

Safety & Environment

Report 2003 to 2004 - Summary Update



1.0 Explanation of Update

Honda of the UK Manufacturing Ltd (HUM) published their first EMAS brochure covering both Safety and Environment performance on 13th March 2002 covering the period up to September 2001. The first update to this report was published in March 2003.

This summary updates the information in that brochure and the 2003 summary update up to the end of March 2004.

For ease of comparison the paragraph numbers used are the same as those used in the original brochure.

2.0 Introduction

HUM development in 2003

Having stabilized our production performance in the previous year, HUM's main task was to improve overall efficiency without detriment to the customer. Significant work was therefore completed to move line 2 to a single shift operation to build the Civic, and to reintroduce Civic into line 1 within the existing 2 shift CRV production. This was successfully completed in the summer of 2003 enabling HUM to produce similar number of cars to the previous year with one shift less.

Other major projects supported this activity including an overall strengthening of the logistics and parts supply management.



3.2 Management Systems

HUM's ISO14001 and OHSAS18001 management system has been maintained during 2003 and compliance verified through internal audits and external surveillance audits. Communication of changes to the management systems is achieved through the company and department Safety and Environment committees.

3.3 Plant Environmental Performance

3.3.1 Air and Odour

In 2003 HUM has continued to see stable performance in the Die-Casting emissions to air and an overall reduction in the paint emissions to air.

In the paint shops. In 2003 the focus was on further reducing the VOC emitted to atmosphere and ensuring compliance with the Solvent Emissions Directive (and later the Regulations). The main activities to reduce VOC were to seek alternative materials for those with high solvent or containing certain risk phrase substances and to improve solvent recovery through improved associate awareness. This has been successful in Paint line 1 with a result of 19g/m² against a target of 20g/m² and the VOC emissions from the Paint line 2 process were maintained at a stable level.

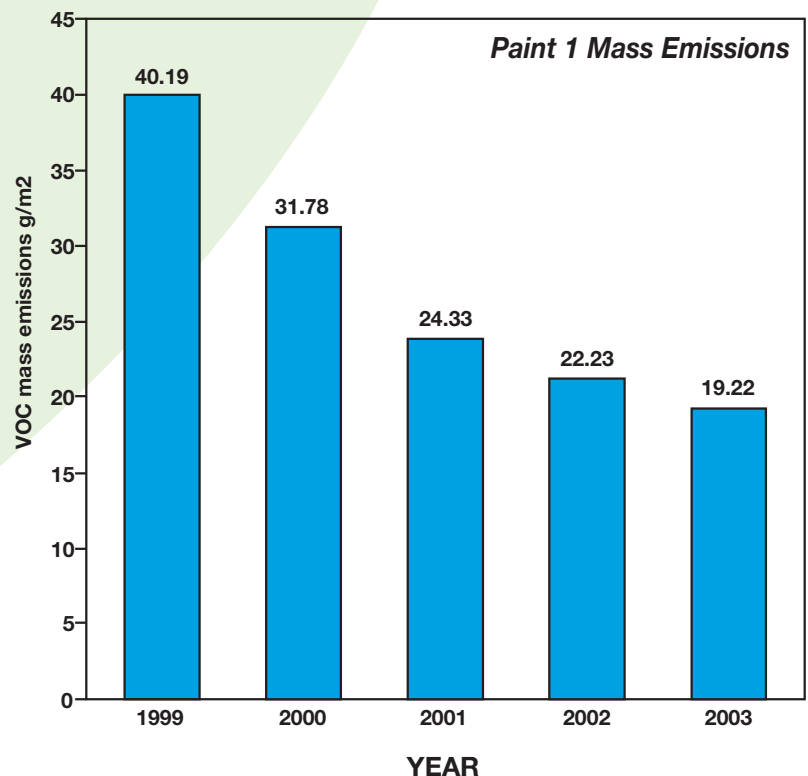
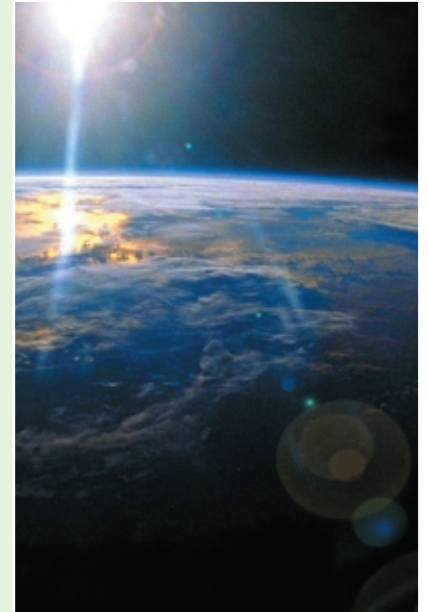
In 2004 the painting process has been set a challenging monthly mass emission target of 18g/m³ in Paint line 1 and 24g/m² in Paint line 2. This will be achieved by improving associate awareness through training to encourage efficient use of solvent and increase solvent recovery. Paint line 1 will also be replacing two of the thermal oxidisers because they are nearing the end of their economic life.

