

# Response to Permit Variation Application BV99001S by

**The Small Dole Action Group** 16<sup>th</sup> March 2009.

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## 1. Introduction

We feel that to consider this application in isolation without knowledge of the site history or local knowledge is inappropriate. To put the application into context we offer the following notes:

1. The site is about 1 mile from and overlooked by the South Downs which are a proposed National Park
2. Due to the presence of clay there has been considerable abstraction and now subsequent landfill activity.
3. This site together with the adjacent site (now closed) although an ongoing problem) comprises over 60 hectares of landfill active for a duration of approximately 40 years. The Horton site has been active as a landfill site for nearly 20 years.
4. Original Planning Permission in 1990 specified completion of waste tipping in 2004, subsequent changes were to 2008 and now 2010 with restoration by 2011.
5. The base of the site is below mean sea level
6. Geography – the site extends onto the flood plain (approx 10 m AOD) towards the River Adur which is tidal at this point. The land raising by infill forms a low ridge towards the river. Preceding from the south on the A2037 one sees the ridge ahead across the plane, then rise over the ridge to drop down into the hollow where Small Dole is situated. So the village is immediately adjacent to the tip and below it. (Please see photo 1 for a view of the tip from the A2037 and Map 1 which is an old map with contours in feet showing the original site profiles))
7. Climate – this site is in the shelter of the South Downs and the prevailing wind is South-West. The wind roses shown in the Application confirm the prevailing SW direction of the wind however are rather high in wind speed. A windrose generated from site data for an emissions test in early 2008 show much lower velocities (I accept that the rose was in Spring and only for 1 month). The nearest meteorological station is at Shoreham Airport to the more exposed South of the Downs, we have not yet determined where the EA windrose is measured. Herstmonceau
8. The location of the tip is inappropriate. There is an old established Scout Camp, which is used throughout the year, immediately across the road from the tip. Adjacent to the camp is an industrial estate containing a baker. The village is in the hollow immediately below the tip and directly in the pollution path carried in the prevailing SW wind. These factors concentrate the impact of odours, dust and other pollutants on the population. See a copy of a recent OS (Map 2) for the locations of these recipients.

## 2. Comments on the Application

This section contains specific responses to the reference sections in the Application

## 2.1 Section 1 Non Technical Summary Appendix 1 Odour Management

We note that the proposed working method involves the total removal of capping in a phased sequence. We again bring to your attention that:

a) Viridor proposed a working method to WSCC during the Planning Application which did not involve total removal of capping (25% of the thickness was to be left in situ)

b). The Planning Committee voted for a motion which was – *“to ensure that the best possible standards of operation were used to control toxic emissions and odour.”*

This was written into the Planning Approval as Condition 26 – *“that the best practicable (UK) environmental standards of operation and equipment are used on site to control all toxic emissions and odours at all times save for any requirements imposed by the terms of any site permit/licence or direction issued by the Environment Agency.*

*Reason: To control and minimise the impact of noise, toxic emissions and odour from the site on both the local environment and local amenity.”*

Unless Viridor state that their envisaged working method is totally impractical, we would claim that to retain part of the capping in situ as a continuous cover layer (even if only 250mm thick) **would be better** for emissions and odour control than the revised method proposed in the Permit Variation Application. Planning consent was issued as a result of the undertaking made by Viridor not to open cells containing asbestos and this covers the whole site. The Environment Agency stated to the planning committee that they supported the proposed working method and therefore planning approval was issued on this basis.

We insist that the EA do not relax this working method, which is aimed at minimising emissions, odour, and particulate such as asbestos. EA should not **direct** that the lower standard must be used thus over-ride WSCC intentions. We do not think that it is the EA responsibility to **direct** that a working method must be used but we look to the agency to reflect the wishes of the Planning Committee in the decisions they make.

If the working method is impractical then WSCC were misled and should have the condition reconsidered by the Planning Committee. The operator Viridor has now turned the Horton site into a hazardous waste site. This action cannot be reversed therefore we insist the site is treated accordingly.

