

TRANSPORT FOR LONDON

SAFETY, HEALTH AND ENVIRONMENT COMMITTEE

SUBJECT: QUARTERLY HEALTH, SAFETY AND ENVIRONMENT PERFORMANCE REPORTS

DATE: 22 JULY 2009

1 PURPOSE AND DECISION REQUIRED

1.1 To inform the Committee of the key Health, Safety and Environment matters in the Modes during the last quarter. The Committee is asked to note the report.

2 BACKGROUND

2.1 Full reports on Health, Safety and Environmental activities and performance are produced annually. These quarterly reports are to update the Committee on any significant matters from the previous quarter. As these are the reports for Quarter 4 there are some references to performance over the year.

3 INFORMATION

3.1 The Quarter 4 2008/09 Health, Safety and Environment Performance report for each Mode is attached as follows:

- Appendix 1 London Underground
- Appendix 2 Surface Transport
- Appendix 3 London Rail
- Appendix 4 Crossrail
- Appendix 5 Corporate Directorates
- Appendix 6 Health and Safety performance data summary

The tabulated summary of health and safety performance presented in Appendix 6 was requested by the Committee.

3.2 It should be noted that London Underground reported for 4 periods in Quarter 3 whilst the other modes have reported for 4 periods in Quarter 4.

4 RECOMMENDATION

4.1 The Committee is asked to NOTE the report.

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LONDON UNDERGROUND QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1 All safety key performance indicators were stable or improving during 2008/09 (and in the quarter) and are on or better than target with the exception of those indicators noted in sections 1.8 to 1.10 below. This reflects the improving safety performance London Underground (LU) has continued to achieve over the last few years. In particular the employee major injury rate has returned to the stable level of preceding years and there was a 22 per cent reduction in the number of signals passed at danger; from 913 last year to 716 this year.
- 1.2 The improving trends seen since 2005/06 in the percentage of staff taking time off for sickness due to stress anxiety and depression and back pain continued throughout 2008/09. The Health programme continues to be delivered to target.
- 1.3 The overall target of six per cent (669) testing for unannounced drugs and alcohol testing was exceeded in 2008/09 (with 798 tests undertaken, seven per cent). The six per cent target was also met across each line.
- 1.4 Environmental performance indicators are stable or improving. All of the environmental improvement actions were delivered on programme; there was an improvement in the accuracy of reporting station electricity data.
- 1.5 The station and depot recycling rate was 42 per cent in Quarter 4 giving an overall recycling rate of 40 per cent for 2008/09 (meeting the 40 per cent target for 2008/09).
- 1.6 A new reporting system for road fleet emissions performance monitoring was introduced to enable quarterly reporting of performance from the road fleet.

Areas for improvement

- 1.7 There was one contractor fatality in 2008/09; reported last quarter. The investigation by the Health and Safety Executive (HSE) remains inconclusive and is ongoing.
- 1.8 There were 734 platform train interface (PTI) incidents in 2008/09 which exceeded the target of 609; this is as a result of an increase in the number of falls whilst boarding and alighting and in the number of falls from platforms. Alcohol, consumed by passengers before entering the station, is a contributory factor in the number of falls from platforms. The local PTI groups are continuing to review these incidents to identify root causes and potential mitigation actions.

- 1.9 The increasing trend in the number of stalled lifts requiring power winding and cross transfer of customers, as reported last quarter, continued in this quarter. An engineering solution to reduce the number of failures has been developed for a number of lifts.
- 1.10 There were two London Fire and Emergency Planning Authority Enforcement Notices received in the quarter, one at Bank Station and one at Tower Hill Station. The Notice at Tower Hill was subsequently withdrawn. There were three enforcement notices received in 2008/09; all notices have been closed.
- 1.11 There were 29 overdue actions recorded on London Underground Safety Action Tracking System (LUSATS) against safety improvement programme actions. All actions have now either been closed or a revised programme put in place. There was one overdue LUSATS action in LU in relation to a Rail Accident Investigation Branch recommendation which has now been closed.
- 1.12 Fifty four per cent of all environmental complaints in the quarter were associated with noise and vibration (N&V). Public Address System noise continues to be the most significant source of complaints, at 44 per cent. The number of complaints in Quarter 4 was lower than the number received in the two previous quarters. Continued cross-directorate group fortnightly meetings taking place to ensure complaints are addressed.
- 1.13 Traction energy efficiency (MWh/million passenger journeys) fell in Quarter 4. The year-end traction energy efficiency was 896 MWh/million passenger journeys, three per cent above the target of 870.

Significant plans for the next quarter

- 1.14 The impact of the number of customer journeys on a number of safety key performance measures is being analysed further for a correlation and will be reported next quarter.
- 1.15 The London Underground - Royal Society for the Protection of Birds (RSPB) 'Mind the Bird' photograph competition will be launched.
- 1.16 The Carbon Guide for the Carbon Reduction Incentive Mechanism under the Tube Lines Restated Terms for Period 2 of the PPP Contract will be finalised.
- 1.17 A report to identify initial Carbon Reduction opportunities from the Neasden Depot Upgrade will be produced.
- 1.18 The new London Underground carbon footprint report will be published. This comprehensive assessment builds on previous work and identifies the key focus areas for our CO₂ mitigation activities.

2 PROGRESS AGAINST HSE PLAN

- 2.1 Progress against actions in the Health, Safety and Environmental Improvement plans continue to be tracked via LUSATS. Actions from the 2009/10 Safety Improvement Programme will be added in the next quarter.

2.2 Progress on revising the Contract (Quality, Environmental, Safety and Health) QUENSH conditions continues. A plan is being developed to communicate the changes and to verify the effectiveness of this communication. This document will be ready for communication in Quarter 2 2009/10.

2.3 The local incident investigation course was established and a review of investigations completed showed that the quality had improved.

3 STATUS OF HSE MANAGEMENT SYSTEM

3.1 Compliance with LU's HSE Management System (HSEMS) is monitored via audit. LU's former Metronet and Tube Lines audit programmes continue schedule with no safety critical adverse findings in Quarter 4. The Metronet audit programme has been absorbed into the LU audit programme from April 2009.

3.2 An HSE Assurance Letter was prepared prior to submission to the Commissioner and SHEC.

4 HEALTH AND SAFETY PERFORMANCE

Health

4.1 There were 29,764 working days lost to sickness absence in Quarter 4, representing an average of 2.3 days per employee. For comparison, in the previous quarter there were 3.2 days absence per employee and in the same quarter last year 2.5 days absence per employee. The top three categories of sickness absence in Quarter 4 were coughs and colds, gastrointestinal, and musculo skeletal.

Days lost	Q4 2008/09	Q3 2008/09	Q4 2007/08
Sickness absence	29,764	43,404	34,078
Average / employees	2.3	3.2	2.5

4.2 The physiotherapy department has collaborated with the counselling team to work on a condition management programme for employees with chronic musculo skeletal problems to help them understand more about their condition and to help improve their quality of life. Two pilot programmes have been run focussing on a variety of factors that are often associated with persistent pain; physically, mentally and emotionally. The programme is being evaluated to determine effectiveness and whether there is a business case for providing the programme on an ongoing basis.