The VOC emissions from the authorised point sources have been below the authorised limits.

In Die Cast in 2003 the annual stack emission tests results confirmed that HUM was operating the process within the legal limit. In spite of this there were two recorded complaints from local residents relating to odour from the process. As a result of the investigation the wet scrubber has been fitted with a warning beacon to highlight when water levels are too low or high and the dust filters for both high and low pressure die cast have been changed. In 2004 a full situation analysis will be carried out on the abatement equipment to support the current preventative maintenance programme. The Die Cast Pollution Prevention and Control (PPC) application was made to the Local Authority in June 2003 and the authorisation is being developed by the local authority which has been confirmed as duly made.

Other - In 2003 HUM applied to upgrade our existing Part B authorisations for Bumper Paint and the use of Sealers and Adhesives under the Pollution Prevention and Control System.

No notifiable breaches of authorised limits have occurred during the reporting period.



3.3.2 Water Discharge

The Waste Water Treatment plant has focused in 2003 on maintaining the stability of the operation, compliance with our discharge consents and ensuring that their part of the Paint PPC application was completed. There have been no discharge concerns from Thames Water and the Pollution Prevention Control application was accepted by the local authority.

The operational efficiency of the Engine Effluent Treatment Plant has been improved by carrying out equipment modifications and transferring the daily management of the plant to the on-site oil and coolant suppliers. This has resulted a reduction in the amount of oil and water waste sent off site by approximately 50% per month.

No contamination has been reported in the local watercourses. Overall the discharge from the lagoon to the local water course has remained stable.

