

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Planning Committee

3rd September 2008

AUTHOR/S: Executive Director / Corporate Manager - Planning and Sustainable Communities

S/1017/08/F – COTTENHAM
Retention of External Plant and Equipment
Comprising of Extract Fans, Flues and Air Condensing Units.
Unit J, Broad Lane Industrial Estate, Broad Lane, for The Whitfield Group

Recommendation: Approval

Date for Determination: 4th August 2008

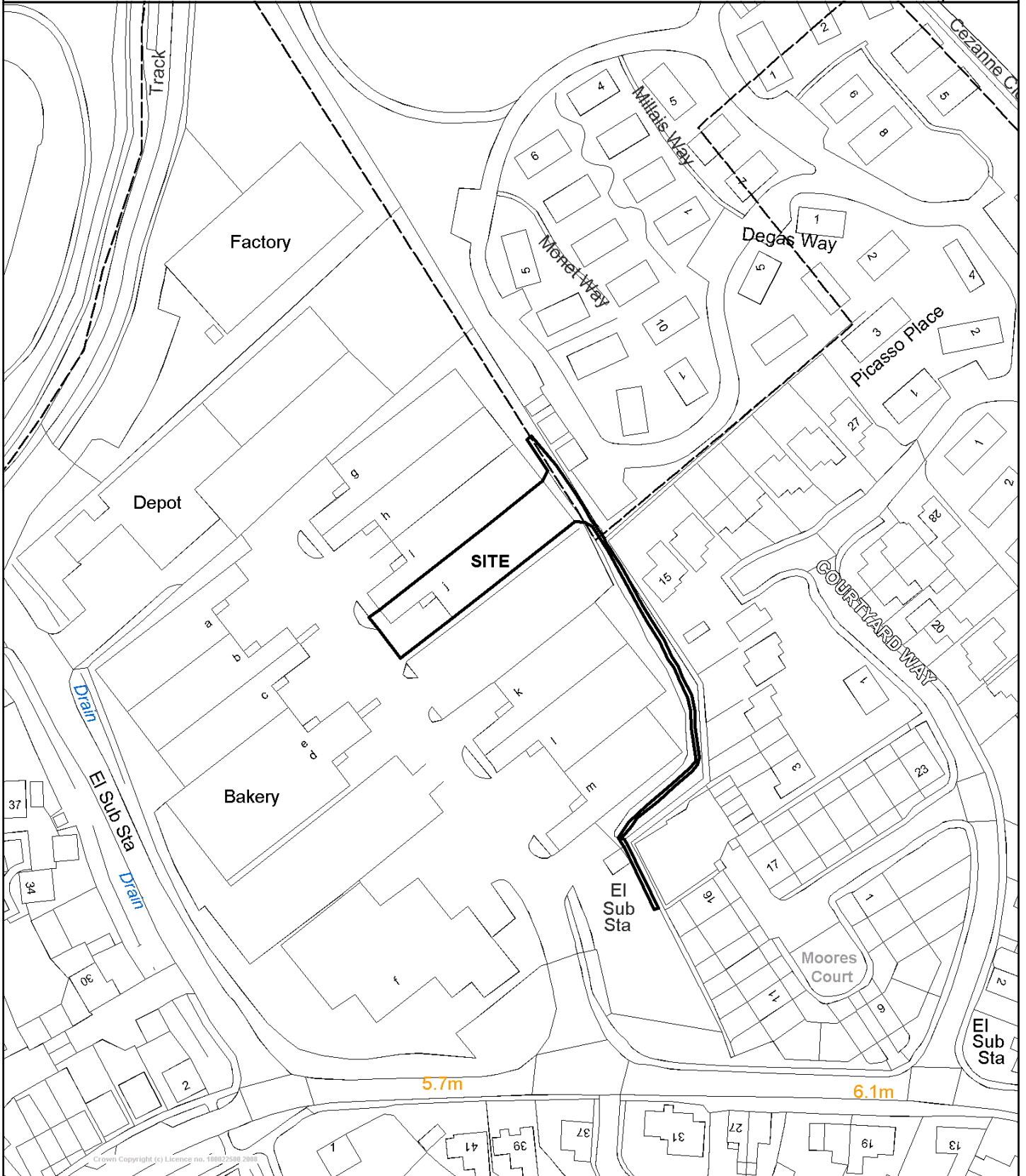
Notes:

This Application has been reported to the Planning Committee for determination because of the recommendation of Refusal by the Cottenham Parish Council.

Members will visit this site on Wednesday the 3rd September 2008.

