

Environmental Noise Control Best Practice

Defining BPM and Best Available Technology



Get the definitive evaluation of BAT and BPM

Reduce costs dramatically and avoid (or win) potential court cases...

Once a noise nuisance has been established, there remains the issue of just what constitutes "best practicable means" for environmental noise control. Companies may employ consultants to generate technical reports, claiming that the cost of mitigation is too high to be reasonably practicable. In most cases, the suggested noise reduction technology is in fact not best practice. Our definitions of BPM across a very wide range of successful applications typically reduce the costs of noise control by 50% - 80% compared with alternative evaluations. This is a game changer for councils, saving time, resources and money - particularly where a court case (which might otherwise be lost) is a possibility that can usually be avoided.

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We can often provide an initial opinion based on information provided by EHOs and / or the company via email, making it fast and cost effective. Moreover, extensive examples indicate that BPM often cannot be claimed without reference to our technology as it constitutes BATNEEC.

The BPM / BAT Noise Control Evaluation Process

The process involves the following steps:-

- **Contact us in the early stages to get an initial opinion**
Call to discuss the noise problem and get a list of the information we need. Email us the information and recordings - photographs, noise levels and sound recordings / video sample (if required) and report(s).
- **Report review**
We can review reports - either from the council or from consultants - and give an expert opinion on the content and conclusions.
- **Diagnosis and BPM evaluation**
*Review your data, (analysing sound samples etc) and assess the noise control options against our database and past experience. Where necessary, make site visits to acquire more detailed information. We can then provide you with an assessment of the noise control options using current **Best Available Technology** with accurate estimates of the costs and potential noise reductions that would be achieved. This can then be used as definitive evidence of what constitutes **best practice** to solve the problem. The process is fast and substantially reduces councils' costs.*
- **Court cases - expert witness**
In virtually every case, the above process will avoid the necessity to go to court as the noise control costs are usually so much lower than expected. However, should a case go to court, then you will have a major technical advantage based on our definitive assessment of BPM and BAT as an expert witness.

New BPM /BAT Technology

Extensive examples indicate that BPM often cannot be claimed without reference to our noise control technology...



...particularly for the most common of environmental problems, that of fan noise.

BPM / BATNEEC Project Examples

Lifting a Fan Noise Abatement Notice

Approaching £50000 had been spent on silencing two large, roof mounted fans in an attempt to solve a long-term environmental noise problem and to satisfy local complainants and the authorities. Unfortunately, this was completely unsuccessful (1dB reduction). The company was considering legal action to claim BPM as they had been informed that the potential costs of additional noise control would be very high - and with no guarantee that this would solve the problem.

We were brought-in to break the deadlock and to prevent escalation to a potentially very costly legal process by providing a definitive evaluation of what would constitute BPM. Our initial diagnosis was made from the soundtrack of a video emailed by the company which allowed us to conclude that a low cost option was practical in the form of our unique Quiet Fan technology. This option was accepted by all parties. Subsequently, the noise from the fans was reduced by over 20dB at source, eliminating the problem at a tiny fraction of the cost of conventional alternatives - and avoiding potential legal costs.



noise control best practice

BPM / BATNEEC Noise Control Projects - Continued

Power Presses - misdiagnosis; wasted money and unnecessary noise nuisance

Complaints about environmental press noise from a factory unit over a long period had resulted in an Abatement Notice. The company took advice from consultants and wasted £12000 to improve the attenuation of the end wall of the building to no effect (1dB(A) reduction). A further expenditure of £65000 had been mooted to increase the roof attenuation, but with no guarantee that it would solve the problem. There then followed a year of legal wrangling at substantial cost to both parties as the company felt that spending the added money without assurances that it would solve the problem was unacceptable.



Complainants' - eye view



The Local Authority finally commissioned a BPM Noise Control Audit to obtain our definitive judgement. We proved that best solution was to use engineering technology to reduce the press noise at source rather than turning the building into an acoustic enclosure. As the £12000 cost was only a fraction of the money already spent on legal fees, the company immediately implemented the recommendations. This reduced the low frequency noise components by 9-24dB, eliminating the problem. If an accurate BPM evaluation had been made at the start, then the company would have reduced its expenditure by c 90% and the council would also have saved a small fortune in direct and indirect (time and resources) costs. Moreover, the complaints suffered unnecessary disturbance over years.

Woodwork Factory Fans - court case avoided

The company appealed against a Noise Abatement Notice on the grounds that they had already spent large sums of money on noise control and that consultants had told them it would cost a further £40k for acoustic enclosures with no guarantee the problem would be solved. On behalf of the Council, we proved that they could not claim BPM as the diagnostic process used was inadequate and that BAT in this case consisted of spending around £6k to control the noise from 5 fans at source. The company backed-out of the court case at the last moment, implemented the recommendations and the problem was resolved.

Ice Cream Dairy - avoiding factory closure and the loss of jobs

Ongoing noise complaints from the landlord (not the residents) of a row of cottages next to the site in the centre of a village meant the the council had to take action. Over a period of many months, the conclusion had been reached that the costs involved in reducing noise levels would be unacceptable and might result in closure of the factory. At this point, a second opinion was sought. We showed that, not only was it possible to reduce the noise from the multiple sources at source at low cost, but that the novel techniques used on the cooling towers (the dominant noise problems) would actually reduce running costs such that the process would pay for itself. The recommendations were implemented and the target noise levels met.



Profitable noise control

Server Chiller Farm - c £100k wasted on ineffective noise control



Definitely not BPM!

A Noise Abatement Notice had been issued against a company operating a large array of chillers as they produced noise levels 10dB above the background and with tonal content. The company had already spent nearly £100,000 on noise control with very little success were considering claiming BPM in court as the perception was that any further noise control would also involve 6 figure sums. The council suggested they might like to get a second opinion....

We established a very precise definition of BPM in this case, such that, provided they implemented our recommendations, we would guarantee that the requirement of using BAT would be met and that there would almost certainly be no further complaints afterwards. The critical elements of the site noise were reduced by 15dB and the tones removed at less than half the previously expected cost. If our approach had been used in the first place, the company would have saved well over £100,000, the council would

have saved considerable money and resources and the complainants would not have had to suffer unnecessary disturbance over a 2 year period.

Taking Advantage of the BPM / BATNEEC Evaluation

Simply contact us to discuss the particular circumstances as early in the process as possible. We can often provide immediate initial guidance over the phone with a subsequent detailed costed programme by email.

Contact us for further technical details and detailed guidance.

INVC on the web - www.invc.co.uk or www.invc.co.uk/services/local-authorities.php

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