# TRANSPORT FOR LONDON

#### SAFETY, HEALTH AND ENVIRONMENT ASSURANCE COMMITTEE

# SUBJECT: QUARTERLY HEALTH, SAFETY AND ENVIRONMENT PERFORMANCE REPORTS

#### DATE: 17 NOVEMBER 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.

#### 3 INFORMATION

- 3.1 The Quarter 2 2009/10 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.

#### 4 **RECOMMENDATION**

4.1 The Committee is asked to NOTE the report.

#### 5 CONTACT

5.1 Name: Richard Stephenson, Director Group HSE Email: <u>richardstephenson@tfl.gov.uk</u> Phone: 020 7126 4905

# 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 Quarter 2 2009/10.
- 1.2 The Safety, Environment and Health Improvement Plans are progressing in line with the project timescales.
- 1.3 An excellent station and depot waste recycling rate (51 per cent in the year to date) continued to be delivered in Quarter 2 as a result of on-going recycling efforts during train and station cleaning and work by the BCV Ambience team with local authorities in Central London.
- 1.4 Swine 'flu policy briefings by Occupational Health to Human Resources managers across TfL were very well received. Further workshops are being developed.

#### Areas for improvement

1.5 Noise and vibration (N&V) complaints continue to be the main contributor (64 per cent) to environmental complaints. The number received in the Quarter (193) is greater than those received in Quarter 1 (130). A review of maintenance activities to manage noise effectively is being planned in Quarter 3. Work continues to manage noise from PA systems effectively.

# Significant plans for the next quarter

- 1.6 A programme of swine 'flu policy briefings/workshops is being planned as the incidences of swine 'flu are predicted to increase in Quarter 3 2009/10.
- 1.7 Initial conclusions and the proposed way forward from LU's renewable energy sourcing consultation exercise will be developed and presented to the LU Executive Committee.

# 2 PROGRESS AGAINST HSE PLAN

- 2.1 Progress against actions in the Health, Safety and Environmental Improvement plans continue to be tracked via the London Underground Safety Action Tracking System (LUSATS) and via the Executive Committee Investment Delivery Meeting. The following items are of note in Quarter 2:
  - a) The Health Fair Programme for 2009/10 is progressing as planned. Positive feedback from employees is continuing to be received.
  - b) The work stream Improving Safety Critical Communications is continuing to progress ahead of schedule.
  - c) Energy champions are in place at all 25 train crew depots.

d) A site waste management plan for track and associated infrastructure maintenance activities has been developed and implemented.

# 3 STATUS OF HSE MANAGEMENT SYSTEM

3.1 Compliance with London Underground's Health Safety and Environmental Management System (HSEMS) is monitored via audit. London Underground and Tube Lines audits continue to programme with no safety critical adverse findings in Quarter 2.

# 4 HEALTH AND SAFETY PERFORMANCE

# Health

4.1 There were 32,910 working days lost to sickness absence in Quarter 2, representing an average of 2.5 days per employee. For comparison, in the previous quarter there was 2.3 days absence per employee and in the same quarter last year 2.4 days absence per employee. The top three categories of sickness absence in Quarter 2 were coughs and colds, musculo skeletal, and mental health.

Days lost	Q2 2009/10	Q1 2009/10	Q2 2008/09
Sickness absence	32,910	29,633	31,840
Average / employee	2.5	2.3	2.4

- 4.2 As the incidence of swine 'flu is predicted to increase during the autumn (Quarter 3), swine 'flu policy briefings/workshops have been delivered to 50 Human Resource managers across TfL. These were well received and further workshops are being planned.
- 4.3 The long term improving trend seen since 2005/06 in the percentage of staff taking time off for sickness due to stress anxiety and depression continued in Quarter 2 2009/10. The number of employees taking time off sick per period was comparable to Quarter 1 2009/10, and was nine per cent lower than in Quarter 2 2008/09. Control room staff and service operators had the highest increase this quarter, with 0.7 per cent of staff being absent per period compared to 0.4 per cent per period in Quarter 2, 2008/09.
- 4.4 The average number of employees taking time off sick with back conditions decreased by 15 per cent this quarter, when compared to Quarter 2 2008/09. On average 121 employees (0.9 per cent of staff) were absent per period in Quarter 2 compared to an average of 141 employees (1.0 per cent of staff) per period in Quarter 2 2008/09. All grades, with the exception of Revenue Control staff had a decrease in absence. Revenue Control's absence rose from 0.17 per cent of staff absent in Quarter 2 2008/09 to 0.19 per cent this Quarter.

# Safety

4.5 The number of accidental customer major injuries in Quarter 2 was 17 (0.07 per million customer journeys at the end of the quarter). For comparison there were 29 accidental customer injuries in the previous quarter (0.11 per million customer journeys at the end of the quarter) and 37 in the same quarter (Q2) last year.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Customer major injuries	17	29	37
Rate/million customer journeys	0.07	0.11	0.15

4.6 There were three accidental employee major injuries in Quarter 2, a rate of 0.19 per 1,000 employees. As former Metronet employees were included in this measure for the first time in the Quarter 1 2009/10 report, comparisons with previous years are not available.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Employee major injuries	3	2	n/a
Rate/1000 employees	0.19	0.14	n/a

- 4.7 There were 107 physical assaults on employees in Quarter 2. For comparison, there were 90 physical assaults on employees in the previous quarter and 82 in the same quarter last year.
- 4.8 There were 207 verbal assaults on employees in Quarter 2 and 148 threats. For comparison, there were 157 verbal assaults and 132 threats on employees in the previous quarter and 201 verbal assaults and 121 threats in the same quarter last year.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Employee physical assaults	107	90	82
Employee verbal assaults	207	157	201
Rate/1000 employees	28.59	22.41	25.24

\*number of employees only includes Chief Operating Officer's employees

- 4.9 Ticket disputes show an increase of 19 per cent from the first quarter of this year.
- 4.10 The decreasing trend in 'Category A' signals passed at danger (SPADs), confirmed in 2008/09, continued in Quarter 2. There were 178 SPADs in Quarter 2, of which 133 (75 per cent) were 'Category A' (i.e. attributable to driver error) and 45 (25 per cent) were 'Category B' (42 due to either signal equipment or train equipment malfunction and three to Service Control errors). There were no Category 'C' SPADs during the quarter. The significant decreasing trend in numbers of 'Category B Service Control' SPADs (occurring from Period 8 last year) continued in Quarter 2.
- 4.11 The trend in the number of platform train interface (PTI) incidents in relation to the number of falls whilst boarding and alighting and persons caught in train doors stabilised in Quarter 2. Customer behaviour is the main contributory factor. More strategically targeted customer awareness campaigns to influence this behaviour are continuing. The remaining categories of PTI incidents remained stable or improving.
- 4.12 As reported last quarter, a number of engineering improvements had been completed to mitigate lifts becoming stalled in shafts. In Quarter 2, there was a 30 per cent reduction in the number of lift incidents (61) compared to 104 in Quarter 1. The reduction occurred across all three categories of lift failures (power winding, hand winding and cross transfer).