Site and Proposal

1. Unit J is a light industrial unit currently occupied by the firm Chemex. The unit is situated within the Broad Lane Industrial Estate within the village framework of Cottenham. The industrial estate contains many other units of a variety of uses and is accessed via Broad Lane. There are several residential areas which surround the industrial estate, with the static mobile home site, Cottenham Park to the north of Unit J and the cul-de-sac Courtyard Way to the east, both of which contain the nearest residential dwellings to the application site, which are No.15 Courtyard Way and 2 Monet Way. Chemex is a Cambridge based company involved in analysing chemicals and compounds within either water borne samples or soil samples. In doing so the firm requires both the use of fume cupboards and cooling equipment.
2. This application, submitted 27th May 2008, seeks the retention of all plant and machinery, which has been installed upon the north-east gable and south east flank elevation of Unit J. The applicant has stated that they would accept any restriction on the hours of use of this machinery in line with the existing condition (No.3 of S/1184/74/F). An amended plan was received with a letter dated 11th July 2008. This illustrated the position of the final as installed equipment.
3. This plant and machinery in question comprises of:
 - 6 extract flues, which are located upon the south-east flank elevation (Numbered 2-7 from left to right upon amended plan No.06/1165:001;
 - 3 air conditioning units located upon the flat roof at the south east elevation at the front of the building;



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- 4 air condensing units within the acoustic enclosure located upon the gable end of the north-east elevation of the building (Units 1a, b, c and d upon amended plan No.06/1165:001);
4. The design and access statement provides a schedule of equipment for the site. It indicates that the following machinery requires use outside of the current permitted hours:
 - Unit 1b) – A Condensing Unit within the acoustic enclosure, which is required to run 24 hours 7 days a week;
 - Unit 1d) – Argon Cylinders within the acoustic enclosure, which is required to vent intermittently;
 - Unit 11 – Cold Store Air Conditioning unit upon flat roof at front of building, which is required to vent intermittently;
 - Units 1c) (Air Condensing Unit) and 7 (Exhaust Flue) are required to run outside of the permitted 08.00-18.00 hours on the occasion when analytical machinery runs.
 5. All other machinery would otherwise run within the permitted hours of 08.00 and 18.00 hours Monday to Saturday.
 6. The unit is currently restricted by condition 6 of planning application S/1184/74/F, which states, no machinery shall be used between the hours of 6pm and 8am on weekdays and shall not be used on Sundays and bank holidays. The applicants have stated that some of the machinery would require in part to be running 24 hours, 7 days a week, albeit not all at once. However, it should be made clear that this current application does not seek to formally vary or remove this condition and the applicants are happy to accept any restrictions on the hours of use that the Council deem necessary.
 7. There are no conditions in place that restrict the normal working hours/occupation of Unit J. All current enforcement action has been put on hold until this current application has been determined. There is also a current public inquiry due in relation to the previously refused planning application S/1048/07/F, which at present does not have a set date.

Planning History

8. Planning Application **S/1184/74/F** was approved for the change of use of Unit J from Warehousing to a Light Industrial Use. Within this consent were several attached conditions. Condition 3 required that power driven machinery shall not be used on site without the prior consent of the Local Planning Authority. Condition 6 required that power driven machinery shall not be used between the hours of 6pm and 8am on weekdays, and shall not be used on Sundays and Bank Holidays. These conditions were attached to safeguard the interests of other users of land in the vicinity.
9. Planning Application **S/1347/97/F** sought the variation of Condition 6 of planning application **S/1184/74/F** in order to extend the hours of operation for machinery to 07.00 hours to 22.00 hours. This application was refused on the grounds that the proposed extension of hours would result in increased vehicle movements and

operations resulting in increased noise, disturbance and loss of amenity to those adjoining residents when background noise levels are generally low.

10. Planning Application **S/2348/06/F** for the retrospective permission of external extractor fan attenuators and acoustic enclosures was withdrawn. This application sought to resolve the outstanding noise nuisance and outstanding external works to Unit J in an attempt to address the enforcement and abatement notice, which was served upon the applicants. This application did not contain the sufficient information to resolve the outstanding issues on the site and would have been refused. However, it was the decision of officers to negotiate the issues at hand and request a detailed application outlying all outstanding issues at the site whilst postponing enforcement action until such an application could be determined. This decision was made on the premise that approximately 80% of the attenuation required to satisfy the Local Plan Environmental Standards had already been carried out albeit retrospectively.
11. Planning Application **S/1048/07/F** for the variation of condition 6 of planning application **S/1184/74/F** for hours of operation, retrospective details of plant and machinery installed in accordance with Condition 3 of Planning Application **S/1184/74/F** and retrospective permission for external plant and machinery comprising of extract flues, fans and air conditioning units was refused. The Planning Committee made this decision on the grounds that the proposal would result in detrimental harm upon the nearby dwellings and mobile homes by virtue of the tone and continuous levels of background noise emitted from the unit. An appeal against this decision was dismissed on grounds of insufficient clear, specific and comprehensive information to justify permission being given.
12. Planning Application **S/0334/08/F** sought the retrospective consent of all external plant and machinery and the variation of Condition 6 of Planning Application **S/1184/74/F** to allow the use of 1 flue, 2 air conditioning units, 1 refrigeration condenser and 1 exhaust unit to be in operation between the hours of 18.00 and 08.00 hours weekdays and for 24 hours on Sundays and Bank holidays. Following the subsequent appeal of the refused Planning Application **S/1048/07/F** further acoustic assessments were submitted in an attempt to address some of the issues raised by the inspector upon her appeal site visit. Despite the additional information submitted, officers were of the opinion that this information did not fully address the previous reason for refusal nor did it satisfactorily address the concerns raised by the inspector upon the appeal. The application was therefore refused under delegated powers on the grounds that the noise emanating from the said machinery outside of the permitted hours would significantly increase the potential harm upon the neighbouring amenities through noise disturbance at times of the day when it is reasonable for residents to expect lower levels of background noise. This decision is currently subject of a public inquiry, of which there is no set date.