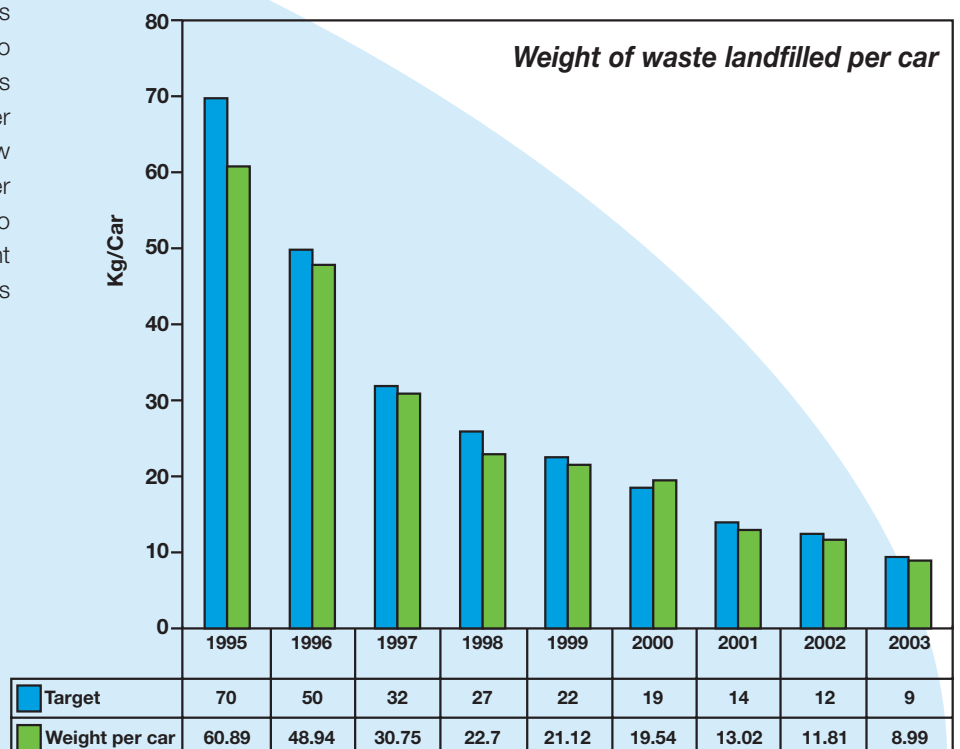
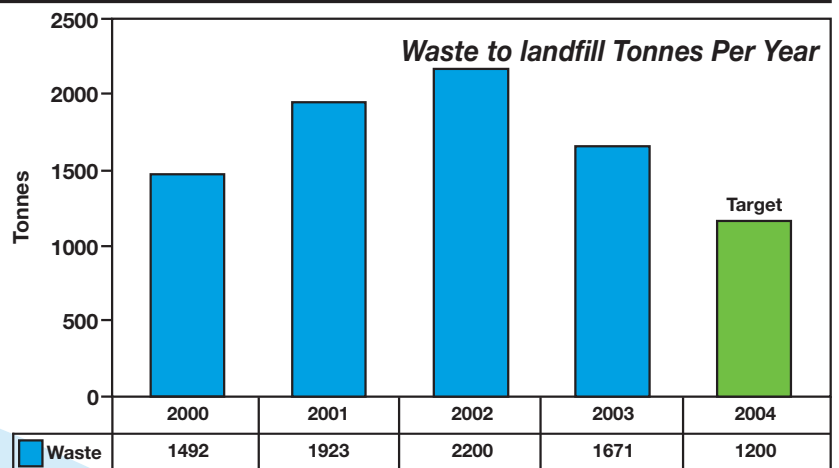
In 2004 our objective will be to maintain our current discharge performance, to ensure the oil storage regulation requirements are achieved in any new developments and any new PPC permit requirements are reflected in the Waste Water Treatment Process.

There have been no notifiable breaches of the consent limits.

3.3.3 Waste

In 2003 HUM achieved a reduction in landfilled waste of 2.82Kg per car. This equates to a reduction of 24% on 2002 performance. The reduction has been achieved through a big improvement in the segregation of recyclable materials in the engine and car plants and by ensuring that scrap parts from model change activities are re-used or recycled where possible.

HUM is changing the way in which waste performance is measured. In 2004 HUM will measure waste in absolute terms. HUM's target for 2004 is to achieve a target of 1200T of waste to landfill. The method for achieving this is to recycle all paint and waste water treatment sludges by using them as raw materials in cement manufacture. Other activities include improvements to packaging recycling across the Paint Division and obsolete parts management.



3.3.4 Energy



Honda's Energy Efficient IMA (Integrated Motor Assist) Civic

In 2003 the target was to reduce energy consumption to 1817 kWh / car. This is based on our global Honda CO2 reduction commitment as well as a more stringent local reduction target. For this financial year HUM achieved 1746 kWh / car. Overall this has been achieved through increased energy monitoring and reduction activities, particularly targeting non production energy usage. The decommissioning of the steam system within the Engine plant is now in progress.

The Energy Information Web page where actual time energy monitoring results can be viewed by departments enabling abnormalities to be investigated as soon as they occur has been a success with many areas of the plant dramatically reducing their usage. The company energy committee has been re-launched to increase the company focus on energy reduction.

In 2004 we are preparing ourselves for entry to the EU Emissions Trading Scheme by installation of new meters and more remote metering in other areas. Efficiency of compressed air systems is also being improved in the coming 12 months.

3.3.5 Noise

In 2003 there were no complaints from the local residents relating to noise. The noise model was updated to include the additional external equipment as a result of new developments on site and individual noise modelling was carried out for the Paint and Die Casting PPC applications. No boundary noise concerns were highlighted by the model. The model has also been updated with the latest software to improve its accuracy and processing speed.

