



PRINCES Ltd CARDIFF SITE



Management Review Minutes

Date – 17th September 19

Attendees: SA, TC, DW, DN, CW, VG, AW

Apologies: VB, VP, AT, IM

Quality

Purpose: To review the Integrated Quality, Safety, Health and Environment System to ensure its suitability, adequacy and effectiveness.

Content of the review agenda is compliant with TFMS version 6 (effective from 2/3/15) and BRC version 8.

1. Review minutes of previous management review, action plan, time frames

Action	Responsibility	Timescale	Confirmation of Completion
Embed new HACCP format	VG	Mar 19	Complete
Project concrete quality documented in minutes	VG	Mar 19	On-going
Maintain current quality during project concrete	VG	Mar 19	On-going
Support programme	VG	Mar 19	On-going

Formal management review was 6 months late due to the on-going project – during the 6 months meetings were held week days and weekly which include the main KPI's and ensure attention was focused in the correct areas.

Environment

Purpose: To ensure the suitability, adequacy and effectiveness of the Environmental Management System by review. Maintain the Cardiff business certification to BS EN ISO 14001:2007 and continually improve business performance, with a transition to EN ISO 14001:2015.

Princes Cardiff achieved the Silver Standard on the Sustainability scorecard for the Marks and Spencer Plan A.

Content of the review agenda is compliant with ISO 14001:2015

1. MATTERS ARISING FROM PREVIOUS REVIEW (ISO 14001:2015 C9.3a)

ISO14001 2018-2019 OTP

	Objective	Target	Who	When	Plans
1	Energy Reduction Reduce Electricity usage by 5% per case @2012 (W.A.G.E.S target commenced)	Average 2012 = 0.411 KWhr/Case Target = 0.371 KWhr/Case	Factory Engineer & Manufacturing Teams, EHS Manager	Mar-19	Establish energy / utilities centre / system with monitoring capability enabling expansion with the business development, including the following: 1. Monitor the utility by software and develop regular reviews / reports (e.g produce spread sheet and graphs etc.) 2. Log shutdown data against half hourly data to determine energy maps 3. Communication to employees regarding energy efficiency. switching off computers etc 5. Energy reduction programme on lines 6. Monitor via Utility spread sheet and graph 7. Monitor and repairing steam leaks on site Establish targets for W.A.G.E.S. improvements based on the process and equipment capabilities.
2	Waste Reduction Increase OEE to improve waste production at source Reduce water L/L usage by 5% from 2012 (W.A.G.E.S target commenced)	Improve OEE > 72%	Operations Manager	Mar-19	1. Installation new equipment with less waste produced. 2. Establish autonomous maintenance programme on new equipment 3. Operator training programme on new equipment 4. Monitor via Utility spread sheet and graph 2. Water reduction programme on by establishing new Ingredient Process Centre (IPC)
3	Waste Reduction Continue with no waste to landfill, target achieved. New target to maintain no waste to landfill and reduce the waste generated, with new equipment installation.	Average waste to landfill 2012 = average 4% (W.A.G.E.S target commenced)	Operations Manager EHS Manager	Mar-18	1. Installation of new production equipment with less waste generation than the current production equipment. 2. Monitor waste via by monthly reporting system and feedback on performance. 3. Maintaing waste segregation standards at Princes Cardiff during the buisness development 4. Investigate the feasibility of further waste segregation, films etc from the general waste.
4	Certification of the Integrated Management System Achieve certification of the integrated management system to ISO14001:2015	Certification of ISO14001:2015	Management Team EHS Manager	Sep-18	Compliance with ISO14001:2015 Standard by external audit.
5	Monitoring of Effluent Monitor and measure during the establishing of the new Ingredient Process Centre project and transfer to production of product Maintain MCERTS compliance for effluent meter Maintain compliance with Environmental Permit	Monitor effluent based on 2012 efficiency (when W.A.G.E.S started) and establish improvement target	Management Team & EHS Manager	Mar-19	Inform the Regulators, Natural Resources Wales and Welsh Water of the IPC development and planned installation. Monitor and measure effluent efficiency during the development and installation of the IPC and handover. 1. Investigate the feasibility of ensuring compliant, consistent and efficient effluent performance in conjunction with the new Ingredient Process Centre (IPC) installation. 2. Continue to remove waste product from the effluent system and to be reused in the anaerobic digestion plant. 3. Investigate the feasibility of reducing waste effluent with the new Ingredient Process Centre (IPC) installation.