Planning Policy

13. **Planning Policy Guidance Note 24** (PPG24) "Planning and Noise", outlines the considerations to be taken into account in determining applications for activities, which will generate noise. Further reference to advice from PPG24 is set out below (Paras. 27 and 28)

South Cambridgeshire Development Control Policies DPD adopted July 2007;

14. **Policy DP/1 "Sustainable Development"** only permits development where it is demonstrated that it is consistent with the principles of sustainable development. The

policy lists the main considerations in assessing whether development meets this requirement.

15. **Policy DP/2 “Design of New Development”** requires all new development to be of a high quality design and indicates the specific elements to be achieved where appropriate. It also sets out the requirements for Design and Access Statements.
16. **Policy DP/3 “Development Criteria”** sets out what all new development should provide, as appropriate to its nature, scale and economic viability and clearly sets out circumstances where development will not be granted on grounds of an unacceptable adverse impact e.g. residential amenity and traffic generation.
17. **Policy DP/7 “Development Frameworks”** permits development within village frameworks provided that retention of the site in its present state does not form an essential part of the local character; it would be sensitive to the character of the location, local features of landscape, ecological or historic importance, and the amenities of neighbours; there is the necessary infrastructure capacity to support the development; and it would not result in the loss of local employment, or a local service or facility.
18. **Policy ET/5 “Development for the Expansion of Firms”** states that expansions will be permitted within village frameworks, or previously developed sites next to or very close to village frameworks. Expansion will not be permitted where it, amongst other, causes problems with noise or if it would conflict with other Policies of the Plan.
19. **Policy NE/15 “Noise Pollution”** states that planning permission will not be granted for development, which has an unacceptable adverse impact on the indoor and outdoor acoustic environment of existing or planned development.

Consultations

20. **Cottenham Parish Council** – Contests the need to determine this application as it is identical to Planning Application S/0334/08/F, which was refused and is currently subject of an appeal and therefore recommends Refusal on the following grounds:
 - The proposal is unacceptable in that the proposed extension of hours will result in an increase in vehicular movements and operations resulting in increased noise, disturbance and loss of amenity to those residents adjoining the site when background noise levels are generally low;
 - Several Planning Applications have been made to vary the hours of operation all of which have been refused and an appeal dismissed;
 - There does not appear to be any clear justification as to why Chemex needs to work extra hours. Indeed it has been brought to the attention of the Parish Council that Chemex is already working outside of its permitted hours. If the appeal were to be upheld and permission granted it would set a precedent for other industrial units to do the same;
 - It is reasonable to expect, on occasions, some noise may be audible during normal operating times, However the variation of the existing conditions for this

site has the potential to adversely affect the use and enjoyment of nearby residential properties. Noise nuisance is an unacceptable interference with the personal comfort or amenity of neighbours;

- Condition 3 of S/1187/74/F states that power driven machinery shall not be used on site without the prior approval of the planning authority. This machinery was installed in 2005 and has had extremely detrimental effect upon residents adjacent to the site due to the noise levels experienced during periods beyond the permitted hours of operation;
- The Parish is concerned that despite the equipment running 24 hours a day, no enforcement has been taken.
- The applicant has shown scant regard to the problems that have arisen for adjacent residents;
- The company that fitted the acoustic enclosures also employs the independent consultant who was responsible for the subsequent noise impact assessments for this site. Therefore if this is indeed true then SCDC should employ a truly independent consultant, who will test the plant with everything running simultaneously, when they come on and turn off and when the gas is started;
- The reports of loud intermittent noises which occur on a frequent basis have not been mentioned within the noise assessment;
- There is no evidence of how many units have been decibel tested, and when the tests were carried out. The testing was obviously flawed and casts serious doubt as to the reported findings;
- There is a concern over the fire exit being blocked by the acoustic enclosure;
- There is no inclusion of residual noise levels, which are required by PPG24 and BS4142;
- The tests carried out within on the night of 11th February though to 12th February 2008 are not representative of normal summer temperatures;
- Variation of conditions in application S/0334/08/F cannot be supported in the LDF 2007 Policies DP/3 and NE/15.