4.13 There were 240 drugs and alcohol tests in the quarter, 190 unannounced, seven for cause, 32 routine monitoring and 11 post incident tests. One Customer Service Assistant on the District line resigned after testing positive for drugs. All other tests were negative.

# 5 ENVIRONMENTAL PERFORMANCE

#### Carbon and energy management

- 5.1 Traction energy in Quarter 2 2009/10 was around one per cent lower than in the same quarter in 2008/09. This is primarily due to a two per cent fall in train kilometres run between the two quarters. Quarter 2's usage was also four per cent lower than that of Quarter 1, although more kilometres were run. Seasonal effects of less heating being required over the summer months are the main contributory factor to this reduction. Traction energy efficiency remains outside the target of 900 MWh/million passenger journeys due to passenger journeys continuing at lower levels than budgeted.
- 5.2 In June 2009 the Department for Food and Rural Affairs (Defra) revised the carbon dioxide conversion factor for electricity from 0.537 to 0.5405 kg CO<sub>2</sub>/KWh. This revised factor is used below. CO<sub>2</sub> emissions in Quarter 2 2009/10 were two per cent lower than Quarter 2 2008/09, though the normalised CO<sub>2</sub> figure has reduced due to the higher passenger km levels in 2009/10. Quarter 2 figures are considerably lower than Quarter 1 due to lower levels of traction energy used and increased passenger km travelled.

	Q2	Q1	Q2
	2009/10	2009/10	2008/09
Total CO <sub>2</sub> (tonnes)	134,681	145,480	137,491
Normalised CO <sub>2</sub> (g/passenger km)	68.4	73.1	70.3
Total Traction Electricity (MWh)	215,769	224,879	214,102
Traction Energy Efficiency	865	903	907
(MWh/million passenger journeys)			

- 5.3 LU's renewable energy sourcing industry consultation exercise was successfully launched in Quarter 2. Responses were received from energy suppliers, consultants and financial experts on potential solutions for LU to deliver 30 per cent of its energy from renewable energy. Initial solutions and the proposed way forward will be presented to the LU Executive Committee in Quarter 3.
- 5.4 An excellent year-to-date waste recycling rate (51 per cent) has been achieved for stations and depots. This exceeds LU's 2009/10 recycling target of 45 per cent. The rate was maintained in Quarter 2 due to a combination of on-going recycling efforts during train and station cleaning and work by the BCV Ambience team with local authorities in Central London.

#### Recycling and waste management

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Commercial and Industrial Waste (tonnes)	3,270	2,711	3,226
Commercial and Industrial Waste Recycled (tonnes)	1,555	1,497	1,247
Commercial and Industrial Waste Recycled (%)	48	55	39

- 5.5 Changes to the free-sheet market in London are likely to have an impact on newspaper litter left on the Tube. The London Paper was withdrawn in September 2009 approximately 500,000 copies of the newspaper were being distributed each day.
- 5.6 In Quarter 2, 27,638 tonnes of construction and demolition waste was generated compared to 12,133 tonnes in Quarter 2 2008/09. Of this, 57 per cent was recycled, which means LU's 2009/10 recycling target for Construction and Demolition waste of 50 per cent, is currently being met.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Construction and Demolition Waste (tonnes)	27,638	22,187	12,133
Construction and Demolition Waste Recycled (tonnes)	15,863	15, 297	6,604
Construction and Demolition Waste recycled (%)	57	69	54

# Noise and vibration

- 5.7 In Quarter 2, 193 N&V complaints were received (64 per cent of all environmental complaints). LU has two targets on noise issues one focused on N&V complaints associated with operations, the other focused on N&V complaints associated with works activities. These are considered separately below. Total figures are not comparable to previous quarterly data as this only reported on complaints received by the LU Customer Service Centre.
- 5.8 Almost 60 per cent of noise and vibration complaints received related to contractor noise and vibration (110 complaints), including equipment noise and noise associated with contractor activities. The Quarter 2 noise complaint rate was 1.62 complaints per 100,000 hours worked (compared to 1.26 in Quarter 1). The annual LU target for "N&V complaints works" is 1.25 complaints per 100,000 hours worked. Over the last two years there has been a gradual increase in the noise complaint rate. In Quarter 3, LU will be undertaking a review of maintenance activities to address the issue of managing noise effectively during maintenance works.
- 5.9 LU's target for "N&V complaints operations" is 150 for 2009/10. To date in 2009/10, LU has received 81 N&V complaints related to operations. The average number of LU Operations PA system noise complaints received per period in the year-to-date is 14 compared to 13 per period in 2008/2009. In Period 5, the number of PA system noise

and vibration complaints received was significantly higher compared to other periods in the quarter and in 2009/10. 26 complaints were received in Period 5. A significant proportion of these complaints related to two stations (South Ealing - seven complaints, Upminster Bridge - nine complaints). Works to the PA system have been carried out at Upminster Bridge and the frequency of PA announcements will be amended early in Quarter 3. It is considered that these actions will resolve the issue. Works are planned to resolve the issue at South Ealing. In both cases, LU is working closely with the Environmental Health Officers and residents to keep them informed of progress.