2. CHANGES (ISO 14001:2015 C9.3b)

External & Internal issues that are relevant to the environmental management system

- Construction project

The needs & expectation of interested parties, including compliance obligations

- The site is currently certified to ISO 14001:2015 Significant environmental aspects
 - o The Environmental Aspects Register has been updated in 2018 with some minor updates. The aspects register is planned to be reviewed in September 2019 with consideration to the construction project.
 - o The method of evaluating the significance of an environmental impact is based on the principal of a risk assessment through multiplying the likelihood of an event occurring with the potential hazard if the event occurs.
 - o All impacts with a significance total of 11 or greater (or where compliance to a licence permit or legislations is required) are classed

as carrying a significant risk to the environment, so a management programme must be developed to control or reduce the risk.

- o Environmental aspects will be reviewed in line with changes see below.

- Risks & opportunities

The site will be going through a major project which includes new buildings and new equipment this will be an initial risk and controls will be implemented as part of the project to mitigate all identified risks. A factory readiness document has been drafted and this will ensure that environmental aspects in addition to food safety, health & safety are considered.

3. ENVIRONMENTAL OBJECTIVES (ISO 14001:2015 C9.3c)

- Improve the efficiency of the management of waste juice.
- Ensure that the effluent flow meter is compliant with the Critical Uncertainty Volume requirements for MCERTS. Also improve the maintenance and calibration of the flow meter.
- Continue to improve energy and resource efficiency in line with WAGES 2020.
- Improve the current recycling to prevent contamination and produce increase rebates.

Environment

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Princes Cardiff achieved the Silver Standard on the Sustainability scorecard for the Marks and Spencer Plan A.

Content of the review agenda is compliant with ISO 14001:2015

4. MATTERS ARISING FROM PREVIOUS REVIEW (ISO 14001:2015 C9.3a)

Action	Responsibility	Timescale	Confirmation of Completion
Complete Improvement project with Forward Waste Management; Aim to ensure we have a viable outlet for the effluent solid waste.	IM, MT, TC,	TBC	Completed
Establish a suitable and sufficient on site system for effluent with pH compliance and suitable flow for MCERT meter calibration tolerance	TC. MT	Mar 2018	MCERTs meter compliance completed. Work underway for the Process system which will improve, result in consistent pH effluent results.
Review lubrication options to minimize water usage.	MT	Mar 2018	Completed
Review & expand LED lighting site wide when replacing lights.	TC/AT	May 2018	In Progress – Group standard.

5. CHANGES (ISO 14001:2015 C9.3b)

- External & Internal issues that are relevant to the environmental management system
- A temporary boiler has been in place since Christmas 2017 due to boiler failure followed by a gas supply issue. The issue is being reviewed to enable return to the site boiler. Natural Resources Wales have been notified and fuel usage is being monitored. There were 2 root causes volumetric flow and burner controller and therefore bill is to be passed on for 3 months hire.
- The needs & expectation of interested parties, including compliance obligations
- The site is currently certified to ISO 14001:2007 with transition planned for September 2018.
- Significant environmental aspects
 - o The Environmental Aspects Register has been updated in 2017 with some minor updates. The aspects register is planned to be reviewed in April 2018.
 - o The method of evaluating the significance of an environmental impact is based on the principal of a risk assessment through multiplying the likelihood of an event occurring with the potential hazard if the event occurs.
 - o All impacts with a significance total of 11 or greater (or where compliance to a licence permit or legislations is required) are classed as carrying a significant risk to the environment, so a management programme must be developed to control or reduce the risk.
 - o Environmental aspects will be reviewed in line with changes see below.
- Risks & opportunities

