to turn our attention to recent threats against the trolley system, and so we have not had the time to devote to the diesel exhaust issue.

I wanted to let you know that our group still plans to invite the ATU to an upcoming meeting. We will be in a better position to set a date and plan for this once the present issue has been satisfactorily resolved.

We understand that Councillor Sloan has made enquiries into diesel exhaust on a couple of occasions and may afford a starting point to raise the issue with Council. If she is available when we have our discussion, it might be beneficial to have her present.

I will be in touch again in the months ahead.

Sincerely,

Brian Tucker
Chair

cc. L. Sloan

Edmonton Trolley Coalition

Sustainable Transit for Livable Communities



May 15, 2006

Edmonton City Council
2nd Floor, City Hall
1 Sir Winston Churchill Square
Edmonton, AB T5J 2R7

Dear Members of Council,

RE: Diesel Exhaust in Transit Garages – Report 2006COM005

I am writing to you today to voice the Coalition’s support for initiatives to reduce transit workers’ exposure to toxins and carcinogens in diesel exhaust.

Background: The health impacts of diesel exhaust have been the subject of much research. Health Canada, the U.S. Environmental Protection Association, the California Air Resources Board, the American Lung Association, and numerous other recognized authorities all agree that diesel exhaust poses a serious threat to human health. Its impacts range from cancer, chronic respiratory disease (such as asthma, bronchitis and COPD), reduced immune function and heart disease. Recent studies have also drawn associations with increased risk of heart attack and increased risk of pneumonia. Diesel exhaust is known to be many times more toxic than gasoline exhaust. The Office of Environmental Health Hazard Assessment in California stated that diesel exhaust poses the *highest cancer risk of any toxic air contaminant ever evaluated*. There are legal proceedings on record in the United States regarding diesel exhaust exposure.

The ETC is aware of two recent deaths of transit garage personnel in which chronic diesel exhaust exposure is likely to have been a contributing factor; we are also familiar with repeated complaints of transit garage personnel of health symptoms that are attributable to diesel exhaust.

While it is laudable that the City take steps to reduce exposures, it is important to understand that the measures proposed at a cost of \$10 million only represent a reduction in exposure and do not eliminate the problem.

Risk from Diesel Particulate: The Occupational Health and Safety Code has set workplace exposure limits for various toxic components in diesel exhaust. However, there is no threshold limit for the most toxic element, *diesel particulate matter*. No limit could be set because this would imply that a safe level of exposure exists; Health Canada maintains that there is “no safe level of exposure”. This is reflected on page 22 of the PHH ARC Westwood Garage study: “An Occupational Exposure Limit for diesel particulate matter does not exist under the Alberta Code.”

We caution that regardless of measures the city may implement to reduce diesel exhaust exposure, it is important that it not be implied that reduced exposure levels are safe, or that workers are no longer at risk.

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Further steps would need to be undertaken to reduce exposures outside transit garages.

Additional Remediation: Reducing levels of diesel exhaust inside by ventilation to the exterior means that the surrounding communities will continue to be exposed to high levels of exhaust contaminants. A member of our group who was a former resident of the Westwood area complained of the “fallout” from diesel bus operations in the area, which necessitated repeated cleaning of his apartment building. In addition, operators of diesel transit vehicles, patrons waiting at transit centres, pedestrians and transit users in busy transit corridors will continue to be exposed to diesel exhaust at greater than ambient levels. Transit operators and transit users who regularly use diesel buses must also be regarded as chronically exposed to diesel exhaust.

A study by Dr. Dale Hattis of Clark University found that chronic exposure to levels as low as 1 microgram per cubic metre resulted in an average of 230 lifetime cancer cases per million population. Ambient levels in many areas, including inside buildings and offices located along busy streets, may be many times this level.

To reduce these exposures, the city would need to embark on a program to retrofit the approximately 500 new diesel buses in its fleet with diesel particulate filters, and/or increase the number of vehicles in its fleet that do not use diesel fuel.

