GreenN8

TOWN AND COUNTRY PLANNING ACT 1990
The Town and Country Planning Appeals
(Determination by Inspectors)
(Inquiries Procedure) Rules 1992

APPEAL BY: LONDON CONCRETE LIMITED
SITE: FERME PARK DEPOT, CRANFORD WAY, HORNSEY

PLANNING INSPECTORATE REF:
APP/Y5420/A/05/1189822

PROOF OF EVIDENCE

GreenN8 Community Group

LONDON BOROUGH OF HARINGEY

21 NOVEMBER 2005

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GREENN8'S STATUS

- GN8 is a Community Group whose members are drawn from the Hornsey, Stroud Green, Crouch End and Harringay wards and which has obtained Rule 6 Party status.
- We attach our Proofs of Evidence, which concentrate on transport, health and ecology issues.
- GN8 strongly supports Haringey Council's rejection for permission for planning in this instance and will be represented by junior counsel at the inquiry to present its case.

GREENN8 PROOF OF EVIDENCE – SUMMARY

1.0 TRANSPORT

Bellamy Roberts's Assessment

1.1 The transport assessment submitted by Bellamy Roberts ("BR") in support of LCL's application is deficient in a number of respects.

1.2 It focuses on only two points, Cranford Way itself and the junction of Cranford Way and Tottenham Lane. It ignores other streets which LCL lorries will use.

1.3 BR's abbreviated traffic count along Tottenham Lane merges vehicle type categories and omits motorcyclists, cyclists and pedestrians that are all vulnerable to HGV accidents.

1.4 No traffic monitoring data is submitted for an LCL plant, as suggested by Steer Davies Gleave, in their peer review.

1.5 The result is misleading evidence, particularly concerning volume of HGV traffic. We undertook surveys at other key locations in Crouch End and a traffic survey outside LCL's Battersea plant.

1.6 We have prepared a video, which demonstrates the physical character of the roads, their relative widths and closeness of surrounding buildings and we believe them to be unsuitable for large volumes of HGV traffic.

1.7 A weight restriction on Wightman Road railway bridge makes this route particularly unsuitable for LCL vehicles.

1.8 BR use an unrealistically low number of vehicle journeys, if you factor in the number of rail movements delivering aggregates. Cement Powder and water added to the aggregate mix bulk out the quantity for delivering by HGV that the Cranford Way site cannot be considered to be economic unless more than 5 vehicles are operating, or more journeys are undertaken.

1.9 Our Battersea study also shows that many more vehicles are using the site than planning permission allows. LCL appear unable to control the number of visits by contractors to the site

1.10 BR do not appear to have assessed the traffic assumptions on which their projected journey numbers were based.

Green N8 traffic surveys: Battersea – Monday 14 November 2005

1.11 This survey was undertaken between 14:20 and 16:35 from Silverthorne Road opposite the entrance to LCL's estate. 14 different 4-axle vehicles entered and left, a total of 39 vehicle movements, or one HGV movement every 3.5 minutes. Repeated in Crouch End from 0700 to 1900 hours, the total would be 205 movements – nearly 4 times that indicated by LCL.

1.12 Vehicle movements also exceed Battersea's planning limit of 8 vehicles.

1.13 Common working practice of self-employed drivers, and over whom LCL has limited control, encourage as many journeys as possible to maximise profit.

1.14 Such working practices also affect the enforcement of health and safety measures, whether regarding equipment, care and maintenance, or responsible driving, such as ensuring drivers to not take short-cuts through residential areas.

1.15 For these reasons, GN8 has no confidence that LCL will remain within the number of movements envisaged in their planning application.

Green N8 traffic surveys: Crouch End – Monday 14 November

1.16 Using a similar methodology to BR, two critical points in Crouch End were selected for monitoring between 0700 and 1000: (1) Ferme Park Road and Tottenham Lane junction, (2) Middle Lane and Hornsey High Street junction.

1.17 The Ferme Park Road – Tottenham Lane survey counted vehicles from three positions, in similar categories to those used by BR and is comparable with BR's survey in Tottenham Lane, in that vehicles moving in that direction which do not turn right into Church Lane will join this traffic flow. Our survey observed only 13 HGV movements in the relevant period. A Haringey Council survey on this road records only 9 HGV movements for the same period.

1.18 BR claim to have observed a total of 132 HGV movements in the equivalent three-hour period, approximately one every 82 seconds. BR assert that the projected additional movements generated by LCL are within the "10% limit at which consideration of whether or not further investigation is justified' and below the 30% threshold at which further investigation of environmental impacts is normally considered appropriate". We argue that both these thresholds are likely to be exceeded. Our surveys and Haringey Council's show broadly similar road use by vehicles of the LCL type but at a level considerably lower than reported by BR.

1.19 The survey at Middle Lane – Hornsey High Street used the same methodology and confirmed how few HGVs of the type LCL use are currently seen in Crouch End.

1.20 Haringey Council's survey for the Haringey Heartlands initiative confirmed that only a small proportion of current traffic in Crouch End is made up of HGVs. Cars and LGVs accounted for 96.7% of total vehicle movements. Only 10 HGV movements were observed. This supports our observations and we believe BR have counted non-HGV traffic as HGV and grossly underestimated the likely increase for the area.

Health and safety implications

1.21 the poor safety record of HGVs and Concrete Mixers which undermines the Government and the local authority's commitment to persuading parents and school children to travel other than by car;

1.22 LCL's failure to use low cost safety devices for vehicles that have been adopted by some of their competitors;

Environmental considerations

1.23 A potentially significant increase in vehicle emissions in an area having a higher than average incidence of childhood respiratory problems;

1.24 Unsuitability of the area in general given the very narrow road widths and leading to increased congestion given HGV vehicle size;

1.25 Vibration damage to road infrastructure and to buildings given the proximity of most buildings to the roadway.

LCL – evidence of Wandsworth appeal, 2002

1.26 LCL's appeal for its plant in Wandsworth displays a 'foot in the door' strategy, which may be repeated at Cranford Way. LCL sought permission to build a plant with an uneconomically viable low operating capacity with relatively low vehicle movements. LCL then made a successful appeal for permission for more vehicles to operate from the plant.

Transport - Conclusion

1.27 This residential and light industrial area is completely unsuitable from the perspective of road use and users and the environmental and amenity losses. The limited benefit of reducing road traffic by delivering aggregates to the site by rail is outweighed by the negative impacts.

2.0 AIR QUALITY/HEALTH

2.1 Implication for Air Quality & Health of Cranford Way Concrete Batching Plant proposal

2.2 In Haringey, the Government's National Air Quality Strategy standards for PM10 (dust particles) and nitrogen oxides (NOx) will not be met by the required date.

2.3 Haringey has declared the whole borough an Air Quality Management Area (AQMA)

2.4 PM10 (Air & Water borne Particle Matter smaller than 10 microns) is one of the eight substances for which the government has established an air quality standard as part of its national Air Quality Strategy.

2.5 PM10 are generally produced as an accidental by-product of various chemical or physical processes, including those used by concrete batching plants.

2.6 Even small increases in PM10 emissions are associated with increases in non-trauma deaths, hospital admission for respiratory & cardiovascular diseases, athsma emergency room visits, restricted activity days, and school absenteeism.

2.7 The fact that air pollutants, especially fine particles, are a serious danger to health is supported by research by credible sources, including WHO, The World Bank, and DEFRA.

2.8 WHO now it says there is no safe limit for PM10.

2.9 The Environment Agency says PM10 particles can travel long distances in the air. Most of the PM10 measured is released from industrial plants and motor vehicles.

2.10 DEFRA is currently consulting on proposals to update the Air Quality Strategy and aims to cut long term particle pollution by 2010 by at least 50%.

2.11 The possible cumulative effect of PM10 from the plant, vehicle emissions. spillages from HGV's and other sources were not assessed in LCL's report

2.12 The sources of fugitive emissions in industrial sites are commonly open vessels; storage areas; loading and unloading of transport containers; transferring material from one vessel to another; conveyor systems; pipework and ductwork systems; poor building containment and extraction; potential for bypass of abatement equipment; accidental loss of containment from failed plant and equipment.

2.13 Additional emissions would be detrimental to local residents' health and amenity and contrary to the policies of the Government, London Mayor, Local Council, WHO, and European Union.

2.14 The three densely populated wards adjacent to the site already have rates of Asthma, which are amongst the highest in the country and anything that could trigger further Asthma incidents would be highly detrimental to our health and amenity.

2.15 The effect a development may have on the local air quality, in terms of the energy use of buildings, polluting emissions from a development or the increase in traffic generated by a development, is a material planning consideration.

3.0 ECOLOGY

3.1 Haringey Council supports (i) the protection of open spaces and biodiversity in the borough and (ii) the improvement of the quality of life and environment of residents through various policies such as the Haringey Draft Inventory Development Plan and others. LCL's proposal is inconsistent with such policies and is likely to have a significant negative impact on local ecology and wildlife.

TRANSPORT

4.0 LOCAL TRAFFIC CONDITION

4.1 The Report commissioned by London Concrete (LC) concerning traffic conditions in the area of their proposed Batching plant from Bellamy Roberts included a transport count, which focussed on two points.

4.2 The first is a point within **Cranford Way**, an industrial estate where the plant is to be located, and so considers the impact on traffic flows within the industrial estate. We, as GreenN8, are not concerned with this aspect of traffic patterns as it does not impact on the local community, and we are prepared to accept their findings in relation to the traffic conditions within the Industrial Estate.

4.3 The second is at the junction of Cranford Way and Tottenham Lane where traffic from the Industrial Estate leaves and joins the traffic flow along Tottenham Lane. Tottenham Lane is, at this point, the southbound part of a one-way traffic system which encompasses Tottenham Lane, Church Lane, the counterpart of Tottenham Lane running north, and the eastern end of Hornsey High Street which leads into Turnpike Lane under a railway bridge which carries local services operated by WAGN, and Intercity Services, run by GNER, being the main east-coast line to Scotland, and Hull Trains, who run services to Hull and intermediate points. Hornsey High Street is, at this point, a wide two-way road with substantial capacity.

4.4 Tottenham Lane, where it is joined by Cranford Way, just to the south of Hornsey Rail Station, is a wide one-way street, with the capacity to accept two lanes of traffic, even with parking on either side. Immediately opposite the exit from Cranford Way is a youth club, and so there are very few houses, flats, or other dwellings in the immediate vicinity surveyed by Bellamy Roberts. However within a very few yards in either direction the character of the road alters dramatically. To the north the road approaching Cranford Way is considerably narrower, and there are houses and flats situated very close to the roadway on the right-hand side, following the pattern of traffic flow. To the south as Tottenham Lane approaches the junction with Church lane, its counterpart in the one-way system, the road narrows appreciably to allow one lane of traffic with parking and there are houses in close proximity to the road.

4.5 By choosing to ignore the conditions in the other streets which London Concrete lorries will be forced to use, Bellamy Roberts's report, which is, we are sure, accurate enough within its very limited brief, paints a false picture of local traffic conditions and the impact the projected traffic movements caused by the batching plant will have

4.6 This report attempts to place these movements in the wider context of the Crouch End area through which London Concrete and their clients' mixing lorries will have to pass. Haringey have already implemented, many years ago, traffic restrictions on movements within this area,

designed to, where possible, prevent or limit the practice of 'rat-running' and to protect the many schools in the immediate location. This severely limits the options open to LC lorries and enables us to indicate three key points through which all traffic movements, both to and from the plant, must be channelled.

5.0 LOCAL TRAFFIC SURVEYS

5.1 In producing this section of our report we have relied on two external documents for information on certain traffic points within the Crouch End area. These are as follows:

5.2 **Bellamy Roberts** Report and the survey which they conducted on Thursday 13th March 2003. As mentioned above this took place at two points, one within Cranford Way, the other, which we shall refer to, at a point in Tottenham Lane, just to the North of the exit from Cranford Way. Whilst they do not make this clear in their report, it would seem from their map (Map 2 in their Transport Assessment) that this includes the movement of traffic all of which must turn left from Cranford Way into Tottenham Lane.

5.3 **Haringey Council** produced a count, as part of the Haringey Heartlands development project, (Manual classified counts for Heart lands master plan.xls), on Thursday 13 July 2004. The area that we are concerned with borders, but is not part of, the Haringey Heartlands area; however the junctions of Church Lane and Tottenham Lane with Hornsey High Street were extensively, and we are sure accurately, surveyed by Haringey at this point. This survey is called "Count on Us". Unfortunately this was carried out at a time in the year at which local private schools such as Channing and Highgate, and many smaller private nursery and preparatory schools, had broken up for their summer holiday break, but state schools were yet to break up. This will have had some impact on traffic movements attributable to the 'school run' and so would tend to underestimate movements at certain times of the day. This is included with this report on a CD-Rom containing all pertinent documents to this part of the report.

5.4 **GreenN8** With the shortage of time and resources available to the voluntary group we decided to accept the findings of the two reports mentioned above and not to attempt to prove or disprove their findings, subject to the caveats mentioned in the two preceding paragraphs. We decided to concentrate our efforts on two of the three critical points through which traffic movements associated with LC must pass. The third point – the railway bridge at the junction of Turnpike Lane and Hornsey High Street - having been extensively surveyed by Haringey in their report referred to above, we excluded from our count.

5.5 **GreenN8 surveyed sites:** two teams of volunteers were assigned to count traffic movements at the two critical points selected and counted traffic movements using a similar, but not identical, analysis to that adopted by Bellamy Roberts in their Transport Assessment

(Appendix 3), where they show movements ahead on Tottenham Lane (West), although we believe that at the point indicated on their map as being the point of survey, as shown in Plan 2 of their assessment, the road curves and the general direction of traffic movement is still southbound. Unfortunately Bellamy Roberts chose to make detailed counts at only certain points, so we have very detailed records of movements of all types of vehicles into Tottenham Lane from Cranford Way (Appendix 3, Table 1) into Cranford Way from Tottenham Lane (Appendix 3, Table 2) and passing along Cranford Way in both directions (Appendix 3, Tables 3 and 4). However, in the critical section of movements along Tottenham Lane from the North to the South, where the major community impact of their movements would be expected to be shown, they chose to make an abbreviated count, merging together categories which were separately identified within Cranford Way, but most significantly, in our opinion, omitting two important traffic groups, motor cyclists and pedal cyclists, although these were included in the detailed counts.

5.6 This is doubly unfortunate as it is these two groups of road-users, in addition to pedestrians, which may be considered to be most vulnerable in accidents with vehicles of the size and limited vision of those used by LC. We also consider it unfortunate that no attempt was made by any of the three counts to assess pedestrian movements, despite the fact that the entry to Cranford Way is very close to the entrance in Tottenham Lane to Hornsey Rail Station. We can only justify this omission, in relation to our limited count, by the fact that the resources to count pedestrian movements across roads affected by these traffic movements were not available to us.

6.0 TRAFFIC SURVEY OF LONDON CONCRETE'S BATTERSEA SITE

6.1 **The Battersea site** was chosen because we wanted to get some idea of the movements that could actually be expected in relation to a batching plant situated in an urban area – this is one of the few LC sites which is located in a primarily residential area where road access may be expected to show some similarity to that experienced in Crouch End.

6.2 This count was no more than a limited sample in the afternoon of Monday 14 November 2005 but may be regarded as a representative sample nevertheless of the number of vehicles that may be expected at a plant on a typical operational day.

6.3 We are led to understand that there is an operational limit of 8 vehicles at the Battersea site, although originally the planning permission was to limit this to four vehicles. The increased limit of 8 was allowed on appeal by LC against the more restricted limit. However in the interval that observations were made at the Battersea site we observed 13, or perhaps 14, different LC vehicles accessing and leaving the site. If representative this would suggest a much higher pattern of usage that permitted under the planning permission given. As it was not realised that so many vehicles would enter and leave the site during this period it was not

possible to identify each registration number individually, but the following vehicles were identified by registration or partial registration during this limited two-hour period:

WX05JMN	RX03EFZ
LF52UHH or JHH	RK53GDV
KJU ???	BB02EBB
Y164KAN	LC04BMC or DMC
KX05COU	S183LJH
W895PPD	RO52KJD or KJU
KE05JVC	

6.4 Another vehicle was observed leaving but the registration was not observed as we had not, at that time, realised how many vehicles were using the site – it may be one of the above vehicles; it had arrived at the plant before 14.20 when observations began, it left at 14.35, however as all of the returning vehicles were matched with earlier vehicle departures it seems likely that it was a different vehicle. These movements can be seen in the schedule entitled Battersea Page 1 in the appendix to this document. However in two hours no less than 39 separate vehicle movements were observed. Obviously the planning implications for the Battersea site are something that may need to be considered by the appropriate local authority but it leads us to the conclusion that there may well be far more vehicle movements associated with a given site than LC themselves may anticipate.

Why should this be so?

6.5 We have been informed by a local resident in the Battersea area, who knows some of the drivers involved at the LC location there, that the drivers purchase their own vehicles. Now this may be apocryphal and may not be true – however it is a normal working pattern in this trade and is not unexpected.

6.6 This working practice was encountered by the courts in a National Insurance Contributions case in 1968 – Ready Mixed Concrete (South East) Ltd v Ministry of Pensions and National Insurance QB 1967 [1968] 1 All ER 433. In this case drivers contracted to RMC, owning their own vehicles, were held to be providing their services under a 'contract of carriage' rather than a 'contract of service' which would be the hallmark of the relationship of employer and employee. MacKenna J observed that "freedom to do a job by one's own hands or by another's is inconsistent with a contract of service…". In the more recent case of Express & Echo Publications Ltd v Tanton CA [1999] ICR 693 this was endorsed by the Court of Appeal in a case concerning a driver engaged by a provincial newspaper group who possessed the right," if he was unable or unwilling to act", to engage a substitute at his own expense entirely, and who did so; the Court found that this right was incompatible with a contract of service.

6.7 In effect, assuming this practice obtains with regard to LC, this means that LC has no control over their drivers, other than, we assume, who supplies them with ready mixed concrete and it is no surprise that, in an endeavour to maximise their profits, drivers will make as many journeys as they are able to. It is difficult to see, if this is true, how LC can forecast the limited

number of vehicle movements they anticipate with the Crouch End site, given that its capacity to produce exceeds the apparently planned production at the moment.