The site will be going through a major project in the near future which includes new buildings and new equipment this will be an initial risk and controls will be implemented as part of the project to mitigate all identified risks. A factory readiness document has been drafted and this will ensure that environmental aspects in addition to food safety, health & safety are considered.

6. ENVIRONMENTAL OBJECTIVES (ISO 14001:2015 C9.3c)

- Improve the efficiency of the management of waste juice.
- Ensure that the effluent flow meter is compliant with the Critical Uncertainty Volume requirements for MCERTS. Also improve the maintenance and calibration of the flow meter.
- Continue to improve energy and resource efficiency in line with WAGES 2020.
- Review and advise on the BREF notes for the Food, Drink and Milk Industries, IED 2010/75/EU requirements.

- Improve the current recycling to prevent contamination and produce increase rebates.

ISO14001 2017-2018

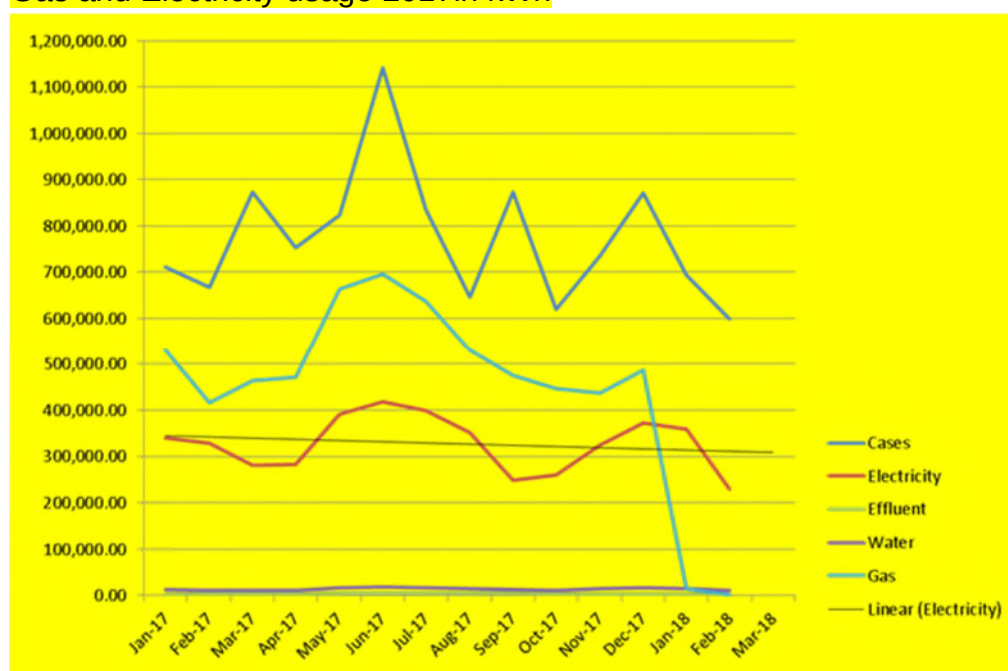
	Objective	Target	Who	When	Plans	Progress Assessment	2017-18 Proposed
1	Energy Reduction Reduce Electricity usage by 5% per case @2012	Average 2012 = 0.411 KWhr/Case Target = 0.371 KWhr/Case	Factory Engineer EHS Manager Energy Reduction Team	May-17	1. Monitor via Utility spread sheet and graph 2. Log shutdown data against half hourly data to determine energy maps 3. Meter log equipment usage and starting energy mapping equipment 4. Establish an energy improvement team to reduce energy use. 5. Energy reduction programme on lines 6. Improve the monthly reporting system to support the improvements required. Plan to use MES for IPC to monitor utility in Process e.g. Chill energy use	Electricity usage monitored KWhr/case will be confirmed end of year once all billing information received	
2	Waste Reduction Increase OEE to improve waste production at source from 2012 @ 59%	Improve OEE to 70%	Operations Manager	Jul-17	1. Autonomous maintenance programme 2. 5S 3. Operator training programme	YTD = 68.6%	70%