Planning Condition 24 is also applicable:

*“Unless otherwise agreed in writing with the County Planning Authority no material once deposited on the site shall be removed from the site or disturbed within the site other than in accordance with the submitted scheme of working and restoration. Save that any requirements imposed by the terms of any PPC or direction issued by the Environment Agency Waste Licensing Authority shall be considered as being an authorised amendment to the scheme.*

*Reason: To minimise disturbance to the areas and to promote the efficient restoration of the site.”*

Again we do not think the EA imposes or directs but only sets out guidelines or approves and it is the responsibility of Viridor to select an appropriate working method which both meets the guidelines and the Planning Conditions.

## 2.2 Section 1 Non Technical Summary Page 5 Table 2-1

The variation of permit condition 2.1.3. opens the permission to over tip to the entire site rather than the Planning Permission which restricts over tipping to 400,000 m<sup>3</sup> on an *area of change* within the site. The variation to the permit appears to permit removal of capping and tipping anywhere in the site. Viridor assured WSCC at the time of the Planning Application that the only area of surcharge will be within the delineated area and this was incorporated in the Planning Permission, so

Condition 7 would appear to be applicable:

*The development hereby permitted shall :-*

*(i) subject to( ii) below, not take place other than in accordance with Drawing No.s, HCP 245 'Planning Application Boundary Plan1 Rev A (dated Jan 2007), HCP 248 'Proposed Pre-Settlement Restoration Contours' (dated Feb 2007), HCP 236 'Proposed Post Settlement Restoration Contours' Rev B (dated Sep 2006), HCP3000/OCT06 'Environmental Monitoring Location Plan' (dated March 2006), D113261/LVIA/006 'Restoration Masterplan' Rev A (dated 04 Jan 2006) and Viridor's 'Site Life, Void Space and Input Rates factsheet1 (received by the County Planning Authority on 14 January 2008).*

*(ii) not involve tipping on cells 1,2,3 and 4 other than within the broken red line in accordance with (a) the pre-settlement contours shown on Drawing No, HCP 248 'Proposed Pre-Settlement Restoration Contours' (dated Feb 2007) and the proposed changes to post-settlement levels shown on Drawing No. HCP 264 'Proposed Changes to Post Settlement Levels' (dated Dec 2007) and (b) in accordance with a scheme of working to be submitted to, and approved by, the County Planning Authority prior to the commencement of tipping within the broken red line. save that any requirements imposed by the terms of any PPC direction issued by the Environment Agency (the Waste Licensing Authority) shall be considered as being an authorised amendment to the development.*

*Reason: For the avoidance of doubt and to secure a satisfactory restoration of the site.*

The License Application also mentions feathering outside the area marked with the dotted red line (which is supposed to mark the **only** area of uplift). This is inappropriate as it is so imprecisely specified as to permit opening up, tipping and re-profiling anywhere on the site. The Planning Application showed a tapered fill commencing at the red line so there should be no requirement for external feathering.

We request that the EA are not so inconsiderate as to remove these safeguards included to protect local people, workers and young scouts in the adjacent scout camp.

### **2.3 Section 3 H1 Assessment Page 10**

Although the application states “*Vehicles entering and leaving the site are sheeted to prevent the escape of litter and debris*”, we have been told by the site management that vehicles leaving the site don't need to be sheeted and it is not the responsibility of the site. Perhaps the next time we have cause to complain we should phone the police. The planning condition 33 applies and should be enforced by the Operator. If the site does not wish to take positive action then this clause is misleading. Can the EA include in the License a requirement for this to be enforced by the site operator?

### **2.4 Section 4 LFGRA Para. 2.3 Page 6 also Section 4 Appendix 2**

The waste density is calculated at 1 tonne/m<sup>3</sup> also the void calculation shows tipping continuing after the expiry of the planning permission. Norman Carreck is already in communication with EA on this topic.

A copy of the Email is attached to this response as Appendix 1

With the increased waste density (due to changing content?) the contours showing settlement figures will need amending also the gas emissions will change impacting the engine utilisation, flare requirements etc.

It has been stated by Viridor at a liaison meeting that the changes were only used as input parameters for the Gas Model but Para 2.3 demonstrates a significant change from the Planning Permission is intended.