4.3 The counselling and trauma service has introduced a new process for priority referrals which aims to provide telephone counselling for 85 per cent of clients within one day of referral. Performance against this target is being monitored.

4.4 Occupational health services to the Greater London Authority for medical advisory and physiotherapy services commenced. The provision of the service to date has been well received.

4.5 Preparations were made to provide counselling and drug and alcohol services to the employees 'tupe-ed' into London Underground from Metronet, from April

2009. This is being extended to include medical advisory and physiotherapy services from June 2009.

- 4.6 The improving trend in the percentage of staff taking time off for sickness due to stress, anxiety and depression continued in 2008/09.

Safety

- 4.7 There were 23 accidental customer major injuries in Quarter 4 (0.09 per million customer journeys). For comparison there were 45 accidental customer injuries in the previous quarter (0.13 per million customer journeys) and 19 in the same quarter last year.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Customer major injuries	23	45	19
Rate/million customer journeys	0.09	0.13	0.07

- 4.8 There were two accidental employee major injuries in Quarter 4, a rate of 0.65 per 1,000 employees. For comparison, there were two employee major injuries in the previous quarter and three in the same quarter last year.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Employee major injuries	2	2	3
Rate/1000 employees	0.65	0.57	1.52

- 4.9 There were 97 physical assaults on employees in Quarter 4. For comparison, there were 120 physical assaults on employees in the previous quarter and 112 in the same quarter last year.
- 4.10 There were 319 verbal assaults on employees in Quarter 4 and 102 threats. For comparison, there were 284 verbal assaults and 120 threats on employees in the previous quarter and 245 and 112 in the same quarter last year.
- 4.11 LU and the British Transport Police (BTP) have a joint Workplace Violence Unit (WVU) which was set up in 2006 to focus on physical violence, threats and abuse against Tube staff, which aims at making the Tube network a safer place for staff.
- 4.12 Every LU station has been issued with a DNA 'spit kit' for staff to take samples of saliva if they are spat at.
- 4.13 LU actively encourages its staff to report all assaults, no matter how minor, in order to develop effective preventative measures. This has been effective and the reporting of all types of assaults, threats and verbal abuse provides both BTP and the WVU unit with valuable intelligence.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Employee physical assaults	102	120	112
Employee verbal assaults	319	284	245
Rate/1000 employees	30.19	28.23	25.85

- 4.14 There was one contractor fatality in 2008/09 which was reported last quarter. The investigation by the Health and Safety Executive (HSE) remains inconclusive and is ongoing.
- 4.15 The overall Signals Passed at Danger (SPAD) trend continues to decrease. This has reduced by 22 per cent from an average of 70 per period last year to 55 per period this year, with a total of 147 SPADs occurring in the quarter. The average number of Category A SPADs (due to driver error) has reduced by 23 per cent, from 54 per period last year to 42 this year.

5 ENVIRONMENTAL PERFORMANCE

Carbon and energy management

- 5.1 In Quarter 4 traction energy usage rose by seven per cent whilst passenger km only rose by three per cent, leading to an increase in normalised CO₂ emissions in Quarter 4. More train kilometres run and an increased level of heating and lighting on trains through the winter led to increased traction energy use. Traction energy consumption and passenger km for Quarter 4 2008/09 were three per cent higher than the same quarter last year.
- 5.2 The 70.0 g CO₂/passenger km emitted for 2008/09 is a reduction compared to the comparable 2007/08 data (75.6 g CO₂/passenger km). The CO₂ figures included in this report are based solely on electricity use, which accounts for 82 per cent of total emissions. A wider scope of emission sources will be included for 2009/10.

	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09	Total
Total CO ₂ (tonnes)	135,837	133,809	185,593	157,223	605,063
Normalised CO ₂ (g/passenger km)	70.7	68.0	69.2	72.4	70.0
Total Traction Electricity (MWh)	217,320	215,768	299,333	243,592	976,014
Traction Energy Efficiency (MWh/million passenger journeys)	892	864	864	938	896

- 5.3 Lower than forecasted passenger journeys and an increase in traction energy usage led to a year end traction energy efficiency of 896 MWh/million passenger journeys (MWh/m passenger journeys), three per cent above the target. Higher passenger journeys in 2007/08 meant that performance was similar to 2008/09 even though traction energy consumption was higher. The overall level of normalised CO₂ is forecast to increase in the short term due to the higher energy requirement from the increased service levels delivered by the Line Upgrades. The long term trend is forecast to be downwards due to the efficiencies from increased regenerative braking across the network, other energy efficient technologies and increased passenger numbers.

Recycling and waste management

- 5.4 The paper recycling collection activities continue to deliver excellent recycling rates, particularly when considered in the context of the increase in waste. Of the station and deport waste collected during Quarter 4, 42 per cent was recycled. The majority of this was paper. This corresponded to a 40 per cent recycling rate for 2008/09 and reflected a 50 per cent increase in the tonnage of waste recycled in recent years (5,651 tonnes recycled in 2008/09 compared to 3,674 tonnes recycled in 2006/07). A customer newspaper recycling trial (launched in October 2008) has been running at six stations. London Underground's Ambience team has also started a trial to improve recycling, working in partnership with the City of London and City of Westminster. Twelve stations are involved in the trial and over 780 tonnes of paper has been collected for recycling since February 2009.

	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09	Total
Commercial and Industrial Waste (tonnes)	3,253	3,226	4,101	3,624	14,205
Commercial and Industrial Waste Recycled (%)	37	39	41	42	40
Construction and Demolition Waste (tonnes)	17,039	12,133	44,538	44,467	118,177
Construction and Demolition Waste recycled (%)	39	54	90	70	72

- 5.5 In Quarter 4, an increased amount of construction and demolition waste (44,467 tonnes) was handled compared to previous quarters this year. The increased volume of waste and recycling noted in Quarters 3 and 4 was due to an increase in the amount of work being undertaken, inclusion of scrap metal figures in Quarter 3 for the year to date and implementation of new construction waste legislation which has resulted in improved waste performance reporting from projects. Quarter 3 is also a longer quarter than other quarters. The improved waste performance data collection systems resulted in reporting for the first time by non-PPP projects (Tottenham Court Road and Step Free Access at Baker Street). The Tottenham Court Road project delivered a 90 per cent recycling rate for Quarter 4. The Quarter 4 recycling rate was 70 per cent and 72 per cent for the year.