3	Water Reduction Reduce water L/L usage by 5% from 2012	2012 1.34 L/L Target = 1.27 L/L Below 1.20 litres of water per litre of finished product.	Operations Manager, Engineering Manager EHS Manager	Dec-17	1. Monitor via Utility spread sheet and graph 2. Include water reduction programme on site in the energy resource improvement team. 3. Review KPI to establish litres of water per litre of finished product and report monthly. 4. Train and educate colleagues in water efficiency	Water usage monitored L/L and a reduction on 1.20 litres of water per finished product.	
5	Waste Reduction Continue with no waste to landfill.	Zero to landfill Improve contamination and increase rebate on the solid waste.	Operations Manager EHS Manager	Mar-18	1. Monthly monitoring with FWM Limited. 2. Improve waste segregation at site 3. Increase rebate for recyclable waste 4. Reduce the carbon footprint of the waste management system compared to 2016.	Waste reduction, 1291 tonnes produced in 2016 (including waste juice) Improve the rebate return for recyclable waste	Zero to landfill Reduce waste
6	Monitoring of Effluent Ensure compliance with MCERTS and IPPC Permit regarding the flow meter. No pH and suspended solids breaches Improve the efficiency of the juice waste	Reduce the suspended solids and COD in the effluent waste. Averages were COD 4966, suspended solids 236.04 Consistent pH levels within the consent limits.	Operations Manager Engineering Manager EHS Manager	Sepr-17	1. Implement waste juice efficiencies 2. Continue to remove effluent from site for anaerobic digestion 3. Improve the effluent flow meter compliance 4. Establish a system for compliance with effluent consent limits and no breached in pH and suspended solids.	Effluent meeting permit compliance. Waste juice going to animal feed	Reduce effluent through efficiency of equipment & rework (2016/17 data shown in graph below)

