Professor Mayhew's further report on anti-social behaviour in Enfield

1. Background

I have been asked by the London Borough of Enfield to provide a further, updated, report as to the relationship between anti-social behaviour and the HMO sector in order to assist it in its determination as to whether it should ratify the decision made on 09/04/2014 to introduce an additional licensing scheme covering HMOs other than those already subject to mandatory licensing legislation.

By way of background, I produced a report entitled 'Understanding the relationship between private rented properties and anti social behaviour in Enfield', dated November 2013. At that time, I had available only police reports of anti-social behaviour (ASB) in the borough, the majority of which were not linked to a specific address, but rather were geographically identified by a map grid reference.

The grid referenced information showed a link between ASB and single family rented properties[1] but not with HMOs. The latter consisted of properties of two or less storeys as well as mandatory HMOs of three or more storeys. Mandatory HMOS were only estimated to comprise less than 0.5% of the total high risk HMO stock

Of the 1,530 ASB address specific reports provided to me, only 590 were in the private sector. Although the data confirmed that ASB rates among single family rented properties were higher than for the private sector I was unable to discern a relationship between HMOs and the available ASB reports.

I have now been provided with further data from Enfield's records of ASB reports which *are* address specific. These data were included in the original cabinet report as part of Appendix 4, titled Anti Social Behaviour and the Private Rented Housing Sector in Enfield – Evidence Base and Research Summary, Feb 2014, but did not form part of the data sets used by *nkm* at that time.

I have now taken the data available in my original report coupled with the additional data and applied the same methodology. The new address specific reports concern enviro-crime (noise, rubbish in gardens, etc.) and council reported ASB. My further analysis is set out below.

2. Trends in Enviro-crime

Based on data from April 2010 to August 2014 Enfield council recorded around 19,500 addressable incidents of enviro-crime (~37,000 altogether). The main categories were domestic noise, rubbish in front and back gardens, fly-tipping and other (e.g. graffiti, litter, and dog fouling).

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[1] The original study risk assessed all residential properties' in Enfield and classified them into either suspected single family households or suspected HMOs. Households with the highest risk scores were then sub-designated as either high risk single family households or high risk HMOs. In the analysis which follows only those designated high risk properties are referred to e.g. high risk HMOs comprise rows 1 to 7 of Table 1 in my original report or 12,811 properties.

Figure 1 shows that overall levels of enviro-crime have been slightly declining over time but that in the most common category, noise complaints, levels are persistent and increasing slightly year on year. Other common categories of any scale include garden rubbish and fly-tipping.

Enviro-crime by tenancy type and incident rates

Enviro-crime data were matched to tenancy information by Unique Property Reference Number (UPRN) as previously established. The number of enviro-crime events occurring in each tenancy type is shown in Table 1 in which the 'private sector' has been further subdivided into either high risk HMOs or single family dwellings.

The figures for each tenancy type used here are based on a methodology taken from our previous study to identify and separate single family dwelling and HMOs. For the purposes of this further analysis the details are not repeated here.

Table 1 shows the number of recorded incidents by tenancy type, so that for example, for comparative purposes, council stock experienced 1,646 incidents of any type in the period from 1/4/2010 to August 2014.

Table 2 shows the same information but converted into incident rates. For example, based on a council stock of 11,010 homes, this gives an overall enviro-crime rate of 15% for this property type (1,646/11,010 x 100 = 15%).