In 2004 the noise model will continue to be updated following any significant changes or developments.

Time	East (EP07) dB(A)	Limit	West (WP05) dB(A)	Limit
Day 07:00 to 22:00	32.8	40dbA	39.6	50dbA
Evening and Morning 22:00 to 00:00 & 06:00 to 07:00	32.1	35dbA	38.4	45dbA
Night 0:00 to 06:00	13.7	30dbA	34.4	40dbA

3.3.6 Traffic

Transporters dispatching cars to UK dealers and Ports

During 2003 the Vehicle Logistics Department continued to maximise the number of vehicles carried on each transporter. The investigation into the use of rail to deliver cars was concluded in 2003 and presented to our customer (HME) for them to make a decision.

Parts deliveries from local warehouses or directly from suppliers.

HUM has continued through 2003 to work with suppliers to minimise the number of deliveries to site. A significant reduction of over 800 vehicle movements on public roads has been achieved through the Key Point Distribution Facility and the movement of parts from this facility to HUM on an internal road.

This facility has replaced a number of small warehousing facilities in Swindon. During 2003, a new SDC warehouse management system (ALPS) was introduced and there is a further plan to introduce a warehouse management system into TDG warehouse by the end of 2004. Plans to further reduce transport movements by 10% by the end of March 2005 have started. Bulky stillage parts have already been transferred from SDC main site to the Keypoint internal road facility.

In December 2003 HUM Line one direct supplier deliveries were transferred from HUM to SDC main site. In March 2004 HUM Line 2 direct deliveries were transferred to SDC Keypoint, therefore allowing for further reductions in transport movements.

By the end of June 2004, delivery service operations for suppliers UYS and Visteon will move from SDC main site to SDC Keypoint.

Associates driving to and from work.

The Car sharing database was launched in September 2002. The focus of activity for 2003 was to encourage greater use of the database and to increase the number of associates car sharing by 10%. The system was repromoted in a poster campaign in early May 2003 and a traffic survey will be carried out in 2004 to confirm the results of this promotion.



Honda's Internal Road

3.3.7 Visual Impact

In 2003 extensive grounds maintenance will continue but there is no planned additional planting.

2004 HUM will carry out tree husbandry along our boundary with South Marston village by thinning the existing immature trees to promote further growth.



Honda's extensive grounds

3.3.8 Indirect Impacts



The Product

Two cars of each type sent to the EU, America and Japan are confirmed as compliant to emission limits and external noise every month.

There has been no change to this activity in 2003.

Supplier Management

During 2003 HUM has encouraged all tier 1 component parts suppliers to achieve certification to ISO14001 or EMAS by March 2005. This requirement was communicated to all suppliers at the supplier forum held in April 2003.

Following assessment of the supply base in January 2004, 77% of suppliers have confirmed as having achieved certification to ISO14001/EMAS. The remaining suppliers are targeted to achieve certification by March 2005.

Contractor Management

Improved reporting in 2003 has seen an increase in the number of low risk contractor incidents. Overall there were 26 incidents reported against a target of four. **Incidents are defined as any activity or action that has the potential to cause pollution, for example, spills or wastes incorrectly segregated.** All of the environmental incidents related to hydraulic leaks from car transporters. The Vehicle Logistics department has been working with the transport companies to ensure adequate preventative maintenance on the vehicles and good spillage clean-up procedures are in place.

The development of the approved contractor list continued in 2003 through the Facilities department and this activity will continue in 2004 with the development of a contractor passport scheme on site. This scheme will require all contractors to receive detailed Safety and Environmental training prior to working on site.

Other New Activities

End of Life Vehicle Directive Compliance

HUM has approached the ELV directive in a structured way so that we have achieved compliance.

1. Hazardous materials management

The content of Lead, Mercury, Hexavalent Chromium and Cadmium in parts supplied to HUM is confirmed via a supplier survey controlled by the Purchasing department. The responses from the survey are analysed against the ELV directive and any actions prioritised against the relevant cut off date. Suppliers of concern parts meet with HUM and Honda R&D in order to confirm the countermeasures and timing of compliant parts introduction. The fitting of these parts is tracked through VIN (Vehicle Identification Number) and EIN (Engine Identification Number) numbers. A declaration of compliance has been completed for all HUM manufactured models before making these vehicles available for sale.