Changes to the road layout will enable placement of the effluent treatment equipment, the capital request documentation for the road layout has been incorporated into a larger project and is therefore progressing through this route.

i. Energy Usage

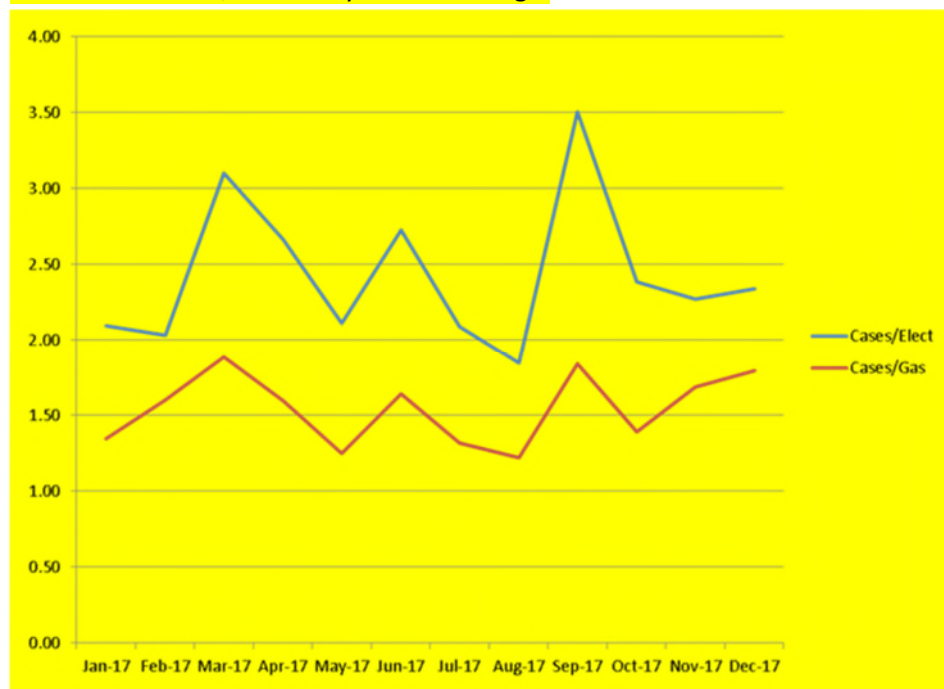
ITS WAGES 2020										
Site	Year	2017	2018	2019	2020	2021	2022	2023	2024	Notes
Cordiff	Effluent	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Our Cymru Wales Water, Prifysgol 10 investigation the management of wastewater produced on site. This investigation will include the potential for onsite treatment.
	Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Our Cymru Wales Water, Prifysgol 10 investigation the management of wastewater produced on site. This investigation will include the potential for onsite treatment.
Cordiff	Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Our Cymru Wales Water, Prifysgol 10 investigation the management of wastewater produced on site. This investigation will include the potential for onsite treatment.
	Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Our Cymru Wales Water, Prifysgol 10 investigation the management of wastewater produced on site. This investigation will include the potential for onsite treatment.
Cordiff	Air	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Air leaks are given priority and dealt with promptly, evidence required. Air supply is variable speed drive, 5% saving per year in 2018, our environmental project meeting 2018 target 2018. Air line network to be developed to identify any potential solutions for improvement.
	Air	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Air leaks are given priority and dealt with promptly, evidence required. Air supply is variable speed drive, 5% saving per year in 2018, our environmental project meeting 2018 target 2018. Air line network to be developed to identify any potential solutions for improvement.
Cordiff	Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Gas usage monitored weekly. Boiler usage to be monitored by a specialist. The aim is to identify possible areas for boiler efficiency improvements. Boiler maintenance monitored on per report advice.
	Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Gas usage monitored weekly. Boiler usage to be monitored by a specialist. The aim is to identify possible areas for boiler efficiency improvements. Boiler maintenance monitored on per report advice.
Cordiff	Electricity	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Electricity usage monitored weekly. A high level investigation of site energy use opportunities is being carried out by DOWW in identifying opportunities for savings. Site energy mapping underway to identify possible savings in lighting replacement with LED lighting in accordance with the work area and office facilities in 2018 completed and a feasible trial in 2018 and 2019 (project 2).
	Electricity	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Electricity usage monitored weekly. A high level investigation of site energy use opportunities is being carried out by DOWW in identifying opportunities for savings. Site energy mapping underway to identify possible savings in lighting replacement with LED lighting in accordance with the work area and office facilities in 2018 completed and a feasible trial in 2018 and 2019 (project 2).
Cordiff	Steam	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Steam usage monitored weekly. Steam leaks are given priority and dealt with promptly. Steam usage monitored for pH in excess pH and excessive in system. Logging of pipework in all areas to be improved. Investigate ability operating temperature to optimise efficiency. Investigate potential for steam supply from waste incinerator. The potential for steam supply from waste incinerator to be investigated and the potential for steam supply from waste incinerator to be investigated.
	Steam	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Steam usage monitored weekly. Steam leaks are given priority and dealt with promptly. Steam usage monitored for pH in excess pH and excessive in system. Logging of pipework in all areas to be improved. Investigate ability operating temperature to optimise efficiency. Investigate potential for steam supply from waste incinerator. The potential for steam supply from waste incinerator to be investigated.

