

Vehicle emissions from Canadian Tire facility won't be bad

By Bill Rea

Emissions from diesel trucks and other vehicles have been a big concern for those opposing the proposed Canadian Tire development in Bolton's industrial area.

But it looks like the impacts aren't going to be that bad.

That was a conclusion spelled out to Caledon councillors Tuesday by Mike Lepage, project director and principal with RWDI Consulting Engineers and Scientists. That company was retained by Canadian Tire Real Estate Limited to conduct an air quality assessment for the proposal.

Canadian Tire is interested in placing a large distribution centre and office facility on about 180 acres at the northwest corner of Coleraine Drive and Healey Road in Bolton.

Lepage concluded the impacts to air quality from vehicles on the property are going to make only a slight difference to what's already in place. As well, he said the impacts from this proposal will be less than what would result from various possible alternatives, including a business park, retail development and 1,200-unit residential subdivision.

Lepage told councillors vehicle emissions are subject to federal regulations, although the Province has some influence through such things at the Drive Clean program.

Emissions from vehicles have been decreasing over the last couple of decades, and he said air quality in Ontario has been improving over the last 10 years. He also said 2006 saw a change in the regulations governing diesel engines, after there were changes in the sulfur content of fuels. Lepage said new heavy diesel vehicles sold after 2010 have to meet more stringent standards.

Canadian Tire meets those standards, he said, observing that around 98 per cent of Canadian Tire's fleet complies with them, and that figure should be at 100 per cent by 2017.

Pollutants from vehicles are a mixture of a number of chemical compounds, Lepage said. They can be arranged into three groups; inorganic oxides like carbon monoxide and nitrogen dioxide; particulate matter; and hydrocarbons like benzene.

Measurements of the existing air quality in Bolton were based on data from the nearest monitoring station in Brampton, about 15 kilometres south of the site. Lepage said nitrogen dioxide levels are well within accepted air quality levels.

He added the U.S Environmental Protection Agency recently announced a new tier of testing. Since Canada normally follows such leads, Lepage said emission levels in this country should soon decline even more.

He also said Ontario has very stringent requirements for levels of benzo(a)pyrene, pointing out there are pristine rural areas that don't meet them (he said they're just barely met inside the Arctic Circle). He added this is the only jurisdiction he's aware of with standards anywhere near that level, also commenting Ontario's standards for benzene are similar.

Lepage said the study's traffic findings are based on 350 truck trips in and out of the site per day, in addition to 900 car trips for employees. During peak periods, he said there would be 53 trucks and 415 cars per hour moving on the property. He said those numbers are a lot less than the existing traffic volumes in Bolton, so there shouldn't be a major increase in the amount of emissions. The study was based on a couple of assumptions, including projections of what vehicles will be like in 2016.

"We tried to error on the high side," he told councillors, as he said the study was based on winter conditions, when emissions are usually higher. It also assumed an average vehicle speed of just 10 km-h on the site, which is a lot slower than would be likely. He said emissions are higher at lower speeds, since the vehicle takes longer to get where it's going. As well, he said they allowed for trucks on site idling for seven minutes at a stretch, which he said would be in violation of Canadian Tire policy.

He also said his figures just took on-site emissions into account, which is where most of them are going to be. "I don't think we're missing too much there," he said.

Lepage said the levels from the models they used tend to be somewhat higher than actual levels, but they're generally within 10 to 20 per cent.

He also pointed out the emissions would be spread all over the property. Staff parking will be scattered about the site, and there will be truck bays on both sides of the building.

The result, he said, is there will only be a small addition to the amounts of particulate matter from the development. The benzene levels would be well above the Provincial standards, but Lepage said that's the case with the existing levels. He added they would be well within the levels in other jurisdictions. He added the increase from this development should be offset by future tightening federal standards.

Referring to other possible uses for the property, Lepage said projections indicate a 180-acre business park would generate 3,720 vehicle trips per day, while a 1.5 million square foot retail mall would see 3,905 trips and the 1,200 homes would see 985.

No matter what is done with the property, Lepage said it will still generate car and truck traffic.

Councillor Richard Paterak commented there have been concerns that diesel emissions can cause cancer, but understood that involved engines that are mainly used in the Third World these days. Lepage agreed the characteristics of diesel fuel in Canada have changed a lot in the last 10 or 15 years.

He also told Councillor Rob Mezzapelli that they had taken winds into account, noting they mainly come from the south and west. Data for that was obtained from Pearson International Airport.

Lepage told Councillor Richard Whitehead they did not look much into non-vehicle pollution, since there should be very little in the way of emissions from such a source.

Whitehead also pointed out the peak traffic hours at the Canadian Tire facility will not be the same as normal commuting times. He suggested that point be stressed at the public meeting on the matter, set for May 28.

Councillor Doug Beffort wondered about independent truckers, and whether they would be subject to the same standards as Canadian Tire trucks. In a case like that, "the statistics may be slightly different," he said.

Kathleen Freeman, real estate manager with Canadian Tire Real Estate Limited, said the trucks used by the company represent a mixture of ownership, including Canadian Tire and Canada Cartage. She said she would have emission information from the third-party trucks ready for the May 28 session.

Mezzapelli was concerned that there's been mention of 800 truck trips per day on the site. Lepage told him even in such an event, the emission levels would only see a slight increase over what's there now.

Mezzapelli observed it would be a lot less than the alternatives Lepage mentioned.