21. **Environmental Health Officer** – There are no objections in principle to the above-proposed application, however if the application is successful, it is recommended that the following conditions be applied to any consent granted:

- The plant and machinery, hereby approved, can be in constant operation 7 days a week, including bank holidays but the noise emitted from this machinery, shall not exceed 35db(A) within 3 metres of the façade of the nearest residential dwelling, namely 13 Courtyard Way or 2 or 3 Monet Way Cottenham. (Reason - To ensure that plant and equipment does not exceed noise levels that would be to the detriment of the amenities of local residents within the vicinity of the site.)

- Details of the location and type of any further power driven plant or equipment including equipment for heating, ventilation and for the control or extraction of any odour, dust or fumes from the building but excluding office equipment and vehicles and the location of the outlet from the building of such plant or equipment shall be submitted to and approved in writing by the Local Planning Authority before such plant or equipment is installed; the said plant or equipment shall be installed in accordance with the approved details and with any agreed noise restrictions. (Reason – To ensure that plant and equipment would not be detrimental to the amenities of local residents within the vicinity of the site.)
- Time controllers shall be applied to all plant and equipment/air conditioning units that is/are not required to operate outside the hours for which consent is sought.

Representations

22. 4 Neighbour letters of objection have been received from 15 and 13 Courtyard Way, 2 Monet Way and from a resident writing from a business in Histon.

The letters raise the following issues:

- The amended plans are still incorrect, the drawings do not show the steel supports of the acoustic enclosure and the line shown outside of the extract flues does not accurately show the edge of the car park area / hand rail;
- At no time has the applicant consulted with local residents;
- It is unclear from the drawings how many condensing units are located within the acoustic enclosure;
- The information within the application form is incorrect. There is regularly a skeleton staff on site from 07.00 hours to 22.00 hours Monday – Friday and at varying times at the weekends both Saturday and Sunday as well as bank holidays. Furthermore, the various items of machinery operate 7 days a week, 24 hours a day;
- The Design and Access Statement refers to Unit 6 and not Unit J Broad Lane;
- The schedule of equipment is the same one used in the previous application and is ambiguous, misleading and does not accurately state what is actually in use during the times stated;
- There is no information in relation to the amount, how many run and the duty cycle of the condensing units within the acoustic enclosure;
- The argon cylinders result in a loud hiss that can occur at any time of the day or night on any day of the week. There is no information to when this venting occurs or its frequency;
- It is indicated that certain items of machinery only run between 08.00 and 18.00 hours in accordance with Condition 6 of S/1184/74/F. However, some staff are on site before 07.00 hours and after 22.00 hours Monday to Friday it is therefore

questionable as to whether the hours of operation of the stated items do comply with Condition 6;

- There is no mention of hours of operation on Bank Holidays, when staff often attend the site on these days;
- It is stated that Unit 7 runs on Saturdays if Chemex work, whereas in reality this unit runs 24/7 and only stops when there is a power cut. It also emits a whine. This has not been fixed despite the inspectors report;
- It is stated that Units 9 & 10 run between 08.00-18.00 hours Mon-Sat when they actually run 24/7 as and when required, one runs almost continually and the other runs approximately 50% of the time;
- Unit 11 is supposed to vent intermittently, whereas it runs 24/7 when required;
- No figures have been provided for the ambient noise level with all the machinery switched off, this information is essential to draw a comparison between the current noise level and that prior to Chemex's operations;
- The residual noise level varies with much of the noise being short lived, i.e. a passing vehicle, this cannot be appreciated from the information provided;
- The random noises are far less objectionable than the constant noise from the fume cupboard extract motors as well as the low frequency drone of the air conditioning units;
- It is reasonable to expect distant passing noise from time to time whereas it is not reasonable to expect the noise produced by the development at all times;
- The acoustic report appears to concentrate on the fume extracts rather than the air conditioning condensers, it is therefore unclear as to what precisely was running at the time the tests were taken;
- There is noise data for the worst case scenario with respect to the air conditioning units, as they were not forced into operation during the tests. (This was also mentioned within Para 20 of the inspectors report);
- The sound level readings were taken on a cool night when the temperature was close to freezing point and they therefore they do not reflect summer noise levels as an increase in the ambient temperature results in noise increases from the air condensers at the rear of the building;
- The consultant taking the readings was not independent to the applicant and also is related to the owner of the firm who installed the acoustic enclosures, therefore this could be a possible conflict of interest;
- The consultant's readings were not witnessed by the EHO within No.15 Courtyard Way, although he was present. In addition these readings were taken

with only one vent open, it is likely that two or more would be open within the summer months;

