

October 10, 2001

TO: Chair and Members - Planning and Transportation Committee

FROM: Councillor Michael Walker

RE: Protection from Terrorism

Dear Chair and Members,

The recent tragic destruction of the World Trade Centre in New York, on Sept 11th, should serve as a wake up call to all major cities with 'standout' structures, utilities and concentrations of high rise buildings.

Up to now we have all taken it for granted that such acts of terrorism could not happen. But now all that has changed with the death of 6,000 innocent people on that sunny autumn morning in the bustling centre of Manhattan.

I would like to formalize a framework for City Council and those officials who are charged with the protection of the City and its people so that the impact of any possible acts of terrorism is minimized.

Buildings: There is no doubt that our high rise buildings are designed by professional engineers to be structurally sound and under design parameters as required by the Ontario Building Code. Buildings are not designed to withstand the intense heat generated by the impact and explosion of tens of thousands of litres of aviation fuel. The Trade Centre disaster has shown that those above the point of impact had little chance of escape and the intense heat of over 1,000° C gradually weakened and buckled the structural steel, resulting in the collapse of the structures. The 110-storey north tower was struck first and remained standing for 90 minutes while the south 110-storey tower collapsed 62 minutes after its impact.

Planning: There must be a re-thinking of city planning. There is no need to construct buildings over 25 or 30 stories. European cities have not adopted our North American 'reach for the sky' system and their city planning has worked well. Buildings - either commercial or residential should not stick out as potential 'targets'. City Council should direct our planners to report on this suggestion to the first meeting of Council in 2002.

Air Supply: The location, design and operation/management of all heating, ventilation & air conditioning (HVAC) systems for all structures - especially buildings over four stories - should be reviewed by building specialists with input from the Building Owners and Managers Association (BOMA)

Water Supply: City Council should be briefed by Works Department officials on the security of our filtration plants, pumping stations, reservoirs and distribution systems and any extra precautions needed to ensure that our water supply is not poisoned.

Subway System: Recent attempts to use poison gas in the Tokyo subway system should act as an added warning to increase our safety programmes for the subway system

Pickering Nuclear Power Station: Although there has been no terrorist attacks on any of the world's 400 plus nuclear power plants (NPPs), the US has begun to tighten security around their 103 plants. Here, at our doorstep, in Pickering, the 4,120 MW nuclear power plant - the oldest such plant in Canada - is well past its middle age with enormous amounts of spent fuel stored on site. To date there has been no decision on the final storage arrangements for the spent fuel. Since the mid 1970s, it has been piling up and there seems to be no end in sight.

Power Grid: Power lines have been targets for terrorists in the past - not in Canada - but in other less stable countries. But the fear is that attacks on the power grid may soon become a fact of life and an easy target for terrorists. Are we prepared?

Biological War: It is impossible to 'second guess' where terrorists would strike or what biological weapons they would use. But there is always the possibility that these weapons may be available in many forms to some terrorists. Anthrax, Pneumonic Plague, Botulism and even deadly virus like smallpox could be available to those who plan terrorism.

Emergency Response Procedures: Coupled with *crisis prevention* is *after-event emergency measures*. The City must be proactive with planning and augmenting its emergency tactics to further facilitate the removal of citizens from compromised structures. One aspect of planning for such an evacuation is protecting the citizens' ability to breathe while enveloped by smoke. The device, "Evac-U8 Smoke Hood" (see attachment to hard copy for photo), is a Canadian-designed personal air-filter solution to aid the flight of residents or employees of buildings, chiefly high-rise buildings. Every hotel room, every office desk, et cetera, or any site that has fire hazard potential should be required to be equipped with this device and other such safety devices (i.e. flash light), regardless of the height or floor plan of the structure, to ensure safe evacuation.

The most expeditious way to prepare a defense against terrorist acts is to set up a working group to begin planning on how to defuse, foil and combat terrorist acts.

As a first step, I suggest the following -

- a) **City Council set up a *Buildings and Systems Protection Committee* to include the Buildings Commissioner and a representative of the Fire Chief, Police Chief, Works Commissioner, Medical Officer of Health, the TTC, Ambulance and Emergency Services and at least one member of City Council.**

- b) **The terms of reference should include the matters referred to and expanded to include other items to be added by members of City Council.**
- c) **That the city of Pickering, Ontario Power Generation, Toronto Hydro, Enbridge Consumers Gas, the Ontario Building Code Commission, the Toronto Building Owners & Managers Association (BOMA) be invited to participate on the Committee.**
- d) **That the Provincial and Federal Governments be invited to participate in the deliberations of the Committee.**

Sincerely,

Michael Walker
Councillor - Ward 22
St. Paul's

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