Gas and Electricity usage 2017in kWh



Date	Cases	Electricity	Effluent	Water	Gas
Jan-17	711,892.00	339,867.00	3,335.00	12,009.00	529,579.00
Feb-17	666,992.00	328,969.00	3,302.00	11,299.00	416,833.00
Mar-17	872,869.00	281,577.00	3,579.00	11,562.00	464,142.36
Apr-17	752,219.33	282,668.00	3,930.00	11,335.00	471,955.27
May-17	824,187.00	391,106.00	5,728.00	16,649.00	662,614.95
Jun-17	1,141,876.33	418,950.00	5,350.00	17,811.00	696,738.53
Jul-17	835,314.33	399,779.00	5,068.00	16,567.00	636,427.81
Aug-17	646,704.33	350,568.00	4,903.00	14,782.00	531,030.75
Sep-17	872,343.67	249,319.00	4,214.00	13,531.00	474,549.28
Oct-17	619,265.67	260,254.00	2,773.00	11,446.00	446,138.71
Nov-17	735,015.00	324,311.00	3,230.00	13,801.00	436,195.00
Dec-17	871,386.67	373,171.00	3,459.00	17,340.00	486,839.95
Jan-18	694,383.67	358,943.00	3,878.00	15,425.00	14,797.00
Feb-18	598,539.67	229,011.00	2,598.00	10,681.00	378.00

Production Cases / Electricity and Gas usage.



	Cases/Elect	Cases/Gas
Jan-17	2.09	1.34
Feb-17	2.03	1.60
Mar-17	3.10	1.88
Apr-17	2.66	1.59
May-17	2.11	1.24
Jun-17	2.73	1.64
Jul-17	2.09	1.31

Aug-17	1.84	1.22
Sep-17	3.50	1.84
Oct-17	2.38	1.39
Nov-17	2.27	1.69
Dec-17	2.34	1.79
Jan-18	1.93	46.93
Feb-18	2.61	1583.44

Triad Warnings

At each triad avoidance warning action is taken, whatever the level of warning. Action has been taken on all level 1 and 2 warnings, it is expected that a cost reduction will be achieved.

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ii. Production output for CCL compliance

