

## Assessment of Noise whilst collecting recycled glass

North West Leicestershire District Council (NWLDC) will take all reasonable steps necessary to ensure that the risk of hearing damage to employees who work with noisy equipment or in a noisy environment is reduced to a minimum. The NWLDC also recognises that noise levels below those which cause hearing damage, in offices for example, can still cause problems such as disturbance, interference with communication and stress and will take all reasonable steps to reduce noise levels as far as possible. NWLDC will also take all reasonable steps to minimise the disturbance caused by noise from the organisation's premises affecting people in the neighbourhood..

### Arrangements for Securing the Health and Safety of Workers

The Noise assessment conducted by [REDACTED] Environmental Protection Officer (who has the relevant qualifications and equipment conduct an accurate assessment) in March 2006 (Email attached) indicated that noise levels results did not reach 1<sup>st</sup> action levels during the working day for operatives collecting domestic trade and recycled waste.

The assessment will be used as the basis for formulating action plans for remedial measures when necessary. Assessments and surveys will be recorded and updated regularly, particularly when changes in work practice cause changes in noise exposure levels of employees.

As part of the Government initiative it was decided glass recycling was a requirement. [REDACTED] was again commissioned to conduct a second assessment to include the collection of glass, transfer of glass to the hopper and emptying of the hopper to the lorry and subsequently to the storage silo. A second Email from [REDACTED] indicated that the glass collection and transfers now enter noise peaks requiring hearing protection. The problem then becomes one of traffic noise which to ensure the safety of the operatives needs to be heard.

NWLDC will, as far as is reasonably practicable, took steps to reduce noise exposure levels of employees by means other than the use of personal protection, the main reduction being the glass hoppers on the vehicles were lined with an acoustic absorbing material. A second consideration was to consider to include use of reduced exposure time to ensure that the dose rate of 85dB (A) for 8 hours is not exceeded, but as all rounds were going to be involved this was not practical.

### Reduction of Noise Exposure Levels

NWLDC accepted that the use of ear protectors was a last resort, and is committed to continue to seek and introduce alternative methods for reducing noise exposure levels whenever possible in the future on this occasion this was not possible.

### **Provision of Ear Protectors**

NWLDC will provide suitable and effective ear protection to employees working in high noise levels, as indicated as necessary by the results of noise exposure assessments. It also provide for the maintenance and repair or renewal of the protective equipment, and provide training in the selection and fitting of protectors and details of the circumstances in which they should be used. It was decided with consultation with [REDACTED] that the Ultra fit E.A.R 14 provided protection at 2500 Hz of in excess of 24dB protection, but at lower Hz of 80 where traffic noise is at its peak a reduction of less than 1 dB is reached thus enabling the operative to still hear traffic.

### **Use and Maintenance of Noise Control Equipment and Procedures**

NWLDC will maintain all equipment and monitor all procedures introduced for the purpose of reducing noise exposure of employees, such as the acoustic matting. All personnel will be required to use these procedures and equipment correctly and promptly report any defects or deficiencies through the appropriate channels.

NWLDC will provide adequate training to employees as part of its hearing conservation and noise control policy.

All employees who are subject to high levels of noise will be provided with information, instruction and training about the harmful effects of noise information and training on what they must do in order to protect themselves and meet the requirements of the law and of the organisation's policy.

Managers and supervisors responsible for formulating and carrying out the organisation's noise policy will also be given appropriate training.

### **Procedures for dealing with Health and Safety Issues**

Whenever an employee raises a matter related to noise in the workplace as a health and safety issue, the organisation will:

- take all necessary steps to investigate the circumstances
- take corrective measures where appropriate
- advise the employee of actions taken.

Where a problem arises as a result of noise in the workplace, the employee must inform their line manager immediately.

From: [REDACTED]  
To: [REDACTED]  
Date: 20/03/2006 16:37:34  
Subject: Noise from refuse lorries.

[REDACTED]

Further to the short monitoring excersise, undertaken at the depot, on Monday 20/3/06, I can advise that I would consider it unlikely that noise levels experienced by the refuse operatives would contravene the new noise at work regulations (based upon implimenting the European Directive on Physical Agents at Work (Noise)).

As we discussed, the new levels are calculated on an equivalent noise dosage over an 8 hour period. The levels monitored, whilst the bin hoist was working were at approximateley 80 - 82dB but when quieter periods are encountered by these the Leq noise levels would be reduced below the 80dB first action level. If a true figure was required to be absolutely certain that the first action level was not being exceeded, I would suggest that the operatives are fitted with personal noise dosimeters, to monitor levels over the working shift. However, I am confident that taking quiet periods into the calculation of the noise dose would reduce the overall noise dose levels to low to mid 70dB's. Well below the first action level.

If you require any further info, do not hesitate to contact me.

[REDACTED]

[REDACTED]  
Environmental Protection Officer  
NW Leicestershire DC  
[REDACTED]

## ENVIRONMENTAL HEALTH

# MEMORANDUM

FROM: [REDACTED]  
TO: [REDACTED]

OUR REF:  
YOUR REF:

DATE: 2<sup>nd</sup> October 2007

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**RE: Noise exposure from glass recycling collections.**

As we have discussed, the monitoring exercise undertaken to assess the noise exposure of refuse operatives, when collecting glass for recycling, indicates that the operatives would be subjected to excessive noise doses, when compared to the limits of the Noise at Work Regulations 2005.

The main area of concern is that, when the glass is being collected and placed into the kerbside recycling unit, the operatives are exposed to an  $L_{eq(30mins)}$  of 93.7dB. This would equate to an exposure time of less than 30minutes being in excess of the first action level of 80dB equivalent noise dose for an 8 hour period and a 1 hour exposure would exceed the second action level of 85dB.

When taken in the context of a 40 hour working week, if the operatives are only taking part in the glass recycling activities of one 10 hour shift in this noise climate, with the three other shifts being undertaken beneath the first action level, the expected noise dose would decrease to an equivalent of 88dB. Which is still above the threshold for hearing protection to be made available.

The choice of hearing defenders, as we discussed, must be carefully made however, to prevent the operatives being exposed to the dangers of traffic movement. The main content of noise from the glass recycling activities is of a high frequency peaks. Therefore, it is important that hearing defenders are effective at reducing the higher frequency range of the noise. Traffic noise has a much lower frequency content, and as such, the hearing defenders chosen should ideally be less effective at reducing lower frequency sound. This would enable the operatives to be aware of traffic noise in the street, whilst being adequately protected from the noise from the glass recycling activities.

The Ultra Flex 14 Ear Plugs, that we looked at in the ARCO catalogue, would appear to be adequate for the purposes of this activity. The specification

indicates that high frequency noise is adequately attenuated for the glass noise whilst lower frequency noise would allow for traffic noise to be audible.

I would comment that this assessment must be taken in the light of being a brief, general, overview of a potential problem. If a full assessment is deemed necessary I would advise that an acoustic consultant would be required to undertake monitoring over a much longer period of time to accurately predict actual noise doses for the operatives.

If I can be of any further help, please do not hesitate to contact me on extension [REDACTED]

[REDACTED]

[REDACTED] – Environmental Health Officer