2. Recyclability

HUM is also working on a creating a robust method for calculating the recyclability of a vehicle. This will involve a supplier survey to analyse materials content of bought out parts as well as internal activity to understand the quantity and composition of materials in HUM manufactured parts and production materials. This information will be collated using a variety of databases which will allow HUM to calculate the recyclability of a specific model type option. This work is planned to be completed in time for mass production for the major Civic model change in 2006.

3.4 Environment Data for 2001 to 2003

Criteria	2001	2002	2003	Legal reqt
Air and Odour				
• Paint Mass emissions (g/m2) (total)	24	25	23.35	60
• Bumper Paint VOC Stack emissions average (mg/m3)	11	13	6.71	50
• Die cast stack emissions average (mg/m3)				
- Particulate (mg/m3)	3.1	4.8	3.73	50
- Flouride (mg/m3)	0.4	0.2	<0.02	5
- Chloride (mg/m3)	1.4	0.86	2.15	5
- Copper (mg/m3)	0.001	0.0012	0.0017	20
- VOC (stack 3 only) (mg/m3)	15.8	19	2.6	50
- All other results for stack 3 were undetectable				
Water				
• Metals waste water stream				
- Oil and Grease (mg/l)	6	12	20.3	50
- Chemical Oxygen Demand (mg/l)	530	798	1027	2000
- Setttable Solids (mg/l)	15	8	52	1000
- Nickel (mg/l)	0.86	0.62	0.56	2
- Zinc (mg/l)	0.42	0.31	0.29	3
- Copper (mg/l)	0.09	0.07	0.07	3
- Lead (mg/l)	0.12	0.09	0.091	3
- Chromium (mg/l)	0.08	0.07	0.077	3
- PH	8.7	7.9	7.54	6-11
- Phosphate (mg/l)	66	31	30.98	100
• Engine Effluent treatment discharge				
- Oil and Grease (mg/l)	14	20	48	350
- Chemical Oxygen Demand (mg/l)	6135	8886	10370	30000
- PH	6.95	6.84	6.36	6-11
- Setttable solids (mg/l)	23	50	36	1000
- Nickel (mg/l)	0.8	0.05	0.1	2
- Zinc (mg/l)	2.13	2.48	0.9	3
- Copper (mg/l)	<0.1	0.08	0.1	3
- Lead (mg/l)	<0.1	0.18	0.3	3
- Chromium (mg/l)	<0.1	0	0.1	3
• Lagoon Discharge				
- Oil and Grease (mg/l)	2.00	1.87	2.74	20
Waste				
• Waste to landfill (kg/car)	13.02	11.81	8.99	Internal target of zero waste to landfill by 2010
Energy				
• Gas and electricity consumption kwh/car	2326.73	1863.61	1746	Internal targets set.
• Water Consumption m3/car	3.99	2.33	3.48	
Noise				
• Achieve planning permission	Testing carried out in 2001, 2002 and 2003	Completed for the PPC application		Planning consent limits.
Traffic				
• Vehicle dispatch • Parts deliveries • Associate Travel	On-going traffic minimisation activity - refer to section 3.3.6			
Visual Impact				
Refer to section 3.3.7 for general comments				

4.3 Safety Performance - Detail

4.3.1 Fire

There were no major fires in 2003 but there was one minor fire in the Frame Assembly area. No associates were injured but the production line was stopped for approximately 2 hours. Fire extinguisher training continued in 2003 and has now been combined with the spillage response training.

Due to the requirement to implement the Dangerous Substances and Explosive Atmospheres (DSEAR) Regulations risk assessments have been completed in all areas of the plant. The risk assessments have highlighted some areas requiring minor improvement. These improvements will be addressed in 2004. The target for 2004 will also be zero major fires.

4.3.2 Plant and Equipment

Maintenance and inspection procedures are now in place in Car Plant 2 to ensure that all the equipment and systems of work comply with company standards.