Managing noise and noise complaints

- 5.6 Over half of all environmental complaints received in Quarter 4 were associated with noise and vibration. Public Address System noise continued to be the most significant source of complaints (44 per cent of all noise and vibration complaints) although the number of complaints received (93 complaints) was lower or comparable with the number received in the two previous quarters (Quarter 2: 84 complaints, Quarter 3: 99 complaints). A cross-directorate working group meets fortnightly to ensure complaints are addressed in an effective and timely manner. Work also continued to ensure that London

Underground remains compliant with the noise notice served on Earl's Court in April 2008. The Noise Abatement Notice includes operational and technical conditions set out by the Royal Borough of Kensington and Chelsea. Following refurbishment of the roof at the station, a modified Public Address system was installed to deliver compliance with the conditions of the notice by the compliance date of 12 June 2009. The station is now compliant with all conditions of the notice.

6 MAJOR INCIDENTS

6.1 There were no major incidents in the quarter.

**SURFACE TRANSPORT, QUARTERLY HEALTH, SAFETY AND ENVIRONMENT
REPORT**

1 SUMMARY

What went well

- 1.1 As part of the Community Safety Plan, the rollout of the Hub Teams to further improve the safety and security of the transport system was continued with a total of 25 teams now operating from key transport hubs across London.
- 1.2 The number of bus collisions with low bridges fell from nine incidents in 2007/08 to three in 2008/09 - the lowest in five years. The installation of the low bridge warning facility as part of the iBus system is considered to have contributed to this reduction.
- 1.3 As part of the London Safety Camera Partnership (LSCP), a new educational resource was sent to all secondary schools for Key Stages 3 and 4 (11 – 16 years), focussing on addressing the consequences of speeding or red light running on London's roads.
- 1.4 Ringway Jacobs (a Streets highway maintenance contractor) was awarded a good practice certificate from the European Agency for Health and Safety at Work. This was in recognition of the positive contribution they made in promoting risk assessment as the start to systematic occupational safety and health management.
- 1.5 Funding for the roll-out of approximately 300 LED traffic signal sites, from April 2009 to the end of 2011, was secured from the TfL Climate Change Fund. LED technology uses 68 per cent less energy than tungsten halogen lamps. This is the first phase of a proposed wider roll-out.
- 1.6 The Green Estate Management Plan for the Transport for London Road Network (TLRN) was issued as a companion volume to the Highway Asset Management Plan.

Areas for improvement

- 1.7 The planned launch of the web based bus Incident Reporting and Information System (IRIS) in April was postponed due to an unforeseen technical fault when trialled over the internet. Work is ongoing to resolve the problem as quickly as possible. The IRIS training programme for users at bus operating companies was completed with 180 delegates attending the training.
- 1.8 An Environmental Evaluation Procedure is to be applied to all relevant Surface Transport projects to determine whether Environmental Impact Assessment (EIA) is required and, if not, the level of environmental appraisal

required. This procedure helps to ensure an understanding of the potential environmental impacts, manage environmental risk and reduce the risk of challenges to a project. It also helps to ensure that projects meet TfL's environmental objectives and demonstrate environmental best practice for those projects where undertaking EIA is not required.

Significant plans for next quarter

- 1.9 TfL launched its 2009 Road Safety theatre production, *'Now You See Me; Now You Don't'*. The production will tour 17 London boroughs over the next four months visiting 170 primary schools to make young people more aware of road safety. The focus of the production is on the issues surrounding the children's upcoming journeys to secondary school, and emphasises their responsibility for their own and other people's safety.
- 1.10 A three year analysis of falls in buses shows that 22 per cent of incidents were injuries to elderly passengers of which seven per cent were classed as "major injury" (ie taken to hospital). As 15 per cent of bus passengers are Freedom pass holders, work was undertaken with bus operating companies to participate in a national fall awareness campaign in June, facilitated by Help the Aged.
- 1.11 A range of joint initiatives with police and councils to identify unlicensed taxi and mini-cab operation commenced. This has triggered a review and expansion of risks assessments with a view to reducing risks posed to the public from unlicensed vehicles and drivers.
- 1.12 London River Services worked with boat operators, the Maritime & Coastguard Agency and the Port of London Authority to produce a Code of Practice for mooring passenger vessels. Active monitoring to provide assurance that the Code is being followed is planned.
- 1.13 Surface Transport is considering how to meet the requirements of the Carbon Reduction Commitment, a mandatory emissions trading scheme.
- 1.14 Surface Transport management approval will be sought for TfL's support fleet policy and targets to reduce CO₂ emissions, with secondary benefits for improved safety and emissions to air.
- 1.15 As part of the Low carbon taxi programme, the supplier of the Low carbon taxi will be appointed and will deliver up to ten hybrid taxis for trial in London from 2010.
- 1.16 The tender for the New Bus for London supplier will be issued and will include challenging environmental criteria.

2 PROGRESS AGAINST HSE PLAN

- 2.1 Following independent research which showed that one in 10 young drivers think it is acceptable to drive after using cannabis, a targeted road safety campaign was launched to address driving under the influence of drugs, speeding and driving without insurance. In 2007, young drivers (17 to 25 year

olds) were involved in 555 collisions in London that resulted in a death or serious injury. In addition, a number of safety marketing initiatives were progressed during this quarter which included the following:

- (a) The continuation of work to support the reduction of Road Safety Killed and Seriously Injured (KSI) with a new teenage pedestrian campaign themed *"Look out for your mates"* and a *"Kid Again"* campaign run on billboards, on system media and in cinemas.
- (b) The launch of Powered 2 Wheelers (P2W) in bus lanes was supported by a media campaign including advertising in petrol stations. A P2W *"Optical Illusions"* campaign was also re-run on TV and Radio in March.
- (c) The London Safety Camera Partnership joined the Hillingdon Road Safety Unit as part of a speed awareness campaign and also supported Hammersmith and Fulham's *"Kill Your Speed or Live With It"* campaign.

2.2 The bus operator health and safety audit programme for 2008/09, which incorporated some environmental elements, was completed in the year. Areas for improvement were identified and communicated to operators but there were no major safety concerns.

2.3 A plan was developed to complete the actions and recommendations from the audit of London Streets by The Royal Society for the Prevention of Accidents.

2.4 TfL's Motorcycle Policy Unit assisted the Motorcycle Industry in developing a Code of Conduct for P2Ws on the use of bus lanes.

2.5 As part of the organisational change involving the Surface Transport safety team, a Tunnel Safety Officer was appointed to provide assurance to TfL on suitable measures for the safety of road users. A paper on tunnel safety is to be submitted for the September 2009 SHEC meeting.

3 STATUS OF HSE MANAGEMENT SYSTEM

3.1 Staff resource issues meant a continued delay in the completion of HSE Management Systems for Surface Transport public transport modes in 2008/09. However, good progress has been made in the development of the management system following the engagement of additional resources. The revised systems will be in place by the end 2009.