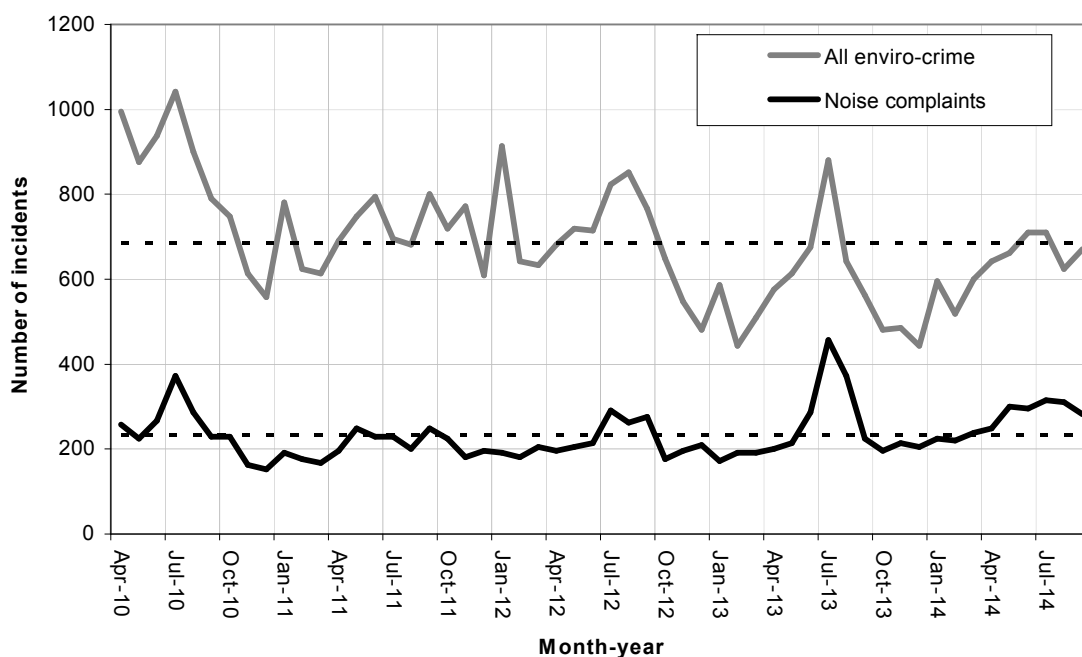*Figure 1: Monthly incidence of enviro-crime from April 2010 to August 2014(all tenancies)*

Category of incident	Council Stock	Housing Association	Private	of which high risk HMO	of which high risk single family dwelling	Total events
All events of which	1,646	970	16,883	2,203	5,430	19,499
Domestic Noise	1,294	646	8607	1,248	2,974	10,547
Fly Tipping	91	97	2007	209	392	2,195
Rubbish Front & Back Gardens	138	109	3430	430	1,232	3,677
Other	123	118	2839	316	832	3,080
Total UPRNs	11,010	6,995	110,794	12,811	19,290	19,499

Table 1: Number of enviro-crime incidents by type and tenancy

Enviro-crime rates (incidents per UPRN %)	Council Stock	Housing Association	Private	of which high risk HMO	of which high risk single family dwelling	Council-wide all property average
All events *of which*	15.0	13.9	15.2	*17.2*	*28.1*	15.1
Domestic Noise	11.8	9.2	7.8	*9.7*	*15.4*	8.2
Fly Tipping	0.8	1.4	1.8	*1.6*	*2.0*	1.7
Rubbish Front & Back Gardens	1.3	1.6	3.1	*3.4*	*6.4*	2.9
Other	1.1	1.7	2.6	*2.5*	*4.3*	2.4

Table 2: Incidence rates of enviro-crime by type and tenancy

The following main points are noted:

- The highest rate of enviro-crime is committed by high risk single family rented dwellings (28.1%) as compared with the borough average of 15.1%. The lowest rates are committed by housing association tenants (13.9%)

- The comparative rate for high risk HMOs, over 99.5% of which are *not* currently covered by the current mandatory licensing scheme is 17.2% which is higher than, and statistically significantly different from the borough average ($p<0.001$)

- The largest differences in enviro-crime between high risk HMOs and other properties are domestic noise (9.7% versus 8.2% borough wide) and rubbish in front and back gardens (3.4% versus 2.9% borough wide).

These results are consistent with my previous findings, namely that single family private rented dwellings are most likely to be associated with common types of ASB than other tenancies. The difference is that this analysis ties events to addresses and not just to the locality as previously.

However, it further shows that HMOs also tend to be more associated with ASB that is concerned with enviro-crime than the Council-wide average. Key examples of this tendency include domestic noise or garden rubbish.

The differences in incident rates between HMOs and council-wide averages is smaller than is the case for single family rented dwellings but is nonetheless statistically significantly different from zero (p<0.001).

Since it is believed that the vast majority of high risk HMOs are not currently covered under the mandatory licensing scheme, this finding may be safely assumed to apply to this sub-group as well as to all HMOs (mandatory licensed HMOs only account for less than 0.5% of the total number of high risk HMOs).

Property risk markers for ASB and Enviro-crime

A key issue is which kind of households are more likely to commit enviro-crimes as described. Clearly there is more than one possible risk factor or marker and not simply tenancy e.g. whether a dwelling is private rented or not.

In this section we risk profile enviro-crime at address level using different combinations of risk factors including whether a property is a high risk HMO or not.