As duration of tipping and other parameters do not match the Planning Permission, clarity is requested on the scope of the permit. According to a statement made at the liaison meeting in September 2008 the total should only be  $400\text{K m}^3 + 140\text{K m}^3 = 540\text{K m}^3$  to be tipped. There needs to be clarification on volumes and tipping rates. The application specifies a rate of 300K tonnes/annum so the tipping cannot complete 1M tonnes in two years

The amount of existing void (with date), extra amount being claimed due to change of Planning Permission and the conversion factor used (tonnes/m<sup>3</sup>) should be clearly defined together with anticipated tipping rates and completion time. It is also desirable in order to prevent any future misunderstandings that the amount of material that will be required for cover and restoration is also specified in order to avoid any double accounting. We understand that precise figures are not possible but the Operator should be able to give a reasonably accurate estimate and the EA have the flexibility to amend the license if deemed appropriate and not a violation of Planning Permission or scope of tipping.

## **2.5 Section 4 Landfill Gas Generation and Risk Assessment Page 11 Table LFGRA 2**

Side wall liner cells 1-4 specified as Natural Geological Barrier. This does not meet current Landfill Directive requirements which specify an artificial liner whose thickness may be reduced on the basis of a risk assessment. We have not seen any results for permeability of natural in situ clay; however in the CQA regarding Proof Rolling of the bases of late cells normally the general conclusion is that approximately 10 passes are required to assure  $< 1 \times 10^{-9}$  permeability.

## **2.6 Section 4 Appendix 3**

The rate of total bulk LFG produced appears to peak too early. We would expect the peak to be approximately 2 years after ceasing tipping. The parameters used for the model should be re-checked

## **2.7 Section 4 Gas Generation Risk Assessment Appendix 4a**

The table of input parameters giving the distance away from the engines and flares as ZERO appears misleading as the plume would not reach ground level for a considerable distance away from the high level discharge points. Also the year of interest is stated as 2011 which is when the emissions have been modelled as having decreased by 10%

The results indicate a probable violation of the short term UK Air Quality Limits/EAL NOX concentrations as the emissions from engines and flares would be additive not alternate values—We refer you to the previous Email dated 11/2/2009 to Matthew Thompson from Alan Brown reproduced in Appendix 2.

The Law has made very stringent requirements as to the acceptable level of pollutants resulting from the incineration of waste. However no such similar requirements have been made for the pollutants that result from the burning of gasses from flares and energy producing engines. There are many dangerous chemical compounds that are not destroyed during these processes, indeed new one are formulated. The Environment Agency has the duty to protect our community from harm therefore we have a right to the same level of protection that has been put in place for incineration.

## **2,8 Section 4 Dispersion Model Selection**

This states that meteorological data for AERMOD is an hourly sequential data file from Shoreham Airport (Elsewhere it is stated AERMOD is using Herstmonceux, and GasSim uses EA Southern Region windrose). What is the relevance of the choices! Note: currently Shoreham figures are only

available during airport operational hours (daytime).

## **2.9 Section 4 Appendix 7 AQ Executive Summary Page 97 Para 397**

The application contains this statement:

*397. Additionally, odour released when the operational cell is located towards the centre of the site will take place at height above the terrain immediately surrounding the site boundary. Therefore account has been taken of the raised nature of the landform, relative to the surrounding terrain when assessing odour emissions from the operational cell. This will reduce the tendency of the model to overestimate predicted ground-level odour concentrations at sensitive receptors near to the site boundary because elevated releases will not necessarily reach ground level in the immediate area around the site.*

Do **you** believe that emissions at ground level will not stay near the ground and follow the contours down the slope into the village? The implication of this statement is that an even higher (say 1000m) pile of rubbish would be undetectable! Complex hydrocarbons (odours) are heavier than air and can be expected to sink and flow at ground level. Can the operation of the model be reassessed in the light of this statement?

## **2.10 Section 4 Appendix 8 AQ Modelling Page 5 Section 3.2**

It states that 3 engines operating at full capacity are likely to utilise all collected gas. This is clearly incorrect as the flare is in continuous use and apparently at a high level. Is there sufficient spare capacity in case of a sudden shutdown of all engines (e.g. as previously occurred, resulting in an emergency situation, when a digger damaged the main electrical connection to the grid) during a period of high gas production.

## **2.11 Section 4 Appendix 8 AQ Modelling Page 5 Section 3.3.1**

Cumulative emissions of NOX from the engines and flares are shown by my rough calculations to violate the National NOX standards. We note that the figures provided from the model in the application are separately published engine, flare and back ground figures. Cumulatively they show the NOX standards being exceeded. We would expect the worst location would occur within the site (probably where the Biomag is operating). With regard to the NOX levels predicted by the model perhaps Horsham District Council should be requested to monitor on the A2037 as the predicted levels are in excess of their normal monitoring point on the A281.