In this regard, it is again important to recognize that while diesel particulate filters do reduce the amount of particulate emitted by weight, they do not render diesel exhaust safe. There is considerable evidence that the ultrafine particles that pass through the filters and are released into the air pose considerably greater health hazard than the larger particles that the filters trap. These ultrafine particles pass easily through the mucous membranes in the lungs and into the bloodstream.

While we support initiatives to reduce emissions from diesel buses and reduce worker exposures, we find it remarkable that the administration has been able to readily identify over \$10 million in funds available to clean up diesel operations, yet there is such difficulty identifying funds to improve or expand trolley operations. The replacement of diesel buses with trolley buses is a more effective and long-term solution for reducing garage exhaust exposure than overhauling the engines of old diesel buses. A three-year clean-up of leaked diesel fuel at the former Strathcona Bus Barns is currently under way at a cost of over \$2 million, yet there is continued quibbling over the small annual capital investments required to upgrade fixed assets associated with trolley operation. Electric trolley buses do not create any of these environmental and health issues in the transit garages or at transit centers, bus stops and on our streets.

We hope that you find our comments helpful and that initiatives to reduce diesel exhaust exposure will meet with your support.

Sincerely,



Brian Tucker
Chair

Cc: Occupational Health and Safety; Clean Air Strategic Alliance; Bill Chahal, President and Business Agent, ATU 569; C. Stolte, Manager, Edmonton Transit System; R. Millican, General Manager, Transportation



May 22, 2006

ATTN: ALL CITY COUNCIL MEMBERS

Dear Members of Council,

RE: DIESEL EXHAUST IN TRANSIT GARAGES

I am writing to you today to urge your support for measures to improve the ventilation systems and reduce diesel exhaust exposure for staff at the city's three transit garages.

There is a proposal to upgrade ventilation systems at a cost of \$10 million which must go forward to improve working conditions for city employees.

The *Citizens for Better Transit* would also like to express its dismay at the remarks made by Mr. Alex Lee of Mobile Equipment Services at the May 17th TPW that there is no proof diesel exhaust causes cancer.

We see a disconnect with reality here. A U.S. study done already over six years ago linked diesel exhaust to over 125,000 new cancer cases and 64,000 premature deaths each year in the U.S. and called this a 'conservative' estimate. In California, the South Coast Air Quality Management District concluded 70% of the total cancer risks in the Los Angeles area are from diesel emissions. More than 13,000 Canadians will develop cancer in their lifetimes from diesel exhaust, according to a 2003 Canadian study. If diesel exhaust did not impact our health, government funded studies and government legislative bodies would not be making such statements.

According to the California Air Resources Board, diesel exhaust contains many toxins. These include arsenic, benzene, cyanide, formaldehyde, lead, mercury, phosphorus and toluene. The strongest carcinogen identified to date—a compound known as 3, *nitrobenzathrone*, has been identified in diesel exhaust.

The findings of a Swedish study reported by Reuter's Health Information in 2000 concluded that regular job related exposure to diesel exhaust increased the likelihood of developing lung cancer by 63%. There are other studies that quote different figures—but all conclude there is a strong link between exposure to diesel fumes and developing cancer. Health Canada states there is no safe exposure limit to the fine particles in diesel exhaust.

Simply meeting current indoor air quality standards is not adequate because the standards themselves do not reflect the knowledge available from recent research. Improving ventilation at the garages is not a final solution either because the recommendation of Health Canada is to avoid exposure altogether. Further action is necessary, but at least this would be a start.

My group supports investment in public transit as an alternative to private automobiles. But burning diesel fuel for transit vehicles makes it difficult to promote transit on a truly sound environmental or health basis.

We urge you to show leadership on this issue and to put forth further efforts to clean up diesel emissions related to transit operations—both inside the garages and on our streets.

Thank you for your support,

Debra S. Gillett
Chair

Citizens for Better Transit

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