6.8 We would argue that such a practice not only makes it difficult to regulate the number of vehicles and ensure that operating restrictions placed on London Concrete at Battersea are observed, but also makes it all the more likely that such restrictions will be disregarded in the first place as individual drivers pursue profit.

6.9 We must stress that the foregoing is a supposition based on hearsay evidence concerning LC's employment practices. We have no reason to suppose that these would be any different to those of their competitors, who include Ready Mixed Concrete (South East) Ltd. However we have no legal way of compelling LC to provide us, as a voluntary group, with details of their employment practices.

7.0 N8 LOCAL TRAFFIC PATTERNS

7.1 We selected our three critical points after a careful evaluation of the transport permutations available to LC, assuming that none of their vehicles are permitted to 'rat-run' – ie, to use residential side roads in an attempt to avoid traffic hold-ups or to take 'short cuts'.

7.2 Traffic leaving Cranford Way must either turn right into Church Lane, the counterpart of the Tottenham Lane part of the one-way system, or carry on in the direction of Crouch End proper. Until it reaches the mini-roundabout at the junction of Ferme Park Road and Tottenham Lane a vehicle is unable to turn left away from Tottenham Lane as the roads are blocked either at or near the junction to the South with Weston Park, and are so forced to return to Tottenham Lane – eg Rathcoole Gardens, or a short cul-de-sac – such as Inderwick Road with a no entry located yards from its junction with Tottenham Lane (this is to protect the girls attending Hornsey School for Girls located further down this road) or Nelson Road which is simply a no-entry. Traffic can turn right from Tottenham Lane but if it does so this will either lead through very narrow residential streets back to Hornsey High Street, past the David Greig City academy, or back to Rokesley Avenue, and from there back into Tottenham Lane or over to Middle Lane (see below). Unless it does turn it will reach the mini-roundabout where it will have a choice of turning left towards Stroud Green and Finsbury Park or carrying on into Crouch End. This is, therefore, the first of our three critical points.

7.3 Traffic turning right into Church Lane from Tottenham Lane will have the choice of turning left at the end of Church Lane along Hornsey High Street or turning right towards the junction with Tottenham Lane and Turnpike Lane. Church Lane is a much narrower street than Tottenham Lane. No turning to the right is permitted, left turns along its length simply lead back to the 'rat-runs' and ultimately Middle Lane or Hornsey High Street.

7.4 If traffic does turn left into Hornsey High Street it has a number of turnings on the right which loop back on themselves. This is because there is a combination of Waterboard land to the east, small Industrial Estates in the middle, and then Alexandra Palace and Park to the North and West, so that there is no access to roads leading to the north except at Muswell Hill, or Hornsey Park Road in the opposite direction, left under the railway bridge. This can clearly be seen in the copy of an Ordnance Survey map that Bellamy Roberts included in their transport assessment as Plan 1. Turnings to the left will either lead into Middle Lane or back to Tottenham Lane. This then leads inevitably to the identification of our second critical point, which is the junction of Middle Lane and Hornsey High Street, another mini-roundabout.

7.5 If traffic turns to the right at the end of Church Lane and its junction with Hornsey High Street it will either be traffic returning to the site, joining with traffic moving along Hornsey High Street in an easterly direction, or it will intend to travel to the north or the east and will proceed under the railway bridge, which is, therefore, our third critical point.

8.0 THE DVD – CROUCH END TRAFFIC

8.1 To better demonstrate the problems created by the road system in the Crouch End area we have prepared 2 videos, which drives through the options that are open to LC drivers and graphically demonstrates the reasons why we selected the sites which were chosen for count purposes. 'Crouch End Traffic' video was filmed at 11am on Wednesday 9th November, the various journeys undertaken being completed by 12.30pm. This time was chosen deliberately so that there would be as little traffic on the roads as possible and so that the shape of the roads, their relative widths at various points and the closeness of surrounding buildings could be clearly seen. In making the programme we discovered the weight restriction imposed on the railway bridge at the end of Wightman Road, which makes this escape route from Crouch End particularly unsuitable for LC vehicles. 'The Traffic Congestion' video was filmed on Mon 14th of November between 15:00 – 16:30pm.

8.2 The programme 'Crouch End Traffic' demonstrates the directional choices open to vehicles leaving the proposed batching plant, which are as follows:

8.3 **Ferme Park Road – Tottenham Lane junction:** Turn left to exit towards Stroud Green, Finsbury Park and then the City.

8.4 **Ferme Park Road – Tottenham Lane junction:** Carry straight on to Crouch End Broadway, and then bear left towards Finsbury Park on Crouch Hill or continue on towards Highgate and Holloway along Crouch End Hill.

8.5 **Middle Lane – Hornsey High Street junction:** Turn left into Middle Lane and straight on to Crouch End Broadway. All turnings to the right are blocked, all turnings to the left return to Tottenham Lane.

8.6 **Middle Lane – Hornsey High Street junction:** Carry straight on to the foot of Muswell Hill, either turn sharp right to Alexandra Palace and Park, or turn right up Muswell Hill [10% gradient] to the north, or turn left into Park Road. This gives two options on the right: Cranleigh Gardens leads to Muswell Hill and Highgate, Wolsey Road (which becomes Shepherds Hill) leads to Highgate. All turnings to the left are blocked. Park Road then leads back to Crouch End Broadway.

8.7 **Hornsey High Street – Turnpike Lane junction:** Turn left into Hornsey Park Road at the back of Wood Green Shopping City to the north.

8.8 **Hornsey High Street – Turnpike Lane junction:** Or straight on to Turnpike Lane and the east.

8.9 **Hornsey High Street – Turnpike Lane junction:** Wightman Road would allow a turn to the right and an exit to the south and the City through Manor House, but **would be illegal for LC vehicles** because of the imposed **weight restriction**.

8.10 It is our opinion that the surveys carried out and the pattern of roads in Crouch End **make the proposed site completely unsuitable** given the impact that this will create on the surrounding roads, road users and pedestrians, and the commercial and residential properties that this traffic will have to pass through.

9.0 TRAFFIC MOVEMENT ASSUMPTIONS

9.1 Para 5.1 of the Bellamy Roberts assessment refers to the delivery of 100,000 tons of aggregates per annum to the site. We believe that most cement is a mixture of cement powder (16%), sand (42%) and gravel (42%) [http://www.diyonline.com/servlet/GIB_BaseT/diylib_article.html?session.docid=495] – to this water would then be added to give an approximate additional 8% in bulk terms, so the **delivered production to be carried by road would be 108,000 tons**.

9.2 Assuming 5 loads per day and five trucks operating for 48 weeks of the year, allowing for holidays, down-time, and seasonal shutdown in the building trade etc., this is an average of 18 tons of concrete per load. A 10 yard concrete lorry has a capacity of 20 tons (http://tx-taca.org/concretefaq.htm), so these statistics do make sense, assuming 100,000 tons of aggregate, and a description of aggregate as including sand and cement powder as well as gravel. Assuming cement powder is not included within the industry definition of aggregates (and it seems not to be – this is based on information contained in the planning application as well as information available from London Concrete's parent company's web-site), then 100,000 tons of aggregates, with powder and water added, would equate to 130,000 tons of delivered products. This would then require, at 20 tons per load, 6,480 single movements,

clearly exceeding the planned capacity of 5 trucks. Even allowing for the much larger 32 ton vehicles which use the Battersea site there would seem to be an inconsistency here.

9.3 In fact the basic planning application talks about 2 – 3 trains per week (main proposal paragraph 3.2) bringing a delivery of 1,350 tons per load. 2 deliveries would be approximately 130,000 tons of aggregates; assuming 3 loads is the theoretical maximum this would mean approximately 195,000 tons, all of which would then be bulked by the addition of cement powder (20% of aggregate weight) and water (8% of mixed weight) giving a delivered product weight of 168,480 tons and 252,720 tons in turn requiring a fleet considerably exceeding in size to that on which the traffic report has been prepared. Assuming a 48-week year, 5 loads a day, 5 days a week and 20 tons per load, each vehicle can carry 24,000 tons per annum. Assuming delivered production of 168,480 tons this requires a fleet of 7 vehicles, and at maximum production more than 10 vehicles. Allowing for 32 ton vehicles, each fully loaded, the equivalent figures become 38,400 tons, requiring 5 vehicles at the lower end, but 7 vehicles at the higher end. Nevertheless at the Battersea site (see below) 13 vehicles were observed being serviced from the site in just over a two-hour period.

9.4 The report admits that the cement powder will arrive by road and states that two to three journeys per day would be required to accommodate these deliveries. In fact assuming the vehicles making the deliveries also have a capacity of 20 tons there would need to be 5 to 8 of these deliveries per day – even assuming a capacity of 32 tons (which is a monster of a delivery vehicle to be accommodated within our narrow roads http://www.elemans.com/3) the number of journeys needed is considerably more than those assumed by the survey.

9.5 It seems clear, therefore, that the Bellamy Roberts survey was based on an unrealistically low number of journeys being made, undoubtedly because of the brief that they would have been given by their client.

GREENN8 | BATTERSEA SITE TRAFFIC SURVEY DETAILS

The Battersea Site

9.6 This survey was a sample taken over a two-hour fifteen minute period on Monday 14th November 2005 between 14.20 and 16.35. It does not claim to be any more than a sample of LC vehicle use during the period in question.

9.7 The survey point was close to the Victoria Public House on the one-way stretch of Silverthorne Road, opposite the narrow entrance/exit to the Industrial Estate, which houses a number of enterprises including London Concrete. The traffic passing along this stretch of road was turning in from Queenstown Road (A3216), a four-lane wide main road. Passing traffic during the survey period amounted to a few cars and light goods vehicles. The main movements were into, and out of, the Industrial Estate by HGVs serving the Tarmac Ready Mix Concrete

plant, Day's aggregate facility and London Concrete's ready mix plant. The majority of the HGVs observed on Monday 14 November were London Concrete's.

Monitoring London Concrete Lorry Movements

Silverthorne Road, Battersea, London - Monday 14th November 2005

All lorries recorded during 2 hours monitoring period were 4 Axle

No.	Reg. No.	In	Out	In	Out
1	WX05 JMN	14:20	14:32	16:03	16:14
2	LF52 UHH or JHH		14:20	14:55	15:16
3	KJU xxx	14:21	14:39		
4	Y164 KAN	14:22	14:44	16:17	
5	KX05 COU	14:27	14:55	15:42	15:53
6	W895 PPD	14:32	14:58	15:58	16:07
	xxx xxx		14:35		
7	KE05 JVC	14:52	15:11	16:35	
8	RX03 EFZ	14:57	15:20	16:08	16:22
9	RK53 GDV	15:04	15:36		
10	BB02 EBB	15:07	15:33	16:13	
11	LC04 BMC or DMC	15:09	15:43		
12	S183 LJH	15:27	15:48		
13	RO52 KJD or KJU	15:51	15:58		

9.8 Apparently, according to two local residents we spoke to during our survey, the Silverthorne end of the old railway yard housing the Industrial Estate is in Wandsworth. The other, eastern, end is in Lambeth. The exit to be used by London Concrete is apparently at the Lambeth end. This information seemed to be confirmed when we were informed, by a customer leaving the Victoria Public House, that drivers of London Concrete vehicles were aware that we were recording their movements and had been advised to use the other exit. There is also no sign to indicate London Concrete's existence at the Silverthorne entrance.

9.9 Local residents also informed us that London Concrete's vehicles start deliveries as early as 0700 and sometimes continue up to 19.00.

9.10 We believe that 14 different vehicles – all liveried LC - entered and left the site from and to Silverthorne Road, Battersea during this period as shown in the table above. We were able to record the registration numbers of 13 of them, either fully or partially.

9.11 They made a total of 39 vehicle movements during this period. As can be seen in the table above, many came and went twice during this limited period – one every 3.5 minutes on average. If this pattern was repeated evenly during a twelve hour day from 7am to 7pm, the operating times envisaged for Crouch End, this would indicate 205 movements, almost 4 times as many as envisaged by London Concrete.

9.12 It was also observed that all of these vehicles were 4-axle mixing lorries, indicating 32 tonne vehicles.

9.13 We stopped recording at 1635 but observed London Concrete vehicles, running past the Victoria Pub and along Queenstown Road as we walked to Battersea Park Station, up until 1735 hours. In addition to the London Concrete vehicles, three 6-axle articulated cement tankers were noted delivering their 30 ton loads of cement to the Battersea plant.

9.14 Even if these movements are not representative of a typical day's movements this would seem to indicate a pattern of usage which exceeds the planning limits imposed on the Battersea site for normal working days. We understand that the limit on vehicle movements can be exceeded if there is an emergency, such as the collapse of the rail tunnel at Gerrards Cross, but as far as we are aware there was no emergency at this time in the area which would be served by the Battersea plant. Whatever the case, such surges in demand will result in an increase in HGV movements, in turn resulting in more frequent peaks of noise and dust creation and inconvenience to nearby residents and other road users.

9.15 We conclude that the suggested usage of the proposed Crouch End Batching plant would also be exceeded. As identified above (paragraph 3.3) the intensive use of the site may be partly caused by what we believe to be the working practices common in this industry, and almost certainly used by London Concrete, whereby drivers are technically self-employed and make as many journeys as they can within the limits laid down by driving regulations to attempt, understandably, to maximise their income.

Implications of such volumes for the proposed Cranford Way Batching Plant

9.16 Our observation of no fewer than 13 different vehicles operating out of Battersea on the afternoon of 14 November gives cause for concern, given that London Concrete's operating licence for Battersea is for 8 vehicles. We have no confidence that London Concrete will remain within the number of movements envisaged in their planning application for Cranford Way, based on the movements observed here and the production estimates examined above (Section 6).

9.17 From their previous history we have every reason to believe that London Concrete would seek to increase both the number of vehicles operating and their frequency of operation once they have secured a foothold in Cranford Way. A key document in this regard is the Inspector's report written following London Concrete's appeal in Wandsworth (See Section 12 below).

We make the following observations in relation to Cranford Way

9.18 i) In their application to Haringey, London Concrete have stated that they would have 5 vehicles operating, taking a daily maximum of 5 loads each. ie 50 movements a day to and from Cranford Way, or 56 loads if 3 loads a day by cement tankers were included. This would give an average of 4 - 5 movements an hour.

9.19 ii) At Battersea it would appear that London Concrete, operating with 13 different vehicles, could have the capacity to move up to 65 loads, making **130 movements a day!** If this level of movement were attempted into and out of Cranford Way to Tottenham Lane, a rate of some

11 movements an hour along narrow and generally already congested roads through residential and shopping areas would result.

9.20 iii) This would pose risk of collisions with parked vehicles and others in attempts to squeeze past oncoming buses and delivery vehicles supplying local businesses.

9.21 iv) Movement of vehicles transporting the many of school children and hundreds of toddlers being taken to the many play groups in the area between 7.45 – 9.30 and the return home of school children between 3 – 4 pm, and the normal congestion which exists from 4 – 7pm due to workers returning home by car, would seriously delay and frustrate London Concrete drivers, who would then attempt to short-cut congested routes by travelling through residential areas, with ensuing loss of amenity.

9.22 v) Parents of school children would likely feel even more apprehensive for their children's safety than at present. Many have to walk to school, or to catch a bus, and have to cross busy roads en route. Haringey Council have outlined plans to increase the number of school children journeying to school on foot or by cycle (see below, Section 11, paragraph 11.7).

9.23 vi) It is reasonable to assume that a similar pattern of vehicle ownership and working practices will be in place at the proposed Cranford Way site, and it is difficult to see how London Concrete can control the number of vehicles using the site, or the number of journeys that they make. The pressure on drivers to attempt to secure as many loads a day as possible could result in speeding and negotiating short-cuts through residential areas. Most of the vehicles observed during our Battersea survey did enter Silverthorne Road, from Queenstown Road at a good speed. One resident advised that residents were concerned at the speed at which London Concrete vehicles in particular were driven.

9.24 vii) It is more than probable that the awarding of the Olympics to London and other developments east of London will create a considerable demand for concrete production which the Crouch End site would be well placed to supply, were transport links to the site more suitable (see Section 3 below) and the character of the area less residential.

9.25 viii) The character of this large, popular and generally attractive residential area with its local shopping areas, nearby schools and other amenities, will deteriorate as a result of the type, size and frequency of movement of the vehicles serving the plant and the very existence of the plant itself.

9.26 ix) Apart from the negative impact on potential employment opportunities in the buildings currently empty, along Cranford Way itself, businesses currently operating in the area would also find they would loose custom and may move out to more attractive localities.

GRENNN8 | LOCAL TRAFFIC SURVEY DETAILS

Site 1: The Ferme Park Road – Tottenham Lane Site

9.27 This was surveyed by local residents on Monday 14th November 2005 between 7am and 10 am. The survey sheets used with the raw data are attached, together with an Excel spreadsheet, which summarises the movements (MonitoringTraffic14November2005.xls), which is attached as part of the appendix to this report.

9.28 It was decided to count vehicles in similar categories to those used by Bellamy Roberts to describe traffic movements along Tottenham Lane. These were:

- Cars/LGVs
- MGVs
- HGVs
- Buses/coaches

9.29 As we are interested in the environmental impact that traffic movements of vehicles, which are all HGVs of the type proposed to be used by LC will have, we decided to simplify our count in one respect, that is to merge MGVs together with cars and LGVs. These vehicles all share two axles only and are the most populous type of vehicles seen on local roads, creating little environmental impact in these terms.

9.30 However as Pedal Cycles and Motorcycles had been, inexplicably, omitted by Bellamy Roberts from their report we decided that they should be included in ours

9.31 **Movement 1** was traffic moving along Tottenham Lane towards the plant, measured at a point to the east of the junction. This is one of the three flows that returning vehicles may join to arrive at the site. If so it will merge with movements along Hornsey High Street observed by Haringey's Count on Us count and enter the Tottenham Lane one-way system from the west in Hornsey High Street. During the 3 hour period 1,619 movements were observed at this point of which cars etc accounted for 1,509 – 93.21% of the total. There were only 7 HGV movements during the period against 59 movements from Buses and Coaches. At this point we counted 22 cycles and 22 motor cycles; however the point counted is just before cycles join Tottenham Lane emerging from Inderwick Road as part of London Cycle Route 7. This would suggest that actual cycle usage further along Tottenham Lane would be expected to be greater. Cyclists and Motor Cyclists are vulnerable to traffic accidents with HGVs (See below, section 4).