3.2 An HSE Assurance Letter was prepared prior to submission to the Commissioner and SHEC.

3.3 As part of the TfL business planning process, three strategic objectives have been developed for inclusion in the Operations Service Delivery Plan:

- (a) The completion of the HSE management systems in operational modes and their subsequent implementation.
- (b) The establishment of a formal process for setting and reviewing health and safety objectives across Surface Transport.
- (c) The management of tunnel safety.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 9,452 working days lost due to sickness absence in Quarter 4, representing an average of 2.3 per employee. For comparison, in the previous quarter there were 3.3 days absences per employee and in the same quarter last year 2.9 days absence per employee. The top three categories of sickness absence were coughs and colds, mental health and musculoskeletal.

Days lost	Q4 2008/09	Q3 2008/09	Q4 2007/08
Sickness absence	9,452	13,330	12,029
Average / employee	2.3	3.3	2.9

Safety

- 4.2 The number of accidental customer major injuries in Quarter 4 was 192 (0.29 per million customer journeys). For comparison, there were 245 accidental customer major injuries in the previous quarter (0.47 per million customer journeys) and 285 in the same quarter last year.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Customer major injuries	192	245	285
Rate/10 ⁶ customer journeys	0.29	0.47	0.43

- 4.3 There were two accidental employee major injuries in Quarter 4. For comparison, there were four employee major injuries in the previous quarter and two in the same quarter last year.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Employee major injuries	2	4	2
Rate/1000 employees	0.45	0.83	0.43

- 4.4 There were 62 physical assaults on employees in Quarter 4. For comparison, there were 34 physical assaults on employees in the previous quarter and 24 in the same quarter last year. There were 17 verbal assaults on employees in Quarter 4. For comparison, there were the 13 verbal assaults on employees in the previous quarter and 15 in the same quarter last year.
- 4.5 In May last year, TfL began distributing 'spit kits' to all London Buses operators to issue to their drivers, and provided training to each operator so that drivers are properly briefed on how to use DNA collection kits.
- 4.6 Where an individual is convicted of assaulting a member of staff, TfL publicise the case to the media. There have been 75 press briefings to journalists in the past year explaining TfL's work in clamping down on employee assaults.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Employee physical assaults	62	34	24
Employee verbal assaults	17	13	15
Rate/1000 employees	17.63	9.79	8.42

- 4.7 There were 139 physical assaults on contractors in Quarter 4. For comparison, there were 154 physical assaults on contractors in the previous quarter.

Crime and disorder

- 4.8 A quarterly bulletin that brings together transport crime and incident statistics from TfL, the British Transport Police and the Metropolitan Police was published on the TfL website. Quarter 4 data will be added shortly.
- 4.9 The Workplace Violence Unit is staffed by an inspector, a sergeant, 10 constables, three TfL staff and a representative of the bus operators. The Unit engaged with bus garages as part of a phased roll-out of the scheme. The Unit is continuing to support the investigation into cases occurring since January 2009. There have been 324 reported crimes, of which 142 have been dealt with and 68 cases ongoing. To date, 52 cases have received judicial disposals (person has been charged, summonsed, cautioned etc).
- 4.10 An updated version of a web based Geographical and Management Information System went live. The system was improved to enable key stakeholders such as bus garages and school staff to input intelligence to inform TfL and police responses to crime and disorder issues on the transport system.

5 ENVIRONMENTAL PERFORMANCE

CO₂ emissions

- 5.1 Surface Transport's CO₂ emissions reported here arise from fuel used by the public transport fleet vehicles and London Streets highway and traffic operations term contractors' fleet vehicles. In addition, emissions from electricity used by London Streets operations for street lighting, subways and tunnel systems, traffic signals, safety cameras, CCTV, and variable message signs are included. Year on year changes were relatively small and in total resulted in a small, 1,673 tonnes (0.17 per cent) decrease in emissions.

CO₂ emissions (tonnes)	2007/08	2008/09
Streets	49,927	53,361
Buses	646,410	647,737
Taxis	249,496	245,856
Dial-a-Ride	2,866	2,896
London Service Permit vehicles	24,998	22,224
Total	973,697	972,074

Streets waste and recycled materials

- 5.2 Streets Highways Maintenance and Works contractors (HMWC) report on service performance indicators which are based on TfL's environmental KPIs. Excavated and non excavated materials (including lighting luminaires) are reported separately due to the very different nature of the materials. In 2008/09, 99.2 percent of excavated waste was recycled and reused against a target of 88 per cent.
- 5.3 Non excavated waste recycled in 2008/09 was 92 percent against a target of 88 per cent.
- 5.4 The target for 2008/09 was to procure 40 per cent of requirements as recycled and green material. The target was not met with only 26.7 per cent being procured. The performance and target will be reviewed and industry benchmarked.

HMWC waste and recycled materials	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09	Total 2008/09
Excavated waste recycled and reused - per cent (tonnes)	99.2 (19,727)	99.9 (22,677)	99.3 (33,049)	98.8 (53,467)	99.2 (128,920)
Non-excavated waste recycled and reused – per cent (tonnes)	91.5 (862)	91.8 (716)	90.4 (935)	94.7 (760)	92.0 (3,273)
Recycled and green material procured – per cent (tonnes)	20.3 (2,009)	22.9 (1,568)	25.1 (6,342)	28.7 (18,416)	26.7 (28,336)

Built environment

- 5.5 Where there is no proven safety need, Streets have undertaken to remove guardrail to improve the public realm. In 2008/09, 8.71 km of pedestrian guardrail was removed from the TLRN towards the target of 60km by June 2010.
- 5.6 Streetscape Guidance was revised and issued in January 2009 with positive feedback from stakeholders including Living Streets and English Heritage. The Guidance has been developed for the TLRN to ensure that our streets are designed and maintained to a consistently high level of care and attention and to be safe, attractive and accessible to all users.

Natural Environment

- 5.7 The Green Estate Management Plan for the TLRN (comprising tree strategy, biodiversity action plan and landscape management plan) was issued and describes the policy and delivery objectives for the trees, grassed and planted areas and water bodies on the TLRN.
- 5.8 Surface Transport records the numbers of trees felled and replaced and additional trees planted. It is not always possible or desirable to replace trees due to inadequate underground conditions, or the presence of utilities, or trees which have grown from seed in unsafe locations.

Trees felled on TLRN	2008/09
Safety	4
Natural causes	842
Third party claims	6
GLA schemes	1
Developer	0
Total	853

Trees planted on TLRN	2008/09
Replacements	215
Additional	310
Total	525

6 MAJOR INCIDENTS

- 6.1 There were six fatalities on the bus network during the quarter. There were five pedestrian fatalities involving road traffic collisions with buses and a bus passenger was fatally injured after a fall. These incidents are currently under investigation.
- 6.2 The DfT responded to the Rail Accident Investigation Branch's (RAIB) concern that the window of the (Route 468) bus involved in the fatal collision with a tram at George Street, in September 2008 offered little protection to passengers. The DfT's assessment shows that it is unlikely that there were contraventions of regulations to the design and fixing of the window. The police investigation continues.
- 6.3 An inquest will be held at Southwark Coroner's Court following an incident in which a TfL-owned tree fell onto a private vehicle fatally injuring one of the occupants in August 2008.