Several other risk factors were tested to find those most predictive of ASB among those available. Among these were pest control incidents, notification of housing disrepair and housing benefit status of each UPRN (a marker of low-income).

As an indication of the scale of the problem, we determined that there are over 300 pest control notifications per year and over 900 reports received of homes in disrepair. Annual reports of disrepair have increased over time whilst pest control figures have been broadly steady.

We tested whether pest control and houses in disrepair alongside rental markers such as whether or not a high risk HMO and benefit status were also predictive of enviro-crime (mainly domestic noise, garden rubbish, etc.). For this, we focussed our attention on privately owned properties.

Our four risk markers were as follows:

- Whether there had been any pest control event at an address since 01/04/2010

- if a home had been reported as being in disrepair

- whether occupants were in receipt of Housing Benefit

- if the property was a high risk HMO.

Four risk factors give rise to 16 possible combinations of risk factors or risk categories as shown in Table 3. In this table the risk categories has been ordered from highest to lowest risk based on the incidence rates of enviro-crime in each.

The columns show the number of properties exposed in each risk category, the risk factors that apply (indicated by 'Y'), and the percentage of UPRNs experiencing at least one enviro-crime event. The column totals given the number of properties for which each risk factor has been identified.

Category	number in category	High Risk HMO	Any pest control event at address	Housing Benefit at address	Disrepair reported at address	% of UPRNs reporting enviro-crime incident
1	12	Y	Y	Y	Y	50.0
2	7	Y	Y		Y	42.9
3	47		Y		Y	42.6
4	26	Y	Y	Y		42.3
5	109		Y	Y	Y	42.2
6	183		Y	Y		35.5
7	576		Y			30.4
8	134	Y			Y	29.1
9	80	Y	Y			27.5
10	167	Y		Y	Y	26.3
11	941				Y	23.7
12	1,972			Y	Y	19.7
13	1,313	Y		Y		16.5
14	15,508			Y		12.6
15	11,072	Y				7.9
16	78,647					6.7
total	110,794	12,811	1,040	19,290	3,389	8.4

Table 3: Risk ladder showing the incidence of enviro-related crime based on the given risk factors.

For example in the first and highest risk category, row 1, we indentified just 12 properties to which all four risk factors applied; 50% of these had experienced at least one enviro-crime incident in the time period.

The table shows that the average incident rate per property for any incident occurrence is 8.4% (bottom right) but that this ranges from 6.7% in the lowest risk category to 50% in the highest. Further, the top seven categories are associated with pest control, the top three with disrepair and top two with HMO status.

However, as can be seen, relatively few homes, whether HMO or not, are at risk in these higher categories. Nevertheless, it can be verified that wherever HMO status is indicated in the table enviro-crime incidence is above the borough average. An exception is row 15 where it is 7.9% i.e. just below the borough average.

Further analysis shows that the odds of any incident of enviro-crime occurring increase:

- 4.6 times if there has also been a pest control event
- 2.3 times if disrepairs have been have been reported
- 1.9 times if a person in the property receives housing benefit
- 1.2 times if it is a high risk HMO

These odds are multiplicative and statistically significantly different from evens (i.e. odds of one) at the 95% level of confidence. For example, if all four risk factors apply to a property the odds of enviro-crime are increased 4.6 x 2.3 x 1.9 x 1.2 = 24.1 times.

Hence, this means that if one of the risk factors applying to a property is HMO status the odds of enviro-crime are increased by 20% - in this example from 20.1 times to 24.1 times.