## **2.12 Section 4 Appendix 8 AQ Monitoring Page 7 Section 3.4**

States that the Herstmonceux weather records are used. The wind rose appears different from the Horton site, Shoreham Airport or EA. Horton is probably in a wind shadow so wind velocities will be lower than more exposed locations. Where is the EA Southern Region windrose generated?

## **2.13 Section 5 Hydro geological Risk Assessment Page 5 Section 3.0**

The future steady state leachate generation rate is stated as 32 m<sup>3</sup>/day (c.f. current CEMEX site at 200 m<sup>3</sup>/day). It is currently stated that one tanker per day is more than sufficient to cope with existing leachate production. (How big is a tanker?) and the levels are stated as having been lowered. The Q4 2008 Environmental Review does not appear to show the reduction.

## **2.14 Hydro geological Risk Assessment Page 7 Section 4.1**

Leachate trigger levels – approximately 10-15 m leachate depth. Is this appropriate as the side walls are only proof rolled to 2 m? Also in the past, leachate levels higher than the height of the southern flank walls have been reported on site. As there appears to be no barrier to prevent equalisation of leachate levels throughout the site (no high inter cell bunds) when capping is completed this would potentially result in positive upward pressures on the capping.

## **2.15 HRA Review Page 1 of 8**

States *Saturated Vertical Pathway – No vertical pathway*. We would have expected the pollution would reach the green sand through the clay. The drawing OTS - Conceptual Hydro geological & Risk Assumed Scenarios shows the Saturated Vertical Pathway as the route. The drawing also shows a concave downwards clay/sand boundary. The geological drawing submitted for the original planning application UB/51/90 shows a clay/sand boundary as slightly convex upwards, which is the direction which would be expected on the Weald anticline and matches with the borehole data. Thus the drawing OT5 gives the impression of a thicker clay layer than actually exists. A marked up drawing is attached also a copy of the geological plan from the original planning application.

### **3. General Comments on the Site**

This section contains general responses to items not covered by the Application

#### **3.1 Basal Construction**

This application would result in cells which have been permanently capped being re-opened and having biodegradable waste tipped on top. This is in contravention of the current Landfill Directive regulations.

Uplift is over cells stated as permanently capped. The cells were constructed sequentially from 1990 (cell 4 constructed 1994) so early cells will have been constructed to the standards of the 1974 Control of Pollution Act and later cells will be 1994 Environmental Protection Act. The last cells should be to current regulations. We have not yet seen the early CQA regarding construction of cells 1-3, but cell 4 does not appear to have an artificial liner and not even proof rolling was described. This is on the thinnest thickness of geological clay and at the base of the strata where the uniformity is poor. The existence of the SSSI illustrates that the clay is not uniform, and lenses of extraneous material within the clay have been noted in CQA. In later cells (higher in the clay strata) it was determined that 10 passes of proof rolling were required to consolidate the base of cells to meet the  $1 \times 10^{-9}$  permeability figure. The ground water monitoring and earlier information from proving bores for the clay extraction should be reviewed to confirm the adequacy of the clay. The borehole 1HT010WM is 12m deep with 4 m of green sand at the base. If the drawing provided with the original Planning Permission UB/51/90 *Geological Data Points and Contours on Base of Gault Clay* is valid then only the last 10 cm should have been within the green sand. The borehole data also indicates that drilling was through damp material from 2.5 m down. We would suspect that the reason that the clay was not extracted at this top end of the site is due to quality problems for cement production.

#### **3.2 Side walls**

Up to ground level the side walls in earlier cells were in situ clay. In later cells where the walls went above ground level the extra height was built up by tipped clay but not apparently consolidated. In the later cells the face of the in situ clay wall was only proof rolled to a height of 2 m above the base. The permitted levels of leachate have been permitted to increase from the original 2 m above base to several meters. The height of the leachate (although reduced by tankering away 1 load a day) is still (Q4 2008 figures) being measured well over this 2 m proof rolled height. This is not the containment specified in the regulations.

