



*Air Noise & Nuisance Team
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FAO Duncan McNab

Dear Duncan

Consultation on a Statutory Code of Practice on Sewerage Nuisance

I am writing to you with my comments on the draft code of practice (COP) issued in October 2005.

As you may know, *The Airshed* is a specialist environmental consultancy with odour assessment experience throughout the UK. Our experience includes consultancy work for SEPA, Scottish Water and their PFI operators, animal rendering and feed plants, municipal waste treatment, fishmeal and food processing. Further details on our project experience may be obtained at <http://theairshed.com/>.

Overall, I consider that the COP is well drafted and should make a positive contribution to improving the quality of life for people in Scotland. However I have four comments on the draft COP:

- The degree of enforcement proposed by the COP is inconsistent with odour regulation in other sectors. The wastewater treatment industry should be encouraged to move away from nuisance based standards and be required to meet the same amenity based standards that apply to other smelly industrial activity;
- The COP refers in passing to the Planning System, but does not make it clear that new development must be designed to protect amenity rather than avoid nuisance. Some planning authorities may seek to apply the standards proposed by the COP when determining new projects, particularly in view of the current dearth of planning advice on odour;
- The Odour Risk Assessment Matrix has not been widely used or validated and the outcomes are highly sensitive to single variables input by the user. While it is potentially a useful tool it is probably unwise to include this within the framework of a statutory COP; and
- The COP should be formally reviewed in the light of experience and should include a minimum period for review, say every 4 years.

I have included some more detailed commentary explaining my views on amenity standards and interface with the Planning System overleaf.

Nuisance or Amenity

The wastewater treatment industry should be encouraged to move away from the concept of nuisance avoidance and move towards promoting standards that protect amenity. The wastewater treatment industry now enjoys a privileged position compared to other smelly industries such as animal rendering plant, animal feeds plants and odour from WWTW associated with some industrial plants. I can't think of a good reason why this privileged position should continue indefinitely.

Since the introduction of the Environmental Protection Act 1990, the operators of Part A and Part B industrial processes have been obliged to ensure that their process emissions should not cause offensive odour at or beyond the site boundary as perceived by an authorised inspector. More recently these odour standards have been extended by the Pollution Prevention and Control Regulations to include larger food processing plants and intensive livestock units. This type of requirement has been tried and tested in the courts of both Scotland and England.

In my opinion it is unreasonable for government to propose less rigorous regulation for operations effectively under its own control. The odour standards that apply to most odorous industrial processes within the private sector should also apply to urban wastewater treatment works.

The effectiveness of the COP would be greatly enhanced if "no offensive odour" were an explicit requirement.¹ In some cases it may be more appropriate to consider applying a receptor based standard, rather than a site boundary standard. Alternatively the COP should be based on the aim of avoiding "reasonable cause for annoyance" as proposed by current IPPC Odour Guidance.²

It may be unrealistic to expect the industry to adopt an amenity protection based approach immediately and it would be prudent to allow for a period of at least 5 years to allow the industry to adjust to this regime.

Interface with the Planning System

The major upgrading of works over the last decade has in many cases either failed to meet public expectations or created new odour conflicts. The industry missed an opportunity at some sites to reduce odour, partly due to the inherent difficulties in assessment, uncertainty in odour quantification, poor Environmental Impact Assessment practice and lack of technical understanding of the issues by planning authorities.

The COP only briefly discusses how the planning process may be used to control odour from new WWTW through the use of appropriate planning conditions. The approach in Scotland as adopted by Planning Authorities, Water Authorities and their consultants has varied widely in the past. There are many cases in Scotland where the Environmental Statements for new or substantially enlarged WWTW appear to have significantly underestimated the likely odour impacts.

¹ In 1998 the Scottish High Court found in favour of "no offensive odour" type of condition in the case SEPA took against Seed Crushers (Scotland). The Court found that "The condition laid down a standard which was ascertainable, and the officer's view was "a way of verifying, readily but not conclusively, whether the standard has been met."

² Environment Agency October 2002 Technical Guidance Note H4. Horizontal Guidance for Odour.

In practice the planning system is often ineffective in protecting the amenity of local residents. There are a number of reasons why this might be the case: e.g. there is no consensus about how odour from WWTW should be quantified, some agencies prefer H₂S because it is easier to measure, but doesn't allow for the complex organic odours associated with sewage; influent characteristics in the catchment may be poorly understood and may not have been adequately considered at design stage; design assumptions are sometimes too optimistic or may change post planning during detailed design or construction; there is significant uncertainty in source estimates from fugitive emissions such as open tanks; and odour emissions are sometimes dependent on operational conditions which are difficult to anticipate and control effectively through the planning regime.

The consistency and robustness of odour assessments for new processes could be improved if the industry and/or SE commissioned a review of the odour assessment methods employed for proposed WwTW and compared with the predicted impacts with subsequent operational performance. Such a review may make for uncomfortable reading in some cases but would help promote good practice for environmental impact assessment and provide useful background information for Planning Authorities considering developments in the future.

Such a review would also provide useful background for any subsequent planning advice note although it may be premature to consider an odour related PAN at present.

Conclusion

I hope that these are helpful and constructive. I confirm that I have no objection to this material being made available in the SE library and/or website.

Kind regards



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