#### 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 The Surface Transport Traffic Operations Centre (STTOC) went live in September with London Streets Traffic Control Centre (LSTCC), CentreComm and MetroComm now operating from the new site in Palestra. Work, as part of resilience planning, was commenced to utilise existing facilities at Buckingham Palace road as a recovery site. It is intended that this site would receive additional works to the mechanical and electrical systems to make it more resilient and to enable LSTCC to be integrated within the floor space.
- 1.2 The Health and Safety Executive (HSE) gave a presentation to the Bus operators forum safety sub group on the findings of their review of how recommendations from earlier inspections carried out in 2003 on the bus network have been taken forward. The HSE indicated that impressive progress had been made and that a follow up report was not necessary. Areas where further developments could be made were noted and will be considered for future London Buses audit programmes.
- 1.3 A second cycle scheme workshop consisting of delegates from three bus operating companies, members of the Cycle Superhighways and Cycle Hire Scheme, Bus driver communications and the Surface Safety Team (SST) was held in the quarter. The workshops provide opportunities to consult bus operators on current thinking and concepts.
- 1.4 Following the issue of the new Code of Practice for Boat Operators on the Thames, London River Services (LRS) arranged with London Underground Safety, Quality & Environment team to carry out a series of boat observations (one at each of its piers) to monitor compliance with the Code. The results showed around 90 per cent of operators to be fully compliant. Instances of non-compliance (mainly by smaller operators) are being progressed with the operators.
- 1.5 Road fatalities fell by 28 per cent in the first quarter of 2009 when compared with the same quarter in 2008. Serious and slight casualties also fell by 18 and nine per cent respectively.
- 1.6 In an effort to ensure that road safety messages resonate with teenagers, footballers from London Premier League teams and AFC Wimbledon academies were approached to lend their support to TfL's '*Look out for your mates*' road safety campaign. Photographs of youth players were taken to raise awareness of the need to take care when near or using London roads whilst promoting a 'friendship' message. Arsenal football team dedicated a full page in its biggest match day programme of the season to support the campaign.

- 1.7 Good feedback was received from the 170 delegates who attended the annual pan London Road Safety Conference hosted by the London Road Safety Unit. The conference was designed to facilitate the sharing of best practice and new ideas on road safety, education, training and publicity.
- 1.8 The Workplace Violence Unit, that became fully operational in January 2009, continues to be well received by frontline staff and management. The Unit is resourced by Metropolitan Police and TfL staff and has been successful in dealing with some high profile cases. For example, a man was given a 12 week custodial sentence and ordered to pay £200 compensation for assaulting a night bus driver.

# Areas for improvement

- 1.9 The passenger safety risks on the Woolwich Ferry are low but, despite a number of improvements in the safety management under SERCO Marine, the age of the structure and plant and the design of the heavy lifting towers on the site means that the ferry continues to present significant risks to staff working in some areas. These risks are mitigated through strict management controls and improved physical controls. The annual health, safety and environmental audit, an important part of LRS's contract management of SERCO Marine, will take place in the next quarter.
- 1.10 Following three incidents of damage to trees by utility and highway contractors on the TLRN, TfL intends to recover the cost of the trees, amounting to thousands of pounds, using the tree asset valuation system supported by the London boroughs. None of the contractors were following guidance issued by the National Joint Utility Group for working near trees and a number of the damaged trees had to be felled immediately. This has resulted in a loss of valuable assets, amenity and biodiversity value.

#### Significant plans for next quarter

1.11 Work is continuing to ensure health, safety and environment management is unaffected by the transfer of East Thames Buses to London General (part of Go Ahead) and sharing of premises at Mandela Way.

# 2 PROGRESS AGAINST HSE PLAN

# Priority 1: Road casualty reduction

- 2.1 The Intelligent Speed Adaptation (ISA) project completed the voluntary fitting of ISA equipment to vehicles at four London boroughs (Kensington and Chelsea; Southwark; Islington and Hackney). Other users testing the equipment include the Green Tomatoes Company (a private hire company), Black Cab, Radio Cabs and Arriva. The London Borough of Tower Hamlets plans to fit two of their transport buses with ISA in January 2010.
- 2.2 TfL joined the DfT's new national Drug Driving Campaign which was launched in August 2009. The campaign seeks to raise awareness that convicted offenders face the same tough penalties as drink drivers. TfL's part in the campaign includes the use of posters, on-line advertising and on the back of London buses.

# Priority 2: Safety of highways and the TLRN (including tunnels)

- 2.3 TfL Streets Construction Design Management (CDM) system provides an opportunity for TfL staff to demonstrate competence and receive a qualification in the application of their CDM knowledge. It obtained accreditation from the Construction Skills Council in June and is being awarded by the Open University. TfL is the first organisation in the country to have developed a CDM award under the government's new Qualifications Credit Framework (QCF). Thirty eight staff from Surface Transport have obtained the qualification.
- 2.4 TfL hosted the National Tunnel Safety Officers and Safety Managers Forum in June with representatives from France, Ireland and various locations around the UK. The event involved a visit to the new London Tunnels Traffic Operations Centre (LTTOC) and a demonstration of Video Incident Detection trials in London. TfL continues to chair the Tunnel Safety Officers Group on behalf of the UK Road Tunnel Operators Forum.

# Priority 3: Health and safety of staff and contractors

2.5 A health fair which offered operational staff confidential medical checks, advice and the opportunity to consult a counsellor and physiotherapist was held at Buckingham Palace Road. A further event is planned for November. The fairs are being run by Occupational Health using a similar format to those currently being run for London Underground staff.

#### Priority 4: Safety and security of the public transport network and its users

- 2.6 The annual bus operators' safety assurance audit programme for 2009/10 commenced in the quarter and will be completed in February 2010.
- 2.7 The annual health, safety and environmental audits of all LRS piers have been completed. The interim results show a continued improvement in health and safety standards on the piers.
- 2.8 The Public Carriage Office (PCO) enforcement and compliance team participated in multi-agency roadside operations with the Metropolitan Police, local authorities, customs, immigration and other agencies. This has enabled the PCO to increase the number of these operations. The effectiveness of this initiative increased the ability of agencies to use a range of enforcement powers to achieve the overall goal of getting dangerous, unlicensed and unlawful taxis off the road.
- 2.9 The Taxi and Private Hire Directorate has a long established, robust process in place for vetting would-be taxi or private hire drivers in London. Anyone with a history of violence would not have been licensed until they had a clean record for a minimum of three years, more if the original offence was of a serious nature, if it was racially motivated or if the individual had more than one conviction for a violent offence. The Licensing Authority made decisions on a case-by-case basis, in line with the Rehabilitation of Offenders Act 1974.
- 2.10 The recent high profile case raised significant concerns about the underlying guidelines. TfL commissioned a review of the licensing guidelines and has introduced a series of immediate changes.

2.11 Applications for driver licences from anyone with a serious criminal record will now be refused unless there are exceptional mitigating circumstances. In addition, a review panel will be established by the end of this year where complex and sensitive cases can be presented and discussed before a decision to issue a licence is made. It is expected that the panel will include experts in the fields of criminal justice as well as senior representatives from TfL.

