# SAFETY ISSUES CONCERNING ABOVE GROUND STORAGE OF LPG AT PETROL FILLING STATIONS

#### 1 SUMMARY

1.1 Planning Services Committee has requested an investigation into the safety issues associated with above ground storage of Liquefied Petroleum Gas (LPG). This report summarises the legislation and guidance associated with bulk LPG storage.

#### 2 INTRODUCTION

- 2.1 On 28 August 2003 Planning Services Committee considered an application to install an above ground LPG storage tank within a walled and fenced area at the Rayleigh Garage, 113-115 High Road, Rayleigh.
- 2.2 The application was refused on visual amenity grounds and Members also felt further consideration should be given to the safety issue of siting LPG storage tanks above ground, with a view to petitioning Ministers.
- 2.3 The use of LPG as a fuel for vehicles is spreading, with an increasing number of installations providing vehicles with this fuel. The plant usually consists of one or more pressurised storage tanks with dispensing or metering units for filling the fuel tanks of vehicles. These tanks can be located above or below ground.

#### 3 SAFETY ISSUES OF LPG STORAGE

3.1 Petroleum Licensing Authorities (Essex County Council Trading Standards Department) enforce the Dangerous Substances and Explosive Atmospheres Regulations 2002 at petrol filling stations. These regulations are concerned with protection against risks from fire and explosion and events arising from substances such as LPG and petrol. There are national Codes of Practice prepared by the LP Gas Association in full consultation with the Health and Safety Executive for the bulk storage of LPG at fixed installations, both for buried/mounded LPG storage vessels and for vessels located above ground. The Codes provide guidance on the safe practice of storing and handling LPG in bulk at fixed installations in the UK. If Members require more detailed information about the content of these codes and the requirements for this site, it will be necessary for a representative of Essex County Council Trading Standards Department to make a presentation.

#### 4 RISK IMPLICATIONS

#### 4.1 Strategic Risk

To promote the use of greener fuels such as LPG, the refuelling facilities need to be available.

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#### 4.2 Regulatory Risk

The safety standards regarding LPG storage at petrol filling stations are enforced by Essex County Council Trading Standards Department.

#### 4.3 Third Party Risk

The national Codes of Practice have been written so that there is no significant risk if health and safety requirements are complied with.

#### 5 ENVIRONMENTAL IMPLICATIONS

- 5.1 The Government is promoting the use of LPG as a vehicle fuel in order to improve air quality. Compared to petrol, vehicles running on LPG emit around 12% less carbon dioxide and around 30% less oxides of nitrogen (NOx), hydrocarbons and carbon monoxide. Compared to diesel, there is around 90% less NOx, 1/50th of the particulates and only 1/500th of the ultra fine particles.
- 5.2 The promotion of LPG as a vehicle fuel within Rochford District would assist in further improving the air quality of the District.

#### 6 RECOMMENDATION

#### 6.1 It is proposed that the Committee **RESOLVES**

That, having regard to the content of this report, no further action be taken.

#### G Woolhouse

Head of Housing, Health & Community Care

#### **Background Papers:**

LP Gas Association Code of Practice 1 "Bulk LPG Storage at Fixed Installations Part 1: Design, Installation and Operation of Vessels Located above Ground"; LP Gas Association Code of Practice No. 1 "Bulk LPG Storage at Fixed Installations Part 4: 1999 Buried/Mounded LPG Storage Vessels".

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