LONDON RAIL QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1 Skanska Grant Rail Joint Venture (appointed to carry out the construction work for the DLR extension to Stratford International) has issued their final report on the DLR West Ham fatal incident that occurred at the end of Quarter 3. The report gives a comprehensive description of the event, and lists a number of recommendations. DLR will continue to work with the Joint Venture to ensure all recommendations are closed out in a timely manner. DLR also commissioned an independent investigation report into its role as Client; this has now been completed. The report did not reveal any significant issues but did make some recommendations that are being progressed. DLR have received an assurance from all their Principal Contractors that proactive steps have been taken in relation to the control and management of items of plant fitted with 'quick hitches'. This includes a review of method statements where plant and human interface exists. There is a programme in place to phase out the use of 'quick hitch' devices.
- 1.2 The Safety Authorisation Application for the 'core route' on the East London Line was sent to the Office of Rail Regulation (ORR) during Quarter 4. The ORR has a four month period to offer comments..
- 1.3 The Improvement Notice on foot crossings on London Tramlink was formally noted as being complied with by the ORR during Quarter 4. This involved a substantial piece of work to carry out risk assessments for all foot crossings on the network. Work to improve the crossings is in the planning phase.
- 1.4 The operator of London Overground services (LOROL) prepared an Environment and Sustainability Strategy for 2009. This sets out the key initiatives which will be taken forward in 2009 and how these will be achieved. In particular, it sets out the strategy for the development of a robust environmental management system and achievement of ISO14001 accreditation.
- 1.5 A carbon footprinting report has been completed for London Tramlink which identifies a series of projects that can be taken forward to reduce emissions of CO₂. The report enables a better understanding of the current impact of Tramlink services and infrastructure to be achieved and which areas can be targeted to gain the greatest impact.
- 1.6 London Rail hosted a joint meeting between TfL and Greater Manchester Passenger Transport Executive to enable the benchmarking of environment and sustainability issues between the two organisations.

Areas for improvement

- 1.7 Serco have been served notice of prosecution by the ORR following the fatality last year in which a station user was assaulted by his partner, knocked onto the track, and then hit by an approaching train. The prosecution relates to the ability to stop a train remotely in an emergency situation. Since the incident procedural changes have been implemented to ensure trains are stopped in the vicinity of any reported persons on the track. DLR are not involved in the prosecution.
- 1.8 There have been a number of door related issues on DLR in this quarter. The incidents are primarily associated with carriage interconnecting end doors on the new B2007 stock, opening while trains are moving. It should be noted that if any train doors open while the train is in motion, trains are automatically brought to a stop. There have been no injuries as a result of these incidents. DLR is working closely with Bombardier to understand why the fault occurs, and investigations subsequent to Quarter 4 have discovered an inadequate design on one part of the door retention mechanism; it has now been redesigned by the manufacturer and is being implemented on all B2007 vehicles. There has also been an incident with a side door opening slightly, this is a different case and a specific solution has been found.
- 1.9 An Environmental Improvement Plan is being developed to set out the process for taking the environmental agenda forward at London Rail. This will ensure a more coordinated approach is adopted across the different parts of the business. A series of workshops is planned to ensure buy-in from across the business and to incorporate knowledge and expertise into the plan.
- 1.10 Improved knowledge of electricity, gas and water use on the London Overground network has been achieved in the past quarter through an audit of meters. However, further detail and implementation of a routine for inspecting and reading the meters are required to enable utilities usage to be better understood and areas for improvement to be identified.

Significant plans for the next quarter

- 1.11 The Integrated Management System (IMS) on DLR has now been developed. Within the next quarter the following work streams will be introduced as part of the implementation process: Mandatory presentations to all DLR staff on the IMS, mandatory presentations on Railways and Other Guided Transport Systems (Safety) Regulations (ROGS), optional presentations on key processes and 'One on One' meetings with staff conducted by the management system project team.
- 1.12 Work will continue on the development of the detail of the London Overground HSE Management System (HSEMS) to include the role of Infrastructure Manager for the East London Line. Work will also continue on the development of the London Tramlink HSEMS; the work stream includes enhancing the documentation to include the additional responsibilities of Infrastructure Manager and fully integrating the HSE management arrangements.

- 1.13 London Rail will be entering a number of teams in the Global Corporate Challenge (GCC) in the next quarter. Other staff not taking part will be encouraged to take part in shadow activities associated with walking. This will be the first of a number of health initiatives planned for the forthcoming year.
- 1.14 Sound barriers will be installed around the new depot at New Cross Gate where East London line trains will be maintained. This will ensure that the impact of noise on local residents and businesses is mitigated as far as is reasonably practicable.
- 1.15 A pilot scheme at Beckton, to use line-side super-capacitors on the Docklands Light Railway network, will continue to be developed. This will allow the energy provided through regenerative braking to be better captured and reused.
- 1.16 The use of low energy lighting on tram vehicles and at tram stops on the London Tramlink network is currently being explored.

2 PROGRESS AGAINST HSE PLAN

- 2.1 London Tramlink is primarily concerned with the development of their new safety management systems, and as such the development of strategic safety objectives will not be finished until later this year, but this work has begun.
- 2.2 The DLR improvement plan has been reviewed and rescheduled to run on an annual basis from January to December. This change aligns better with the reporting arrangements specified in ROGS. Six out of ten objectives in the original plan were fully completed. Of the remaining four objectives, a number of key elements were also completed and the remaining incomplete elements have been carried over to the new plan. At the end of Quarter 4 good progress had been made on the new plan.
- 2.3 London Overground Infrastructure completed all eight of its improvement objectives.

3 STATUS OF HSE MANAGEMENT SYSTEM(S)

- 3.1 The DLR framework has been revised during the year, and is now an integrated management system which has been communicated to staff and is operating. The system in Trams is being revised, with the aim of implementing an integrated system for August 2009.
- 3.2 An HSE Assurance Letter was prepared prior to submission to the Commissioner and SHEC.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 127 working days lost due to sickness/absence in Quarter 4 by employees of London Rail. This represented an average of 0.55 days per

employee. For comparison, in the previous quarter there was 331 days lost equating to 1.45 days absence per employee and in the same quarter last year there was 212 days lost, equating to 1.07 absence per employee. The top three categories of sickness absence in Quarter 4 were Gastrointestinal, Coughs and Colds, and Neurological including Eye and Ear.