- The development is not free from thumps and clatters, neither is it free from continuous tones, as suggested it should be by the proposed conditions for application S/1048/07/F;
- Sound readings have not been taken from No.2 Monet Way, although it is calculated that the average sound level is lower than that of No.15 Courtyard Way. The thumps, and clatters from the air condensing and associated works are a greater problem within properties in Monet Way due to their construction and proximity to the machinery;
- The noise from the occasional thumps and clatters do not appear at their full levels as they are hidden within the average levels taken during the noise testing;
- Much of the noise produced by the air condensers is low frequency (i.e. 50HZ-63HZ); Graph 2 shows that the measured levels within No.15 Courtyard Way to be in excess of 40db at 50hz with night time plant running, this is above the WHO figure of 35db;
- The site plan has been marked with a thick line and it is unclear to define exact boundaries of ownership, although the land owners have been notified by certificate B, it is unclear if permission has been granted to develop part of the free holders land that does not form part of the lease;
- The acoustic enclosure blocks the access and possible escape route of occupiers of the building to the north east. Similarly the pedestrian route along the flank elevation of the building is obstructed by the flue units;
- Despite the current application not seeking to vary condition 6 of S/1184/74/F I find it difficult to believe that they will not carry on to work 24/7 as is required in order for them to create ambient testing conditions for their work;
- Materially nothing has changed since the Planning Committee visited the site in July of last year, where they witnessed the probable closest impression of the full noise potential from the site;
- All previous prosecutions have not been effective in deterring the applicant, neither have the subsequent articles in the Cambridge Evening News;
- As the noise issues have been ongoing for over 3 years, other businesses in Broad Lane have followed suit with the installation of air conditioning units, which run outside of normal working hours;
- The development is contrary to PPG24 as the development has introduced noise into a sensitive area that has enjoyed peace and quiet outside the on-line day for a considerable time;

- Will the applicant adhere to Condition 6 and the required hours for operation if this planning application were to be approved?
 - Should this application even be considered for approval when nothing has changed with respect to noise since the Planning Committee visited the site;
23. 2 letters also make reference to key points within the appeal decision for Planning Application S/1048/07/F, a copy of which is attached within annexe 1 of this report. The issues raised will be commented on within the planning considerations of this report.
24. The Cottenham Village Design Group notes that this application appears to be substantially the same as earlier applications relating to this development. Whilst the Design Group encourages the retention of small-scale commercial activities and the development of business offering employment opportunities in Cottenham it is also important that businesses respect their residential neighbours. It therefore hopes that a successful compromise can be reached whereby noise from external equipment can be attenuated to the satisfaction of local residents.

Planning Comments – Key Issues

Material Considerations

25. The main issue in the determination of this application is whether the fume extraction units, air condensing equipment and other associated plant can be operated within limits that would not seriously harm the living conditions of occupiers of the adjacent mobile home park and nearby houses. This application is being considered for determination on the grounds that it provides significant additional information, which goes further in providing answers to the questions raised by the inspector upon the previous dismissed appeal. Furthermore, it is clear that despite prosecution Chemex has continued to operate outside of the permitted conditions that apply to Unit J. Therefore, it is the opinion of officers that this development should be revisited and explored again in full with the view to bring this matter to a close once and for all.
26. The inspector who dealt with the previous dismissed appeal for this site (Reference No.APP/W0530/A/07/2053559 and SCDC planning reference No. S/1048/07/F) stated that due to the view from nearby dwellings being obstructed by the angle of vision, vegetation and fencing there was no visual objection to the appearance of the external plant and machinery. Furthermore, the plant is considered to be of character and colour that might be expected of an industrial estate. In addition the issue over means of escape from the rear of the building was confirmed as a matter for assessment under other legislation.

Planning Policy Guidance

27. Paragraph 19 of Annex 3 (noise from industrial and commercial developments) of Planning Policy Guidance Note 24 "Planning & Noise" (PPG24) states that the likelihood of complaints about noise from industrial development can be assessed, where the Standard is appropriate, using guidance in BS 4142: 1990 (now 1997). Tonal or impulsive characteristics of the noise are likely to increase the scope for complaints and this is taken into account by the "rating level" defined in BS 4142. This "rating level" should be used when stipulating the level of noise that can be permitted. The likelihood of complaints is indicated by the difference between the noise from the new development (expressed in terms of the rating level) and the existing background

noise. The Standard states that: "A difference of around 10dB or higher indicates that complaints are likely. A difference of around 5 dB is of marginal significance." Since background noise levels vary throughout a 24 hour period it will usually be necessary to assess the acceptability of noise levels for separate periods (e.g. day and night) chosen to suit the hours of operation of the proposed development. Similar considerations apply to developments that will emit significant noise at the weekend as well as during the week.

28. Furthermore, Paragraph 15 of PPG24 states that the appropriate use of planning conditions can enable many development proposals to proceed where it would otherwise be necessary to refuse permission. Paragraph 10 states that much of the development, which is necessary for the creation of jobs and the construction and improvement of essential infrastructure, will generate noise. The planning system should not place unjustifiable obstacles in the way of such development. Nevertheless, local planning authorities must ensure that development does not cause an unacceptable degree of disturbance. They should also bear in mind that a subsequent intensification or change of use may result in greater intrusion and they may wish to consider the use of appropriate conditions.

