



Policy Title: Dangerous Goods Route Network Development Policy
Policy Number: TP001
Report Number: LPT2006-06
Approved by: Council
Effective Date: 2006 February 13th
Business Unit: Roads/Transportation Planning/Land Use Planning

BACKGROUND

The City of Calgary first established dangerous-goods routes in 1979. A multidisciplinary committee was created to select and manage Calgary's Dangerous Goods Truck Routes (DGR). The committee consisted of nine members representing various City Department stakeholders, and chaired by the City of Calgary Traffic Operations/Safety Representative. Using their expertise, this committee reviewed existing truck routes and made a consolidated recommendation on acceptability of Dangerous Goods Truck Routes as defined by Bylaw 13M2004, Transportation of Dangerous Goods Bylaw".

Over time, the need for more in-depth analysis of the safety of DGR was realized. The committee recognized the need to include alternate DGR in the emergency response plans.

PURPOSE

It was recognized that there was a need to re-evaluate the existing Dangerous Goods (DG) network to account for recent and future expansion of the road network and changes to legislation. This policy provides guidelines and principles for identifying acceptable dangerous-goods routes based on sound engineering and taking into account public safety.

SCOPE

Shipment of dangerous goods on the streets of Calgary is a necessary risk for economic prosperity and the lifestyle the citizens have come to expect. This policy is designed to minimize the risks to the citizens of Calgary during the transportation of dangerous goods. The policy is based on accepted methods for risk management with criteria for evaluating routes.

Given the wide range of chemicals that are classified as dangerous goods it is impossible to regulate all shipments. Shipments not covered by the "Dangerous Goods Transportation and Handling Act, R.S.A. 2000 c. D-4" (TDGA) will not be



covered by this policy. The TDGA provides exemption for dangerous goods in the following quantities:

- a. Less than 30 kilograms purchases for personal use;
- b. Explosives with UN numbers UN0044, UN0070, UN0105, UN0131, UN0173, UN0193, UN0336, UN0337, UN0373, UN0404, UN0432 and UN0454;
- c. Dangerous goods in a quantity less than or equal to 500 kg gross mass in transport;
 - i. If dangerous goods other than dangerous goods included in Class 2, Gases, in one or more means of containment each of which has a gross mass less than or equal to 30 kg and is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety, or
 - ii. For dangerous goods included in Class 2, Gases, in one or more means of containment in compliance with Part 5, Means of Containment. (CSA B340, CSA B622, Type 5 or Type 7 portable tank)

POLICY

The development and maintenance of a dangerous goods route network and for recommending a roadway for inclusion in the Transportation of Dangerous Goods Bylaw is an exercise in risk management to ensure the network is as safe as possible throughout the life of that network. "The Dangerous Goods Transportation and Handling Regulation, Alberta Regulation 157/1997 under the Dangerous Goods Transportation and Handling Act, RSA2000, c. D-4" requires a review every five years to ensure the expected level of safety is maintained.

Transportation Planning Business Unit will incorporate dangerous goods considerations into planning of new routes, as appropriate. Transportation Planning Business Unit will monitor the planned infrastructure projects and notify the Dangerous Goods Committee if a review of existing routes is required prior to the regular five year review.

The City of Calgary will use a procedure that considers; risk management, social implications, environmental impact, and economic considerations in determining whether routes should be designated as dangerous goods routes. Once



roadways have been reviewed and evaluated by the Technical Review Team of the Dangerous Goods Committee, a risk matrix will be employed to determine whether a roadway is suitable for inclusion as a dangerous goods route. The risk matrix, and how roadways are evaluated, will be expressly explained in the Technical Review and Evaluation Procedures Manual, and administered by the Technical Review Team. Should the roadway fall into the low risk category, it will be designated as a dangerous goods route. If the roadway falls into the high risk category, it will be removed as a dangerous goods route or, if the implications of removal from the dangerous goods network are unacceptable, appropriate mitigation measures must be employed to minimize risk.

The Dangerous Goods Committee will provide input on the network and specific routes. This committee will include a diverse set of representatives including members from Transportation Department, Emergency Services, private industry who use trucking, the Calgary Health Region and the Province.

Land use Planning and Policy will take into consideration dangerous goods routes included in Bylaw 13M2004 and Dangerous Goods Route Framework when drafting transportation related sections for the new Municipal Development Plan (MDP). Implementation would occur through the detailed local area planning processes. At this planning level, consideration of broader DGR and related network planning issues (route contiguity, employment and residential area connections etc.) will be evaluated. At more detailed planning policy levels (i.e. area structure plans, community plans, area redevelopment plans and then subdivision/outline plan) more localized impacts of DGR planning and abutting land use issues (i.e. appropriate land uses, separation distances and buffers) will be considered.

PROCEDURE

N/A

AMENDMENTS

New Policy