# 3 STATUS OF HSE MANAGEMENT SYSTEM

3.1 The revised Surface Transport HSE management systems are planned to be in place by the end of 2009.

# 4 HEALTH AND SAFETY PERFORMANCE Health

4.1 There were 10,019 working days lost due to sickness absence in Quarter 2, representing an average of 2.5 per employee. For comparison, the previous quarter's average was 2.4 days absences per employee and the corresponding quarter of last year was 2.3. The top three categories of sickness absence were mental health, musculoskeletal and gastrointestinal.

Days lost	Q2 2009/10	Q1 2009/10	Q2 2008/09
Sickness absence	10,019	9,599	9,417
Average / employee	2.5	2.4	2.3

#### Safety

4.2 The number of accidental customer major injuries in Quarter 2 was 212 (0.41 per million customer journeys). For comparison, there were 223 accidental customer major injuries in the previous quarter (0.39 per million customer journeys) and 235 in the same quarter last year.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Customer major injuries	212	223	235
Rate/10 <sup>6</sup> customer journeys	0.41	0.39	0.45

4.3 There were two accidental employee major injuries in Quarter 2. For comparison, there were three employee major injuries in the previous quarter and one in the same quarter last year.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Employee major injuries	2	3	1
Rate/1000 employees	0.50	0.65	0.19

4.4 There were 27 physical assaults on employees in Quarter 2. For comparison, there were 33 physical assaults on employees in the previous quarter and 44 in the same quarter last year. There were five verbal assaults on employees in Quarter 2. For comparison, there were 15 verbal assaults on employees in the previous quarter and nine in the same quarter last year. There were two threats with offensive weapons in

Quarter 2, two in the previous quarter and four in the corresponding quarter of last year.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Employee physical assaults	27	33	44
Employee verbal assaults	5	15	9
Employee threatened with			
offensive weapon assaults	2	2	4
Rate/1000 employees	8.0	10.81	11.11

4.5 There were 98 physical assaults on contractors in Quarter 2. For comparison, there were 115 physical assaults on contractors in the previous quarter and in the corresponding quarter of last year, there were 179 physical assaults.

# Crime and disorder

4.6 There have been 729 staff (including bus contractors) assaults reported since January 2009. The WVU has dealt with 264 cases with 113 cases remaining ongoing. To date, 97 cases have received judicial disposals (such as charged, summonsed or cautioned).

# 5 ENVIRONMENTAL PERFORMANCE

# CO<sub>2</sub> emissions

5.1 The bulk of CO<sub>2</sub> emissions come from bus operations and as the supporting data are currently provided annually it is not possible to report quarterly.

# Waste and recycled materials

- 5.2 The Highways Maintenance and Works contractors (HMWC) recycled and reused 99.2 per cent and 96.3 per cent of excavated and non excavated materials respectively against a target of 90 per cent for 2009/10.
- 5.3 The target for 2009/10 is to procure 45 per cent of requirements as recycled and green material. The target for the quarter was not met with only 28.1 per cent being procured. The performance and target are being industry benchmarked with assistance from the Government's Waste and Resources Action Programme.

HMWC waste and recycled	Q2	Q1	Q2
materials	2009/10	2009/10	2008/09
Excavated waste recycled and reused - percent (tonnes)	99.2	99.9	99.9
	(7,602)	(5,161)	(22,677)
Non-excavated waste recycled and reused – percent (tonnes)	96.3	95.9	91.8
	(866)	(747)	(716)
Recycled and green material procured – percent (tonnes)	28.1	27.2	30.5
	(3,581)	(2,925)	(6,084)

- 5.4 London Buses have a target to recycle 10 tonnes of paper from offices and bus stations (excluding customer waste) in 2009/10. To test this target, London Buses is conducting a trial of paper recycling at staffed bus stations and offices in the East Region. In Quarter 2, 0.14 tonnes of paper was recycled
- 5.5 Office recycling facilities are now in place in all six Dial-a-Ride (DaR) depots. In Quarter 2, 3.45 tonnes of office waste was recycled. No recycling target has yet been set for DaR.

Recycled waste (tonnes)	Q2 2009/10	Q1 2009/10	Q2 2008/09
London Buses office waste	0.14	0.67	N/A
DaR office waste	3.45	4.20	

#### **Built environment**

5.6 The target is to remove 60km of pedestrian guardrail by June 2010. The target for the end of Quarter 2 was 11.549km and this has been exceeded with a total of 11.913km removed. The assessment part of the programme has exceeded forecasts and it is expected that all of the pedestrian guardrail on the TLRN will be assessed by the end of December 2009, allowing the removal to be completed by the end of the financial year, 3 months early.

Pedestrian guardrail			
removed from TLRN (m)	Q2 2009/10	Q1 2009/10	Q2 2008/09
Pedestrian guardrail	10,773	1,140	N/A

# **Natural Environment**

5.7 Environmental awareness training sessions (by ST environmental professionals) have been arranged for Streets and Traffic and HMWC staff to help ensure that damage to trees and other similar incidents involving the 'green estate' are minimised.

# **Cycle Hire Scheme (CHS)**

5.8 In addition to the need for planning approval for each cycle hire station, Surface Transport has obtained flood defence consent from the Environment Agency for the installation of six cycle hire stations close to the River Thames. Conditions for consent include the submission to and approval by the Environment Agency of an Environmental Management Plan (EMP) for those sites. The provision of an EMP (or Plans) is already one of a number of environmental requirements in the contract with Serco, the contractor.

# 6 MAJOR INCIDENTS

#### Fatalities on the bus network

6.1 There were two fatalities as a result of road traffic collisions with pedestrians on the bus network during the quarter. The incidents are currently under investigation.

#### **Hurricane Clipper Incident**

- 6.2 In September, a Thames Clippers passenger vessel was moving off from the Waterloo Pier with passengers on-board when it collided with a small rowing boat. The rowing boat was significantly damaged but the seven man crew was rescued from the water and were unharmed.
- 6.3 The Marine Accident Investigation Branch (MAIB), Maritime and Coastguard Agency (MCA) and Port of London Authority (PLA) were all informed. The MCA and PLA are investigating the incident and will share their findings with LRS.
- 6.4 The results of the initial investigation, including CCTV footage apparently absolve the Hurricane Clipper from blame. It appears that the rowing boat had moved out into the river to pass the pier then cut across the front of the Hurricane Clipper, which was unable to see the small low craft due to its very close proximity to the bow.
- 6.5 The MCA has indicated that no further action will be taken. Thames Clippers are reviewing the incident to see if they can identify any measures to prevent similar occurrences.