Noise Survey Results & Conclusions

29. Noise surveys have taken place in February and July 2008. In February a nighttime noise survey was carried out outside and inside a complainant's property at Courtyard Way Cottenham and outside a mobile home at Broad Lane Mobile Home Park. In July a daytime noise survey took place at Broad Lane Mobile Home Park that took account of the noise levels from plant and equipment at Unit J. Sound pressure level measurements were taken approximately 3 metres from the fence at the visitors' car park at Broad Lane Mobile Home Park with a line of sight to the extract fans and enclosure. Measurements were also taken in front of the enclosure, with no line of sight to the extract fans in order to simulate the conditions in the garden of the property at 15 Courtyard Way Cottenham.
30. At both locations measurements were taken with all plant operating and then nearly all switched off, leaving a couple of air conditioning condensing units operating in the enclosure for some of the time. During the last measurement series the air/gas discharge noise was identifiable but the noise was not intrusive, producing a cumulative level (including residual noise not from Chemex of approximately 34dB(A)) of approximately 37dB(A), indicating that the air/gas discharge noise level was approximately 34dB(A) as well.
31. The first series of measurements indicates that the plant noise was below 40dB(A) towards Mr Taylor's dwelling, with the overall level typically varying between around 40dB(A) and 45dB(A). The third series of measurements indicates that the residual level varied between around 35dB(A) and 43dB(A). Combining these indicates that the plant noise level was around 37dB(A) to 39dB(A) at this location with all plant operating. This is consistent with the previous measurements (taken at night time in February 2008) that indicated that the plant noise level is 35dB(A) or lower at Mr Taylor's house with some but not all of the extract fans operating and slightly higher than this with all plant operating.
32. The second series of measurements indicates that the plant noise was below 37dB(A) towards Mr Taylor's dwelling, with the overall level typically varying between around 37dB(A) and 42dB(A). The third series of measurements indicates that the residual level varied between around 32dB(A) and 40dB(A). Combining these indicates that the plant noise level was around 34dB(A) to 39dB(A) at this location

with all plant operating. Taking account of the screening of the extract fans at this location indicates that the plant noise level is around 34dB(A) to 35dB(A) at this location, with all plant operating. These levels are consistent with the noise condition that is being recommended in respect of this application.

33. It is not possible to accurately measure noise from the plant because it is similar to or lower than the residual noise level, which varies so that the relative contributions of plant and residual noise cannot be accurately determined. This demonstrates that because the noise level from plant and equipment at Unit J is so low, the month when noise is measured is not relevant.
34. Nighttime readings have yet to be taken at the same location as July 25th and currently weather is precluding a meaningful nighttime noise survey. As soon as weather and availability of personnel to participate in the noise survey permit, the findings of the nighttime survey will be reported as an annexe to this report made available to Members along with a verbal explanation from the Environmental Health Officer.
35. When one considers the model conditions in Annex 4 of PPG24 relative to the conditions that have been proposed, that proposed are sufficient to ensure that the residents are properly protected against noise from the site. Many of the suggested works in the example conditions were carried out, e.g. before any specified plant and/or machinery is used on the premises, it shall be enclosed with sound insulating material and mounted in a way which will minimize transmission of structure borne sound in accordance with a scheme to be agreed with the local planning authority to abate the nuisance value of the noise from the extracts to the fume cupboards. The suggested condition seeks to achieve a higher standard of protection against noise than the suggested conditions as mention is made of BS 4142. This standard does not provide as much protection for the residents as the appellant's proposed/suggested condition. Many of the suggested conditions in PPG 24 talk about insulation of the buildings rather than the plant that is allegedly disturbing the residents.
36. The further noise assessments (Day & Night), which have been carried out, provide evidence that the condition stipulating a threshold of noise of 35db within 3m of the façade of No.15 Courtyard Way would be achievable. Table 1 below from www.Osicus.com (Osicus is a UK independent noise assessment company) illustrates common sounds and their typical noise levels along with their effects. Within this table 30db is defined as a whisper with its effect being defined as very quiet. The next audible threshold is 50db, which is defined as comfortable and the level of an average air conditioning unit. This helps illustrate the dampening effect of the acoustic attenuation to the plant at the rear of the building. Therefore the predicted internal noise level of below 35db is considered an acceptable if not comfortable level of noise. A limit of 35 dB(A) from the site is proposed outside the nearest dwelling. Allowing for a more pessimistic correction 10dB from outside to inside a dwelling via an open window means that the resultant level inside neighbouring bedrooms will be less than 25dB(A), which is significantly quieter than the WHO and BS8233: 1999 "Sound Insulation and Noise Reduction for Buildings Code of Practice" recommended levels.
37. Table 1: www.Osicus.com (Accessed 15/08/08)