9.32 **Movement 2** was traffic moving west on Tottenham Lane in the direction of Crouch End, this is the flow that LC traffic leaving the plant along Tottenham Lane will join. This was the rush-hour period and as expected there was a greater flow in this direction – 2,935 movements of which 2,708 were light vehicles, 92.25% of the flow.

9.33 HGVs were again very small proportion at 15 observed movements, against 76 for buses and coaches, 50 cycles and 86 motor cycles. The higher number of motor cycles possibly explained by the fact that many cycles will have turned into Inderwick Road to follow Cycle Route 7.

9.34 **Movement 3** was traffic moving south along Ferme Park Road away from the junction with Tottenham Lane, which is one of the routes that LC vehicles can use to exit the area without getting caught in central Crouch End. 1,755 movements were observed of which light vehicles were 1,667 - 95% of the total. HGV movements were 7 in total, against buses and coaches, 41 movements (this is a bus route for the W3 and W5 buses), cycles - 14 movements and motorcycles - 26 movements.

Commentary on this survey site

9.35 This site bears comparison with the Bellamy Roberts count in Tottenham Lane as vehicles moving in that direction which do not turn right into Church Lane will join this traffic flow, particularly Movement 2, but partly Movement 3 if they turn left at this point.

9.36 Bellamy Roberts claimed to have observed 2,004 movements in the equivalent period which bears comparison with our survey; of these, light vehicles accounted for 1,821 movements – 91% of the total. However they claim to have observed 132 HGV movements in this period which seems to be completely contrary to our findings of 13 in the same period. We cannot account for this apparent discrepancy unless certain MGVs have been analysed by Bellamy Roberts as HGVs, or a significant number of HGVs turn off Tottenham Lane right along Church Lane. If the problem is in the count then this casts serious doubts on the proportions of vehicles that they claim to have counted, which in turn minimises the impact that the additional LC vehicles will have.

Monitoring Traffic Movements | Ferme Park Road/Tottenham Lane mini-roundabout | 14th November 2005

Movement 1 = Traffic moving along Tottenham Lane away from Crouch End after the roundabout

Time	Cars/LGVs/MGVs	HGV	Bus/Coach	Cycles	Motorcyles	Total
07.00 - 07.15	73	0	2	2	0	77
07.15 - 07.30	79	1	3	1	3	87
07.30 - 07.45	105	2	4	1	4	116
07.45 - 08.00	127	0	2	1	2	132
Hourly total	384	3	11	5	9	412
08.00 - 08.15	141	0	3	4	1	149
08.15 - 08.30	159	1	4	3	2	169
08.30 - 08.45	153	0	3	1	1	158
08.45 - 09.00	129	0	5	0	2	136
Hourly total	582	1	15	8	6	612
09.00 - 09.15	147	2	9	2	4	164
09.15 - 09.30	120	0	8	2	1	131
09.30 - 09.45	142	1	8	4	1	156
09.45 - 10.00	134	0	8	1	1	144
Hourly total	543	3	33	9	7	595
Total	1509	7	59	22	22	1619

Movement 2 = Traffic moving along Tottenham Lane towards Crouch End before the roundabout

Time	Light vehicles 2 axles	3 axles +	Bus/Coach	Cycles	Motorcyles	Total
07.00 - 07.30	352	0	11	3	9	375
07.30 - 07.45	245	4	8	2	7	266
07.45 - 08.00	261	0	5	7	15	288
Hourly total	858	4	24	12	31	929
08.00 - 08.15	289	4	5	4	6	308
08.15 - 08.30	250	1	6	4	6	267
08.30 - 08.45	265	2	10	13	13	303
08.45 - 09.00	235	1	5	2	4	247
Hourly total	1039	8	26	23	29	1125
09.00 - 09.15	181	1	6	6	6	200
09.15 - 09.30	226	1	9	4	6	246
09.30 - 09.45	210	0	4	1	9	224
09.45 - 10.00	194	1	7	4	5	211
Hourly total	811	3	26	15	26	881
Total	2708	15	76	50	86	2935

Movement 3 = Traffic moving up Ferme Park Road from the roundabout

Time	Light vehicles 2 axles	3 axles +	Bus/Coach	Cycles	Motorcyles	Total
07.00 - 07.15	28	0	1	0	0	29
07.15 - 07.30	76	0	3	0	2	81
07.30 - 07.45	132	1	4	2	2	141
07.45 - 08.00	170	2	5	2	3	182
Hourly total	406	3	13	4	7	433
08.00 - 08.15	176	1	3	0	3	183
08.15 - 08.30	170	0	5	4	2	181
08.30 - 08.45	195	0	4	1	7	207
08.45 - 09.00	143	0	2	1	3	149
Hourly total	684	1	14	6	15	720
09.00 - 09.15	183	1	4	2	1	1
09.15 - 09.30	147	1	3	1	2	2
09.30 - 09.45	138	0	4	1	1	2
09.45 - 10.00	109	1	3	0	0	1
Hourly total	577	3	14	4	4	602
Total	1667	7	41	14	26	1755

9.37 If it is caused by vehicles turning into Church Lane, joining returning vehicles at this point, the strain placed on Church Lane will be greater than the strain at Tottenham Lane and yet no investigation of these movements were carried out by Bellamy Roberts.

9.38 Their summary report at paragraph 5.6 claims that the count observed indicates that the additional movements are within “the limits of 10% at which consideration of whether or not further investigation is justified… well below the threshold of 30% at which further consideration of environmental impacts is normally considered appropriate”. Our count would suggest that their additional movements could, and indeed do, easily exceed both of these

thresholds, whether on their own figures or our own estimates, at this point in the traffic network of surrounding roads.

9.39 However Haringey also surveyed traffic along this stretch of road, although at the earlier point where traffic turns into Tottenham Lane from Hornsey High Street to the west and Turnpike Lane to the east. They observed 2,728 movements of which 2,600 were light vehicles – 95.3% of the total, and only 9 HGV movements. These findings are very close to our own and so would tend to indicate there has been the possibility of the inclusion of what may be described as lighter HGVs in the Bellamy Roberts report. However as we explained above (Section 2) this count was not made with the same degree of analysis as the counts within Cranford Way.

Conclusions

9.40 It is our belief that in this immediate part of the area the proposed HGV movements will have a significant impact and could well exceed the thresholds at which further consideration should have been made to support the planning application. We also believe that there is evidence of manipulation of the data presented by Bellamy Roberts, wittingly or unwittingly, which misrepresents the number of journeys recorded by vehicles of the type that they propose to use in this area.

Site 2: The Middle Lane Hornsey High Street site

9.41 This was surveyed by local residents on Monday 14th November between 7am and 10 am. The survey sheets used with the raw data are attached, together with an Excel spreadsheet which summarises the movements (MonitoringTraffic14November2005.xls), which is attached as part of the appendix to this report.

9.42 It was decided to count vehicles in similar categories to those used by Bellamy Roberts to describe traffic movements along Tottenham Lane. These were:

- Cars/LGVs
- MGVs
- HGVs
- Buses/coaches

9.43 As we are interested in the environmental impact that traffic movements of vehicles which are all HGVs of the type proposed to be used by LC will have, we decided to simplify our count in one respect, that is to merge MGVs together with cars and LGVs. These vehicles all share two axles only and are the most populous type of vehicles seen on local roads, creating little environmental impact in these terms.

9.44 However as Pedal Cycles and Motor Cycles had been, inexplicably, omitted by Bellamy Roberts from their report we decided that they should be included in ours.

9.45 **Movement 1** was traffic moving along Middle Lane towards Crouch End to the south of the mini-roundabout. 982 movements were observed, 901 were light vehicles 91.75% of the total, with 5 HGV movements and 23 buses. The number of buses is distorted because of traffic hold-ups caused by the road-works currently taking place in Middle Lane, so that between 8.45 and 9.30 buses using this road were diverted away. This was exacerbated , as we observed, by the inability of a bus and a light goods vehicle to pass each other, without getting parked cars to move, however this took place in a section of the road BEFORE the road works and cannot be attributed to them. There were 24 cycle movements and 29 motorcycle movements.

Monitoring Traffic Movements | Middle Lane/Hornsey High Street/Priory Road mini-roundabout | 14th November 05

Movement 1 = Traffic moving along Middle Lane towards Crouch End after the roundabout

Time	Cars/LGVs/MGVs	HGV	Bus/Coach	Cycles	Motorcyles	Total
07.00 - 07.15	27	0	2	1	2	32
07.15 - 07.30	52	0	1	0	1	54
07.30 - 07.45	66	0	3	4	3	76
07.45 - 08.00	106	3	4	3	2	118
Hourly total	251	3	10	8	8	280
08.00 - 08.15	134	0	2	3	4	143
08.15 - 08.30	30	0	4	3	1	38
08.30 - 08.45	100	0	3	3	3	109
08.45 - 09.00	57	0	0	1	3	61
Hourly total	321	0	9	10	11	351
09.00 - 09.15	110	1	0	1	3	115
09.15 - 09.30	80	0	0	3	1	84
09.30 - 09.45	75	1	2	1	5	84
09.45 - 10.00	64	0	2	1	1	68
Hourly total	329	2	4	6	10	351
Total	901	5	23	24	29	982

Movement 2 = Traffic moving along Middle Lane away from Crouch End just before the roundabout

Time	Light vehicles 2 axles	3 axles +	Bus/Coach	Cycles	Motorcyles	Total
07.00 - 07.15	20	0	1	0	0	21
07.15 - 07.30	20	0	3	0	0	23
07.30 - 07.45	20	0	1	0	0	21
07.45 - 08.00	50	0	2	0	0	52
Hourly total	110	0	7	0	0	117
08.00 - 08.15	43	1	2	0	0	46
08.15 - 08.30	66	0	2	0	1	69
08.30 - 08.45	52	2	1	1	1	57
08.45 - 09.00	62	1	1	0	0	64
Hourly total	223	4	6	1	2	236
09.00 - 09.15	85	0	0	0	0	85
09.15 - 09.30	53	0	0	0	0	53
09.30 - 09.45	41	1	0	0	0	42
09.45 - 10.00	46	1	0	0	0	47
Hourly total	225	2	0	0	0	227
Total	558	6	13	1	2	580

Movement 3 = Traffic moving along High Street towards Priory road before the roundabout

Time	Light vehicles 2 axles	3 axles +	Bus/Coach	Cycles	Motorcyles	Total
07.00 - 07.15	135	4	3	2	5	149
07.15 - 07.30	147	1	1	0	2	151
07.30 - 07.45	167	0	5	3	1	176
07.45 - 08.00	145	4	7	2	2	160
Hourly total	594	9	16	7	10	636
08.00 - 08.15	179	4	6	1	2	192
08.15 - 08.30	170	0	2	4	0	176
08.30 - 08.45	170	1	3	0	5	179
08.45 - 09.00	150	3	5	3	3	164
Hourly total	669	8	16	8	10	711
09.00 - 09.15	170	0	2	1	1	174
09.15 - 09.30	127	0	5	2	3	137
09.30 - 09.45	122	2	6	0	2	132
09.45 - 10.00	131	2	3	1	2	139
Hourly total	550	4	16	4	8	582
Total	1813	21	48	19	28	1929

9.46 **Movement 2** was traffic moving in the opposite direction away from Crouch End towards the mini-roundabout. Here there were only 580 movements during the total period, of which light vehicles accounted for 558, 96.2% of the total. There were 6 HGV movements and only 13 buses, here they were diverted away from 8.45 to the end of the count. Only 1 cycle movement took place here but Cycle Route 7 exits into Hornsey High Street further to the East. 2 motorcycle movements were recorded.

9.47 **Movement 3** was traffic moving along Hornsey High Street towards the mini-roundabout in a westerly direction away from the Church Lane junction. Here we counted significantly more vehicles as this is the direction in which most rush-hour travel will take place at this time of day. There were 1,929 movements, of which 1,813 were light vehicles (94% of the total) and 21 HGV movements. 48 buses and coaches were observed together with 19 cycles and 28 motor cycles.

Commentary and conclusions on this survey site

9.48 This site seems to confirm in broad terms the proportions of vehicles of each type using local roads – again it shows how few HGVs of the size to be used by London Concrete are seen on Crouch End roads and this in turn highlights the environmental impact that these vehicles will be expected to have.

9.49 Comparing the results of these two sites with the Bellamy Roberts survey leads us to a conclusion that they have indeed identified lighter vehicles as HGVs thus minimising the impact that these movements will be expected to have on a local road system which is completely unsuited to movements of this type. Indeed, the very small number of HGVs

similar to those proposed by LC observed may itself be proof that roads in this area are unsuited to these traffic movements.

10.0 HARINGEY | LOCAL TRAFFIC SURVEY DETAILS

The Hornsey High Street Turnpike Lane site

10.1 This was surveyed by Haringey Council, as part of the Haringey Heartlands development initiative on 13th July 2004.

	Movement 4	Movement 5	Movement 6	Total
Cars/LGVs	719	1151	970	2840
HGV	2	8	0	10
Bus	0	58	0	58
Cycle	8	13	4	25
Motor cycle	9	6	5	20
Total	738	1236	979	2953

10.2 The movements are those used by Haringey Council on Sheet 12 on their survey and can be described as follows:

10.3 **Movement 4** is the left turn in Hornsey Park Road after travelling under the railway bridge. It is not a bus route, and at several points, as can be seen in our DVD, is probably too narrow and winding to permit bus routing, which explains the absence of buses along this road. On the left hand side of this road, opposite Wood Green Shopping City, is an industrial estate and a Council recycling centre in Western Road.

10.4 **Movement 5** is straight ahead into Turnpike Lane. This is a bus route. Until recently there was a bus lane in Turnpike Lane in the easterly direction represented by this flow, but it seems that the road was too narrow to support this level of segregation and the bus lane has now been removed.

10.5 **Movement 6** is the right turn into Wightman Road which runs alongside an Edwardian estate, known as the Ladder Roads, on the left hand side and the railway line on the right. There are no turnings to the right until the junction with Endymion Road at the end of Wightman Road. The ladder roads are all residential terraced houses and each road is subject to a 20 mph restriction. At the end of Wightman Road, as explained in the DVD, is a railway bridge with a weight restriction of 8 tonnes GVW, and 6 tonnes axle weight. This is presumably why neither buses nor HGVs were counted using this road.

10.6 The sum total of these three movements represents the movements made from Hornsey High Street in this direction, save and except for any vehicles making a U-turn under the bridge. In

total 2,953 movements were observed, of which light vehicles accounted for 2,840, 96.17% of the total. There were 10 HGV movements observed, 58 buses, and 25 cycles and 20 motor cycle movements.

Commentary and conclusions on this survey site

10.7 We did not conduct this survey, it was carried out at a different time of year, and for a different purpose. However the figures collected by Haringey on this survey, shown on sheet 12 of their count, bear direct comparison with their figures on Sheet 13, which directly affects our count of the traffic movements along Tottenham Lane and our hypothesis concerning the analysis of traffic movements at this point by Bellamy Roberts. There are, at present, very few vehicles of this type on any of the roads in this area, so that the proposed number of journeys, even at the lowest frequency proposed by LC will dramatically increase the number seen and their inevitable environmental impact.

Comparing Bellamy Roberts, Green N8 and Haringey Council Counts

Bellamy Roberts Count

Thursday 13 March 2003
Movements ahead on Tottenham Lane

Time Sampled	Cars/lgvs/mgv	hgv	Bus/Coach	Cycles	M/cycles	Total
07.00 - 07.15	99	11	3	not counted	not counted	113
07.15 - 07.30	175	24	6			205
07.30 - 07.45	179	9	3			191
07.45 - 08.00	175	8	7			190
Hourly Total	628	52	19			699
08.00 - 08.15	195	5	3			203
08.15 - 08.30	184	6	2			192
08.30 - 08.45	175	13	8			196
08.45 - 08.00	128	11	4			143
Hourly Total	682	35	17			734
09.00 - 09.15	136	10	3			149
09.15 - 09.30	113	14	6			133
09.30 - 09.45	136	8	2			146
09.45 - 10.00	126	13	4			143
Hourly Total	511	45	15			571
Gross Period Total	1821	132	51			2004

Green N8 Count

Monday November 15 2005
Movements along Tottenham Lane junction with Ferme Park Road

Time Sampled	Cars/lgvs/mgv	hgv	Bus/Coach	Cycles	M/cycles	Total
07.00 - 07.15						
07.15 - 07.30	352		11	3	9	375
07.30 - 07.45	245	4	8	2	7	266
07.45 - 08.00	261		5	7	15	288
Hourly Total	858	4	24	12	31	929
08.00 - 08.15	289	4	5	4	6	308
08.15 - 08.30	250	1	6	4	6	267
08.30 - 08.45	265	2	10	13	13	303
08.45 - 08.00	235	1	5	2	4	247
Hourly Total	1039	8	26	23	29	1125
09.00 - 09.15	181	1	6	6	6	200
09.15 - 09.30	226	1	9	4	6	246
09.30 - 09.45	210		4	1	9	224
09.45 - 10.00	194	1	7	4	5	211
Hourly Total	811	1	26	15	26	879
Gross Period Total	2708	13	76	50	86	2933

Haringey - Count on Us count

Thursday 13 July 2004
Movements along Tottenham Lane junction with Ferme Park Road

Time Sampled	Cars/lgvs/mgv	hgv	Bus/Coach	Cycles	M/cycles	Total
07.00 - 07.15	183	0	5	1	3	192
07.15 - 07.30	207	0	4	4	1	216
07.30 - 07.45	237	1	5	4	2	249
07.45 - 08.00	224	0	5	7	3	239
Hourly Total	851	1	19	16	9	896
08.00 - 08.15	258	1	6	7	0	272
08.15 - 08.30	249	2	6	7	1	265
08.30 - 08.45	245	1	5	5	2	258
08.45 - 08.00	247	2	3	4	1	257
Hourly Total	999	6	20	23	4	1052
09.00 - 09.15	205	0	4	3	1	213
09.15 - 09.30	180	1	3	1	1	186
09.30 - 09.45	176	1	3	4	1	185
09.45 - 10.00	189	0	4	2	1	196
Hourly Total	750	2	14	10	4	780
Gross Period Total	2600	9	53	49	17	2728

Hourly Counts	Cars/lgvs/mgv	hgv	Bus/Coach	Cycles	M/cycles	Total
Bellamy Roberts	628	52	19			699
Green N8	858	4	24	12	31	929
Haringey	851	1	19	16	9	896
Bellamy Roberts	682	35	17			734
Green N8	1039	8	26	23	29	1125
Haringey	999	6	20	23	4	1052
Bellamy Roberts	511	45	15			571
Green N8	811	1	26	15	26	879
Haringey	750	2	14	10	4	780

11.0 HEALTH AND SAFETY ISSUES

11.1 In our previous Statements of Objections (September 2004 and August 2005), we have referred briefly to concerns surrounding the health and safety record of HGVs, particularly in connection with fatalities which involve non-car modes of transport. Aside from concerns relating to congestion and the incapacity of local road network, our conclusions on the significant increase in the volume of HGV traffic that would be generated by the proposed plant have given us renewed concerns on health and safety and environmental issues. In this section we adduce further information on the health and safety record of HGVs in general, and evidence which suggests that London Concrete is not doing all it might in this critical area of concern. We emphasise in particular how damaging the increase would be with regard to Haringey Council's drive to reduce the volume of vehicles caused by the 'school run'.