#### **3.3 Groundwater**

Alan Brown has already raised concerns regarding ground water monitoring whether monitoring is adequate. The main points are:

- a). Direction of ground water flow – we would have expected the flow to be from the south beneath the Downs towards the exposure of the Green sand north of the site. As boreholes 1HT004WM and 1HT006WM are no longer measured the direction of flow cannot be verified.
- b). Wells 1HT002WM and 1HT007WM are reported as giving rather erratic water depth measurements (in one case below mean sea level!).
- c). The ground water (if the Viridor up gradient and down gradient are accepted) appears to be purified by passing beneath the tip.

### **3.4 Tipping in high winds**

There should be some specification of the maximum wind speed below which tipping is permitted, currently although it is stated that wind hollows are provided but no limits are in place. Surrounding garden fences can be covered with wind blown waste from the site in windy conditions. Photographs have been taken and copies can be made available should you wish.

### **3.5 Bird Populations and Daily Cover**

The number of birds frequenting the site is steadily increasing, these poses a health risk both to local inhabitants, scouts cooking in the open and to food processing performed on the industrial site. The presence of the Scout Camp across the road and downwind has not been clearly shown. This also raises the question whether the daily cover is of adequate thickness and composition sufficient to prevent scavenging. The cover appears to have white material mixed in and showing on the surface. We were told at the liaison meeting that this was due to Frag waste being used as cover. When was this permitted and is it suitable?

### **3.6 Emissions**

Over the last three weeks (written 4<sup>th</sup> March) there has been a very strong stench from the tip. The liaison committee were told this was because of de silting of leachate wells and a fractured gas main.

I would have expected that good engineering planning and practice would minimise leachate odours during the working period and eliminate them in the evenings and night. A fractured gas main is an event one would normally plan for. Good pipeline design would provide valves to isolate the fault and redirect the extraction through an alternate route, also facilitate a rapid repair. As there are claimed to be adequate flares for contingencies then any gas in the pipes which was unsuitable for use in the engines should have been burnt to eliminate smells.

The graph showing the calculated total emissions shows the emissions peaking before the tipping ceases. We would have expected the peak emission to occur some time after tipping ceases!

### **3.7 Asbestos**

We note that local EA staff are investigating this. We would also note that when the asbestos cell was shut down there was no specification on the provided drawings that it should be sealed with clay cover in order to ensure leachate from the adjacent biodegradable material did not enter the asbestos waste in cell 7. The separating material was described as inert material of unspecified thickness as shown in the drawing HPC 222.

We do believe that the dedicated asbestos waste cell now includes other waste, possibly bio degradable, and as such leachate produced as a result could be contaminated.

The Horton waste site was originally designated as 'non-hazardous' then, prior to the designation of cell No7 for asbestos it became a 'co-disposal' site. Dumping of hazardous material i.e. asbestos on the Horton site was specifically forbidden in the original planning permission. The village of Small Dole commences 200 metres from the boundary and the predominant South Westerly wind creates a pollution pathway over the village. This is significant as the pollution footprint is located on the village of Small Dole. Without further planning the officers of the Environment Agency and the West Sussex County Council, allowed the site to become a hazardous waste site.

### **3.8 Settlement**

The degree of settlement expected has changed during the lifetime of the tip due to changing waste compositions. We would have expected that the original 15% would apply to any wastes tipped at the early stages. The late 27% would be applicable to the middle period of tipping and as the model is being calculated at far higher densities (1 tonne/m<sup>3</sup> instead of 0.8 tonnes/m<sup>3</sup>) the projected tipping levels should reflect the large change in expected settlement and the uplift should be far less than the drawings indicate. We also note that when the settlement figure was increased to 27% the contour levels were increase appropriate to 35% in the pre settlement levels including cell 1 etc. tipped at an earlier time.

### **3.9 Capping**

We are confused with the state of capping. At the liaison meeting it is stated at one meeting that significant areas have been capped and much restored, then at a following meeting that far less has been capped and little restored. We think the CQA should define when capping and/or restoration has been performed and this should be considered permanent and only to be subsequently removed by express permission from EA.