Days lost	Q4 2008/09	Q3 2008/09	Q4 2007/08
Sickness absence	127	331	212
Average / employees	0.55	1.45	1.07

Safety

- 4.2 There were no employee major injuries or physical assaults in London Rail in Quarter 4 or in the last year.
- 4.3 There were no accidental customer major injuries for London Overground in Quarter 4. For comparison, there were no accidental customer major injuries in the previous quarter or the same quarter last year.
- 4.4 There were no TfL employee assaults this quarter on London Overground. The number of LOROL employees who suffered workplace physical and verbal assaults in Quarter 4 were three and two respectively. For comparison there were three and two in the previous quarter. The low rates in staff assaults is encouraging and is the result of a number of initiatives such as the LOROL Staff Welfare and Assaults working group. This group includes representatives from the British Transport Police and reviews each incident and identifies action plans to deal with particular issues.

LOROL	Q4 2008/09	Q3 2008/09	Q4 2007/08
Physical assaults	3	3	N/A
Verbal assaults	2	2	N/A
Rate/1000 employees	7.6	7.6	N/A

- 4.5 The number of accidental customer major injuries for DLR in Quarter 4 was five (0.25 per million customer journeys). For comparison, there were five accidental customer major injuries in the previous quarter and three in the same quarter last year.

DLR	Q4 2008/09	Q3 2008/09	Q4 2007/08
Customer major injuries	5	5	3
Rate/million customer journeys	0.25	0.33	0.29

- 4.6 There were no TfL employee assaults this quarter on DLR. On DLR, assaults are classified as major or minor (minor includes verbal abuse and pushes and shoves). The number of employees of our franchisee Serco, who suffered workplace assaults in Quarter 4 was zero and 13, for major and minor respectively. For comparison there was one and 12 in the previous quarter and zero and six in the same quarter last year. The increase in rates is associated with staff reporting a greater number of verbal assaults.

DLR	Q4 2008/09	Q3 2008/09	Q4 2007/08
Major assaults	0	1	0
Minor assaults	13	12	6
Rate/1000 employees	22	23.2	10

- 4.7 There were no accidental customer major injuries for London Tramlink in Quarter 4, for comparison there were no accidental customer injuries in the previous quarter. Historic data regarding customer injuries is not currently available, but we are trying to recover this with the cooperation of Tram Operations Limited (TOL).

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Customer major injuries	0	0	-
Rate/million customer journeys	0*	-	-

*7.8 million customer journeys Quarter 4

- 4.8 In London Tramlink there were no TfL employee assaults this quarter. The number of workforce physical and verbal assaults in Quarter 4 for our contractor TOL on London Tramlink was three and eleven respectively. For comparison, there were five and seven respectively in the previous quarter. Historic data regarding assaults are not currently available, but as above we are trying to recover them. Tramlink have a strong reporting culture and low tolerance for verbal assaults.

	Q4 2008/09	Q3 2008/09	Q4 2007/08
Contractor physical assaults	3	5	-
Employee verbal assaults	11	7	-
Rate/1000 employees	86	74.5	-

- 4.9 On London Overground Infrastructure there were two contractor RIDDOR reportable (Reporting of Injuries, Diseases and Dangerous Occurrences Regulation) accidents during the quarter. The cumulative contractor accident rate was 0.25 per 100,000 hours worked. Overall performance was better than the benchmark rate of 0.59 per 100,000 hours worked set for the project.
- 4.10 On DLR Major Projects there was one contractor RIDDOR accident in Quarter 4. The cumulative contractor accident rate was 0.51 per 100,000 hours worked at the end of the quarter and was better than the benchmark rate of 0.55 per 100,000 hours worked set for construction upgrade work.

5 ENVIRONMENTAL PERFORMANCE

Carbon emissions

- 5.1 Annual emissions of CO₂ have been forecast through to 2025 to show how London Rail will contribute to achieving the Mayor's 60 per cent CO₂ reduction target. Over the shorter term, the overall level of CO₂ from activities is projected to increase due to longer trains and increased frequencies on the London Overground network, the opening of the East London line extension and the three-car lengthening project and Stratford International extension on the Docklands Light Railway. Total CO₂ emissions over the last four quarters remained relatively stable, and emissions per passenger journey saw an increase in Quarter 4 primarily due to increased train km from Overground services.

	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09
Total CO ₂ (Tonnes)	11,309	11,266	11,334	15,457
Normalised CO ₂ (g/passenger km)	54.0	53.9	53.8	55.9

- 5.2 The data collected by London Rail are considered to be of medium quality. The accuracy of the measurement will increase in the future and there is therefore the potential for reported emissions to increase or decrease significantly as a result of the increased knowledge. Both traction and non-traction energy is included in the figures above. Improving our data is a key to making planned reduction improvements.
- 5.3 It should be noted that whilst London Overground data in the figures above are available by period, data for the Docklands Light Railway, Tramlink and the East London Line Project are currently only available on an annual basis and have therefore been averaged between the quarters.

Construction and Demolition Waste

- 5.4 London Rail has ongoing major infrastructure projects which produce a significant amount of construction and demolition waste. As much of this waste as possible is recycled or reused, generally by re-use on site. The data below are for the East London Line Project, and shows that a high percentage of construction and demolition waste has been recycled, with the remainder going to landfill.

	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09
Construction and demolition waste (tonnes)	79,544	66,635	127,020	101,779
Cumulative construction and demolition waste recycled (%)	98.9	99.1	99.3	92.9

- 5.5 The percentage of waste recycled is a cumulative figure across the life of the project, as it is not possible to provide sufficiently accurate figures by period. The percentage of construction and demolition waste recycled dropped considerably in Quarter 4. This is due to a correction applied to the figures in Q4 to reflect that an increased proportion of waste went to landfill than was previously estimated. Nevertheless, the percentage of waste recycled/reused in Quarter 4 remains high for this type of project.
- 5.6 London Rail is working to include data from the Docklands Light Railway Stratford International Extension and 3-car upgrade projects in future reports.

6 MAJOR INCIDENTS

- 6.1 On 10 March 2009 an in service DLR train derailed at 1125 points on the approach to West India Quay Station whilst being operated in manual mode. The train had stopped at the Points Position Indicator, and on the instruction of the Controller proceeded. During this movement 1125 points moved and the route was no longer set for the train to continue. The movement of the points caused the train to derail. There were no injuries to passengers or staff.
- 6.2 This incident was subject to an independent investigation commissioned by DLRL and Serco and the recommendations are now being progressed.
- 6.3 The Rail Accident Investigation Branch (RAIB) and ORR are carrying out their own separate investigations. The RAIB issued an Initial Status Report in March outlining their findings.
- 6.4 Subsequent to Quarter 4 the RAIB have issued an interim advice notice. This is as a result of a near miss incident at 1125 points (that occurred two weeks after the derailment). The near miss had some similarities to the situation prior to the derailment and is also subject to an independent inquiry.

