

## **BUILDING ACT 1984 - SECTION 39**

### **APPEAL AGAINST REFUSAL BY THE COUNCIL TO RELAX REQUIREMENT H2 (WASTEWATER TREATMENT SYSTEMS AND CESSPOOLS) IN PART H (DRAINAGE AND WASTE DISPOSAL) OF SCHEDULE 1 TO THE BUILDING REGULATIONS 2000 (AS AMENDED), IN RESPECT OF THE CAPACITY OF A CESSPOOL SERVING A TOILET BLOCK AT A TOURING PARK.**

#### **The building work and appeal**

3. The papers submitted indicate that the building work to which this appeal relates comprises the provision of a toilet block at a touring park containing five WC's, two urinals, four shower stalls, eight wash hand basins, one disabled shower/WC cubicle and a chemical toilet emptying facility. Planning permission has been provided for a maximum of 40 pitches for caravans or touring vans. A building regulations full plans conditional approval was issued on 1 April 2007; one of the conditions being that a suitably sized cesspool or other drainage system be provided.

4. The touring park started trading on 1 May 2008. The Council was advised on 7 May 2008 that a cesspool of 27,000 litres capacity had been installed, which they considered to be inadequate and in contravention of Requirement H2 of the Building Regulations. You therefore applied for a relaxation of Requirement H2 on 27 May 2008 to allow the cesspool tank as installed on the grounds that: water saving devices had been fitted throughout the toilet block; water pressure had been reduced; water usage would be monitored by the site owners and the alarm float level would be set at 9,000 litres leaving 18,000 litres spare capacity.

5. The Council refused your relaxation application on 3 June 2008 for the reasons set out below and it is against this refusal that you have appealed to the Secretary of State.

#### **The appellant's case**

6. You made a number of points in your original letter dated 29 June 2008 to support your appeal, including:

- (i) The ground at the site is permo-triassic reddish mudstone and till which has low permeability and is generally unsuitable for sub-surface irrigation drainage (soak-away). To a depth of three metres the ground is a mixture of clayey material and trial holes for a permeability test remained full after 24 hours. The specialist company undertook a water interest

survey and evaluated possible access to a main sewer. Access to a water course was not an option and mains drainage was not available to the site.

(ii) The toilet block is fitted with water saving devices (push taps and showers) and supplied by mains water with reduced water pressure. Both shower and taps supply 1.4 litres of water per press (repeatedly tested).

(iii) As indicated above, the touring park started trading on 1 May 2008 and on the 24 June, 4,500 litres (1,000 gallons) of waste water was removed by vacuum tanker, leaving the cesspool nearly empty, and an independent vacuum tanker company provided a waste transfer notice. You contacted all the waste water disposal companies to verify that just this one emptying had occurred at that date.

(iv) The premises caters for adults only and no washing or laundry facilities are available. Each touring van is equipped with a cassette that collects waste from the van. The cassettes vary in volume but 15 litres is the norm. Since 1 May 2008 there have been 281 vans using the touring park who have used 4,500 litres of waste water, which equates to 16 litres per van. You calculate that taking into account the water saving devices installed at the park this could average out at about 14 litres per van.

(v) In your view, toilet blocks are getting smaller due to the private washing and toilet facilities on board caravans or touring vans. This is not a hook up foul drainage park and only electric is provided. Visitors prefer to wash and use their own facilities and empty their own waste water cassette as required. While some vans take part of their waste water off site, some equally bring a full cassette to the site and it appears to balance itself out. The touring park is not residential and therefore a considerable amount of the visitors' time is off site where other toilet facilities are used.

(vi) The current cesspool capacity is 27,000 litres equating to 1,687 vans (27,000/16 litres). However, the alarm light is set at 9,000 litres, the capacity of a standard vacuum tanker (larger tankers are available which carry 13,500 litres), but since the opening of the park, this has not been activated. The high level alarm switch has been tested and the liquor level in the tank is inspected weekly. The cesspool is a water retaining structure surrounded in concrete and located in clay, so leakage is not a possibility.

(vii) The size of the cesspool is based on 40 tourers therefore generating a waste volume of  $40 \times 16 = 640$  litres, which equates to  $27,000/640 = 42$  days storage, without emptying.

(viii) In your experience, touring parks use considerably less water than tented camp sites and the use of water saving devices can achieve considerable cost savings in both environmental and fiscal terms.

7. You concluded by stating that the touring park is a seasonal facility, with owners resident whenever the touring park is in use and who have made every effort to fulfil their obligations. The specialist company designed and installed the

cesspool, with a high level alarm. The first two months of opening have given actual, concrete volumes of foul liquor which back up the calculations and experience used to determine the size of the tank. With a 40 plus day retention capacity before the 9,000 litre mark is reached (one third of the total capacity) you are more than happy with its performance.

8. You subsequently submitted details of a second waste transfer from the touring park and current water meter readings with your letter dated 1 August 2008, to support your case, and responded to queries from the Department and the Council on the information provided in your emails dated 12 and 15 September 2008. You stressed, amongst other things, that between the two recent cesspool emptying dates, 24 June - 28 August 2008 - 65 days, 368 vans had used the touring park and 4,500 litres of waste water had again been exported from the site. In your original submission you advised that 281 vans had used 4,500 litres, which equates to 16 litres per van - therefore 368 vans/4,500 litres equates to 12.2 litres per van. In your view, this clearly gives more days storage than originally suggested.

### **The Council's case**

9. The Council provided a statement with its letter of 4 July 2008 giving the following reasons why your application to relax Requirement H2 in relation to the capacity of the cesspool was refused:

(i) You have not calculated the potential daily discharge to the tank installed, nor established the availability and frequency of emptying services. There is no basis for establishing a workable and affordable management plan, or calculating a reasonable reserve capacity in case of service failure and the need to activate contingency measures. In the absence of this information, it is not possible to affix the notice required by Requirement H2(3) of the Building Regulations for the avoidance of risks to health.