HGVs' health and safety record

11.2 The true impact of what might be called the other half of the equation - London Concrete and private contractors' vehicle movements concentrated within a narrow radius - is conveniently forgotten by their consultants in their relentless emphasis on the environmental claims of bringing in freight by rail. As it is only by use of HGVs that London Concrete's products can be delivered to customers, and concrete itself will still be brought to the site by HGVs, it is worth looking a bit closer at the health and safety record of HGVs.

11.3 The poor road safety record of HGVs and LGVs is well attested, and indeed a number of interesting statistics regarding this can be found on the websites of several organisations campaigning for an increase in the amount of freight on rail. Here is a selection of recent statistics from various sources:

11.4 Lorries account for only 7% of traffic but were involved in 22% of fatal crashes. (Transport Statistics Great Britain, 2004 edition, DfT, 2005.)

11.5 There were 28,864 accidents involving HGVs and LGVs in 2003. (Transport Statistics Great Britain, 2004 edition, DfT, 2005.)

11.6 Lorries and LGVs had the highest blameworthiness ratio of all work vehicles, over 4 times higher than buses (Road Safety Research Report, Nottingham University for DfT, August 2005.)

11.7 HGVs / LGVs are responsible for more fatalities than any other work type vehicle regardless of blame. A quarter of fatalities are caused by HGV/ LGV drivers breaking the speed limit. (Road Safety Research Report, Nottingham University for DfT, August 2005.)

11.8 We are aware from anecdotal sources that concrete mixer trucks in particular have a poor safety record, especially where cyclists are concerned. Mrs Cynthia Barlow, whose daughter was killed by a left-turning concrete mixer lorry while cycling to work in the City of London in 2000, has worked with Cemex (formerly known as RMC) on remedial action in this regard, including visibility on the left-hand side of vehicles, and visibility of indicators. Shortly after commencing work with Cemex she was contacted by the City Police, after they had dealt with their fifth death of a cyclist involving a concrete mixer lorry. What is important to note here, in relation to London Concrete's application, is that the narrow road layouts that are so typical in the City of London, and which give rise to the particular problems faced by the City Police, are precisely the type of roads common to Crouch End and Hornsey.

11.9 In November 2004 the London Road Safety Unit published an analysis of pedal cyclist fatalities involving goods vehicles from January 1999 – May 2004. During this period, 49 out of a total of 87 pedal cycle fatalities involved a goods vehicle. Over half involved left-turning goods vehicles when one or both of the road users had been stationary at signals. Four-axle rigid goods vehicles, such as those that would be used by London Concrete, were over-represented compared with the number of licensed vehicles and traffic make-up in London. Data suggests that neither cyclists nor drivers were particularly inexperienced.

11.10 While in this survey tippers had the highest frequency of involvement in fatalities amongst the four-axle rigid vehicles, specialist police officers commented that cement mixers might be more often involved in collisions than tippers or skip loaders because they are travelling in London throughout the whole day. Tippers and skip loaders tend to make one or two longer distance journeys in and out of the capital in one day.

11.11 There is no escaping the fact that concrete mixer trucks in particular represent a potentially fatal hazard to pedestrians, children on their way to school, and to cyclists in particular, out of all proportion to their number. The huge increase in this type of vehicle in Crouch End and Hornsey that the plant would give rise to therefore gives us grave concerns for the safety of those residents who use non-car modes of travel. Furthermore, such an increase would compromise significantly Haringey Council's attempts to promote these modes of travel, as put

forward in a number of policy initiatives: Sustainable Haringey Local Agenda 21 Action Plan, the Living Streets Manifesto, the Road Danger Reduction Charter, and also the Mayor of London's Transport Strategy.

Two further council initiatives in particular are intended to generate growth in non-car modes of travel:

11.12 The Cycling Action Plan outlines targets which will contribute to London-wide targets of an 80% increase in cycling levels by 2010, and a 200% increase by 2020.

11.13 School travel plans are one of the most important of Haringey Council's initiatives in the battle against road congestion, aimed at persuading children and parents to make journeys to school on foot or by cycle, and not to resort to the 'school run'. 32 plans are now in place, and 33 in preparation, winning Haringey the School Travel Borough of the Year prize at London's Sustainable Transport Awards 2005. St Marys Primary School on Church Road N8, is the closest primary school to Cranford Way. The parents and teachers are working very hard to implement their travel plan, but many parents have stated that if the London Concrete application gets the go ahead they will forbid their children to walk or cycle to school and will drive them, adding to the congestion and pollution in the area. It is our view that the continuing success of school travel plans will be seriously jeopardised by the increase in the volume of HGV traffic generated by the plant.

London Concrete operating practices

11.14 Recognising the relative poor performance of HGVs in comparison with other types of vehicles, some businesses have introduced new features designed to reduce the number of accidents and fatalities involving HGVs. Our information is that these features are not yet featured as standard, by vehicle manufacturers. We have information on two devices which, to the best of our knowledge, and on the advice of London Concrete's Senior Health and Safety Officer for south-east region, have yet to be implemented by London Concrete.

11.15 A large side-guard on the left side of the vehicle with the word 'Caution' on it, incorporating sensors which set off an alarm in the driver's cab when a cyclist is alongside. This is also connected to a voice box, activated by the indicator when a driver wishes to turn left, which broadcasts an alert, 'Caution. Truck turning left', to anyone alongside. (Cost: £370)

11.16 A 'fish-eye' mirror fitted to the front left hand side of the vehicle, which has been found to improve the driver's visibility of cyclists and pedestrians along the front and left hand side of the mixer trucks. (Cost: £50)

11.17 Both these devices are to be fitted as standard to lorries of one of London Concrete's competitors, Cemex. At only £370 and £50 respectively, both are relatively inexpensive items. That London Concrete has not, to the best of our knowledge, implemented these safety solutions would appear to indicate that they are not doing all that they could in this critical area.

11.18 We also have concerns about how such measures, and indeed safe and responsible driving in general, can be enforced given the contractual arrangements of London Concrete drivers mentioned above, that is to say either those drivers who purchase London Concrete vehicles and are effectively operating on a self-employed basis, or those which are employed by other concerns which have purchased mixer trucks from London Concrete. We also assume that London Concrete do not stipulate that the vehicles owned by third parties who will be picking up concrete also have these added safety features.

11.19 We believe that very serious concerns should be raised concerning LCs ability to ensure that their drivers, delivering ready-mixed concrete to their clients, are not abusing the Health and Safety Regulations relating to causes of driver fatigue; are working within and working towards a safe environment as required by Health and Safety Law, given that their work is performed in the open streets and roads of residential areas in close proximity to other roads users and pedestrians who are entitled to expect that these drivers play a full part in providing such an environment. If, as we suspect, their drivers are indeed self-employed then the only sanctions open to LC are contractual as they cannot, by definition, exert control over these drivers as an employer would. In truth this would suggest that LC's responsibilities literally stop at the Batching Plant gates.

Conclusions

11.20 We believe that there is a demonstrable case that HGVs of the type which LC use, both for deliveries of concrete powder to their sites and for carriage of ready-mixed concrete to their customers are creating environment dangers out of all proportion to their frequency on British residential roads. We further believe that there is evidence that the particular type of HGV proposed here is known to have particularly high levels of risk because of its design features. Despite the fact the some of these dangers may be appreciably reduced by simple and relatively cheap technological solutions we believe that there is evidence that LC, unlike some of its competitors, has failed to introduce these features on their vehicles. We in turn believe that this may be attributable to working practices, which reduce the practical operational control that LC has over its drivers and staff involved directly in delivery operations.

11.21 Further we believe that these vehicles are a clear hazard to vulnerable road users and pedestrians and this is inconsistent with both the Government and the local authority's commitment to encourage more journeys to be made by methods other than private motor vehicles.

12.0 ENVIRONMENTAL CONSIDERATIONS

12.1 In this final section we look at a range of environmental aspects, including vehicle emissions, noise from HGVs, road widths, building proximity, and vibration and associated damage.

Vehicle emissions – NO2 and PM10

12.2 Emissions from road freight transport increased by 59% between 1990 and 2002, with carbon dioxide emissions from road hauliers, the majority of whom would be operating HGVs, increasing by a third. According to DEFRA, road freight now accounts for 8% of UK carbon dioxide emissions.

12.3 Not only do HGVs have a poor health and safety record disproportionate to their number, they are also similarly responsible in terms of pollution and vehicle emissions. Nitrogen oxides (NO2) can potentially impact on health by lowering resistance to respiratory infections; PM10 particulate matter has been recognised as a cause of inflammation and worsening lung and heart conditions, and a cause of circulatory problems. They may also carry carcinogenic compounds into the lungs.

12.4 In a paper prepared by Drs A Pahari, S Welch and S Lingam, of the Academic Department of Child Health, St Ann's Hospital, Haringey, London *[BCG, Tuberculin Skin Tests and Asthma prevalence in School Children in North London]* they observed that "Haringey is an inner-city area with a high immigrant and ethnic minority population. Respiratory problems, including asthma and tuberculosis, are common in school children in this area".

12.5 Figures cited in Haringey's Air Quality Management Action Plan (December 2004) from the Greater London Authority / Transport for London state that HGVs were responsible for 26.1% of NO2 emissions, and 23.3% of PM10 emissions in Greater London (2001). While at first sight such levels appear to be exceeded by car and light vehicle emissions which by the same survey accounted for over 60% of all emissions, what needs to be borne in mind is the relatively small number of HGVs on the roads in this area in relation to cars, as shown by our own and Haringey Council's traffic surveys in Crouch End and the surrounding areas. As with accidents, the amount of such dangerous emissions produced by HGVs is out of all proportion to their actual numbers. As we have pointed out in previous Statements of Objections, the increase in HGVs travelling through Haringey that would be generated by the plant, especially travelling along the principle routes leading to and from it, will result in significant increases in vehicle emissions in this area. LC claims that the site will reduce the overall number of HGV movements within the general Haringey area, but this would only follow if they take a share of the market which is currently enjoyed by their competitors AND use larger vehicles for the purpose of the deliveries. In any event lower numbers of journeys in the area as a whole has to be balanced, surely, by a very great increase in the number of journeys undertaken in the immediate area of this planning application which is, and should be the concern of this enquiry.

Noise from HGVs

12.6 This aspect of the transport implications of London Concrete's proposals has been largely overlooked, but evidence from other concrete batching plants, such as the one at Stewart's Lane depot in Wandsworth, show this to be a major cause of residents' complaints in addition

to other factors such as dust. In his proof of evidence to the appeal inquiry concerning London Concrete's application to build a batching plant at the depot, Colin Stanbury, Area Environmental Health Officer for Wandsworth, gives extensive evidence on this issue, believing that extra HGV movements associated with the plant will cause a deterioration in the local noise climate for residents close to the plant:

12.7 'From my own observations I have noted how at times HGVs and articulated vehicles find themselves stuck at the entrance of the appeal site, unable to either exit or enter from the site without many attempts at manoeuvring back and forward. These events are often accompanied by dust rising from the lorry wheels, and high local concentrations of exhaust fumes. This sort of activity is often accompanied by the sounding of car horns from other road users who are held up. It is not possible to quantify these events in terms of either air pollution or noise standards but is nevertheless part of the overall picture, which causes general disturbance to local residents.'

12.8 (All quotations from Proof of evidence of Colin Stanbury, Area Environmental Health Officer, London Borough of Wandsworth, 15 December 1998. DETR reference: APP/H5960/A/98/299070; Local Planning Authority Reference: N/98/0106).

Road widths

12.9 Health and Safety considerations prevented us from measuring road widths at critical points in the locality to see if there was sufficient room to enable a higher number of HGVs to pass each other and pass buses and coaches without causing congestion. The evidence of the DVD would suggest that the roads along which LC vehicles MUST pass are very narrow at a number of points. It is not merely Victorian whimsy which led to the many lanes that are found in the Crouch End area – Tottenham Lane, Church Lane, Middle Lane and Turnpike Lane, for example, being called lanes – historically they were, and the pattern of speculative Victorian house development which took place here from the 1880s onwards when the railway arrived followed the existing street pattern.

Building Proximity

12.10 For the same reasons many properties in the locality are built on streets with narrow pavements and either no front garden or a very narrow front garden. Again this can be clearly seen in the DVD.

Vibration and associated damage

12.11 We received the following information from Sean Wallis of University College London: "The lowest estimates of damage to road surfaces which are often quoted is the following: "A 40 tonne, 5 axle lorry causes over 10,000 times more damage to road surfaces than an average car." (Highways Agency, 1994). But recent estimates, generated by more thorough studies and an industry survey of road-pricing, have been far higher, e.g. "a single 8 tonne axle of an HGV causes approximately 65,500 times more damage than the 0.5 tonne axle of a car" (Cebon, 1999)

12.12 These higher damage estimates derive from the examination of several factors which can act in combination.

12.13 “Road pavements suffer distress and deteriorate with use and over time as a result of traffic loading from HGVs and also climatic interactions. Studies conducted by AASHO in the 1960s revealed that the amount of pavement damage caused by an HGV was related exponentially to the static axle load of the vehicle (AASHO, 1962). Further studies have revealed that pavement damage is also affected by a number of vehicle characteristics (eg axle configuration, suspension type and tyre type) and pavement properties (eg type and structure, surface roughness) (see for example Gillespie et al., 1993). The nature and variety of these properties is such that pavement damage caused by HGVs can vary widely both spatially and temporally (European Commission, 1995).” (Doodoo & Thorpe, 2004)

12.14 In an investigation into the collapse of a section of the A2, Transport for London comment that, in the case of modern roads, ie roads with compacted stone foundations, vibrations are absorbed into the ground.

12.15 “Current standards permit normal HGVs with axle loads of 10 tonnes. This is carried on a contact area of the vehicle tyres of 0.3 x 0.3m. Geotechnical theory shows that the depth of influence of a loaded area is 1.5 times its smallest horizontal dimensions, i.e. 0.3 x 1.5 = 0.45m. Modern roads are designed so that there is sufficient thickness of compacted stone sub base to ensure that the depth of influence of the load is entirely within the road construction and not the underlying ground.” (Transport for London 2002)

12.16 However “most purpose built compaction plant [rollers for road building] is designed to operate at an optimum vibrational frequency of 30-50Hz, compared to the frequency of vibrations resulting from an HGV on an uneven road surface of 1-2Hz.” (Transport for London 2002)

12.17 In our opinion the proximity of buildings to the road surface in the Crouch End area means that the proposed increase in HGV traffic will cause inevitable damage to these structures, let alone to the structure of the roads, and will clearly have a material impact on local residents as well.

Conclusions

12.18 It is both clear and established, we submit, that HGVs in general, and these vehicles in particular, contribute significantly to pollution in the environment as a whole, but particularly in this area of London which is established as having a high incidence of allergies, asthma and related conditions. Whilst not as high as inner London areas such as Islington and Hackney, it should be noted that the area proposed for this plant is immediately adjacent to the London Boroughs of Hackney and Islington, and so the incidence of respiratory disorders would be expected to be closer to those of the adjacent inner city centres, rather than the Northern parts of the borough where residential estates and industrial areas are situated further apart from

each other. [Children's health in London now – www.londonshealth.gov.uk/pdf/hinl2005Chap3.pdf]

12.19 We believe that an increase in the appearance of HGVs of this type on roads in the immediate area will lead to an inevitable increase in Noise Pollution, although this may not be considered apt to be measured, but will cause significant problems with the structure and size of roads in the locality, as well as causing damage to adjacent buildings and residents, who on many parts of the roads in the locality are very adjacent to the road, and so far more vulnerable to the vibrations which these constantly rotating HGVs must create.

13.0 OVERALL CONCLUSION

13.1 We believe that we have demonstrated that this area is completely unsuitable from the perspective of road use and users for the siting of such a plant and the environmental and amenity losses, from a transport perspective alone, completely outweigh the limited benefit of reducing some road traffic by delivering aggregates directly to the site by rail.

AIR QUALITY & HEALTH

14.0 INTRODUCTION

14.1 A planning application was submitted to Haringey Council by FirstPlan Ltd on behalf of LONDON CONCRETE for the development of a concrete batching plant with associated hoppers, conveyors and ancillary facilities in Cranford Way, London N8 9DG.

14.2 This application was rejected by LB Haringey, and the applicant has gone to appeal.

14.3 The applicant has now submitted two planning applications for the siting of the concrete batching plant in Cranford Way. Further, they have submitted various reports, including a dust assessment, plus addendum, supplied by contracted consultants.