### **3.10 Hazardous Designation**

The EA has admitted that cell 7 has been designated as 'Hazardous'. We believe that the EA regulations require that asbestos within a dedicated asbestos cell must not be contaminated with leachate. We were informed that there was insufficient asbestos available to complete the construction of cell 7 and that the void was completed with other bio degradable waste with a small layer of porous inert waste in between. This condition will now allow the production of leachate and land fill gas. This being the case, wells will have to be drilled to extract the liquid and gasses and it is well published that the EA regulations forbid the disturbance of cells containing asbestos. The reason for this is to prevent the leachate and gasses being contaminated by the asbestos fibres that would be released as a result of the drilling and or combustion and in consequence released into the environment.

We have no confidence as to what hazardous substances have been deposited on the site as the regulation regarding the routine inspection of each load has not been carried out to the degree that several audits raised this issue and was not rectified for many years. This was a constant contravention of the current IPPC licence.

n.b. We are now aware that cadmium has been identified in the leachate !!

We believe therefore that the whole site should be designated as 'hazardous' because in addition to cell 7 we are aware that there are other locations within the site where deposits of asbestos have been placed.

### **3.11 Restoration**

Included in the first Planning Permission and through all the subsequent changes it has been a requirement that a phased progressive restoration should occur. No effective restoration has been done – if it had then there would be sheep grazing on over half the site instead of the bomb site currently existing.

## **4. Conclusions**

4.1. The Small Dole Action Group represents the residents from which we have a mandate to speak on their behalf. We made strong representations to the planning committee last year, and with the subsequent use of solicitors and counsel we managed to get condition 7 improved, the work method agreed and the total surcharge limited to 400,000 cu metres. The density agreed at that point in time had always been 0.8 tonnes per cu metre. n.b. the unit of measure was always as volume not mass.

Now we see attempt to vary these conditions within the licence variation application

4.2. We believe that the authorities have a duty to protect communities living near landfill sites, especially as in the case of Small Dole where we believe that the accumulated effect of 40 years of pollution is that we are seeing higher than average incidences of cancers and birth defects. Such is the local concern that the doctors at the Henfield Health Centre requested that an open letter was read out to the planning committee members at the hearing in April . This was ignored !

4.3. We believe that this site must be regarded now as a hazardous waste site and as such any further construction, capping and restoration must be carried out under the correct regulations. Furthermore any variation to the permit should reflect **only** the permitted planning permission to the extent that additional planning approval must be sought if there is a variance.

4.4. From our extensive research, including various CQAs, we are convinced that this site does NOT comply with the EU Landfill Directive and as such it should close by the 16<sup>th</sup> July 2009. We are also aware of the representations being made by Defra on behalf of the industry to subvert the directive and in addition we hear rumours that Defra may take a unilateral decision to re interpret the regulations to suit government demands. The regulations state that the thickness of an artificial basal lining may be reduced as a result of a risk assessment but it does not state that it can be removed entirely. We fear that there may be attempts to rely on the natural clay base of the pit to justify an adequate base quality and thickness, this concern is compounded by the evidence that subsequent sectional drawings of the site show an increasing thickness of clay under the waste by about 2 metres !

4.5. We understand that for some of the parties involved this whole issue it is a game to get more than has been granted with a view to keep the tip open for as long as possible. We have seen incremental steps of increases in the volume and time, sometime without planning approval. The people of Small Dole are the pawns in this game and the ones who have to tolerate the pervasive smells, an un-sightly hill of waste on the edge of the village, constant heavy traffic, surrounding roads and lanes full of rubbish, concerns for the health and welfare of their families. Having endured waste tips down wind of the village for 40 years we would like to look forward to some peace if and when this last extension has expired. Please have some social conscience and give some overdue thought to the residents as you make your decision regarding this application.

16<sup>th</sup> March 2009

The Small Dole Action Group  
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Small Dole  
Henfield  
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# Appendix 1

Copy Email to Matthew Thompson from Norman Carreck dated 3<sup>rd</sup> Feb 2009

Re: Tipping rates and duration

Dear Matthew,

Further to our telephone conversation earlier today, I am writing to thank you for sending me the copy of the application by Viridor Waste Management to vary PPC Permit No. BV99001S dated 21/11/08, which I understand you have only recently received at your office. I will pass it on to other members of the Small Dole Action Group.