#### LONDON RAIL QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

#### 1 SUMMARY

#### What went well

- 1.1 The Safety Authorisation Application for the 'core route' on the East London Line has now been approved by the Office of Rail Regulation (ORR).
- 1.2 The first of the new '378' type rolling stock has been successfully introduced on London Overground. These trains have a higher capacity which will reduce crowding on the Overground routes, encouraging modal shift from road to rail transport. This will have an overall positive impact on carbon emissions. The trains are also equipped with regenerative breaking, allowing them to return energy to the electricity distribution network when they are braking. This significantly reduces the electricity required to operate the Overground services. A phased introduction of the fleet is now underway.
- 1.3 On London Overground, workforce assault rates are decreasing. Ongoing initiatives include training and coaching of staff, better targeting of crime hotspots and police coverage. The recent introduction of Travel Safe Officers should have a positive impact on both staff and customer assaults.
- 1.4 London Rail's six teams successfully completed the Global Corporate Challenge health initiative. The Docklands Light Railway team came first amongst the TfL teams and finished 230<sup>th</sup> in the world out of 18,500 teams. The initiative led to some significant changes in overall health awareness and walking behaviour.
- 1.5 On the East London Line Project, works have been progressing to develop the preliminary design of the Phase 2 alignment. In parallel with this, various environmental surveys have been undertaken to establish the current environmental conditions and to commence any necessary mitigation actions. Surveys have been undertaken for bats, lizards and Japanese Knotweed. Surveys have also been completed to confirm the background noise levels along the route, and these are being used to establish the mitigation needed to achieve the Project's noise requirements. Outline landscaping proposals, which include ecological enhancements, have also been developed.
- 1.6 On the DLR, the new fly under at Delta Junction was opened in August 2009. Trains travelling from Bank towards Lewisham use this new track during peak times, improving frequencies and journey times through this busy location. DLR's contractors made sure they limited the impact on the environment as much as possible during the construction. For example, where possible, sections of the existing viaduct were reused and shipping containers were used as temporary supports instead of wasting material building new supports. Also, hydro-demolition was used instead of jackhammers as this dramatically reduced the dust, noise and vibration impact of the demolition process.

1.7 London Rail has been liaising with Network Rail, the Train Operators and the TfL Delivery Unit over the installation of electric car charging points in National Rail station car parks. This will help to fulfil the Mayoral targets of expanding electric car use across London.

#### Areas for improvement

- 1.8 The Accident Frequency Rates on Docklands Light Railway (DLR) for Major Projects continues to decrease. Work is planned to bring the accident rates down further on the Stratford International Extension Project and the 3 Car Upgrade Works.
- 1.9 The operator of the London Overground concession, LOROL, has continued to have problems with obtaining waste data from one of their contractors who collects commercial waste from stations. LOROL's other waste collection contractor has demonstrated that it can collect waste from all areas of LOROL's operations and provide the necessary data. Arrangements are therefore being made to terminate the contract with the supplier unable to provide the necessary data.

# Significant plans for the next quarter

- 1.10 DLR has developed a Safety Performance Index during Quarter 2. This will be launched during the next quarter and will provide a better indication of overall safety performance on DLR.
- 1.11 London Rail has developed an overarching strategic safety plan. The plan is due to be approved by the London Rail Executive Group during the next quarter and will cover all the London Rail modes.
- 1.12 London Rail will participate in a workshop to be arranged by the DfT on preparing a carbon pathway to 2050 for the rail industry. This will identify which long term initiatives are considered to be potentially viable and worthy of further research. The aim is to enable rail to make a significant contribution towards long term Government carbon emission reduction targets. London Rail also expects the workshop to inform potential initiatives that could be introduced in the longer term on the Overground, DLR and Tramlink.
- 1.13 London Rail will also begin to explore work that will be needed to inform the new reporting requirement for public sector organisations on climate change adaptation. This requires assessing the risks of a changing climate and how these risks will be addressed.
- 1.14 To coincide with National Stress Awareness day, London Rail is organizing an educational workshop and seminar for its staff in November 2009.

# 2 PROGRESS AGAINST HSE PLAN

2.1 London Tramlink has developed its annual safety improvement plan and work is underway to meet its objectives. The development of a longer term more strategic plan has also commenced.

- 2.2 To date, progress has been made on all elements of the DLR plan. In response to emerging issues, to supplement the existing HSE plan, DLR has also developed a capability enhancement programme. The programme identifies a number of prioritized issues for which good progress is also reported.
- 2.3 London Overground Infrastructure has reported good progress on all objectives.

# 3 STATUS OF HSE MANAGEMENT SYSTEM(S)

3.1 DLR and London Overground have established safety management systems in place. The system in Trams is being revised, with the aim of implementing an integrated system for December 2009.

# 4 HEALTH AND SAFETY PERFORMANCE

#### Health

4.1 There were 272 working days lost due to sickness/absence in Quarter 2 by employees of London Rail. This represented an average of 1.21 days per employee. For comparison, in the previous quarter there was 164 days lost equating to 0.71 days absence per employee and in the same quarter last year there was 325 days lost, equating to 1.54 days absence per employee. The top three categories of sickness absence in Quarter 2 were Coughs and Colds (including swine flu), gastrointestinal and musculoskeletal.

Days lost	Q2 2009/10	Q1 2008/09	Q2 2008/09
Sickness absence	272	164	325
Average / employee	1.21	0.71	1.54

# Safety

- 4.2 London Rail had no employee major injuries or physical assaults in the last year.
- 4.3 There were no accidental customer major injuries for London Overground in Quarter 2. 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 2 was two and four respectively. For comparison, there were four and six in the previous quarter. The overall low rates in staff assaults is encouraging and is the result of a number of initiatives including 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	Q2 2009/10	Q1 2008/09	Q2 2008/09
Physical assaults	2	4	10
Verbal assaults	5	6	17
Rate/1000 employees	8.1	11.7	22.1

4.5 There were six accidental customer major injuries for DLR in Quarter 2 (15.8 million customer journeys). These were mainly the result of slips, trips and falls. For comparison, there were no accidental customer major injuries in the previous quarter and two in the same quarter last year.

DLR	Q2 2009/10	Q1 2008/09	Q2 2008/09
Customer major injuries	6	0	2
Rate/million customer journeys	0.37	-	0.13

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 2 was zero and 18, for major and minor respectively. For comparison, there were zero and 15 in the previous quarter and zero and six in the same quarter last year. The majority of the minor assaults are made up of verbal assaults.