(ii) Monitoring and alarm functions are not likely to be wholly effective, judging by the following comments by the Council's Planning Services Enforcement Officer in a letter dated 15 October 2007: "Please note that arrangements will need to be made to empty the cesspit (sic) before the alarm is activated as the owners are not always on site and the alarm may cause nuisance to surrounding occupiers".

(iii) In refusing the relaxation request, the Council has attempted to calculate a potential maximum discharge rate as follows:

- No benefit will derive from the fact that touring vans have on-board waste water storage facilities as chemical toilet cassettes will be emptied on arrival or pre-departure.
- Approved Document H (Drainage and waste disposal) suggests a cesspool filling rate of 150 litres per person per day as a guide to emptying frequencies.

- The Environment Agency guidance PPG 4 suggests daily per capita sewage volumes of 120 litres for caravans.
- The Code for Sustainable Homes Level 3 gives 105 litres per person per day as a water efficient target.
- A daily per capita rate of 100 litres has therefore been taken as a reasonable and conservative assumption.
- The maximum population may be taken as 120 persons (40 pitches at an average occupancy of three persons) giving a potential filling rate of 12,000 litres per day.
- The tank as installed will require inspection and emptying on a daily basis, twice daily at peak times, while the reserve capacity is only one and a half days.

(iv) You have not provided any information to show that the above requirement is acceptable and sustainable, or that the required service is available. The planned monitoring programme is essentially reactive and likely to be ineffective in preventing pollution and health risks through overflowing of the tank. Occupation of the site will be seasonal and variable, with the peak summer months having the potential for maximum occupancy levels.

10. Taking all the circumstances into account, the Council concludes that the cesspool as installed contravenes Requirement H2(2)(a), which requires it to be of adequate capacity, and has the potential to be prejudicial to health. For that reason a relaxation is not considered appropriate.

### **The Secretary of State's consideration**

11. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties relating to the matter in dispute.

12. She notes that the site investigation has shown that the soil type is such as there will be no useful discharge of effluent into the ground and that this being the case it would not be practicable to install a septic tank in the touring park. In addition, seasonal use means that a waste water treatment plant would not be desirable. In the absence of a sewer connection a cesspool is therefore the only practicable means of dealing with effluent from sanitary appliances on the site, but the Council has taken the view that the capacity of the cesspool installed, ie, 27,000 litres, is inadequate to achieve compliance with Requirement H2 of the Building Regulations.

13. Although you stress that low water use appliances have been installed, there are limits to how much discharges can be reduced. Your case is dependent

on low water use by site users but, with appliances such as showers, there can be no assurance that users will not repeatedly push the button after each interruption.

14. The Council has suggested a rate of water use of at least 100 litres per person per day. This is somewhat lower than rates suggested in several guidance documents which they refer to (such as higher levels in the Code for Sustainable Homes) and, in installations associated with conventional buildings, this would only be achieved with innovative appliances.

15. You have provided details of the volume of effluent removed following two cesspool emptying dates. You indicate that 281 vans had used the touring park during the period from 1 May to 24 June 2008, when it was first emptied and the volume removed was 4,500 litres. As this is an eight-week period in the earlier part of the season, it can only be deduced that most of the time the site was running below capacity. You indicate, however, that there was increase in the number of vans to 368 between 24 June and the second emptying date on 28 August 2008 - some nine weeks later - but the volume removed was again 4,500 litres. However, this would again suggest that the site was running below capacity.

16. Even allowing for 75% occupation of the site and very moderate water use of 75 litres/person/day, the daily discharge would likely be in the order of 4,500 litres (75% of 40 vans = 30, and 30 vans x 2 occupiers x 75 litres = 4,500). With a capacity of 27,000 litres, this would entirely fill the tank in six days whereas the expected emptying interval for cesspools is usually once or twice a month.

17. The Secretary of State considers that the site in question is close to one of the major holiday routes that serves Southwest England. If the site is fully occupied with more than two people in each van and if some of them are not careful water users, the potential figure given by the Council of 12,000 litres water use per day is quite reasonable. This would mean that the cesspool could fill up regularly, particularly over a busy weekend. As such, the site operator would be utterly dependent on prompt emptying in order to prevent pollution and health nuisance. However, as the Council indicates, such arrangements do not appear to be in place and may not be feasible, as it is unlikely that the tank would be emptied on a Sunday and on a Bank Holiday weekend.

18. The Secretary of State therefore concludes that the cesspool installed is not of adequate capacity for the number of users that could visit the site and without evidence of an almost infallible tanker service, it would be unacceptable. While she notes the representations you have made, in her view a sufficient case has not been made to relax Requirement H2 of the Building Regulations.

19. You could discuss with the Council the possibility of the touring park continuing to operate on reduced capacity using the current cesspool, whilst you consider other options further, such as installing larger or more tanks or connection to a sewer. Alternatively, a biological treatment system that could be reseeded and restarted by a service technician might be an appropriate method.

### **The Secretary of State's decision**

20. As indicated above, the Secretary of State has concluded that it would not be appropriate to relax Requirement H2 (Wastewater treatment systems and cesspools) in Part H (Drainage and Waste Disposal) of Schedule 1 to the Building Regulations 2000 (as amended) in relation to the capacity of the cesspool in this case. Accordingly, she dismisses your appeal.

21. You should note that the Secretary of State has no further jurisdiction in this case and that any matters that follow should be taken up with the building control body. A copy of this letter is being sent to the Council.