14.4 Haringey, and in particular this part of Haringey, is a densely populated urban area, with residential homes, and several schools and play areas, on both sides of the proposed site. The surrounding roads are narrow in nature, and already heavily congested.

14.5 The Government's National Air Quality Strategy for the UK sets out air quality standards for seven key pollutants. The Council has carried out a three-stage review and assessment of air quality in the borough based on the Governments standards for the key pollutants. The results show that in Haringey the Governments standards for PM_{10} (dust particles) and oxides of nitrogen (NOx) will not be met by the required date (PM_{10} – 2004 and NOx – 2005), mainly due to traffic emissions. Therefore action needs to be taken to improve air quality in Haringey, especially in relation to PM_{10} and NOx.[1]

14.6 Haringey has declared the whole borough as an Air Quality Management Area (AQMA) and a draft action plan has been prepared which sets out actions to improve air quality. Actions covered in the draft action plan relate to four main areas:

- Action to reduce emissions from vehicles
- Action to reduce traffic volumes
- Action to reduce emissions from non-road traffic sources
- Awareness raising, education and public information.[1]

15.0 CONSTITUENTS OF CONCRETE.

15.1 Concrete is a well-dosed mix of cement, aggregates, sand, water and admixtures. The formula changes in accordance with the uses to which the concrete will be put.
In this mix, the cement acts as a hydraulic binder. The cement itself is made of clinker, which is obtained by the partial fusion of a mix of quarried products such as limestone and clay. Clinker also contains lime, silica and aluminum. The clinker is combined with secondary constituents, such as blast furnace slag, a mineral residue of the preparation of cast iron from ore and blast furnace coke, flyash or limestone fillers, and fine aggregates obtained by grinding rock. Depending on the proportions of these constituents, there are five types of cement: 1) Portland 2) Portland composite 3) blast furnace cement 4) blast furnace cement with high slag content and 5) slag and ash cement. Portland cement is used in reinforced concrete preparations. Composite Portland cement is used for works such as flagstone paving and road building. The other types of cement are reserved for works that do not require any particular level of resistance to heat. They are especially suitable for underground works and very large structures in aggressive water.

15.2 Aggregates are the second key constituents of concrete. Their features (mechanical, physical and chemical qualities as well as their colour) depend on the properties of the rock they originate from, and these properties directly influence the aesthetic and mechanical properties of the concrete, as well as its durability.

15.3 The third constituents of concrete are admixtures, low quantities of which (less than 10 kg/cu. m.) are incorporated into the concrete, such as water-reducing agents, superplasticisers or thinners, accelerating agents or retarding agents, concrete waterproofing compounds, and air-entraining agents. Finally, the fourth constituent of concrete is mixing-water.

15.4 The mixing of cement and water produces extremely complex reactions. Silicates and aluminates develop during the hydration phase. They then form a crystalline gel, which signals that the “setting” process has begun.[2]

PM10 (Air & Water borne Particle Matter smaller than 10 microns)

15.5 PM10 is the term used to describe tiny particles in the air, made up of a complex mixture of soot, organic and inorganic materials having a particle size less than or equal to 10 microns diameter (10 microns is equal to one hundredth part of a millimetre). PM10 is one of the eight substances for which the government has established an air quality standard as part of its national Air Quality Strategy. How is it released? There are many man-made sources of PM10, including road transport and industry. There are also natural sources, for example, volcanoes and dust storms.

15.6 PM10 are generally produced as an accidental by-product of various chemical or physical processes. PM10s as such are not deliberately manufactured, although many industrial processes do use finely-divided powders and dusts as a normal input into manufacturing and processing. Examples include the Cement & Lime and Iron and Steel sectors.

15.7 PM10 particles are made up of a complex mixture of many different species including soot (carbon), sulphate particles, metals and inorganic salts such as sea salt. The particles vary in size and shape, up to 10 microns diameter.[3]

16.0 HEALTH IMPLICATIONS OF PM10

16.1 Dust (from cement) comprises particulate matter that might give rise to health problems from inhalation of respirable particles. Particulate matter of less than 10 microns (PM10) is classified as an air pollutant, and recent attention has been directed towards particulate matter of less than 2.5 microns (PM 2.5).[4]

Health Implications of PM10: DEFRA (Department for Environment, Food & Rural Affairs)

16.2 From: Department for Environment, Food & Rural Affairs; Air Quality Strategy: Particles, Benzene, Carbon Monoxide and Polycyclic Aromatic Hydrocarbons; October 2001

16.3 Para 45. Scientific research has established that particulate air pollution is associated with a range of effects on health including effects on the respiratory and cardiovascular systems, asthma and mortality. Although the precise mechanism by which particles damage health remains unclear, a number of epidemiological studies have shown relationships between various indices of ill health and measurements of particle concentrations. Research has established to a degree the extent of the effects of particles on health, but there remains at the moment considerable uncertainty about the precise nature of these effects. Further work is underway to reduce this uncertainty and to improve our knowledge of the mechanism for effects on health and the extent of the health effects.

16.4 Para 47. It is thought that following inhalation, particles of less than 10μm (10 micrometres) or PM10 may deposit in the conducting and gas exchanging areas of the lung where they may, if

they override local defence mechanisms, initiate tissue injury and inflammation. The inflammatory reaction caused by inhalation of toxic particles may lead to worsening of existing lung disease and enhance the sensitivity to allergens of people with hay fever and asthma. It may also have the capacity to alter blood coagulability and circulating red blood cells and platelets, a mechanism that could explain the association between inhaled particles and cardiovascular mortality and morbidity, especially among the elderly population.

16.5 Para 48. The Expert Panel on Air Quality Standards (EPAQS) first considered particles in its report published in 1995. The Panel concluded that particulate air pollution is responsible for causing excess deaths among those with pre-existing lung and heart disease, and that there is a relationship between concentrations of PM10 and health effects, such that the higher the concentration of particles, the greater the effect on health. Since the most applicable evidence at the time related daily average concentrations of particles to effects on health, EPAQS concluded that PM10 should be measured as a 24-hour running average. In its report, the Panel recommended an air quality standard of 50µg/m3 as a 24-hour running mean. However, the Panel also recommended that policies should aim to ensure that there is a decline in both peak and annual average concentrations of PM10.

16.6 56. The advice from COMEAP on long-term health effects of particle air pollution is based on research findings on the effects of PM2.5. In their report, EPAQS considered this research along with all other literature on PM10 and PM2.5, and concluded that measurement of particles as PM10 currently provided the most appropriate basis for an air quality standard. PM10 includes all sizes of particles smaller than PM10, including PM2.5. The long-term effects are most closely associated with PM2.5. However, although the short-term effects are most consistently associated with PM10 and PM2.5, some studies do find associations with coarse fraction. Concentrations of particles are generally higher in congested urban areas. Measures taken to reduce concentrations of PM10 in these areas are likely to have the greatest impact on the smaller particles of PM2.5 or less, so that PM2.5 levels will also be reduced.

Health Implications of PM10: Other Studies

16.7 PM10 – particles smaller than 10 microns, or about 1/7 the thickness of a human hair – are associated with numerous adverse health effects from increased hospital admissions to increased premature deaths.[5]

16.8 Reviews of daily time-series mortality studies from many cities throughout the world suggest that daily mortality counts are associated with short-term changes in particulate matter (PM) air pollution. [6]

Health Effect of Selected Air Pollutants [7]

- Particulate Matter
- Acute respiratory infections (ARI), especially in children
- Damages lung's defense mechanisms and causes COPD,

- cardiovascular disease & lung cancer
- Triggers asthma
- Irritation in the eye
- Low birth weight

Studies indicate that every 10 µg/m3 increase in PM10 increases

- Non-trauma deaths by 0.8 %
- Hospital admission for respiratory & cardiovascular diseases by1.4 & 6% respectively
- Emergency room visits by 3.1 %
- Restricted activity days by 7.7%

16.9 The most significant health impact of outdoor air pollution has been associated with particulate matter and to a lesser extent, with ground level ozone (Cohen et. al., 2003; Holgate et. al., 1999 and World Bank 2002). In most cities in developing countries, particulate matter is a major concern because their concentration in the air is often very high. [8]

16.10 Particulate matter does not consist of one compound or element but rather, it is a complex mixture of different organic and inorganic substances that are present in the air as both liquid and solid. Primary particles are emitted directly by emission sources, whereas secondary particles are formed through reaction of gases in the atmosphere. Many of the substances that make up particulate matter are very harmful to human health. These include metals, PAH and VOC. [8]

16.11 The effect of particles on human health varies depending on size and chemical composition. Particle size can vary between 0.005 microns (µm) to 100 microns. For comparison, the thickness of an average human hair is approximately 50 microns. All particles in the ambient air are collectively referred to as Total Suspended Particles (TSP). Particles that have an aerodynamic diameter of less than 10 µm are referred to as PM10. As these particles are small enough to enter the human respiratory system, they are also called respirable particulate matter. Similarly, particles that are smaller than 2.5 µm are referred to as fine particles or PM2.5. Coarse particles generally refer to particles with an aerodynamic diameter greater than 2.5 µm. When particles in the air are inhaled by human beings, they are deposited in various regions of the respiratory system depending on the size of the particles. Particles that are greater than 10 microns are normally retained by the cilia in the nose and do not enter the respiratory tract. Therefore, particles larger than 10 microns do not cause much harm except some irritation in the nose or eye. [8]

16.12 Smaller particles have more surface area where harmful substances, such as PAH, can attach themselves. For example, diesel exhaust has many fine particles that are coated with PAH and other harmful substances. Smaller particles penetrate deeper into the human body.

16.13 Some people are more sensitive to air pollution than others. Generally, children, elderly and people with lung and heart diseases are more vulnerable to the health effects of air pollution. [8]

16.14 Children are more vulnerable to air pollution because they inhale more air, their natural defense mechanism is not as strong as adults, they often spend more time in outdoor environments, and because of their lower heights, they are closer to the tailpipes of vehicles than adults. [8]

16.15 National Institute of Environmental Health Sciences in the US studied 110 ten-year old children who shifted to different cities with different levels of air pollution over a period of five years and found a strong association between annual average exposure to PM10 and the annual lung function growth rates. This shows that air pollution can impede lung function in children. [8]

16.16 In another study in Santiago, Chile scientists studied daily visit of children to primary health care clinics for upper and lower respiratory track symptoms for a period of two years. The study showed that a 50 µg/m3 change in PM10 was associated with a 4 to 12 percent increase in lower respiratory symptoms for children under two and 3 to 9 percent increase for 3 to 15 year-old children (Ostro et. al., 1998). [8]

16.17 In Kathmandu, a study done by CEN indicated that young children under the age of six who were attending a school located next to brick kilns suffered from more respiratory problems than similar children who went to school in an area without brick kilns. The study also showed that the absentee rate in the school next to the brick kilns was almost twice as high as the absentee rate in the school with a relatively clean environment (Tuladhar and Raut, 2002). [8]

16.18 **Elderly:** In 2000, a Canadian study used three measurements of particulate matter:coefficient of haze (COH), total sulphate and PM2.5 and reported an association with respiratory diseases and other non-accidental diseases including diabetes. Additionally, COH was associated with increases in cancer deaths and sulphate was associated with mortality from coronary artery disease and cardiovascular diseases. All associations were generally stronger for those above 65 years. [8]

16.19 **Asthmatics:** Although asthma can have several causes, studies have shown that air pollution tends to trigger and aggravate asthma attacks and asthmatics are more vulnerable to other effects of air pollution. When an asthmatic encounters a “trigger” such as dust, cold air, or irritating chemicals, muscles around the bronchial tubes contract and secretory cells produce a thick mucus that block the airways. This results in wheezing and difficulty in breathing (Cunningham and Saigo, 1999). [8]

16.20 A few studies have indicated that there is a link between PM10 concentration and asthma attacks. A ten-year study in Chicago found that asthmatics had double the risk of PM10-

associated hospital admissions. Another study investigated the short-term health effects of particles in eight European cities and found that for each 10 µg/m3 increase in PM10, asthma in children less than 14 years old increased by 1.2 percent and 1.1 percent in people between 15 and 64 years of age. [8]

16.21 **Diabetics:** Particles can increase the risk of heart disease for diabetics. A study done by Harvard School of Public Health investigated the association of PM10 with hospital admissions for heart and lung diseases in persons with or without diabetes in Cook County, Illinois. The study found that a 10 µg/m3 increase in PM10 was linked with a 2.01 percent in crease in admissions for heart diseases with diabetes but only a 0.94 percent increase in persons without diabetes. [8]

16.22 Various epidemiological studies done in the 1990s showed that even at very low concentrations tiny particles can kill and the impact of air pollution is not limited to the respiratory system as all vital organs of the body, including the heart are affected. Scientists are still studying the details on how pollutants chemically and biologically affect various systems within the human body. **But the fact that air pollutants, especially fine particles, are deadly and they can cause morbidity as well as mortality is well established.**

Previously, WHO had recommended 70 µg/m3 as a guideline value for PM10 concentration but now it says there is no safe limit for PM10.

16.23 Two of the most influential (and controversial) studies so far have been the Six Cities Study done by Harvard University and a study done by American Cancer Society (ACS). The Harvard Study found that higher levels of fine and sulphate particles were associated with a 26 percent increase in mortality from all causes when comparing the most polluted to the least polluted city – a difference of 18.6 µg/m3 for PM2.5 in six cities. Fine particles were also associated with mortality from cardiopulmonary diseases. The ACS study followed 552,138 adults from 154 US cities from 1982 to 1989 and found higher levels of fine particles were associated with increased mortality from all causes and cardiopulmonary diseases. Higher sulphate levels were also associated with lung cancer (Dockery et. al, 1993).

16.24 One of the latest studies indicates that a mere 10 µg/m3 increase in fine particles (PM2.5) can increase the risk of lung cancer by 8 percent, cardiopulmonary deaths by 6 percent and all deaths by 4 percent (Pope et. al, 2002 in Ghose 2002). The findings are based on sixteen years of research involving about 500,000 people and 116 metropolitan areas in the US. Arden Pope, one of the co-authors of the study, says that “the findings of the study provide the strongest evidence to date that long-term exposure to air pollution is an important risk factor for cardiopulmonary and lung cancer mortality” [8]

16.25 WHO (2000) has developed the following relationships to estimate the relative increase in various health parameters as a function of PM concentration:

16.26 Percent change in daily mortality = 0.6 x mean sulphate
= (0.151+ 0.039) x mean PM2.5
= (0.070 + 0.012) x mean PM10

16.27 According to these relationships, the mean PM10 levels were to increase by 10 µg/m3, mortality will increase by approximately 0.7 percent. WHO has also developed relationships between changes in PM concentration and percent change in hospital admission. [8]

16.28 More recent studies, however, show associations between increased hospital admissions and mortality and air pollutants. Several studies specific to the Utah Valley (known for the low smoking rates of its residents, low levels of ozone and acid aerosols and high levels of PM10, and the presence of an operating steel mill) have evaluated associations between various indicators of health and PM10 pollution. Taken together, they suggest a coherence of associations across various health end points for a specific location and population. Health effects found to be associated with elevated PM10 pollution included: increased respiratory hospital admissions and increased mortality, especially respiratory and cardiovascular mortality. It is improbable that these apparent air pollution-related health effects were due to methodological bias; in addition, confounding factors such as cigarette smoking and weather were ruled out by researchers. [9]

16.29 European studies show similar results. **Evidence is accumulating that the presence of air pollution below the levels of national and international standards has adverse short-term health effects related to daily mortality.** Data from l2 European cities showed that increases in sulphur dioxide and particulate matter were associated with increased total mortality. An increase of 50 micrograms per cubic metre in sulphur dioxide or black smoke was associated with a three per cent increase in daily mortality (both cardiovascular and respiratory) and **the corresponding figure for PM10 was two per cent.** The effects of the two pollutants seem to be independent. The authors of the study noted that the consistency of the results in western European cities with wide differences in climate and environmental conditions suggests that these associations may be causal. Although the reported relative risks are small, the short-term effects of air pollution are not a trivial public health problem if the omnipresence or “being everywhere” of air pollution exposure is taken into account. **From a population health perspective, exposure of a large number of people to a small risk can result in more illness in the population than exposing a small number of people to a large risk factor.** In short, researchers conclude that current low levels of sulphur dioxide and particles still have detectable short-term effects on health and further reductions are needed. [9]

16.30 There are indirect indicators of the effects of air pollution on children. Ransom and Pope showed convincingly that school absences in grades one to six were significantly associated with PM10 levels. The response was greater in those in grades one to three (six to nine years old) than in the older children. [10]

16.31 The Environment Agency says PM10 particles can travel long distances in the air. Occasionally, PM10 in the UK has been found to contain dust from the Sahara desert or from a volcanic eruption. Some particles are formed by chemical reactions in the air to form substances such as ammonium sulphate. High concentrations of PM10 in the UK can sometimes be found to be caused in part by industrial releases from Eastern Europe. However, in general most of the PM10 measured is released from industrial plants and motor vehicles. [3]

17.0 SILICA DUST (FROM SAND)

17.1 Silica dust is generated during the surface mining, processing, and handling (i.e., transporting, loading/unloading, conveying, crushing, screening, mixing, and bagging) of the aggregates. Elevated silica dust levels are frequently found in granite quarrying and processing, in crushed stone and related industries. Currently OSHA (Occupational Safety and Health Administration) has established permissive exposure limit (PEL) of 0.1 mg/m3 for this type of operations.