As I mentioned, it is a large application, which will take us some time to digest, but I have already noted a number of matters of concern on which the SDAG will wish to submit detailed observations, and request that we are given a reasonable time period in which to do so. May I also draw you attention to Section 5 of Schedule 4 of the Pollution Prevention and Control Regulations 2000 which requires that any such application be advertised locally. I would therefore be grateful if you could ensure that notices are published in newspapers read in Small Dole. I would recommend the West Sussex County Times and the West Sussex Gazette.

As I said on the telephone, my immediate concern relates to the fact that the scheme detailed in the PPC Variation application is clearly not the scheme for which Planning Application DC/07/0814 was submitted, and for which permission was granted by West Sussex County Council on 12/11/08. That scheme was for an additional 400,000m<sup>3</sup> of waste, and works were to be completed by 1/10/2010, and planning permission was granted "to be carried out in accordance with the application and plans" and subject to 34 planning conditions.

I was therefore shocked to see that page 6 of Section 4 of the Variation application states that: "On this basis a maximum future waste input of 274,077 tpa results in filling being completed by the end of 2011..." Furthermore, the table contained in Appendix LFGRA 2 shows that a total additional void of 1,019,646 m<sup>3</sup> will be created, and shows an input of 220,000 t taking place during 2011.

Clearly, planning permission for these works has been neither sought nor obtained, and permission was only granted by the Planning Committee on 8/4/08 on the basis that the additional waste void would be 400,000 m<sup>3</sup>, and that tipping operations would cease on or before 1/10/2010.

I must draw your attention to Part II, Section 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 which states that: "*(4) In the case of an application for a permit that will authorise the carrying out of a specified waste management activity at an installation or by means of mobile plant, the permit shall not be granted unless... (b) in the case of an installation where the use of the application site for the carrying out of that activity requires planning permission granted under the Town and Country Planning Act 1990(c), such planning permission is in force in relation to that use of the land.*"

It is clear therefore that your Agency cannot legally grant the Permit Variation, since planning permission has been neither sought nor obtained for the works proposed.

I therefore request that your Agency returns this application to Viridor Waste Management without further consideration, and requests that they submit a Permit Variation Application which accurately reflects the extent of the Planning Permission granted by DC/07/0814.

Yours sincerely,

Norman L. Carreck.

## Appendix 2

Extract from Email to Matthew Thompson from Alan Brown on 11/2/2009 Re: NOX Emissions from engines and flares

Matthew

As you are aware I have been looking at the NOX pollution caused by the emissions in the plumes from the engines and flares since before you took over responsibility for the site and at various times had been told that EA and then that Viridor were going to use an up to date modelling package (GasSim) to check my calculations. I now see that last year Viridor have been making calculations with GasSim, similar to the NOX figures I was requesting for the engines and flares. However again the results are only presented as probabilistic values and with no specific location (it only says boundary), so cannot be compared with the permitted short term EQS or EAL figure of 200 micrograms/m<sup>3</sup> to check compliance. The predicted concentrations at the site boundary in the results from GasSim for 2008 appear to be:

Engines	186.6
Flares	13.0
Background	9.3

Total            208.9        Note: the emissions would be cumulative

The way I read these figures is: as the values appear to be at 98 percentile level (i.e. only exceeded for 2 per cent of the time), then for a total duration equivalent to 7 days per year the values would be exceeded. The short term EAL limit is that 200 micrograms/m<sup>3</sup> should not be exceeded for more than 18 periods of one hour per year. Do you know how to compare these values of a sum total with individual periods?

In my calculations that I showed you, at many wind speeds the emissions reaching ground level from the plumes would be at a maximum within the site and probably not reaching the boundary. Perhaps the Biomag operator is working at just the wrong location as he is working close to the stacks, down the prevailing wind and higher than the emitters. Does he have a cough?

I would have expected GasSim to have a facility to search for maxima and location, and perhaps a mode giving duration. One of your experts could possibly advise.

The actual results from the model will be quite sensitive to the meteorological data used. The application has conflicting statements that a wind rose from Hurstmonceux (about 30 miles to the east), Shoreham (about 5 miles south) and from the EA Southern Region was used. I don't know where the EA Southern Region windrose is measured but I would expect that Small Dole is in a wind shadow from the Downs so the wind is lower velocity. The windrose from the site which was published in the Air Quality Assessment by AMEC in March 2008 supports this view. At lower speeds the plume reaches ground level nearer to the stacks.

Regards

Alan