Monitoring data is reported to EHS Princes Group for compliance

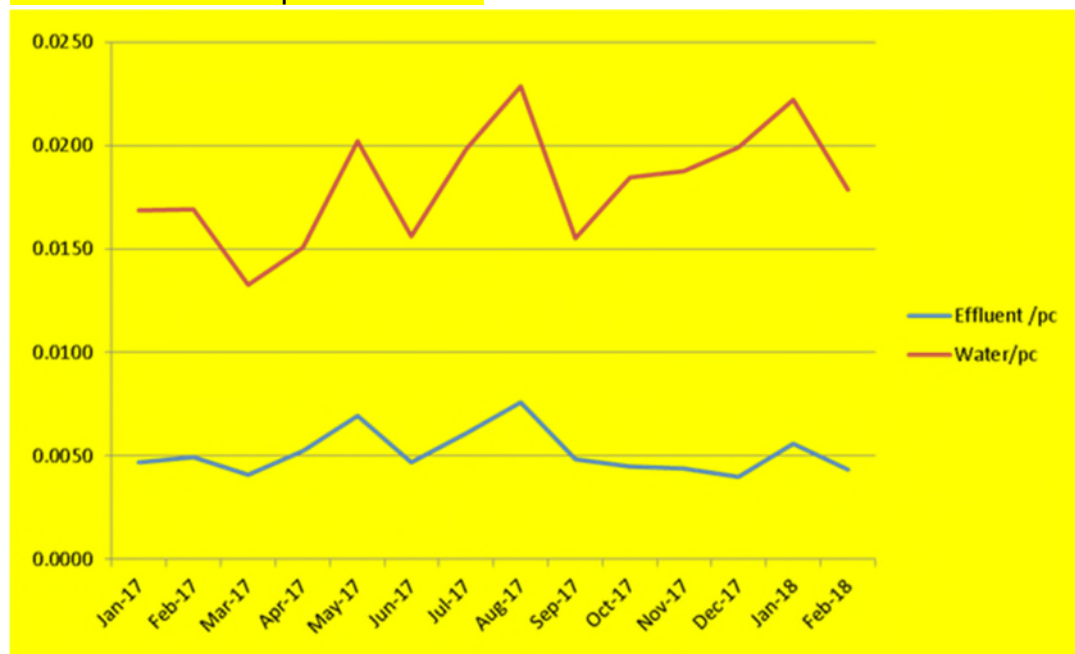
iii. Water Usage

The water usage in the business is detailed in the graph and table below, with an average of 0.0179 m3/case an increase on 2016 which was 0.0162 m3/case.

The effluent discharge average is 0.0051 m3 / case an increase on 2016 which was 0.0041 m3/ case.

Date	Cases	Effluent	Water
Jan-17	711,892.00	3,335.00	12,009.00
Feb-17	666,992.00	3,302.00	11,299.00
Mar-17	872,869.00	3,579.00	11,562.00
Apr-17	752,219.33	3,930.00	11,335.00
May-17	824,187.00	5,728.00	16,649.00
Jun-17	1,141,876.33	5,350.00	17,811.00
Jul-17	835,314.33	5,068.00	16,567.00
Aug-17	646,704.33	4,903.00	14,782.00
Sep-17	872,343.67	4,214.00	13,531.00
Oct-17	619,265.67	2,773.00	11,446.00
Nov-17	735,015.00	3,230.00	13,801.00
Dec-17	871,386.67	3,459.00	17,340.00
Jan-18	694,383.67	3,878.00	15,425.00
Feb-18	598,539.67	2,598.00	10,681.00
Mar-18			
Total	10,842,988.67	55,347.00	194,238.00
		0.0051	0.0179

