



Hampshire
County Council



Relocation of Havant HWRC Harts Farm Way, Havant

Traffic Statement

Modelling and Analysis of likely queue lengths for the new layout and location of the Havant HWRC

1. Purpose of the analysis

The purpose of this analysis is to determine the likely traffic queue lengths that would occur during busy periods at the new Havant HWRC.

2. Traffic counts for existing site

A survey was carried out over the period from 16th December 2008 to 24th September 2009.

On the busiest day (22nd June 2009), 1455 vehicles were recorded.

The busiest month was June 2009, with a total of 25196 vehicles recorded on site.

The maximum number of vehicles recorded in any one hour was 143 vehicles on 9th May 2009 between 1500 hours and 1600 hours.

3. Factoring of existing traffic figures to accommodate future demand at the site in its new location

Take the maximum number of vehicles recorded in any one hour (143) and increase by 50% for future expected demand:

$143 \times 1.5 = \underline{214 \text{ vehicles per hour for design purposes}}$

4. Capacity of the new site

The average duration on site per vehicle = 6 minutes and the site has 19 parking spaces including 2 disabled spaces.

Theoretical capacity of site = $54/6 \times 19 = 171$ vehicles/hour parked

(This is on the assumption that all spaces are full at the start of the hour and one will take 6 minutes to empty and that all traffic is free flowing.)

There is room for approximately 34 vehicles to queue within the site in the stacking lanes.

5. Modelling of queue lengths

Taking the future demand figure minus the capacity of the site:

$$214 - 171 = 43 \text{ vehicles to queue}$$

There is room for 34 vehicles in the stacking lanes, so 9 (43 - 34) vehicles would be theoretically tailing back onto the access road to the site. An additional lane dedicated to HWRC traffic only has been provided on the access road and there is capacity for up to 11 cars within this lane and through the HWRC customer entrance area.

6. Summary

It is therefore calculated that there will be sufficient customer vehicle parking and stacking capacity at the new Havant HWRC to prevent a queue from blocking the mouth of the access road and from backing up onto Harts Farm Way.

It should be borne in mind that the above relates to the worst case scenario. Queue lengths will be far shorter than this in general. The dimensions of the site and the provision of an additional lane on the access road both provide sufficient room for stacking to minimise the probability of traffic queuing back onto the public highway.

Wendy Wright
Engineering Consultancy, HCC
31st August 2011

PERMITTED WASTES

<u>EWC</u>	<u>DESCRIPTION</u>
20	Municipal Wastes (Household Waste and Similar Commercial, Industrial and Institutional Wastes) including Separately Collected Fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 27*	paint, inks, adhesives and resins containing dangerous substances M
20 01 28	paint, inks, adhesives and resins other than these mentioned in 20 01 27*
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than these mentioned in 20 01 29*
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than these mentioned in 20 01 33*
20 01 35*	discarded electrical and electric equipment other than these mentioned in 20 01 21 and 20 01 23 containing hazardous components. Hazardous components may include accumulators and batteries mentioned in 16 06 and marked as hazardous; mercury switches, glass from cathode ray tubes and other activated glass etc. M
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35*
20 01 37*	wood containing dangerous substances
20 01 38	wood other than mentioned in 20 01 37*
20 01 39	plastics
20 01 40	metals
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soils and stones
20 02 03	other non-biodegradable wastes
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 07	bulky waste



M. Mirror Entries. Hazardous Waste only if dangerous substances are present above threshold concentrations.

Wastes that have the potential to be either hazardous or non-hazardous depending on their actual composition and the concentrations of 'dangerous substances' within the waste.

- 13 02 waste engine, gear and lubricating oils**
- 13 02 04* mineral based chlorinated engine, gear and lubricating oils
- 13 02 05* mineral based non chlorinated engine, gear and lubricating oils
- 13 02 06* synthetic engine, gear and lubricating oils
- 13 02 07* readily biodegradable engine, gear and lubricating oils
- 13 02 08* other engine, gear and lubricating oils

16 Wastes not otherwise specified in the List

- 16 05 gases in pressure containers and discarded chemicals**
- 16 05 04* gasses in pressure containers (including halons) containing dangerous substances
- 16 05 05 gases in pressure containers other than these mentioned in 16 05 04*
- 16 05 09 discarded chemicals other than these mentioned in 16 05 06, 16 05 07 or 16 05 08
- 16 06 01* lead batteries
- 16 06 02* ni-cd batteries
- 16 06 04 alkaline batteries
- 16 01 13* brake fluids
- 16 01 14* antifreeze fluids containing dangerous substances
- 16 01 15 antifreeze fluids other than these mentioned in 16 01 14*

Inert Wastes

- 17 Construction and Demolition Wastes (including excavated soil from contaminated sites)**
- 17 01 concrete, bricks, tiles and ceramics**
- 17 01 01 concrete
- 17 01 02 bricks
- 17 01 03 tiles and ceramics
- 17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06*
- 17 06 04 insulation materials other than these mentioned in 17 06 01 and 17 06 03
- 17 08 02 gypsum- based construction materials other than those mentioned in 17 08 01