

## STAFF REPORT

**TO:** Environment & Planning Subcommittee

**FROM:** Paul Milsom, Hazardous Substance Advisor

**REFERENCE**: C653

SUBJECT: RESULTS OF RICHMOND INDUSTRIAL SURVEY - REPORT

EP06/05/16 - Report Prepared for 30 May 2006 Meeting

### 1. BACKGROUND

Throughout 2005, a survey of Richmond industries, which store and/or use hazardous substances, was carried out to determine their compliance with the Council's Hazardous Facilities rules (Sections 16.7.3 and 4 of the Proposed Tasman Resource Management Plan) using the Hazardous Facility Screening Procedure (HFSP). This survey also served as a follow-up to a study done in 1998 and HF compliance work carried out since 2001.

# 2. OBJECTIVES

The main objective of this exercise was to:

- check for compliance with the Hazardous Facility rules
- identify the status of the activities as either permitted, controlled or discretionary, and notify any businesses conducting non-permitted activities that resource consents are required if the activity is to continue
- assess the hazards and the risks of the activities to human health and the environment and the risk of fire and explosion
- work closely with the industries to minimise these risks and make improvements where problems exist
- identify any activities that are contributing to air, water or ground pollution, or have the potential to do so, and initiate action to prevent this from continuing
- obtain a clear understanding of the problems associated with the existing industries in the Richmond industrial zone so that, through good planning, steps can be taken to eliminate problems in any future expansion of this zone.

## 3. MAIN FINDINGS

A total of 110 businesses in the Richmond area were inspected, mostly without prior warning, to observe actual work practices. Most of these businesses are located in the light industrial zoned areas around Beach Road, McPherson Street, Gladstone Road, Queen Street and McGlashen Ave. The types of activities surveyed include:

- Service Stations / Truckstops
- Agrichem / Rural Supply Stores
- Light and heavy duty vehicle/farm equipment servicing workshops
- Transport / Storage Depots
- Mechanical Workshops
- Vehicle Sales Yards
- Concrete Mixing / Fabrication Plants
- Waste Handlers

Of these activities 100 were classified as permitted, 10 as controlled. Of the controlled activities 6 currently have Hazardous Facility resource consents. Most of the businesses that require resource consents have been instructed to apply for them.

Overall, the impact of the activities on the environment and human health, and the risk of fire and explosion, ranges from minimal to totally unacceptable requiring immediate action. The main problem identified is pollution of stormwater, particularly in the Beach Road and Vercoes drains, which ultimately discharge into the Waimea estuary, a highly sensitive area. The main pollutant appears to be washwater from vehicle and plant wash facilities, which traditionally have discharged their wastewater to stormwater drains rather than to the trade waste. These facilities range from car sales yards where the vehicles are regularly washed in the yards, with the washwater discharged into the stormwater drain in the road, to large earthmoving, forestry vehicle and trucking company maintenance workshops also discharging to streams or drains. In many cases the washwater is totally untreated before discharge and is highly contaminated with detergent, silt, oil/grease and floating material. According to Council rules, these discharges require a discharge consent but consent would not be granted in nearly all cases because of the levels of contamination.

Forty four of the businesses inspected have vehicle/plant wash facilities, of which only 10 are known to discharge to trade waste. Twenty are known to discharge to stormwater and in 13 cases it is not known where the wastewater discharges to. Thus, 33 wash facilities are considered to be substandard and require upgrading. The combined effect of the discharges from these facilities is considered to be the most serious source of ongoing pollution from the Richmond industrial area. Even with a high standard of washwater treatment plant, it is considered necessary that the washwater is discharged to trade waste rather that stormwater if this source of pollution is to be eliminated. This will be difficult in areas where trade waste connections are not readily accessible. Provision will also need to be made to allow clean stormwater to discharge from the facility (via a divert system) when not in use, to prevent overloading of the trade waste system.

Work has commenced to prepare detailed guidelines for the design and installation of vehicle/parts wash facilities covering the full spectrum of size.

The imminent introduction of the Trade Waste Bylaws for Tasman District will require significant monitoring of the volume and quality of wastewater discharged by industry into the sewer if the bylaws are to be effective. This will require resources in terms of funding and staff.

There is currently a major issue with the discharge of extremely ecotoxic material from a timber treatment plant in Beach Road. This is being addressed by Council, but bringing this facility up to the standard required is proving to be exceptionally difficult. This case raises the issue of allowing any industry, which uses ecotoxic materials, to be established close to sensitive environments such as the Waimea estuary.

Another problem found is the storage of waste oil and used vehicle parts at workshops and vehicle wreckers. The storage vessels and parts are often unbunded and have overflowed allowing oil to escape into the surrounding ground and be washed into the stormwater system during heavy rain. Similarly, some toxic materials escape into the environment through the inadequate storage of empty drums that are allowed to accumulate in yards, fill with rainwater and overflow. Improved storage facilities, better arrangements for the disposal of waste material and empty chemical containers, plus good housekeeping practices need to be implemented to eliminate this source of pollution.

Since the initial 1998 industry survey and the subsequent HFSP work, many businesses have made significant improvements to reduce their environmental impact and the risks of accidents occurring.

Substantial upgrading of the oil company service stations and truckstops in the Richmond industrial area has been carried out in the past decade. All now have good underground fuel storage facilities and forecourt spill containment systems, and comply with the new HSNO (Hazardous Substances and New Organisms) regulations. Some non oil company fuel facilities are still substandard however and require upgrading.

The HSNO regulations, which are currently administered by central government, replaced the Dangerous Goods regulations (administered by Council) in 2003, and this has resulted in some confusion (and resistance) to regulations regarding the storage and use of hazardous substances. In addition to complying with Council's Hazardous Facilities rules, businesses must also comply with the HSNO regulations and there is much concern about the time spent and the costs of complying with both, especially by smaller businesses. Longer term, it appears quite likely that local authorities will take over the administration of the HSNO regulations. Although the user of the regulations pays, some funding will be required plus staff resource will be issues.

The industries in the Richmond industrial area considered to present the greatest hazards to the environment, human health and to the environment are:

- Timber treatment
- Service stations/truckstops
- Agrichemical stores
- Coolstore (anhydrous ammonia)
- Transformer storage and servicing, substations

Whilst these facilities are considered the most hazardous because of the quantities and types of hazardous materials stored, most of them have the required safety features in their designs and are operated according to industry codes to minimise the risk of accidents. There are however some problems with a few of them and Council is working with these industries to make the necessary improvements.

#### 4. **RECOMMENDATIONS**

- 1. That Council's Environment & Planning Subcommittee receive this report.
- 2. Compliance continues to follow up with businesses where improvements have been requested and follows up outstanding resource consent applications for those hazardous facilities requiring them
- 3. In conjunction with Council's Utilities Asset Engineer complete design/installation recommendations for vehicle/parts wash facilities
- 4. Ensure that lessons learnt from this industry survey are applied to any future expansion of the Richmond industrial zone. Any new areas where hazardous substances are stored/used should be planned to eliminate or minimise the discharge, or the potential for discharge, to stormwater, ground or air.

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