DLR	Q2 2009/10	Q1 2008/09	Q2 2008/09
Major assaults	0	0	0
Minor assaults	18	15	6
Rate/1000 employees	28	24	10

4.7 There were no accidental customer major injuries for London Tramlink in Quarter 2. For comparison, there were no accidental customer injuries in the previous quarter and two in the same period last year.

	Q2 2009/10	Q1 2008/09	Q2 2008/09
Customer major injuries	0	0	2
Rate/million customer journeys	-	-	0.34

\*5.8 million customer journeys Quarter 2

4.8 In London Tramlink, there were no TfL employee assaults this quarter. The number of workforce physical and verbal assaults in Quarter 2 for our contractor TOL on London Tramlink was one and nine respectively. For comparison there were two and 13 respectively in the previous quarter and five and three in the same quarter last year. There has been a gradual reduction in physical assaults over the last year.

	Q2 2009/10	Q1 2008/09	Q2 2008/09
Contractor physical assaults	1	2	5
Employee verbal assaults	9	13	3
Rate/1000 employees	62	93	49

4.9 On London Overground Infrastructure, there was one contractor RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reportable accident during the quarter. The cumulative contractor accident rate was 0.13 per 100,000 hours worked. Overall performance was significantly 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 2. The cumulative contractor accident rate was 0.37 per 100,000 hours worked at the end of the quarter. The accident frequency rate now includes the following projects; Stratford International Extension, 3 Car Enhancements works, Serco projects and the new vehicles project. The accident frequency rate is showing a reduction in the second quarter of this year.

# 5 ENVIRONMENTAL PERFORMANCE

#### Carbon and energy management / Carbon emissions

- 5.1 CO<sub>2</sub> emissions for Quarter 2 2009/10 are shown in the table below. The total emissions are slightly higher than the previous quarter, by around three per cent. This is because of timetable changes introduced during the second quarter which has resulted in an increased level of operational service. Compared to the same quarter the previous year, the increase is greater due to new services beginning during the previous year such as the DLR Woolwich Arsenal extension.
- 5.2 Reported emissions per passenger kilometre have remained fairly stable since the previous quarter. This indicates that the changes in vehicle kilometres which is causing the increased carbon emissions is broadly matched by the increases in passenger kilometres.

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Total CO <sub>2</sub> (Tonnes)	13,113	12,726	11,939
Normalised CO <sub>2</sub> (g/passenger km)	59.6	60.1	58.9

5.3 This data is still considered to be of medium quality and contain some significant assumptions, e.g. the data for DLR, London Tramlink and the East London Line Project are estimates based on annual reporting rather than the more detailed periodic reporting available for London Overground.

#### Waste Management

5.4 Waste produced and recycled from London Rail's major infrastructure projects that are underway is reported below. The amount of construction and demolition waste produced is much lower than in the previous quarter. In Quarter 1 2009/10, the majority of the waste was created on the East London Line extension to Highbury & Islington (Phase 1a).

	Q2 2009/10	Q1 2009/10	Q2 2008/09
Construction and demolition waste (tonnes)	31,211	362,209	75,343
Construction and demolition waste recycled (%)	89.0	91.1	96.3

- 5.5 The percentage of waste recycled is slightly lower than Quarter 4 2008/09 when all of London Rail's projects are taken into account. However, the overall figure remains high for this type of project.
- 5.6 While the data is included for all London Rail's major infrastructure projects, this data is not available on a regular basis for the DLR projects. Averages have therefore been used from previous quarters.

#### 6 MAJOR INCIDENTS

6.1 There were no major incidents in the quarter.

#### **CROSSRAIL QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT**

#### 1. SUMMARY

#### What went well

- 1.1. A high level user requirements statement was defined for the Incident Management System and RIVO Safeguard software were selected to provide the Incident Management System.
- 1.2. The Construction Design and Management (CDM) software package has been introduced across the programme, with training provided to end users. The use of this tool will assist in the monitoring of compliance with the CDM regulations. Awareness training for Directors and Senior Managers was launched in September.
- 1.3. In the period design focused behavioural safety leadership workshops were held. These two hour workshops attended by principal designers and design managers discuss the moral obligations for including safety in design and the importance of demonstrating personal leadership to achieve the objectives of the Crossrail Zero Accident Culture.
- 1.4. The Environment Management Systems (EMS) Management Review was held this quarter in line with the requirements of ISO14001. Good progress was reported against all the objectives albeit recognising the need to re-baseline office performance following the move to Canary Wharf. The environmental objectives and targets for the next year have been agreed by the Crossrail Executive Committee and are proceeding to plan in all areas. Areas for improvement of the EMS identified during the management review have been addressed.
- 1.5. A workshop on environmental reporting was held with attendees from Network Rail, the Olympic Delivery Authority, East London Line, the Crossrail Project Delivery Partner and the contractor, Taylor Woodrow presenting information and discussing best practice reporting and performance indicators for construction.
- 1.6. A staff training needs analysis has been completed to align Crossrail requirements with the TfL HSE Competency Framework and a training plan issued to the Crossrail Executive Committee, which has been endorsed. The first of the awareness training packages is now under development.

#### Areas for improvement

- 1.7. The leadership tour programme is going well, with the target of two tours a period being completed. The target set for the number of tours is being reviewed to take account of the expansion of the leadership team and the increase in construction activity.
- 1.8. The fire safety arrangements at the Tottenham Court Road visitors centre need to be improved following a visit from the London Fire Brigade.
- 1.9. The regular review of occupational health risk assessments identified the need to update the assessments to meet the current requirements of the programme. The work to update the assessments is progressing well and will be completed in Quarter 3.
- 1.10. Ensuring environmental aspect evaluations and any resultant mitigation is in place for all Crossrail sites.
- 1.11. Awareness raising for employees in relation to the EMS in particular and the environment as a wider issue.

#### Significant plans for the next quarter

- 1.12. The Health and Safety Directorate with support from Environmental Resources Management (ERM) will be conducting a study of safety attitudes, behaviours and procedures. On completion of the study, the Crossrail behavioural safety programme will be designed.
- 1.13. Raising of staff awareness with introductions to the health and safety, and environmental management systems to all teams at Crossrail, will commence next Quarter followed by an associated e-Learning training package. Delivery of e-Learning is projected to commence in early December.
- 1.14. A combined HSE incident procedure and associated Incident Management System (IMS) will be developed. The first phase of the IMS is projected to commence in early December.
- 1.15. The Stage 1 verification of our Health and Safety and Environment management systems to the ISO14001 and BS OHSAS 18001 standards is scheduled for November 2009.