CROSSRAIL QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT**1 SUMMARY****What went well**

- 1.1 The recently appointed Health and Safety Director is providing direction and leadership of Crossrail's Health and Safety Programme moving forward. The health and safety team has been re-organised and better aligned to the emerging Crossrail management structure which now includes the Programme and Project Delivery Partners. Both Partners are bringing added breadth and experience to the health and safety aspects of the programme to deliver the required work.
- 1.2 The Crossrail Construction (Design and Management) Regulations (CDM) Co-ordinators have been engaged in design and risk review meetings for a number of the Crossrail work packages. They have reviewed Pre-Construction Information Packs produced by the design teams as part of the invitation to tender process for the advanced works packages for Pudding Mill Lane, Farringdon, Liverpool Street and Whitechapel Street Stations.
- 1.3 Industry Liaison:
 - (a) The Contractors Forum met twice during the quarter and has begun to share industry best practice and lessons learnt from reported incidents and near miss events;
 - (b) A newly formed "Crossrail Stakeholders Group" met during the quarter. The Group brings together Stakeholders and Industry Partners and is focussed on the shared objective of delivering health, safety and environmental best practice across the programme;
 - (c) A "Utilities Health & Safety Group" also met for the first time. This Group has been set up to share and incorporate best health, safety and environmental practice from across the involved parties.
- 1.4 The Crossrail's Environmental Management System is being developed to ensure its consistency with the principles of ISO14001 and that it provides assurance in relation to delivery of key project requirements. A gap analysis was conducted and an action plan has been developed to address outstanding requirements.
- 1.5 Environmental Consents training was developed and delivered in February 2009 to ensure that those working on the project including consultants and contractors were fully aware of relevant environmental legislation including the Crossrail Act, which dis-applies some environmental legislation and in some cases makes extra provisions with regard to consents.

Areas for Improvement

- 1.6 Work is in hand to prepare and consolidate the Crossrail HSE Management System so as to provide clear direction for the delivery of the TfL and Crossrail's Health Safety and Environmental Policy Statement commitments.
- 1.7 Arising from organisational changes, work is also in hand to ensure clarity around CDM duty holder roles and robust compliance with the CDM Regulations across each work package.

Significant plans for the next quarter

- 1.8 Plans for the next quarter include initiating the procurement processes for an Incident Management System and a Zero Incident Programme.
- 1.9 An Induction Working Group has been set up to determine and agree the content and logistics for Crossrail's induction for all new personnel into the Programme.
- 1.10 Further development of Crossrail's Environmental Management System will take place to ensure it is consistent with the principles of ISO 14001 and that the environmental management systems of the various Crossrail delivery partners (e.g. Network Rail, Canary Wharf Group and Berkeley Homes) are consistent with it.
- 1.11 An integrated audit plan will be developed with the Quality, and Health & Safety teams for the central section works to ensure audits of individual departments are kept to a minimum and are coordinated between Crossrail's Health and Safety, Quality, and Environment departments.
- 1.12 Existing audit programmes and associated protocols will be reviewed to enable quarterly risk based changes to be made to the annual audit plan.

2 PROGRESS AGAINST ANNUAL HEALTH AND SAFETY PLANS

- 2.1 Actions from the 2008/09 Health and Safety Plan were completed during the quarter.
- 2.2 The Crossrail Board agreed the 2009/10 Health and Safety Improvement Plan which will be published shortly. Managers are being assigned to lead delivery of the agreed actions.

3 STATUS OF HEALTH & SAFETY MANAGEMENT SYSTEM(S)

- 3.1 The Health and Safety Management System is being developed so that it is sufficiently robust to meet the requirements of BS OHSAS 18001. The work is on target for completion in July.
- 3.2 An HSE Assurance letter regarding management system compliance was prepared prior to submission to the Commissioner and to SHEC.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 301 working days lost due to sickness absence in Quarter 4 which equates to a rate of 1.46 for the average sickness days per employee. These figures exclude the Programme Partner, Project Delivery Partner and Contractors.

Safety

- 4.2 There were two RIDDOR reportable (Reporting of Injuries, Diseases and Dangerous Occurrences Regulation) injuries in the quarter involving an employee and a contractor. The employee was struck whilst using a motorised revolving door which suddenly stopped. The impact of the injury resulted in a fractured cheek bone and a lengthy period of absence from work. The contractor sustained a broken foot (metatarsal) when he tripped on a pallet truck on a site in Plumstead. The Contractor subsequently produced a briefing newsletter covering the incident and has issued further safety instructions concerning the storage of pallet trucks.

5 ENVIRONMENTAL PERFORMANCE

Carbon emissions

- 5.1 Crossrail's carbon footprint was reported in the Crossrail Environmental Statement. Since then the model has been refined and the latest emissions prediction is estimated to be in the order of 1.7MtCO₂ (equivalent to 1.5% of the annual UK transport emissions and 0.3% of UK total CO₂ emissions for 2006), from the construction phase of the Crossrail project.

The arrangement of the processes for the collection of CO₂ emissions data from the various delivery partners for, amongst other things, the TfL annual environment report are currently being agreed and put in place. As regards current emissions, the target is to report Crossrail's office based data at the next SHEC meeting.

- 5.2 Crossrail is currently awaiting confirmation of the installation of electricity sub-metering for its offices at 25 Canada Square. Data collection will then commence and will be used to report on future Crossrail office carbon dioxide emissions. The Crossrail Citigroup offices are not part of the TfL head office portfolio so data will be reported separately by Crossrail.
- 5.3 Energy management requirements will be included in all relevant construction contracts, which will include the measuring and reporting of electricity consumption on site. It is proposed that these data will form part of the carbon dioxide emissions reporting in the TfL annual Environment Report.

Construction and Demolition Waste

- 5.4 Construction and demolition required for Crossrail has been divided up into a number of works packages. The production of Site Waste Management Plans, in order to manage this area, is a legal requirement for those projects above £300,000, although Crossrail has made this mandatory for all work packages. With the exception of the construction of the Canary Wharf station at the Isle of Dogs, site works associated with Crossrail has comprised purely survey works including ground investigations, trial trenches, coring and visual inspections. The contractors for these works are required to produce site waste management plans as necessary and waste is segregated for recycling and disposal.
- 5.5 Canary Wharf Group has a Site Waste Management Plan for the Isle of Dogs station works which is currently being updated. The main material arising from the works at present is silt excavated from the dock. Most of the silt has been simply relocated within the dock under an approval from the Environment Agency. Two barges of pile arisings (clay and Thanet sands) have left site for disposal at a licensed waste facility.
- 5.6 Looking to the future enabling and main works, Crossrail-specific requirements on recording and reporting waste will be included in all construction and demolition contracts.

6 MAJOR INCIDENTS

- 6.1 There were no major incidents in the quarter.