The PUWER project to upgrade all pre1995 equipment to latest standards has been ongoing through the year and all priority work has now been completed. This is an on-going project.

Noise

In 2003 HUM changed its noise monitoring strategy. The new strategy focuses on personal dosimetry in high risk areas. This allows departments to concentrate on reducing noise exposure at source. 2003 noise monitoring activity took place in Car Plant 2. Overall the results were encouraging with only 2 processes being found to be over the second action level of 90dBA. Departments are working on countermeasures for the concerns raised including tooling and equipment changes.

In addition to this hand/arm vibration testing was carried out in Car Plant 2 in order to identify any concern areas prior to the implementation of legislation in 2005. Again the results were encouraging with only 2 processes exceeding the proposed 2nd action limit of 5m/s². Departments are actioning countermeasures in order to reduce vibration exposure to associates.

Lifting equipment

The lifting equipment tagging project was started in 2003 with the tagging system being communicated and started in all departments. Training on the system was developed with our external lifting equipment verifiers and will be started in 2004. It is anticipated that this system will be implemented through out HUM by October 2004.



4.3.3 Manual Handling

In 2003 the focus of activity was on the development of future models. The Safety department has been working with the new model teams in both the UK and Japan to enhance the ergonomics of the manufacturing process. This has involved going to Japan with the Frame Assembly process teams to view the test cars and request improvements as required. In June 2004 HUM will continue this process in Japan.

To standardise this process globally, in 2004 the Honda Global Ergonomic standards will be introduced into HUM. The introduction will include comprehensive training of the process teams and managers of process areas from the Honda America Ergonomics team.



4.3.4 Vehicle Movements

Vehicle, forklift and tow truck training has continued throughout 2003. 132 associates who regularly drive on the public road have attended the defensive driver training course and a further 100 associates from the Vehicle Quality and Final Quality Adjustment areas have received maneuvering training. All new associates are now trained during their induction. In addition for all drivers that drive high performance cars a driving assessment has been carried out to verify their competence. All associates driving on site are now required to confirm they will comply with the on-site driving procedure.

In 2004 those associates that drive on business will sign and agree understanding with the Business Driving Procedure. To enable HUM to focus training resources into other areas train the trainer courses have been carried out for maneuvering training so this can be trained by HUM associates. All training will continue in 2004 to maintain safe driving on and off site.

4.3.5 Parts

In 2003 standardised hand safety training continued in departments. As a result of the serious accident involving a stillage last year stillage handles were purchased to ensure that existing spillages could be moved without the risk of hands becoming trapped. These have been issued to all affected departments. All new or refurbished stillages will have handles fitted as standard.

In 2004 HUM will focus on implementing the new Honda Global Ergonomic Guidelines for Cart (stillage) Design to ensure that accidents like this do not reoccur.



The use of stillage handles on line

4.3.6 Construction and Maintenance

In 2003 there has been significant development on the site including the construction of a New Model Warehouse, the Material Logistics North Building and an extension to Engine Material Services and the development of Injection Molding within Bumper Paint department. The focus of activity has been to ensure that the safe systems of work and equipment have been put in place. This activity will continue in 2004.

As part of the ML North project the existing line 1 underground process fluid supply pipes have now been relocated above ground thus reducing the risk of undetected spillage.

Safe Systems of work within the maintenance function have been strengthened by the addition of a Production Support Safety tour for each division. All divisions will receive a tour in 2004 and 2005 and improvements implemented as required.

External Contractor Management has been continuing in its current form. An approved contractor list has continued to be developed in 2003 and this work will carry on through 2004. Further controls will be implemented through the Contractor passport scheme as discussed in section 3.3.8.



Material Logistics Building (ML)

4.3.7 Display Screen Equipment

VDU train the trainer training was completed in 2003 but due to the introduction of new flat screen technology, which will continue into 2004, no additional assessments or associate VDU training has been carried out. In 2004 as the workstations are completed the assessments and training will be carried out.