Common Sounds	Noise Levels dB)	Effect
Jet engine (near)	140	
Shotgun firing, Jet takeoff (100	130	Threshold of pain

- 200 ft)		
Thunderclap (near), Night club	120	Threshold of sensation
Power saw, Pneumatic drill, Rock music band	110	Regular exposure of more than 1 min risks permanent hearing loss
Garbage truck	100	No more than 15 min unprotected exposure recommended
Subway, Motorcycle, Lawnmower	90	Very annoying
Electric razor, Many industrial workplaces	85	Level at which hearing damage begins (8 hours)
Average city traffic noise, Garbage disposal	80	Annoying. Interferes with conversation
Vacuum cleaner, Hair dryer, Inside a car	70	Intrusive. Interferes with telephone conversation
Normal conversation	60	
Quiet office, Air conditioner	50	Comfortable
Whisper	30	Very quiet
Normal breathing	10	Just audible
	0	Threshold of normal hearing (1000 - 4000 Hz)

38. Despite the representations made by residents there is not a large percentage of low frequency sounds from plant and equipment at Unit J. Extractor fan type 'humming' noise is not predominately low frequency. WHO & other acoustic experts refer to low frequency noise meaning a 'rumble' or 'roar' such as the pulsing from large diesel engines possibly from large HGVs or from large boats, large boilers for district heating systems or large buildings, or air handling systems providing ventilation for large buildings. This is not the case at Unit J. The most significant sound from the site is middle to high frequency sound. The confusion about low frequency noise may have been caused by information contained in a communication between Dr. Rokho Kim and Councillor Bolitho upon the previous planning application. I am not aware that Dr. Kim has ever been to Unit J. I presume Dr. Kim was responding to a query in respect of low frequency noise.
39. The noise condition that has been proposed suggests noise levels inside a property with windows open. To suggest that mobile homes should be treated differently to a bricks and mortar construction for the purposes of this application implies that mobile homes are more susceptible to ordinary sounds penetrating the fabric of their structure. In any event, the levels experienced close to the mobile homes from the plant and equipment at Unit J are quite low. There should be no difference in the noise level within a mobile home or brick dwelling when both have windows partly open for ventilation, due to external noise entering the bedroom of the two dwellings. An open window would be the weakest acoustic point in both cases so that noise

breaking in through the structure is insignificant. This explanation justifies why there is no point in testing the building fabric of a mobile home in this situation.

40. On July 25th 2008 while monitoring noise from Unit J at Broad Lane Mobile Home Park, noise from the hiss of gas cylinders was detected (approximately six times in an hour.) Although the sound of the hiss was audible and noise levels were recorded and these will be available soon, the noise of the hiss of the cylinders was suitably attenuated by the acoustic enclosures. Furthermore on July 25th when Mr Heffernan (EHO) visited the site with Richard Coleman “the acoustic consultant” to carry out noise monitoring, all doors to the acoustic enclosure were capable of being opened and closed without difficulty.
41. An indoor level of 30dB(A) means that a substantially lower level is being generated by the equipment at Unit J. If one were to stipulate an indoor figure of 30dB (A) this would equate to a very low level of noise being produced at the source. The suggested condition of 35dB at the nearest residential property will cover eventualities of all equipment running at Unit J. WHO does recommend 30dB (A) inside bedrooms 'in order to protect vulnerable groups against sleep disturbance'. BS8233:1999 states that this represents 'good' conditions and 35dB (A) is 'reasonable'. WHO also uses a figure of 15dB (A) for the difference in noise level outside a dwelling and the resultant level that enters through an open window. However, this is generally felt to be slightly optimistic and a more realistic figure is 10-15dB (A). In relation to the proposed condition that noise from the site be limited to 35dB(A) outside the nearest dwelling, even the more pessimistic correction means that the resultant level inside neighbouring bedrooms will be less than 25dB (A). This is significantly quieter than the WHO and BS8233 recommended levels (Rokho Kim refers to 30dB (A) as 'extremely quiet' and clarifies that this is a strict guideline to 'protect even the most vulnerable people'.
42. Richard Coleman Junior's involvement has been as a representative of Belair Research Limited and Acoustical Control Engineers Limited (ACE), and the purpose of his measurements has been to check that the attenuation system performed as intended. Brian Heffernan has attended as a representative of SCDC to ensure that the Local Authority agreed with the validity of the measurements and to assess the noise at the dwellings from the plant. It is worth noting that the original measurements and subsequent analysis indicated that this was not the case and ACE therefore carried out further work to improve the attenuation provided by the fan enclosures. There is no conflict of interest in this situation and as a professional Chartered Engineer and Member of the Institute of Acoustics; one of Mr Colemans responsibilities is to ensure that he does not get into a situation where a conflict of interest may arise. ACE provides acoustic engineering expertise and BRL provides acoustic consultancy expertise. Richard Coleman Senior was responsible for the original engineering and Mr Coleman Junior became involved in the post installation testing as his father was away at that time.
43. At the previous appeal the inspector was not satisfied that she had sufficient information in order to allow the appeal. On July 25th noise levels from the equipment at Unit J were recorded near to mobile homes at Broad Lane Mobile Home Park, with no equipment running (this will be the equivalent of the residual levels that the residents have mentioned); noise levels were recorded of the hiss of the cylinders, noise levels were also recorded with a variety of equipment such as all fume cupboards and no fume cupboards operating. Therefore, the full detailed information is now available for the determination of this application or any pending appeal should it be required.