# 2. PROGRESS AGAINST HEALTH & SAFETY PLAN

2.1 Progress on the achievement of the key deliverables contained within the annual health and safety improvement plan and the associated action plans is on track with two of the objectives being completed in Quarter 2.

# 3 STATUS OF HEALTH & SAFETY MANAGEMENT SYSTEM

3.1 Development of the HS MS to achieve compliance with the BS OHSAS 18001 standard has been a key focus of the Health and Safety team in the Quarter, with 17 procedures being finalised in the period.

# 4 HEALTH AND SAFETY PERFORMANCE

#### Health

4.1 There were 329 working days lost due to sickness/absence in Quarter 2, which represents an average of 1.25 days per employee. The top two categories of sickness absence in Quarter 2 were coughs and colds and mental illness.

Days lost	Q2 2009/10	Q1 2009/10	Q2 2008/09
Sickness absence	329	326	221.5
Average / employee	1.25	1.98	1.24

- 4.2 An online personal health and wellbeing coach service was launched in the Quarter. As part of this programme, two stations have been installed on the Canada Square office. These stations provide an opportunity for employees to assess their body mass index, heart rate and blood pressure on a regular basis. Using this information, the service then helps to achieve weight, fitness, and health goals.
- 4.3 Crossrail will be offering free seasonal flu vaccinations for all employees in Quarter 3.

# Safety

- 4.4 There were no accidental major injuries reported in Quarter 2. For comparison, there were none in the previous quarter and none in the same quarter last year.
- 4.5 There were no physical assaults and no verbal assaults on employees in Quarter 2. For comparison, there were none in the previous quarter and none in the same quarter last year.

# 5 ENVIRONMENTAL PERFORMANCE

# General

- 5.1 Electricity consumption data for the Canada Square office, obtained via online meter readings (floor by floor data), has been validated by TfL Group Property and Facilities and will be reported in the TfL energy leagues published on source in November and in future SHEAC reports. TfL is still validating the landlord component of Crossrail's energy use which is preventing reporting total energy consumption at present.
- 5.2 During the last two months there have been 14 complaints logged of which only two have been directly related to Crossrail.

5.3 During the Quarter Crossrail planned and carried out 22 site inspections. These identified 13 non-conformances. Analysis of the non-conformances has identified that one particular package of work had issues related to oil storage. Remedial action has been implemented with the contractor and the situation has been resolved. No discernable trends were identified.

#### 6 MAJOR INCIDENTS

- 6.1 There were no major incidents in Quarter 2.
- 6.2 Last quarter, Canary Wharf Group reported an incident in which diesel had entered the dock. The incident has been addressed appropriately and suitable actions have been implemented to prevent reoccurrence.

#### CORPORATE DIRECTORATES QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

#### 1 SUMMARY

#### What went well

- 1.1 A major risk assessment programme associated with the move of large numbers of staff to Pier Walk, North Greenwich was carried out.
- 1.2 Risk assessment work was successfully delivered across a range of areas of the Corporate Directorates, including home working, occupational driving, fire safety and noise.
- 1.3 Working with external partners to ensure smooth delivery of the installation phase of the Prestige Oyster Expansion National Rail programme continued. Further preparatory Prestige related work took place at London Underground's Olympic Gateway, Stratford station.
- 1.4 Work has continued on the implementation of the Driving at Work standard. The on-line risk assessment tool for assessing driver risk has been updated to meet TfL IM standards and Group HSE has been supporting Surface Transport in their roll out for pool car and powered two wheeler users.
- 1.5 The solar energy Photo-Voltaic (PV) array in TfL Head Offices' first combined living roof and PV system has been installed at 55 Broadway started producing CO<sub>2</sub> free electricity during Quarter 2. The living roof elements are due for completion in Quarter 3. The project is part funded by the charity BugLife and the Government's Low Carbon Buildings Programme. The project has wider planning implications, setting a positive precedent for upgrading listed buildings.
- 1.6 At the end of Quarter 2, the Head Office recycling rate is above target at 64 per cent and on track to meet the year-end target of 65 per cent. This is up significantly from previous years (the figure in 2006 was 34 per cent and some sites are now recording figures as high as 85 per cent). A new contract has also been placed to replace the 2,000,000 plastic cups used per year with more sustainable recyclable cups.

#### Areas for improvement

- 1.7 The five 'improvement actions' identified within the Corporate Directorate's 2009/10 HSE Assurance Letter are:
  - a) Using outputs from the TfL Group HSE Competency Framework, a gap analysis will be undertaken to develop a training programme that addresses identified HSE competency requirements;
  - b) HSE Consultation arrangements will be rolled out across the Corporate Directorates to an agreed structure;

- c) Making input to the planning and implementation stages of organisational change;
- d) Updating HSE intranet pages relating to the Corporate Directorates HSE Management System (HSEMS); and
- e) Delivering HSE input at identified stages of the procurement life cycle in conformance with TfL HSE Procurement guidelines and the TfL procurement process model.

Section 2.1 updates on the delivery of these 'improvement actions'.

# Significant plans for the next quarter

- 1.8 An audit will take place on Prestige's partner, Transaction Systems Limited's HSEMS.
- 1.7 Gap analysis against the requirements of the TfL Group HSE Competence Framework for managers will continue.
- 1.8 Results from the General Counsel home working survey will be reviewed and necessary interventions taken forward.
- 1.9 The scale of 'grey fleet' (private vehicles driven on company business) usage within Corporate Directorates will be reviewed to identify relevant issues. The modification and procurement of the on-line risk assessment tool for TfL 'grey fleet' drivers will be initiated.
- 1.10 Detailed design works and approvals have been on-going throughout Quarter 2 for BEEP energy efficiency retrofit works at 22 Head Office buildings. The work is due to start on site in Quarter 3 with the guaranteed energy savings due to be delivered from April 2010.
- 1.11 Updates are due for 27 Display Energy Certificates (DECs) and will be carried out by in house GP&F accredited assessors saving TfL circa £35k in consultancy fees. In addition to Head Office buildings, this includes certification for City Hall, the Transport Museum and Victoria Coach Station. Two London Underground stations will have preliminary DEC assessments to assist London Underground as these buildings may be covered by this statutory scheme for Public Buildings.

# 2 PROGRESS AGAINST HSE PLAN

# Corporate Directorate HSE Management System

- 2.1 Using outputs from the TfL Group HSE Competency framework, a gap analysis is being undertaken to develop a training programme that addresses identified HSE competency requirements.
- 2.2 HSE input continues to be made to inform Group Employee Relations discussions with the Joint Staff Side Representative regarding the

implementation of the HSE consultation arrangements.