CORPORATE DIRECTORATES QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1. Group HSE and the Cycle Hire Scheme project team have worked to develop a health and safety risk register to address the construction and public use of the scheme. As part of the register, assessed risks are monitored by the programme board with Group HSE providing advice on safety issues.
- 1.2 In collaboration with Tube Lines Distribution Services and the Institute of Advanced Motorists work on the development of an online interactive driver/rider assessment tool was concluded to address occupational road risks for employees driving/riding at work.
- 1.3 The £4.7M Building Energy Efficiency Programme (BEEP) business case was signed off, including cost savings of 24 per cent at the 22 Head Office buildings, and savings of over 3,500 tonnes of CO₂ per year. The paper also covered the setting up a revolving fund to reinvest savings.
- 1.4 Group Property & Facilities (GP&F) in collaboration with Surface Transport completed energy audits at six sites, including bus garages, bus stations and the Rotherhithe Tunnel. Potential energy savings of some 24 per cent were identified.
- 1.5 GP&F obtained the first Building Research Establishment Environmental Assessment Method (BREEAM) 'Excellent' rating for one of its refurbishment projects for the Victoria Line training facility at Oxford Circus House and the BREEAM 'Excellent' rating for Palestra was confirmed.
- 1.6 The 2008/09 Environmental Improvement Plan for Head Office buildings, which addressed energy and water efficiency, use of on-site renewables and metering works, was successfully completed.

Areas for improvement

- 1.7 The Group HSEMS review following legislative and organisational changes will be completed once proposals on the structure and the detail have been discussed and agreed with the Modes.
- 1.8 Annual energy consumption in 2008/09 for Head Office sites was eight per cent above target due to colder weather, increased office space and delays in the implementation of Building Management Systems designed to remotely control heating and cooling systems and manage energy consumption.

Significant plans for the next quarter

- 1.9 A gap analysis against the requirements of the finalised HSE Competence Framework for managers will be started with a view to implementing a programme to address areas that require improvement during 2009/10.
- 1.10 Revised consultation arrangements will be presented to the recognised trade unions.
- 1.11 HSE support will be given on safety issues relating to the relocation of staff to Greenwich.

2 PROGRESS AGAINST HSE PLAN

- 2.1 The Display Screen Equipment programme was completed within the Marketing and Communications Directorate in Quarter 4.
- 2.2 Outputs from the manual handling risk assessment programme in the Lost Property Office are under joint review by line management and trades unions.

3 STATUS OF HSE MANAGEMENT SYSTEM(S)

- 3.1 Work to realign the HSE Management System continues to capture changes in organisational structure. In particular, the TfL Group HSEMS and the Crossrail HSEMS are being reviewed to ensure Group requirements are incorporated, to accommodate organisational change and to prepare for the commencement of enabling works.
- 3.2 An HSE Assurance Letter was prepared prior to submission to the Commissioner and SHEC.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 3,744 working days lost to sickness absence in Quarter 4, representing an average of 1.7 days per employee. This compares to 2.2 days in the previous quarter and 1.9 days in the same quarter last year.
- 4.2 The top three sickness absence generator categories comprised (in descending order) mental health, musculo-skeletal disorders and coughs and colds.

Days lost	Q4 2008/09	Q3 2008/09	Q4 2007/08
Sickness absence	3,744	4,858	3,876
Average / employee	1.7	2.2	1.9

Safety

- 4.3 There were no accidental customer or employee major injuries during Quarter 4 or during the previous quarter or during the same quarter last year.

4.4 There were no physical assaults on employees during Quarter 4 or during the previous quarter or during the same quarter last year.

5 ENVIRONMENT PERFORMANCE

Carbon emissions

5.1 For 2008/09 CO₂, emission targets for the Head office buildings were met in all quarters. To date, for the Head Office buildings, reporting on CO₂ emissions was based on energy performance (kWh/m²) and total CO₂ emissions with a three per cent annual reduction, targeted to achieve the Mayor's 60 per cent CO₂ reduction target by 2025. In recognition of the fluctuating requirements in office space the CO₂ reduction target going forward will be normalised to a reduction of three per cent per annum per m².

CO₂ (kg)	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09	Total
Target	4,459	4,503	5,014	7,529	21,506
Emissions	4,288	3,749	4,495	6,685	19,217

5.2 TfL has made substantial progress in reducing water consumption at benchmark Head Office sites. The 2008/09 consumption, 6.8m³ per person per year, is 27 per cent below the Environment Agency's typical use figure of 9.3m³ per person per year for office sites. The 2009/10 target, 6.0m³ per person per year, is a 12 per cent reduction on 2008/09 performance.

Water use (m³/person)	Q1 2008/09	Q2 2008/09	Q3 2008/09	Q4 2008/09	Total
Target	1.62	1.62	1.62	2.15	7.00
Usage	1.63	1.64	1.63	1.84	6.74

6 MAJOR INCIDENTS

6.1 There were no major incidents in the quarter.

QUARTER 4 HEALTH AND SAFETY PERFORMANCE - DATA SUMMARY*

LU – London Underground; ST – Surface Transport; LR – London Rail;
 CD – Corporate Directorates; DLR – Docklands Light Railway; LOROL – London
 Overground

* NB: LU reported for 4 periods in Quarter 3 whereas other modes reported for 3 periods in Quarter 3
 and 4 periods in Quarter 4

Health

	Sickness absence days lost			Average days lost / employee		
	Q4 2008/09	Q3 2008/09	Q4 2007/08	Q4 2008/09	Q3 2008/09	Q4 2007/08
LU	29,764	43,404	34,078	2.3	3.2	2.5
ST	9,452	13,330	12,029	2.3	3.3	2.9
LR	127	331	212	0.1	1.5	1.1
CD	3744	4858	3,876	1.7	2.2	1.9

Safety**Employee major injuries**

	Employee major injuries			Rate / 1000 employees		
	Q4 2008/09	Q3 2008/09	Q4 2007/08	Q4 2008/09	Q3 2008/09	Q4 2007/08
LU	2	2	3	0.65	0.14	1.52
ST	2	4	2	0.45	0.83	0.43
LR	0	0	0	0	0	0
CD	0	0	0	0	0	0

Employee assaults (Total)

	Employee assaults			Rate / 1000 employees		
	Q4 2008/09	Q3 2008/09	Q4 2007/08	Q4 2008/09	Q3 2008/09	Q4 2007/08
LU	421	404	357	30.19	28.23	25.85
ST	79	47	39	17.63	9.80	8.42
LR	0	0	0	0	0	0
CD	0	0	0	0	0	0

Customer major injuries

Customer major injuries				Rate / 10 ⁶ customer journeys		
	Q4 2008/09	Q3 2008/09	Q4 2007/08	Q4 2008/09	Q3 2008/09	Q4 2007/08
LU	23	45	19	0.09	0.13	0.07
ST	192	245	284	0.29	0.47	0.43
DLR	5	5	3	0.25	0.33	0.29
LOROL	0	0	0	0	0	0

Contractor staff assaults (Total)

Contractor staff assaults				Rate / 1000 staff		
	Q4 2008/09	Q3 2008/09	Q4 2007/08	Q4 2008/09	Q3 2008/09	Q4 2007/08
BUSES	139	154	-	-	-	-
LOROL	5	5	-	7.6	7.6	-
DLR	13	13	6	22	23.2	10
TRAM	14	12	-	86	74.5	-