44. It is felt that the numbering of plant upon the submitted plan is satisfactory in aiding the identification of all equipment for the purposes of monitoring. It is understood from the noise readings taken in both February and July that the noise levels from the site are the same throughout the year. Irrespective of the circumstances of internal or external temperature only two units (Extractor Fans 2 & 6 serving fume cupboards) are left on past 18.00 hours. This was evident from nighttime visits and has been confirmed by the Environmental Health Officer. The number of windows open would not significantly influence the readings or noise that would be subjectively appreciated indoors as an opening is simply defined as the weakest point of entry for sound.

Conclusion

45. It is fully acknowledged by officers that noise nuisance can be subjective regardless of measured sound pressure levels. Furthermore, whether or not nuisance arises can often be a matter determined by the sensitivities of the listener (especially someone specifically listening out for a particular noise where they have perhaps already become sensitised to it.
46. Notwithstanding the above officers acknowledge that the applicant's use of this site has proved contentious. Undoubtedly, noise problems have occurred and these have led to justifiable complaints. Additional noise readings and a further detailed assessment have now been undertaken. The concerns raised by the appeal inspector and by third parties have now been fully addressed. Based on the advice of the Council's Environmental Health Officer, I am satisfied that the application can be approved subject to the suggested conditions.
47. Approval of the application would mean that the outstanding appeal could be withdrawn, provided that the suggested conditions cover the times that the equipment and plant is required to be run.
48. Refusal of this application would mean that the appeal would continue. However, Members should bear in mind that given the technical advice provided, your officers do not consider the previous reasons for refusal could now be defended. Evidence would therefore have to be provided either by Members themselves or by third parties. Members need to be reminded about the possible implications for an award of costs against the Council, if evidence to sustain the reasons for refusal cannot be provided.

Recommendation

Approve as amended by Plan No.06/1165/001D.franked 18th July 2008.

Conditions

1. No machinery shall be used between the hours of 18.00 and 08.00 hours on weekdays and shall not be used on Sundays and bank holidays with the exception of the following equipment as listed upon Plan No. 06/1165/001D:
 - Unit 1b) – A Condensing Unit within the acoustic enclosure, which is required to run 24 hours 7 days a week;
 - Unit 1d) – Argon Cylinders within the acoustic enclosure, which is required to vent intermittently;
 - Unit 11 – Cold Store Air Conditioning unit upon flat roof at front of the building, which is required to vent intermittently;

- Units 1c) (Air Condensing Unit) and 7 (Exhaust Flue) are required to run outside of the permitted 08.00-18.00 hours on the occasion when analytical machinery runs.

(Reason – To ensure that the operation of plant and equipment would not be detrimental to the amenities of local residents within the vicinity of the site.)

2. The noise level at the nearest dwelling due to plant at the site shall not exceed a level of 35dB(A). This shall be expressed as a 'free field' LAeq at a distance of 3 metres from the nearest residential facade, for an appropriate time period (to suit measurement and plant operation conditions). Depending upon measurement conditions, the measurements shall either be taken directly at the noise sensitive location or at a more acoustically suitable location and the corresponding level calculated at the noise sensitive location. Noise from the plant shall be free of any distinct continuous note (whine, hiss, screech or hum) or distinct impulse noise (bangs, clatters or thumps) at the noise sensitive location. (Reason - To ensure that the operation of plant and equipment would not be detrimental to the amenities of local residents within the vicinity of the site.)
3. Details of the location and type of any further power driven plant or equipment including equipment for heating, ventilation and for the control or extraction of any odour, dust or fumes from the building but excluding office equipment and vehicles and the location of the outlet from the building of such plant or equipment shall be submitted to and approved in writing by the Local Planning Authority before such plant or equipment is installed; the said plant or equipment shall be installed in accordance with the approved details and with any agreed noise restrictions. (Reason – To ensure that the operation of plant and equipment would not be detrimental to the amenities of local residents within the vicinity of the site.)

Background Papers: the following background papers were used in the preparation of this report:

- South Cambridgeshire Local Development Framework Development Control Policies (adopted July 2007)
- Planning File Reference Nos. S/1184/74/F, S/1347/97/F, S/2348/06/F, S/1048/07/F, S/0334/08/F & S/1017/08/F
- Planning Policy Guidance Note 24 “Planning and Noise” (PPG24)

Contact Officer: Mike Jones – Senior Planning Officer
Telephone: (01954) 713253