2.3 Arrangements are now in place with Group Procurement for the sharing of procurement strategies that have HSE relevance with Group HSE. In addition, the contract calendar is now shared enabling a forward view to be taken on upcoming procurement.

#### Specific areas of risk

- 2.4 The Dseasy programme continues its roll-out across the four Corporate Directorates. Display Screen Equipment risk assessment work is addressing new contact centre staff at Pier Walk, North Greenwich and a new Oyster Control room arising from the extension of Oyster outside TfL.
- 2.5 A survey of home working in General Counsel was carried out. Results from the survey will be reviewed, interventions identified and then applied.
- 2.6 A report commissioned from the Financial Services Centre will enable 'grey fleet' usage to be assessed so as to determine any necessary actions.
- 2.7 A review, with the London Fire Brigade, to determine the fire risk assessments needed for Travel Information Centres sited within London Underground stations is in hand.
- 2.8 Noise risk assessment work was completed at Pier Walk, North Greenwich and Liverpool Street Travel Information Centre in collaboration with London Underground's Safety Quality and Environment Directorate.

# 3 STATUS OF HSE MANAGEMENT SYSTEM(S)

- 3.1 Work to update existing HSEMS standards to address the 'improvement actions' identified within the 2008/09 HSE Assurance Letter is underway.
- 3.2 A review of the TfL Group HSEMS is in progress with the aim of completing the update by the end of March 2010.

#### 4 HEALTH AND SAFETY PERFORMANCE

#### Health

4.1 There were 3,605 working days lost to sickness absence in Quarter 2, representing an average of 1.6 days per employee. This represents a marginal improvement from the previous Quarter (1.8 days) and is identical to the same Quarter last year.

Days lost	Q2 2009/10	Q1 2009/10	Q2 2008/09
Sickness absence	3,605	3,982	3,520
Average / employee	1.6	1.8	1.6

4.2 The top three sickness absence categories comprised (in descending order) coughs and colds, musculoskeletal disorders and gastrointestinal.

# Safety

4.3 There were no accidental customer major injuries, employee major accidental injuries or any physical assaults on employees during Quarter 1, during the previous Quarter or during the same Quarter last year. The Corporate Directorates consist mainly of non-operational staff and periodic workplace risk assessments and the implementation of adequate controls helps to maintain this low risk environment.

# 5 ENVIRONMENT PERFORMANCE

5.1 The target for CO<sub>2</sub> emissions in Head Office buildings was met this quarter. Emissions were 25.2 kg CO<sub>2</sub>/m<sup>2</sup> against the target of 27.4 kg CO<sub>2</sub>/m<sup>2</sup>. This is on track to meet the year-end target of 125kgCO<sub>2</sub>/m<sup>2</sup>. This represents a three per cent reduction on 2008/09 emissions and is part of TfL's wider targets to meet the Mayoral commitment to reduce London's CO<sub>2</sub> emissions by 60 per cent by 2025.

CO <sub>2</sub> kg/m <sup>2</sup>	Q2 2009/10	Q1 2009/10	Q2 2008/09
Target	27.4	31.4	25.8
Emissions	25.2	29.1	27.2

5.2 The water consumption target for Quarter 2 for the Head office buildings was met with consumption of 1.26 m<sup>3</sup>/person against the target of 1.56 m<sup>3</sup>/person. This is on track to meet the year-end target of 6.0 m<sup>3</sup> per person, per year, which represents a 12 per cent reduction on 2008/09 consumption and is significantly lower than the Environment Agency's best practice benchmark of 6.4m<sup>3</sup>/person/year.

Water consumption m <sup>3</sup> /person	Q2 2009/10	Q1 2009/10	Q2 2008/09
Target	1.56	1.74	1.64
Usage	1.26	1.68	1.62

# 6 MAJOR INCIDENTS

6.1 There were no major incidents.

#### QUARTER 2 2009/10 HEALTH AND SAFETY PERFORMANCE - DATA SUMMARY\*

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

n/a - not available

#### Health

Sickness absence days lost			Average days lost / employee			
	Q2 2009/10	Q1 2009/10	Q2 2008/09	Q2 2009/10	Q1 2009/10	Q2 2008/09
LU	32,910	29,633	31,840	2.5	2.3	2.4
ST	10,019	9,599	9,417	2.5	2.4	2.3
LR	272	164	325	1.21	0.71	1.54
CR	329	312	221.5	1.25	1.35	1.24
CD	3,605	3,982	3,520	1.6	1.8	1.6

# Employee major injuries

Employee major injuries			Rate / 1000 employees			
	Q2	Q1	Q2	Q2	Q1	Q2
	2009/10	2009/10	2008/09	2009/10	2009/10	2008/09
LU*	3	2	n/a	0.19	0.14	n/a
ST	2	3	1	0.50	0.65	0.19
LR	0	0	0	0	0	0
CR	0	0	0	0	0	0
CD	0	0	0	0	0	0

\*Comparable data for earlier quarters are not available as current data include Chief Maintenance Officer staff.

# **Employee assaults (Total)**

Employee assaults				Rate / 1000 employees		
	Q2	Q1	Q2	Q2	Q1	Q2
	2009/10	2009/10	2008/09	2009/10	2009/10	2008/09
LU*	314	247	283	28.59	22.41	25.24
ST	34	50	57	8.0	10.81	11.11
LR	0	0	0	0	0	0
CR	0	0	0	0	0	0
CD	0	0	0	0	0	0

\*LU data are for Chief Operating Officer Staff only

# Customer Major Injuries

Customer major injuries			Rate / 10 <sup>6</sup> customer journeys			
	Q2 Q1 Q2				Q1	Q2
	2009/10	2009/10	2008/09	2009/10	2009/10	2008/09
LU	17	29	37	0.07	0.11	0.15
ST	212	223	235	0.41	0.39	0.45
DLR	6	0	2	0.37	0	0.13
LOROL	0	0	0	0	0	0
TRAM	0	0	2	0	0	0.34

# Contractor Staff Assaults (Total)

Contractor staff assaults			Rate / 1000 staff			
Q2 Q1 Q2 2009/10 2009/10 2008/09 2				Q2 2009/10	Q1 2009/10	Q2 2008/09
BUSES	98	115	179	n/a	n/a	n/a
LOROL	7	10	27	8.1	11.7	22.1
DLR	18	15	6	28	24	10
TRAM	10	15	8	62	93	49