4.3.8 Awareness

Good safety awareness has been maintained in all departments through the use of existing communication methods, for example, Start of Shift Notices, department Safety and Environment Committee meetings and Company Safety and Environment committee meetings. To improve awareness and highlight safety concerns Safety Patrols were started in 2003.

The intention of the patrols is to highlight unsafe behaviour rather than hazard spotting and to immediately feedback to the associate to reduce the possibility of an accident occurring. This activity will continue in 2004.



4.3.9 Health

In 2003 the amalgamation of Occupational Health with the Safety and Environment (OHS&E) Department has led to significant improvements in locating and reacting to musculo-skeletal injuries. The new physiotherapy and rehabilitation service provider has supported this activity by carrying out capability assessments on all new associates and those associates with pre-existing conditions and simultaneously assessing processes to match people to processes.

Through 2004 and 2005 we will be assessing the existing workforce to develop a comprehensive database of processes and individual capabilities. The physiotherapy service has also been strengthened by the addition of an on-site chiropractor one day and week.



4.4 Safety Data for 2001 and 2002

Injuries as defined in The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) occurring to HUM employees.

	2001	2002	2003
Fatal Accidents	0	0	0
Major injuries	6	5	6
Dangerous occurrences	0	1	1
3 day Reportable Accident Rate *	1637	1941	1791
Reportable disease	4	1	0
First Aid accident and ill health rate*	15,583	16,393	16,602
HSE enforcement notices	0	0	0
Convictions of HSE offences	0	0	0

*per 100,000 employees as defined in HSE publication *Successful Health and Safety Management (HSG65)*

Description of serious accidents 2003

- Fractured shoulder when slipped on a wet floor
- Deep cut to arm when carrying a press panel
- Fractured cheekbone from fall
- Fractured foot when stepped in a hole
- Fractured elbow when pushed by another associate and fell
- Fractured hand when tripped on stairs

Counter measures have been taken to prevent re-occurrence for all of these accidents.

HUM does not gather specific absence data on the number of employee days lost due to all causes of physical and mental illness separate from general absence data.

As safety at HUM is not driven by cost but by respect for the individual, information on the cost of safety is not available for 2003. In 2004 information on the cost of safety will be collected.

Consideration will be given to providing the specific information in the future as requested by the HSC guidance.

The small increase in First Aid accidents is largely due to improving accident reporting of minor accidents.

5.0 Local Community Activity

School Visits

HUM has continued to work alongside Swindon Borough Council in order to promote environmental management and Local Agenda 21 in schools in the Swindon area. Over 750 students have visited the site from 6 local schools. Once again the plant tour has proved to be the most popular part of the day along with a number of students expressing their interest in Honda's environmental management. The target for 2004 is to increase the number of schools involved to 8 and to continue to work closely with Swindon Borough Council to develop and improve the visits.



The Safety Challenge

The Safety Challenge is an initiative that was introduced in 1998 to reduce accidents by increasing safety awareness and to give Honda associates a choice of charities to whom the company donates money. This is achieved by teams of associates working a number of target days without an accident. When a team has reached its target a donation of £50 is given to a local charity of their choice. In 2003 HUM donated a total of £10,300 to local charities of which £1250 was given to the Swindon Women's Refuge, £1000 to the Special Baby Care Unit at Swindon's Great Western Hospital with donations of £850 to Cancer Research and the NSPCC.

6.0 Verification Statement

6.1 Environment

'The information and data contained within sections 1.0 – 3.0 and section 5.0 – 6.0 has been verified as representing an accurate statement of fact and this environmental statement has been validated as meeting the requirements of Eco-Management and Audit Scheme (EMAS 2) (Regulation (EC) number: - 761/2001).'

Signed:

David Brownsword
VCA, Accredited Verifier for EMAS 2

Vehicle Certification Agency (Registration No. 028)
1 Eastgate Office Centre,
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BS5 6XX

6.2 Safety

The information and data contained within section 4.0 has been verified as representing an accurate statement of fact and the safety statement has been validated as meeting the requirements of the document 'Health and Safety in Annual Reports: Guidance from the Health & Safety Commission'.

Signed:

Steve Spencer
Client manager for OHSAS 18001 (Occupational Health and Safety Assessment Series Specification)