17.2 Studies indicate that exposure to silica dust over a long period of time causes Silicosis. Silicosis (especially the acute form) is characterized by shortness of breath, fever, bluish skin, and may often be misdiagnosed as pneumonia or tuberculosis. Silicosis may be fatal when the lung scavenger cells are overwhelmed with silica dust and are unable to kill mycobacterium and other organisms. Studies of granite quarry workers also establish the link between human lung cancer and exposure to silica dust. [15]

18.0 AIR QUALITY STRATEGY & HARINGEY'S AIR QUALITY

18.1 The Government and the devolved administrations propose to strengthen substantially the Air Quality Strategy objectives for particles by supplementing the present objectives of a 24-hour mean of 50µg/m3 (micrograms per cubic metre) not to be exceeded more than 35 times per year and an annual mean of 40µg/m3, both to be achieved by the end of 2004 with new objectives –

18.2 * for London, a 24-hour mean of 50µg/m3 not to be exceeded more than 10-14 times per year and an annual mean of 23-25µg/m3, both to be achieved by the end of 2010;

18.3 It is proposed the Mayor and London authorities should work towards a target of 20µg/m3 after 2010, with the aim of achieving it by 2015 where cost effective and proportionate local action can be identified. [11]

18.4 The Government's National Air Quality Strategy for the UK sets out air quality standards for seven key pollutants. Haringey Council has carried out a three-stage review and assessment

of air quality in the borough based on the Government's standards for the key pollutants. The results show that in Haringey the Governments standards for PM_{10} (dust particles) and oxides of nitrogen (NOx) will not be met by the required date (PM_{10} – 2004 and NOx – 2005), mainly due to traffic emissions. Therefore action needs to be taken to improve air quality in Haringey, especially in relation to PM_{10} and NOx.[1]

18.5 The Government is *strongly* committed to giving effect to the public's right to know about polluting emissions. (our emphasis). [13]

19.0 LONDON CONCRETE'S PROPOSAL & PM10

19.1 In the LB Haringey Council response to London Concrete revised Planning Application, the officer (s) state: "Conclusion: There are omissions from the submitted report. In particular potential emission points during the batching process have not been identified, and "harmful effects" (PM10 concentrations) from the process have not been assessed. As a result the possible cumulative effect of PM10 from the process and from vehicle emissions together have not been assessed." [12]

19.2 London Concrete's Dust Assessment submissions do attempt to assess the PM10 emissions from the HGVs that would potentially use the site, and conclude: "The estimated incremental PM10 concentrations are very low and will not result in any excedance (sic) of the NAQS objective for PM10". Their estimations are based on their projected 50% capacity operation of the plant and subsequent HGV movements. They have not assessed PM10 concentrations generated from the process, from independent traders using the plant, diesel emissions from additional trains, emissions from power generation, leakage from dry batching (no estimations have been given on quantity of dry batching), spillage from HGVs and subsequent erosion, and from idling of HGV lorries in the already congested surrounding road system, and the knock on effect on congestion and subsequent emissions by other road users.

19.3 As Governments standards for PM_{10} (dust particles) and oxides of nitrogen (NO_2) will not be met in Haringey, and medical research has concluded that even small increments of PM10 emissions can lead to an increase in mortality rates, hospital emissions, asthma incidents, absenteeism from school and so on, it must be a material consideration to consider, at the most serious level, any development that has the potential to increase the release of PM10 in a densely built up area. As the Environment Agency has stated, and Government legislation has indicated, one of those industries prone to producing PM10s is the cement & lime industry, including concrete batching.

19.4 There is further concerned that no proper assessment has been made in the surrounding vicinity, as the site is adjacent to a railway line, and two major local thoroughfares, that is Wightman Rd, and Green Lanes. Local knowledge would lead residents to expect already high concentrations of airborne pollutants from traffic emissions. Green Lanes is regularly clogged up from Manor House to Wood Green, which includes idling diesel-engine buses, and delivery HGVs to the local Sainsbury's Retail Park.

19.5 London Concrete has argued that their incremental traffic generation, or emissions and so on would not be significant. It has clearly been shown that any additional emissions would be detrimental to the local area's health and amenity. It would also run against the policies of the Government, London Mayor, Local Council, WHO, and European Union, which are seeking to reduce emissions not increase them.

19.6 Further Haringey and Hornsey wards, the two densely populated wards adjacent to the proposed site already have rates of Asthma which are amongst the highest in the country. An increase in anything that could trigger further Asthma incidents would therefore also be highly detrimental to the area's health and amenity. Please note, too, that there are several schools (including pre-school, infants and junior) in the immediate area. As the Ontario Medical Association concluded, from a population health perspective, exposure of a large number of people to a small risk can result in more illness in the population than exposing a small number of people to a large risk factor.

19.7 In the LB Haringey Council response to London Concrete revised Planning Application, the officer (s) state: "Conclusion: There are omissions from the submitted report. In particular potential emission points during the batching process have not been identified, and "harmful effects" (PM10 concentrations) from the process have not been assessed. As a result the possible cumulative effect of PM10 from the process and from vehicle emissions together have not been assessed." [12]

19.8 According to the Environment Agency, on many installations fugitive, or diffuse, emissions may be more significant than point source emissions. Common examples of the sources of fugitive emissions are:

- open vessels;
- storage areas (e.g. bays, stockpiles, lagoons etc.);
- the loading and unloading of transport containers;
- transferring material from one vessel to another (e.g. furnace, ladle, reactors, silos);
- conveyor systems;
- pipework and ductwork systems (e.g. pumps, valves, flanges, catchpots, drains, inspection hatches etc.);

- poor building containment and extraction;
- potential for bypass of abatement equipment (to air or water);
- accidental loss of containment from failed plant and equipment.[14]

19.9 Whilst it is recognised that modern concrete batching plants have gone some way to ameliorate the problem of emissions, neither London Concrete, nor their consultants have ever stated that there would be no leakage. Rather they talk about 'minimalising' dust emissions. 'Minimalising' is an abstract word that infers that there would be leakage. Again it is recognised that no industrial process is or can hope to be perfect. Equipment will break and humans will make errors. However, given that Haringey will breach the Government's Air Quality standards; that the adjacent wards already suffer high incidents of Asthma; that WHO, European, National, Regional, and Local policies are to reduce PM10 and other polluting emissions; that this, unlike many other concrete batching plants, is far closer to dense urban residential areas on either side; that incremental emissions will lead to incremental hospital admissions and mortality; the area cannot afford any additional pollution from accidents, errors or poor management. It is unclear, as stated by the Council, as to all the potential emission points during the batching process. For instance, there is a concern that large doors will be open to the elements to allow in trucks and rail freight.

19.10 In short this is an inappropriate application, in an inappropriate location for this type of process.

19.11 The effect a development may have on the local air quality, in terms of the energy use of buildings, polluting emissions from a development or the increase in traffic generated by a development, is a material planning consideration. [1]

19.12 As such, in the face of such overriding health factors, it is suggested that this appeal should be rejected out of hand. At the very least, no decision should be made to grant the application without proper assessment of PM10 levels not just within the immediate 200m vicinity, but also in several adjacent sites such as Green Lanes (N4), and at several points downwind from the proposed site. Further research should also be presented as to the downwind effects of PM10 on health at existing concrete batching plants.

References:

1 Haringey Unitary Development Plan First Deposit Consultation: SPG 8i – Air Quality. September 2003

2 http://www.lafarge.com/

3 http://www.environment-agency.gov.uk - PM10s (Particulates <10um)

4 Cement Industry Federation, Australia

5 South Coast Air Quality Management District, USA

6 C. Arden Pope III, Randy W. Hill, and G. Martin Villegas; Particulate Air Pollution and Daily Mortality on Utah's Wasatch Front; Environmental Health Perspectives Volume 107, Number 7, July 1999

7 Source: Agarwal et. al., 1996; WHO, 2000; WHO, 2001; Shrestha, 2002

8 Health Impacts of Kathmandu's Air Pollution: Prepared for KEVA Secretariat under USAID/Nepal Cooperative Agreement; Submitted by Clean Energy Nepal (CEN) & Environment and Public Health Organization (ENPHO); September 2003: This report has a considerable bibliography, which include reports from the World Bank, UK Department of Transport & WHO. It is available at http://www.keva.org.np/publication/KEVA's%20Publication/Health%20Impact%20Final%20report.pdf

9 The Ontario Medical Association (OMA)

10 Ransom MR, Pope CA lll. Elementary school absences and PM10 pollution in Utah Valley; Environ Res 1992; 58: 204-219

11 Department for Environment, Food & Rural Affairs; Air Quality Strategy: Particles, Benzene, Carbon Monoxide and Polycyclic Aromatic Hydrocarbons; October 2001

12 Planning Applications Sub-Committee 10 October 2005 Item No 7: Planning Applications Sub-Committee 10 October 2005: Report For Consideration At Planning Application Sub-Committee

13 http://www.defra.gov.uk/ENVIRONMENT/airquality/news/news-03.htm

14 OPPC S3.01: Integrated Pollution Prevention and Control (IPPC): Guidance for the Cement and Lime Sector: Environment Agency 2001

15 http://www.infobuddhism.com/gravel/healthissues.htm

20.0 MAYOR OF LONDON POLICY ON AIR QUALITY.

Improving air quality

20.1 Policy 4A.6 Improving air quality

20.2 The Mayor will and boroughs should implement the Mayor's Air Quality Strategy and achieve reductions in pollutant emissions by:

- improving the integration of land use and transport policy and reducing the need to travel especially by car (see Chapter 3, Part C)
- promoting sustainable design and construction (see Chapter 4, Part B)
- identifying environmental constraints on polluting activities to ensure protection of local air quality, setting out criteria in respect of different pollutants against which plans and policies can be appraised and proposals assessed

20.3 4.15 In accordance with the objectives of the National Air Quality Strategy, the Mayor's Air Quality Strategy seeks to minimise the emissions of key pollutants and to reduce concentrations to levels at which no, or minimal, effects on human health are likely to occur. The Mayor's strategy provides guidelines on policies for UDPs and Supplementary Planning Guidance and refers to applicable documents. It also gives

20.4 guidelines on air quality assessments and outlines steps local authorities can take to improve air quality.

20.5 4.16 Boroughs should ensure their UDPs include policies that seek to reduce levels of pollutants referred to in the government's National Air Quality Strategy having regard to the Mayor's Air Quality Strategy, and taking account of the findings of Air Quality Review and Assessments, in particular where Air Quality Management Areas (AQMAs) have been designated.

20.6 4.17 The Mayor, together with Transport for London, the ALG, boroughs, the government and other key bodies have recently completed a study into the feasibility of establishing a Low Emission Zone in London in order to deliver air quality improvements. Consideration is being given to the result of the study and what action should be taken.

20.7 The Mayor will expect London planning authorities to ensure air quality is taken into account along with other material considerations in making decisions on development proposals and that formal air quality assessments are undertaken where appropriate to inform the decisions, particularly where proposals may affect an air quality management area.

20.8 72 The Mayor will encourage the use of appropriate conditions and planning obligations to ensure the protection of local air quality and to help work towards the achievement of the national air quality objectives.

20.9 73 The Mayor will propose that the government consider further national and international measures and mechanisms to reduce emissions of NOX and PM10 to assist in achieving the national air quality objectives in London.

20.10 79 The Mayor will work with the London Development Agency to help develop the growth of environmental industries in London, including supporting the development of fuel cells.

20.11 34 The Mayor will work with the Strategic Rail Authority to encourage passenger and freight train operating companies to investigate methods for reducing emissions from diesel trains.

21.0 DOCUMENTED DUST IMPACT NEAR LC WEMBLEY SITE

21.1 The closest neighbour to LC in Wembley is a 'travellers site'and is mentioned in a report called '**Room to Roam- English Irish Travellers – a report of research, by Dr. Colem Power '** the research was funded by the community fund and was published in June 2004 as a 128 A4 size book. ISBN – 1-871414-11-3

21.2 In section **3.6 Environmental health** para4 and 5 it says:

21.3 *"The then new site was built beside an aggregate factory and residents complained of high incidence of skin abnormalities and rashes since moving on."*

21.4 *"Residents are extremely concerned about dust from the local aggregate concrete factory. They complained about babies 'choking with dust and having bad coughs'. Travellers suggested that the factory be closed down or that the travellers site is moved. The factory was built in 1999 and the management maintained that letters were sent to travellers asking them about the factory proposals. However travellers on the site did not receive them..."*

21.5 *"worker Brody [interview 2002] comment : 'May be the Asthma has a connection with the factory because you couldn't even see through the windscreen [on her car] with the dust on it.'"*

22.0 ECOLOGY

Brief Introduction

22.1 This report seeks to outline the main objections of residents of to the application by London Concrete Ltd to build and operate a concrete batching plant on railway land to the rear of Cranford Way.

22.2 This report will start by highlighting those policies of Haringey Council, which demonstrate its support for the protection of open spaces and biodiversity in the borough and its commitment to protecting and improving the quality of life and the environment of its residents. These are best expressed and largely contained within the following documents:

- Haringey Draft Unitary Development Plan (UDP) – Revised Deposit Consultation September 2004
- Haringey Biodiversity Action Plan (BAP) (Consultation draft September 2002)
- 'Better Haringey' programme
- Local Agenda 21
- Best Value Action Plan (Planning, Environmental Policy & Performance Business Plan Summary 2004-2007)

22.3 The report will then examine the desk research and field study carried out by Ecology Solutions on behalf of the applicant.

22.4 The report will seek to demonstrate that granting permission to erect a concrete batching plant will be detrimental to the ecology of the area and that this is not consistent with stated policies on the environment found in the above-listed five documents.

22.5 During the course of this report, we will call for the council to

- commission an independent study into the impact of the proposed development on the local bat population; and

- to compile an up-to-date species list to determine if the proposed development is likely to impact negatively on any other wildlife

23.0 HARINGEY COUNCIL'S POLICY ON OPEN SPACE AND THE ENVIRONMENT

Unitary Development Plan (UDP)

23.1 The stated vision for this plan is:

> *"The borough becomes a high quality environment where all can prosper and enjoy a good quality of life and where there is choice and quality in the services and opportunities that the borough can provide."*

23.2 In policy G9, the council discusses its priority areas in the borough. It is here that we find its definition of the Western Area of Haringey, in which the proposed concrete factory would be sited:

> *"The Western Area in contrast to the other two areas does not suffer from deprivation or population transience. West Haringey is a predominantly residential area with the borough's heaviest concentration of conservation areas. The priorities in this area are ones of environmental management, improving the quality of life and its environmental assets such as its attractive open spaces." (Western Area para. 3.23)*

23.3 We believe it is highly significant that the designated development site is adjacent to Stroud Green Railway Bank, which is designated as an area of borough importance in schedule 11 of the UDP. Furthermore, the northern tip of the survey site forms part of a Green Corridor as defined in the UDP.

23.4 In chapter 8 of the UDP, on Open Spaces, section OS5 (entitled 'Ecologically valuable sites and their corridors') states that:

> *"Councils will not permit development on or adjacent to Sites of Special Scientific Interest (SSI's) … or other sites of nature conservation value or ecological importance unless there will be no adverse effect on the value of the site for nature conservation caused by the development and its subsequent land use."*
>
> *"Green Corridors form important links between the nature conservation sites…. ...Wherever possible the continuity of these corridors should be protected and their green nature enhanced in order that they do not become fragmented and thereby diminish their ecological value."*

23.5 Later, in OS 15 on bio-diversity, the document states:

> *"All applications and development should respect the biodiversity of the borough, and ensure that the biodiversity is not diminished in any form, and that every opportunity is taken to enhance it." (para 8.36)*

23.6 This issue of Bio-diversity is addressed directly and more fully in Haringey's draft Biodiversity Action Plan.

Haringey's (draft) Biodiversity Action Plan (BAP)

23.7 In appendix 8 of the BAP 'Sites of biodiversity importance in Haringey', Stroud Green Railway Bank is designated as a *Railway Lineside* habitat. The associated species list is to be completed.

23.8 Appendix 5 to the BAP identifies a Habitat Action Plan for Railway Linesides. The stated aim is:

> *"To maintain trackside habitat as a green corridor and as important habitat in its own right for certain key species."*

23.9 This section confirms:

> *"The overground railway lines in Haringey are important areas of habitat in their own right, and they also provide important green corridors for wildlife. They are: The East Coast Mainline from Finsbury Park to Alexandra Palace and beyond."*

23.10 The council asserts:

> *"We will seek to protect the habitat value of the freight sidings on the East Coast Mainline at Hornsey … We will seek to ensure that the UDP gives appropriate recognition to the habitat value of railway lands."*

23.11 Appendix 7 to the BAP is a Species Action Plan and includes a lengthy and detailed Bat Action Plan, which aims to*:*

> *"reverse the current population declines in Haringey's bats."*

23.12 The council recognises that:

> *"Haringey has many habitats important for bats, including: railway line-sides and tunnels." And that: "Bats are an excellent indicator of the quality of our environment, as their complex ecological requirements leave them highly sensitive to environmental changes."*

23.13 Specific factors affecting the species included are:

> *"Loss of feeding habitats due to land use change and destructive developments" and "Disturbance to commuting routes through loss of green corridors or introduction of new features on flight lines."*

Better Haringey

23.14 Better Haringey is a new £5 million programme, launched this summer (2004) to clean up the borough. The aim is to improve the quality of life for people in Haringey. A £60,000 advertising campaign was carried on the radio last year. As reported in the local press,

> *"The green theme of the ads is heightened by the sound of tweeting birds" (source: the Crouch End and Hornsey Journal, 8/7/04)*

Local Agenda 21

23.15 Haringey Local Agenda 21 (LA21) Action Plan gives details of the steps that the council, businesses, voluntary groups and individuals can take to ensure that the borough has a sustainable development that does not destroy the earth's natural resources.

Best Value Performance Plan 2004 – 2005

23.16 Within this document, the Planning, Environmental Policy & Performance Business Plan Summary 2004 – 2007 includes the following key objectives:

- To improve customer care, consultation and community engagement
- To enhance the quality of the environment and improve sustainability

23.17 One of the key things Planning, Environmental Policy & Performance will deliver in 2004 – 2005 is:

> *"Ensuring planning policy and area strategies provide for the protection and enhancement of green spaces and the creation of leisure opportunities."*

24.0 THE ECOLOGICAL ASSESSMENT OF THE SITE BY ECOLOGY SOLUTIONS

24.1 This report was produced to assess the potential environmental impact of the proposed development on the Cranford Way estate. It builds on a previous report by Cresswell Associates in 2003, commissioned for the first application and critiqued in detail as part of our submission to the application review process.