The predictive value of these four markers is apparent from Figure 2 which shows the predicted versus observed risk of enviro-crime based on these four risk factors. Statistically the four factors explain 87% of the variance in enviro-related crime in Enfield.
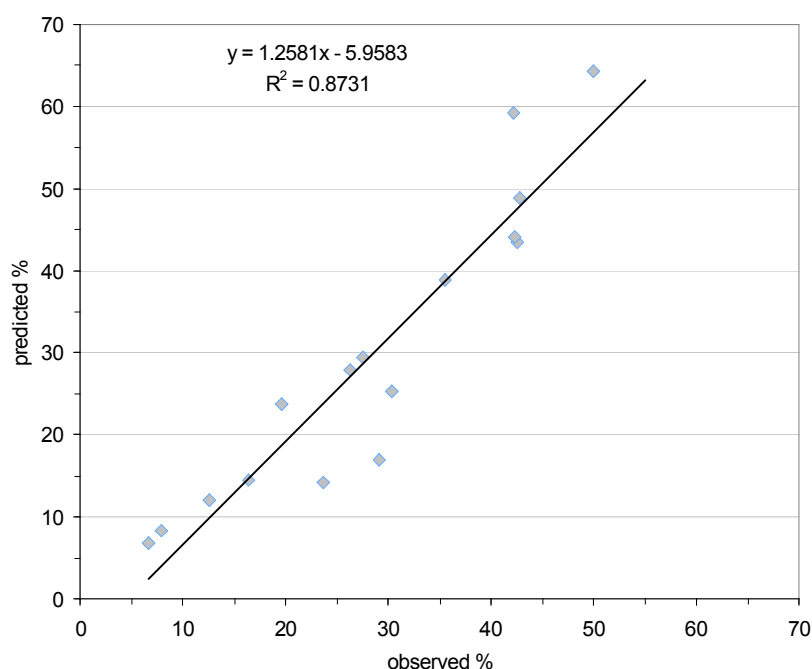

Figure 2: Predicted versus observed incidence of enviro- crime in Enfield based on risk factor analysis

3.   Further information provided on Council reported ASB

The records of ASB offences that are kept by the council, excluding hate crimes, are those incidents that are reported to the Council in the first instance. These total less than the police recorded ASB used in the original study. These Council records contain a higher proportion of address based information.

Much of this data relates to abusive or violent behaviour and drugs, but also more serious noise related incidents such as follow neighbour disputes or other types of disturbance (e.g. associated with drugs or rowdy behaviour). This type of ASB may be considered as belonging to a different and more serious type of enviro-crime, although there are some overlaps (e.g. noise complaints)

Of the data linked to an address, some records show the address of the offender, and some records show where the incident took place, or both. This means it is difficult to

draw meaningful conclusions, especially as incident rates are very low, generally less than 1% of recorded incidents.

We found that incident rates in high risk HMOs were less than in high risk single family rented properties. However it should be noted that the sample sizes were all very small and so conclusions about tenancies are difficult to draw.

However, my findings on the slightly larger sample - which included address based police reported ASB - were contained in my previous report and in a letter from the Council dated 28 April 2014.

This stated that whilst ASB rates associated with abusive or violent behaviour, drugs and serious noise were more than double the average in single family rented dwellings, there was no discernible differences with HMOS and the private sector as a whole.

4. Conclusions

This further report has been concerned with assessing new data alongside previously used data to consider whether the Council should ratify the decision made on 09/04/2014 to introduce an Additional Licensing Scheme covering those HMOs not currently covered under the mandatory licensing scheme.

The evidence found that high risk HMOs were estimated to account for over 99.5% of the likely HMO stock and so whether to include or exclude existing mandatory HMOs does not materially affect the conclusions given here.

Most of the new data concerned various categories of enviro-crime data for which detailed Council records exist, but have not previously been linked at address level or analysed.

The new analysis addressed two issues: Whether HMOs were more likely than other tenancies to be responsible for certain types of enviro-crime and whether HMO tenancies were a risk factor in association with other markers of anti-social behaviour such as housing disrepair or pest control.

The results indicated that HMOs are second after single family rented properties in terms of noise complaints and garden rubbish among the various tenancy types. The differences in incident rates between HMO identified enviro-crime and council-wide rates were higher than, and statistically significantly different from zero. In addition, it was found that an HMO with no other risk factors is 20% more likely to commit an enviro-crime than a similar property with no other risk factors.

To give an illustration of what this might mean in very rough terms, if HMOs did not exist and that they were privately owned and occupied, there would have been approximately 250 fewer reported enviro-crime incidents over the period.

Overall the findings therefore appear consistent with the previous study which was based on police reported ASB, namely that single family rented properties are more

closely associated with ASB than private properties in general, HMOs and other tenancy types.

However, this new analysis which has been consolidated using more recent data shows that high risk HMOs are also more likely to be associated with enviro-crime than the private sector generally. This is especially so where the properties in question are associated with other risk factors, including pest control, disrepair and benefit status.

If the private rented sector continues its recent expansion as seems likely given the state of the London housing market, then the evidence suggests that categories of enviro-crime considered more typical of the private rented sector will tend to grow in tandem.

Although this is more likely to occur in the single family dwelling sector than elsewhere, the evidence is that HMOs are also not immune.

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