24.2 By way of background, it is worth noting that in this earlier submission, in September 2004, GreenN8 pointed out that the Cresswell report was based neither on an up-to-date species list, nor a bat roost survey for this area. We argued that for a true and accurate assessment of the full impact of setting up and operating a concrete factory in this location, further detailed and independent ecological studies should be undertaken.

24.3 Since our original observations were made, it appears that no such independent studies have been completed. To our knowledge, a site visit was made by the then council conservation officer, David Bevan for the purposes of collating an up-to-date species list, but at the time of writing the results of his findings do not appear to have arrived in the public domain.

24.4 Cresswell Associates' desk survey revealed that there are *seven* sites of nature conservation importance within 1km of the survey area. All of these sites are protected by the planning policies in the UDP and the Borough's Biodiversity Action Plan contains action plans for many of these habitats.

24.5 London Concrete's latest amended submission does nothing to address or lessen our concerns about the negative environmental impact of a concrete factory on the neighbourhood and surrounding areas.

24.6 It is worth noting at this stage that the ecological report's validity is in part dependent upon other reports, commissioned by London Concrete to assess the potential impact of dust and noise from the development. If the credibility of these other reports is subject to doubt, then this fundamentally undermines the ecological assessment.

24.7 It is also of concern to us that, in contrast to Cresswell's report, the Ecology Solutions report makes no attempt to identify any mitigation procedures. Cresswell listed no fewer than SEVEN actions that needed to be taken in order to mitigate the impact on the environment.

- Retaining as much vegetation as possible

- Augmenting the link with the Stroud Green Railway Bank
- Maximising biodiversity by creating artificial habitats
- Landscaping, using native species
- Undertaking site clearance outside the bird breeding season
- Adopting special precautions when clearing Japanese Knotweed
- Supervision during clearance at southern end of the site by an experienced ecologist to avoid killing any reptiles that may be present

24.8 The number of mitigation action points requested in this case clearly suggested that the impact on the ecology of this area could be considerable. In our view, it casts grave doubt on the validity of the new report that it should ignore these issues.

24.9 The Ecology Solutions report ignores other issues raised in the Cresswell report too. For example, Cresswell reported that:

> *"overall, there will be a decrease in the amount of semi-natural habitat within the survey area … this will lead a small decrease in the amount of habitat suitable for use by terrestrial invertebrates, nesting and foraging birds and reptiles in the local area." (5.1)*

24.10 And elsewhere:

> *"the potential exists for the indirect disturbance of breeding birds using the adjacent habitats during operation of the batching plant." (5.3)*

24.11 Ecology Solutions makes no mention of these matters. Are we to assume that they are no longer important? Or is the new report deliberately glossing over them in order to make the applicant's case appear more robust?

24.12 Ecology Solutions also claims – without any apparent supporting evidence – that:

> *"both the ecological [or "green] corridor and Stroud Green Railway Bank are offsite and will not be directly affected by the proposed development." (5.7.6)*

24.13 However, in para 5.2 of its report, Cresswell had admitted that the integrity of the ecological corridor would only be maintained *"**to some extent**"* – a critical phrase, which demands a truly independent report to assess exactly to what extent the corridor's integrity would actually be lost.

24.14 In any event, this clearly falls short of the requirement laid down in the UDP and highlighted in section 1 of this report that:

> *"Councils will not permit development on or adjacent to Sites of Special Scientific Interest (SSI's) … or other sites of nature conservation value or ecological importance unless there will be no adverse effect on the value of the site for nature conservation caused by the development and its subsequent land use."*

24.15 Elsewhere, on the subject of **birds**, Ecology Solutions admits that:

"the scrub and trees present in the western areas of the application site are likely to be used by a range of common breeding birds." (4.5.1)

24.16 Later it states:

"in order to avoid any potential offence, it is recommended that any tree or scrub clearance is undertaken outside the bird nesting season (March to end of July)." (5.10.4)

24.17 In our view, this does not go far enough. We would again cite Cresswell:

"Stroud Green Railway Bank is also likely to provide an important feature for birds. Further surveys would be necessary in order to fully assess the value of these habitats for use by breeding birds." (3.2.12)

24.18 But it is the presence of **bats,** which we feel to be the most significant, specific wildlife concern.

24.19 Independent specialists advise that early August is the prime time to make bat recordings, as the young bats leave their roosts at this time. Ecology Solutions carried out their site surveys during the months April – June, which may explain why there were so few sightings.

24.20 A survey commissioned by a local resident and carried out last August by the London Bat Group identified **FIVE different species of bat in one night**. One of these was endangered. The report notes this to be "unusual" and suggests, that "this vicinity is an important area that needs further investigation before any works proceed."

24.21 English Nature has already written to Haringey Council (before it was made aware of residents' sightings) to confirm paragraph 47 of the Planning Policy Guideline: Nature Conservation (PPG9). This states that the presence of a protected species is a material consideration when a local planning authority is considering a development that, if carried out, would be likely to result in harm to the species or its habitat. Furthermore, the Wildlife and Countryside Act 1981 specifies that advice should be sought from English Nature on any works that might affect bats and their roosts.

24.22 As at least one of the species recorded recently was a much endangered one, we understand it is covered by further EU laws which state that its feeding grounds are protected from development, not just its roosting grounds. The Council needs to be absolutely sure that there are no bats feeding or roosting on this site. This can only be done by commissioning an independent body to undertake proper recordings.

24.23 **We therefore request that the Council commissions its own independent bat survey of the site, to be carried out as soon as possible by an ecology consultant registered to record bats.**

24.24 We would also observe that the desk research used by both Cresswell Associates and Ecology Solutions is out of date. In order to evaluate and assess the true impact that London Concrete's proposal will have on this area, it is crucial that the Council has its own up to date species list.

24.25 ***We request that the Council compiles its own up-to-date species list for the application site and for the Stroud Green Railway Bank. This should include an evaluation of the site as a foraging habitat for species, as well as for breeding and nesting birds.***

24.26 As previously stated, the findings of both Cresswell's and Ecology Solutions' reports are reliant upon the credibility of the noise and dust reports also commissioned by London Concrete. These reports claim that there will be no discernable increases in the levels of airborne dust and background noise on and around the site. However, this assertion will be hotly contested in other sections of this report.

24.27 According to English Nature, **"Dust can harm invertebrates indirectly by eliminating their habitat or food plants or making them effectively unavailable and directly through their being toxic or causing mechanical damage."** ("Species Conservation Handbook"). Any impact on invertebrates and small insects would be passed on along the food chain to birds, bats and other species.

24.28 The Ecology Solutions report also makes no mention of the noise generated by the operation of the factory and the large number of HGV movements to and from the site, which have the potential to disturb breeding birds.

24.29 A significant additional concern arises from the plan to locate a washout and settlement pit system alongside the southern site boundary which lies adjacent to the Stroud Green Railway Bank. This is likely to result in contamination of foraging habitat by dirty run-off water from this operation.

25.0 SUMMARISING THE ECOLOGICAL CASE FOR REFUSING THE DEVELOPMENT

Key factors

25.1 The proposed site for development is adjacent to land designated in Haringey's UDP (appendix 11) as a Site of Local Borough Importance, referred to as the Stroud Green Railway Bank. Policy OS5 under the umbrella policy on Open Spaces states that development on or adjacent to such sites must have no adverse effect on the value of the site for nature conservation. The Cresswell Report, commissioned by the applicant in 2003, effectively admits that this condition cannot be met. The Ecology Solutions report does nothing to prove otherwise.

25.2 Dust from the operation and dirty run-off water produced when vehicles and facilities are washed out will contaminate the area and threaten the existence of plant-life and small invertebrates forming a vital part of the food chain for birds, bats and other species. English Nature is unequivocal about the dangers to animal life from dust.

25.3 Activity at the trackside and sidings, such as the unloading of aggregates and clearance of much vegetation on and around the site, will endanger any ecological activity in this green corridor and discourage further use by existing species.

25.4 In terms of assessing the full extent of the impact on animal life, the lack of an up-to-date species list or bat roost survey for this area makes this impossible.

25.5 The Cresswell ecological appraisal report calls for further surveys to be carried out to assess the value of the area for birds. Until and unless such surveys are taken, it would be improper to grant approval for this development. The Ecology Solutions report does not, in our view, fulfil these needs as it is neither comprehensive nor independent.

25.6 The Cresswell report also lists no fewer than SEVEN actions that need to be taken in order to mitigate the impact on the environment. Despite the fact that these are ignored in the Ecology Solutions report, they remain valid and clearly suggest that the impact would be potentially very high.

25.7 The siting of a heavy industrial processing plant in the heart of a family-orientated, residential area is totally inappropriate and out of keeping in a part of the borough defined in Haringey's UDP as:

> *"a predominantly residential area with the borough's heaviest concentration of conservation areas. The priorities in this area are ones of environmental management, improving the quality of life and its environmental assets such as its attractive open spaces."*

25.8 Allowing the development will not contribute to achieving the stated aims of Haringey's Biodiversity Action Plan, which is *"to conserve, enrich and celebrate the wildlife in Haringey."* (Haringey Biodiversity Action Plan BAP)

25.9 Passing the application would be contrary to the aims of Haringey's Biodiversity Action Plan to maintain and protect trackside habitat and to protect the habitat value of the freight sidings on the East Coast Mainline at Hornsey (Appendix 5 BAP)

25.10 The operation of a concrete factory in this area will not help the council to achieve the aims of its Bat Action Plan contained in appendix 7 of the BAP; that is to reverse the declining bat population in the borough. A bat survey is essential to determine the potential impact of this development on the local bat population.

25.11 The proposed development will not improve the quality of life for people in Haringey – the stated aim of the Better Haringey programme. Asthma sufferers, babies, children, the elderly, cyclists, pedestrians and motorists will all be at risk from the factory and its associated operations.

25.12 The development site is dangerously close to the childrens' play area in the grounds of Chettle Court. Preserving the safety and well-being of the habitat and foraging ground of the borough's young people should also be a priority for the council.

PHONE NO. : 020 8965 4921

30 SEP. 2005 07:40AM P1

Fax

FAX OFFER

Brent NHS

Primary Care Trust

Working With Our Partners For A Healthier Brent

Craven Park Health Centre
Shakespeare Crescent
London
NW10 8XW

TEL 020 8965 0151
Fax:020 8965 4921

Email: charlie.roe@brentpct.nhs.uk

To: Patsy

From: Charlie Roe Health Visitor

Date: 30-9-05

Pages: 2 (inc this one) Fax 02084899 5858

☐ Urgent as required ☐ For information ☐ Please comment

Dear Patsy

As promised

Charlie

FROM : CRAVEN PARK HEALTH CENTRE PHONE NO. : 020 8965 4921 30 SEP. 2005 07:41AM P2

Brent NHS
Teaching Primary Care Trust

Working with our partners for a healthier Brent

Craven Park Health Centre
Shakeseare Crescent
Stonebridge
London
NW10 8XW
Tel 020 8965 0151
Fax 020 8961 1940
Email charlie.roe@brentpct.nhs.uk

29th September 2005

Dear Patsy Twomey

Subject: London Cement and Lynton Close, Neasden NW10 0JE

Further to our telephone conversation this afternoon. I can confirm that in 2003 a number of residents who bordered London Cement at Lynton Close did raise concerns about dust in the atmosphere after delivery of 'cement'. They felt it increased their chance of gaining coughs and colds.

At the time my colleague Patricia McGrossan, a social worker for Central Brent Sure Start, who worked for Brent Irish Advisory Service (BIAS), contacted London Cement and there were two meetings. One meeting was held on Lynton Close site. Staff from London Cement did a walkabout and Patricia McGrossan and residents informed them about the concerns about dust particularly in warm weather. London Cement pointed out that the water sprinklers came on to keep down dust contamination. It was noted at that time that water sprinklers tended to spurt water on to the children's play area. I believe this problem was corrected. However, London Cement staff did come onto site for two meetings. They took place before Patricia McGrossan took another social work job in Harrow.

If I can be of any further help please don't hesitate to get in touch with me.

Yours sincerely,

Charlie Roe

Charlie Roe
Sure Start Health Visitor

Copy for Adam Coffman of the letter to the Insurance Company
Fax 0871 247 4514

8A North Villas
Camden Square
London NW1 9BJ

17 June 2005

Thank you very much for speaking to me at the TUC/CCA Conference and for giving me the opportunity to explain some of my work with RMC.

My daughter was killed by a left-turning concrete mixer lorry while she was cycling to her work in the City of London in 2000. In 2001 the driver was prosecuted but acquitted following a completely incompetent criminal justice process.

I therefore decided to buy shares in RMC and I attended their AGM in 2002, in order to speak about what had happened to my daughter and the various actions which I felt were necessary to deal with the numerous questions which had arisen during the trial, such as the issue of visibility on the left hand side of the vehicle, visibility of indicators, etc etc.

My fundamental point was that road deaths are preventable, and bereaved families are entitled to expect that the same sort of health and safety approach should apply to work-related deaths on the road as applies in fixed premises, namely when a death or serious injury has occurred, there should be a systematic and rational analysis of what has occurred and some creative thinking about what can be done to prevent future incidents.

RMC contacted me after the AGM to say that they agreed with my approach and would like to work with me on remedial action.

We began with making a safety awareness video for all their drivers about the whole issue of vulnerable road users: cyclists, pedestrians, children etc. This has since been adopted by other firms and is also used by the Driving Standards Agency in their training of HGV drivers.

Shortly after the video was finished I received some minutes of a meeting which had been held at Transport for London's offices; the meeting in question had been requested by the City Police who said they had just had their fifth death of a cyclist involving a concrete mixer lorry and they asked 'why so many cement lorries?'. A good question - and so I forwarded the notes of this meeting to RMC. At about the same time I received a call from the charity 'RoadPeace' saying that their helpline had received a call from a young woman who was disabled after being hit by a concrete mixer lorry and asking me to contact her to see if there was anything I could do to help. I spoke to her and when I realised that the incident in which she had been involved, with catastrophic consequences for her, was identical to the one in which my daughter had been killed, and had taken

place only a few yards away from where my daughter had been killed in the City, I sent details of this incident to RMC also. I discovered from their Health and Safety Manager that 4 of the 5 deaths referred to in the TfL meeting were RMC lorries (the other being London Concrete) and that the young disabled woman I had been speaking to had in fact been hit by the same lorry that had killed my daughter (different driver, but same lorry and same sub-contractor).

It was therefore obvious that patterns were emerging and that further action needed to be taken, and so attention then turned to the vehicles.

All of the concrete mixer and tipper lorries operating in London have been, or are about to be, equipped with the following:

- an extra left-turn indicator at the front of the lorry just below the door of the cab;
- a sign on the back of the lorry warning cyclists about the problem of visibility on the left hand side of the vehicle;
- a large sideguard with the word 'Caution' on it on the left side of the vehicle; the sideguard also incorporates sensors which will set off a bleeper alarm in the driver's cab when a cyclist is alongside;
- the sensor mechanism is also connected to a voicebox so that if the driver wishes to turn left, the indicators will activate a voicebox which says 'Caution. Truck Turning Left' as an audible warning to anyone alongside;
- there is also a 'fisheye' mirror on the front left hand corner of the vehicle; this was 'on trial' until recently but has been found to improve visibility of cyclists and pedestrians along the front and along the left side of the lorry and so this will also now be fitted to all the RMC lorries operating in London.

I will put in the post to you the training video and also the ITV 'London Tonight' feature on the vehicle adaptations, together with more information on the sensor technology and the fisheye mirror. The sensor costs £370 and the mirror about £50, so none of this is exorbitantly expensive.

RMC has also commissioned RoSPA to produce a short video/DVD (about 5 minutes) which will be circulated to all of their cycle training centres about the potential dangers of HGVs to cyclists. This is now at 'final draft' stage and will be ready in about a month's time. The person responsible for this at RoSPA is Kevin Clinton.

RoSPA has also produced a poster, financed by RMC, about the different perceptions of HGV drivers and cyclists, which can be placed in depots as part of a general awareness-raising exercise. Spare copies of this are also available through RoSPA.

Please let me know if you require any further information on any of this. The person I deal with at RMC is their Health and Safety Manager, Richard Claydon, and I know that Richard would also be happy to provide further information if required. I would be very grateful if you could return the two videos as they are my only copies.

Thank you for your interest.

Yours sincerely

Cynthia Barlow

INCREASED RISK TO HEALTH OF A CONCRETE FACTORY IN HARINGEY

Dr Gabi Brogan MBChB MRCP
Dr Paul Brogan MBChB BSc MRCPCH MSc PhD
Dr Janet Dearden MBBS BSc MRCP
Dr Giles Hellawell MD MA BMBch FRCS

As four medical doctors living in the crouch end area we have concerns regarding the potential health risks of the proposed concrete factory.

After attending local meetings we were concerned about the potential health risks to our local community. The area surrounding the proposed site is densely populated with young families and children, with many local schools.

Haringey has declared the whole borough as an Air Quality Management Area and will fail to meet the governments National Air Quality Strategy standards for PM10 and oxides of nitrogen by the required date.

The Haringey Health report 2003 showed that Haringey has the highest incidence of asthma and ensuing admissions to hospital

We conducted an extensive literature search using Pub Med, Medline, Embase and the web and contacted leading experts in the field of asthma, respiratory illnesses and environmental health.

We believe the health risks are as follows:

1. POLLUTION

With a minimum of 56 HGV's passing through our streets each day we are particularly concerned about the general pollution and emission of PM10's which are a proven risk to health. There are numerous associations- acute respiratory infections, cardiovascular disease, lung cancer, asthma and asthma attacks[1-4], irritations in the eye and low birth weight . There is a direct relationship between the level of PM10's and hospital admissions and mortality[3,6,7] .

There is an association between lung cancer and residence in urban areas and in areas with emissions from certain industries[5]. Three cohort studies conducted in the USA in the 1990's showed a relation between several indicators of air pollution levels and cancer risk among residence [6] . Dockery et al, in the Six-City Study, compared the most versus the least polluted cities and found that fine particulate matter (PM10) was associated with lung cancer mortality (15-20% increase in risk per $10\mu g/m^3$).
The World Health Organisation amongst others agree that, in fact, there is no safe level of PM10's and that even small increments in the atmosphere leads to exponential adverse effects on health[11].

2. CONCRETE PROCESSING

The studies implicating concrete and its constituents as a health risk are varied. There is no doubt that exposure to these materials is a serious risk to health. Our concern is that whilst the newer plants have safeguards to protect workers and minimise dust exposure it will never be 100%. There are risks of leakage from the plant and the HGV's carrying the cargo of cement and this could lead to all of the health hazards that we have highlighted above.

REFERENCES

1. Heinrich et al. Traffic at residential address, respiratory health and atopy in adults: the national German Health Survey. Environomental research 98 (2005),240-249
2. Hwang et al. Traffic related air pollution as determinants of asthma among Taiwanese school children. Thorax 2005; 60
3. Oftedal et al. Traffic related air pollution and acute hospital admissions for respiratory disease in Dramman, Norway 1995-2000. Eur J of Epidemiology 18:671-675,2003
4. kunzli et al. Public health impact of outdoor and traffic-related air pollution: a European assessment. Lancet 2000;356:795-801
5. Pless-Mulloli et al Lung cancer, proximity to industry and poverty in northeast England. Environ Health Perspec 1998;106:189-96
6. Dockery DW. An association between air pollution and mortality in six US cities. N Engl J Med 1993;329:1753-9
7. Arden pope et al. Particulate Air Pollution and daily mortality on Utah's Wasatch Front; Environmental Health Perspectives 1999, 107(7)
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9. Linch KD. Respirable concrete dust silicosis hazard in the construction industry. Appl Occup Environ Hyg. 2002 Mar;17(3):209-21
10. Fano et al. Occupational and environmental exposures and lung cancer in an industrialised area in Italy. Occup. Environ. Med. 2004;61;757-763
11. WHO 2000,2001

SIGNATORIES

Dr Gabi Brogan

Dr Janet Dearden

Dr Paul Brogan

Dr Giles Hellawell

Health and Safety record of London Concrete Ltd and Parent Company Aggregate Industries UK Ltd

The following information was found on http://www.hse-databases.co.uk/ on 30.9.04

London Concrete Limited

Summary London Concrete are being prosecuted for failure to ensure the safety of employees whilst working on a conveyor belt.

Case No. F050000121 Details for Breach 01

Defendant London Concrete Limited
Court Name Marylebone **Court Level** Magistrates Court
Act Health and Safety At Work etc. Act 1974, Section 2, Sub Section 1
Regulation
Date of Hearing 24/07/2000

Result Guilty fine
Fine £9,000.00
Case Details
Location of Offence
Address Bow Depot
Wick Lane
Bow
LONDON
E3 2TQ
England **Region** LONDON
Local Authority Tower Hamlets
Industry Manufacturing
Main Activity 26510 - 26510 Manufacture of cement
Type of Location Fixed

HSE Details

HSE Group ENG/METALS/B **HSE Directorate** Field Operations Directorate
HSE Area 05 **HSE Division** London & South East

Improvement Notice

1 Matching results found from 38152 total records : Showing Page 1 of 1, results 1 to 1
Notice Number Recipient's Name Notice Type Issue Date Local Authority Main Activity

F050002461 London Concrete Ltd Improvement Notice 20/03/2003 Brent 26630 Manufacture of ready mixed concrete

Notice F050002461 served against London Concrete Ltd on 20/03/2003
Notice Type Improvement Notice
Summary Workplace Regs 1992, Reg 17. The workplace is not organised so that vehicles & pedestrians can circulate in a safe manner. Employees & visitors are at risk of serious injury. Improvement notice also issued on Aggregate Industries who share the site.
Compliance Date 14/06/2003 **Revised Compliance Date**
Result Complied With
Breaches involved in this Notice
Location of Offence
Address Old Charrington Yard
Great Central Way
Neasden
LONDON
NW10 0UZ
England **Region** LONDON
Local Authority Brent
Industry Manufacturing
Main Activity 26630 - 26630 Manufacture of ready mixed concrete
Type of Location Fixed

HSE Details

HSE Group MG London NW **HSE Directorate** Field Operations Directorate
HSE Area 05 **HSE Division** London & South East
==========

Aggregate Industries UK Limited

8 Matching results found : Showing Page 1 of 1, results 1 to 8

Case Number Defendant's Name Offence Date Local Authority Main Activity

F010000650 Aggregate Industries UK Limited 20/02/2001 North Cornwall 14110 - 14110 Quarrying of stone for construction
F140000174 Aggregate Industries UK Limited 04/10/1999 Doncaster 14210 - 14210 Operation of gravel and sand pits
F180000248 Aggregate Industries UK Limited 05/12/1998 Copeland 14110 - 14110 Quarrying of stone for construction
F180000250 Aggregate Industries UK Limited 01/03/1999 Lancaster 14120 - 14120 Quarrying of limestone, gypsum and chalk
F180000282 Aggregate Industries UK Limited 01/01/1999 Rossendale 14110 - 14110 Quarrying of stone for construction
F190000335 Aggregate Industries UK Limited 19/10/2000 Teesdale 14110 - 14110 Quarrying of stone for construction
F200000431 Aggregate Industries UK Limited 19/09/2000 ABERDEENSHIRE UA 45230 - 45230 Construction of highways,roads,airfields and sports facilities
F210000379 Aggregate Industries UK Limited 05/01/2001 West Dumbartonshire UA 45230 - 45230 Construction of highways,roads,airfields and sports facilities

9 Matching results found : Showing Page 1 of 1, results 1 to 9
Case/Breach Defendant's Name Hearing Date Result Fine £ Act or Regulation

F010000650/02 Aggregate Industries UK Limited 21/08/2003 Guilty Fine 150,000.00 Health and Safety At Work 1974 / 3
F010000650/03 Aggregate Industries UK Limited 21/08/2003 Guilty Fine 25,000.00 The Management Of Health And Safety At Work Regulations 1999
F190000335/02 Aggregate Industries UK Limited 07/04/2003 Guilty Fine 30,000.00 Health and Safety At Work 1974 / 2
F210000379/01 Aggregate Industries UK Limited 09/05/2002 Guilty Fine 12,000.00 Health and Safety At Work 1974 / 3
F200000431/01 Aggregate Industries UK Limited 23/01/2002 Guilty Fine 2,000.00 Health and Safety At Work 1974 / 3
F180000282/01 Aggregate Industries UK Limited 08/09/2000 Guilty Fine 60,000.00 Health and Safety At Work 1974 / 2
F140000174/01 Aggregate Industries UK Limited 20/04/2000 Guilty Fine 15,000.00 Health and Safety At Work 1974 / 2
F180000250/01 Aggregate Industries UK Limited 19/11/1999 Guilty Fine 10,000.00 Health and Safety At Work 1974 / 2
F180000248/01 Aggregate Industries UK Limited 05/10/1999 Guilty Fine 1,000.00 The Provision and Use Of Work Equipment Regs 1998

Improvement Notice

9 Matching results found from 38152 total records : Showing Page 1 of 1, results 1 to 9
Notice Number Recipient's Name Notice Type Issue Date Local Authority Main Activity

F200005815 Aggregate Industries UK Limited Prohibition Notice Immediate 28/04/2004 Falkirk Unitary Authority 26630 Manufacture of ready mixed concrete
F230005425 Aggregate Industries UK Limited Prohibition Notice Immediate 15/09/2003 Sefton 45211 Construction of commercial buildings
F050002460 Aggregate Industries UK Limited Improvement Notice 20/03/2003 Brent 26260 Manufacture of refractory ceramic products
F080003250 Aggregate Industries UK Limited Improvement Notice 26/02/2003 Mid Bedfordshire 14210 Operation of gravel and sand pits
F090002689 Aggregate Industries UK Limited FEPA Improvement Notice 22/07/2002 NW Leicestershire

01300 Growing of crops combined with farming of animals (mixed farming)
F010005621 Aggregate Industries UK Limited Improvement Notice 18/02/2002 North Wiltshire
26660 Manufacture of other articles of concrete, plaster and cement
F010005622 Aggregate Industries UK Limited Improvement Notice 18/02/2002 North Wiltshire
26660 Manufacture of other articles of concrete, plaster and cement
F180003002 Aggregate Industries UK Limited Improvement Notice 25/09/2001 Copeland 14110
Quarrying of stone for construction
F080002425 Aggregate Industries UK Limited Improvement Notice 29/05/2001 East Hertfordshire
45210 Construction of buildings and civil engineering works.

Notice F200005815 served against Aggregate Industries UK Limited on 28/04/2004
Notice Type Immediate Prohibition Notice
Summary Volvo loading shovel had no left side mirror which impaired the drivers rear view.

Notice F050002460 served against Aggregate Industries UK Limited on 20/03/2003
Notice Type Improvement Notice
Summary Workplace Regs 1992, Reg 17. The workplace is not organised so that vehicles & pedestrians can circulate in a safe manner. Employees & visitors are at risk of serious injury. Improvement notice also issued on London Concrete Ltd who share the site.

Notice F080003250 served against Aggregate Industries UK Limited on 26/02/2003
Notice Type Improvement Notice
Summary You, as an employer, have not provided plant that is safe, in that the Daewoo 250 loading shovel & the Moxy 6225 dumper were fitted with reversing cameras, but they were not maintained in efficient working order so as to ensure all round visibility for the driver.

Notice F090002689 served against Aggregate Industries UK Limited on 22/07/2002
Notice Type Improvement Notice for FEPA
Summary Control of Pesticides Regulations 1986, regulation 4(4). Storage of no longer approved herbicide in farm pesticide store; enforcement notice issued requiring safe disposal by licensed contractor.

Notice F010005621 served against Aggregate Industries UK Limited on 18/02/2002
Notice Type Improvement Notice
Summary MHSW Reg 3(1) . Failure to carry out a risk assessment of a lifting operation: resulted in a load falling and injury to an employee. IN requires procedure to be put in place to ensure all lifting ops are adequately assessed.

Notice F010005622 served against Aggregate Industries UK Limited on 18/02/2002
Notice Type Improvement Notice
Summary LOLER Reg 8. Lifting operations to be planned by a competent person, be appropriately supervised and carried out in a safe manner, following injury of employee during an ad lib lifting operation.

Notice F180003002 served against Aggregate Industries UK Limited on 25/09/2001
Notice Type Improvement Notice
Summary re riska assessment of work activities at quarry face

Notice F080002425 served against Aggregate Industries UK Limited on 29/05/2001
Notice Type Improvement Notice
Summary requires production of system of work on sheeting, co-ordination and co-operation between themselves and non-employees.

Details for Case No. F010000650

Defendant Aggregate Industries UK Limited
Summary 3 informations laid against Aggregate Industries, 4 against Imerys Minerals Ltd in connection with a fatal accident when IP received fatal injuries when the 50t dumptruck he was driving reversed over the end of an aggregate stockpile being constructed by Imerys Minerals Ltd on land leased to Aggregate Industries Ltd.
This case did result from the investigation of a fatality
Offence Date 20/02/2001
Total Fine £175,000.00 **Total Costs Awarded to HSE** £15,860.35

Location of Offence
Address Melbur Quarry

Melbur Quarry
Summer Court
ST AUSTELL
Cornwall
TR8 5RD
England **Region** SOUTH WEST
Local Authority North Cornwall
Industry Extractive and Utility Supply Industries
Main Activity 14110 - 14110 Quarrying of stone for construction
Type of Location Fixed

HSE Details

HSE Group Multi Group Cardiff2 **HSE Directorate** Field Operations Directorate
HSE Area 01 **HSE Division** Wales & West

Details for Case No. F140000174

Defendant Aggregate Industries UK Limited
Summary Failure to guard tail drum of conveyor belt, resulted in employee's arm being trapped. Injured person received serious crush injuries to right arm. Guards taken off several weeks prior to accident and found within three quarters of a metre of machine.
Offence Date 04/10/1999
Total Fine £15,000.00 **Total Costs Awarded to HSE** £280.00
Breach involved in this Case

Location of Offence
Address Doncaster Coated Stone Depot
Grove Road off Station Road,
Kirk Sandall
DONCASTER
South Yorkshire
DN3 1RY
England **Region** YORK + HUMBERSIDE
Local Authority Doncaster
Industry Extractive and Utility Supply Industries
Main Activity 14210 - 14210 Operation of gravel and sand pits
Type of Location Fixed

HSE Details

HSE Group Minerals, Gas & Util **HSE Directorate** Field Operations Directorate
HSE Area 14 **HSE Division** Yorkshire & North East

Details for Case No. F180000248

Defendant Aggregate Industries UK Limited
Summary Case relates to poorly maintained mini-digger. Overhead protection removed.
Offence Date 05/12/1998
Total Fine £1,000.00 **Total Costs Awarded to HSE** £2,643.00
Breach involved in this Case

Location of Offence
Address Ghyll Scaur Quarry
@
The Hill
MILLOM
Cumbria
LA18 5HB
England **Region** NORTH WEST
Local Authority Copeland

Industry Extractive and Utility Supply Industries
Main Activity 14110 - 14110 Quarrying of stone for construction
Type of Location Quarry

HSE Details

HSE Group Services Preston **HSE Directorate** Field Operations Directorate
HSE Area 18 **HSE Division** North West

Details for Case No. F180000250

Defendant Aggregate Industries UK Limited
Summary Unsafe system of work at coating plant bins. Injured person fell into a hot and deep bin.
Offence Date 01/03/1999
Total Fine £10,000.00 **Total Costs Awarded to HSE** £2,155.60
Breach involved in this Case

Location of Offence
Address Back Lane Quarry
@
Carnforth
LANCASTER
Lancs
LA6 1BP
England **Region** NORTH WEST
Local Authority Lancaster
Industry Extractive and Utility Supply Industries
Main Activity 14120 - 14120 Quarrying of limestone, gypsum and chalk
Type of Location Quarry

HSE Details

HSE Group Services Preston **HSE Directorate** Field Operations Directorate
HSE Area 18 **HSE Division** North West

Details for Case No. F180000282

Defendant Aggregate Industries UK Limited
Summary Case follows investigation into the death of employee who received fatal injuries when he was drawn into conveyor taildrum in reclaim tunnel. Many deficiencies including poor guarding, distance guarding where fixed guarding practicable, lack of management control, custom and practice to work on conveyors unguarded whilst operating.
This case did result from the investigation of a fatality
Offence Date 01/01/1999
Total Fine £60,000.00 **Total Costs Awarded to HSE** £9,227.00
Breach involved in this Case

Location of Offence
Address Whitworth Quarry
Tong Lane
WHITWORTH
Lancashire
OL12 8BE
England **Region** NORTH WEST
Local Authority Rossendale
Industry Extractive and Utility Supply Industries
Main Activity 14110 - 14110 Quarrying of stone for construction
Type of Location Quarry

HSE Details

HSE Group Services Preston **HSE Directorate** Field Operations Directorate
HSE Area 18 **HSE Division** North West

Details for Case No. F190000335

Defendant Aggregate Industries UK Limited
Summary Fatal accident to DP 19 10 2000 . 2 offences HASAW etc Act 74 S 2, PUWER 98 reg 11.Attend Teesside Crown Court as witness for prosecution as also 4 other witnesses. For defendant barrister Fred Phillpott. For prosecution, barrister Bryan Cox. Deal struck by both barristers and agreed by Judge Moorhouse before case commenced. Company pleaded guilty to section 2, HASAW etc. Act 74 case as proved by HSE and fined £30,000 with £27,500 total costs payable to HSE direct. Reg 11, PUWER 98 case to lie on the file as agreed no causative link between the section 2 case and the fatal accident
This case did result from the investigation of a fatality
Offence Date 19/10/2000
Total Fine £30,000.00 **Total Costs Awarded to HSE** £27,500.00
Breach involved in this Case

Location of Offence
Address Hulands Quarry
Bowes
BARNARD CASTLE
Co Durham
DL12 9JW
England **Region** NORTH EAST
Local Authority Teesdale
Industry Extractive and Utility Supply Industries
Main Activity 14110 - 14110 Quarrying of stone for construction
Type of Location Quarry

HSE Details

HSE Group Multi Group Newctyne **HSE Directorate** Field Operations Directorate
HSE Area 19 **HSE Division** Yorkshire & North East

Details for Case No. F200000431

Defendant Aggregate Industries UK Limited
Summary Employee of a civil engineering sub-contractor erected a mobile lighting unit beneath an 11 Kv overhead electricity line. The unit made contact with the line, and he sustained fatal injuries. Principal Contractor had been made aware of the existence of this hazard but failed to adopt any reasonably practicable steps to mitigate against the risk posed. Reasonably practicable measures were documented within their own Safety Management System.
This case did result from the investigation of a fatality
Offence Date 19/09/2000
Total Fine £2,000.00 **Total Costs Awarded to HSE** £0.00
Breach involved in this Case
Related Cases
Location of Offence
Address A96 Gartley/Drumblade Junction
HUNTLY
AB54
Scotland **Region** SCOTLAND
Local Authority ABERDEENSHIRE UA
Industry Construction
Main Activity 45230 - 45230 Construction of highways,roads,airfields and sports facilities
Type of Location Transient (above ground)

HSE Details

HSE Group ABERDEEN/GENERAL **HSE Directorate** Field Operations Directorate
HSE Area 20 **HSE Division** Scotland

Details for Case No. F210000379

Defendant Aggregate Industries UK Limited
Summary 61 year old Clerk of Works was fataly injured after being run over by a reversing road sweeper during road reconstruction works on the A82.
This case did result from the investigation of a fatality
Offence Date 05/01/2001
Total Fine £12,000.00 **Total Costs Awarded to HSE** £0.00
Breach involved in this Case
Related Cases
Location of Offence
Address Construction
WEST DUNBARTONSHIRE
Scotland **Region** SCOTLAND
Local Authority West Dumbartonshire UA
Industry Construction
Main Activity 45230 - 45230 Construction of highways,roads,airfields and sports facilities
Type of Location Minor Construction

HSE Details

HSE Group Construction Glasgow **HSE Directorate** Field Operations Directorate
HSE Area 21 **HSE Division** Scotland