Water and effluent per case 2017

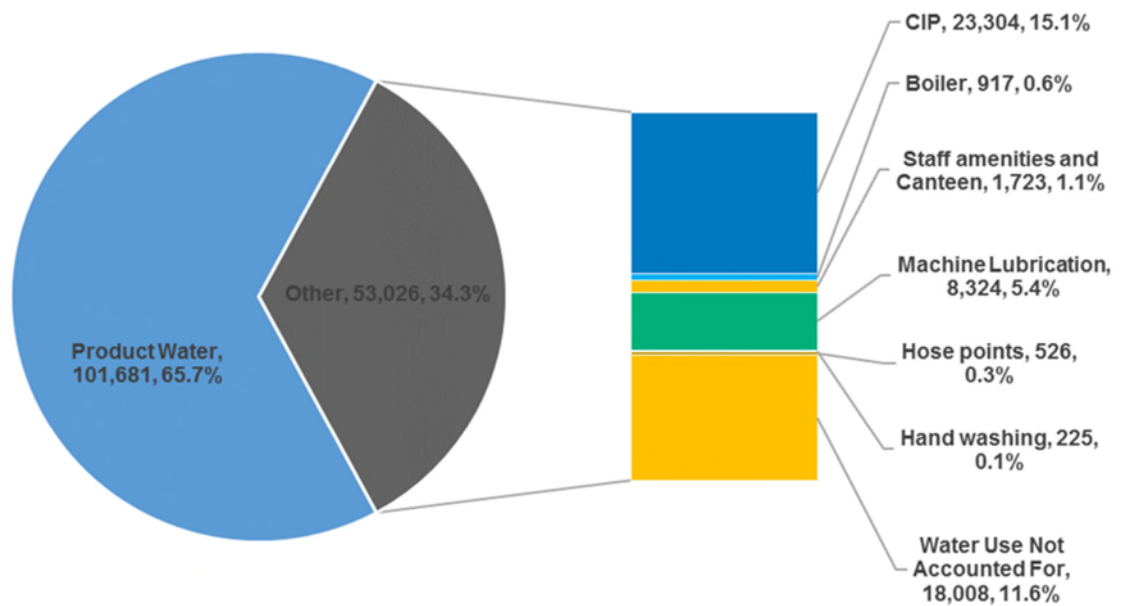


Volume +5% on last year

	Effluent /pc	Water/pc
Jan-17	0.0047	0.0169
Feb-17	0.0050	0.0169
Mar-17	0.0041	0.0132
Apr-17	0.0052	0.0151
May-17	0.0069	0.0202
Jun-17	0.0047	0.0156
Jul-17	0.0061	0.0198
Aug-17	0.0076	0.0229
Sep-17	0.0048	0.0155
Oct-17	0.0045	0.0185
Nov-17	0.0044	0.0188
Dec-17	0.0040	0.0199
Jan-18	0.0056	0.0222
Feb-18	0.0043	0.0178

A study of water usage in September 2016 produced a conceptual water mass balance. The chart below illustrates the water mass balance; there is no significant change to these findings regarding usage.

The chart below illustrates the water mass balance



7. ORGANIZATION'S ENVIRONMENTAL PERFORMANCE (ISO 14001:2015 C9.3d)

I. Trends in nonconformities & corrective actions

II. Trends in monitoring & measurement results

III. Trends in fulfilment of its compliance obligations

New legislation is monitored by the EHS Manager with communication between Natural Resources Wales, Barbour, Princes Group EHS Manager and Institute of Environmental Assessment Management.

Relevant information is cascaded to the rest of the site as required. Changes are then entered into the register of legislation and audited for compliance. The Register of Legislation (F95) was reviewed in March 2018, followed by monthly reviews.

The Best Available Techniques (BAT), known as the BREF notes for the Food, Drink and Milk Industries is being considered for improvements to the production processes.

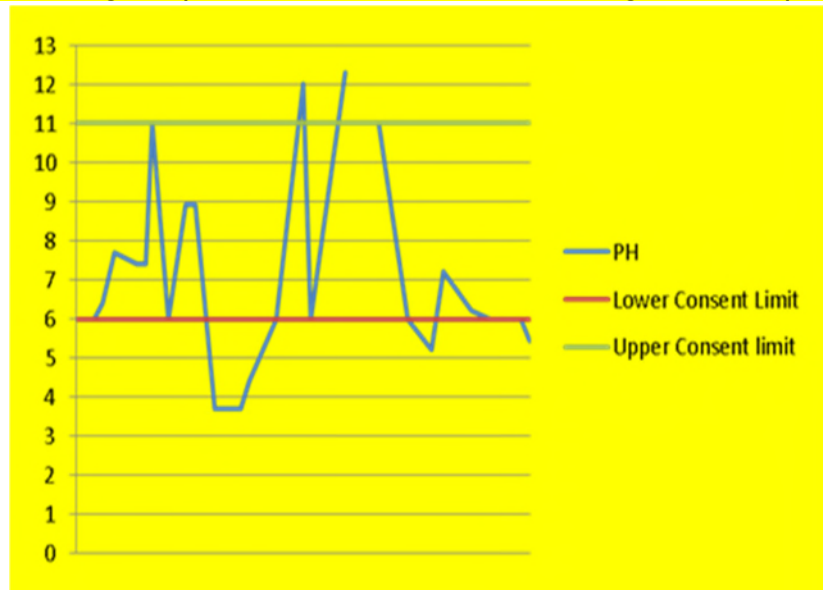
EFFLUENT

The effluent from site has generally operated within compliance of the site consent permit. However, there were two occasions that the waste water was outside of the consent limits, as shown in the graph below. The breaches were low pH and Dwr

Cymru / Welsh Water were informed of the breached of consent limits. Improvement work will be initiated as part of the improvements to the process systems.

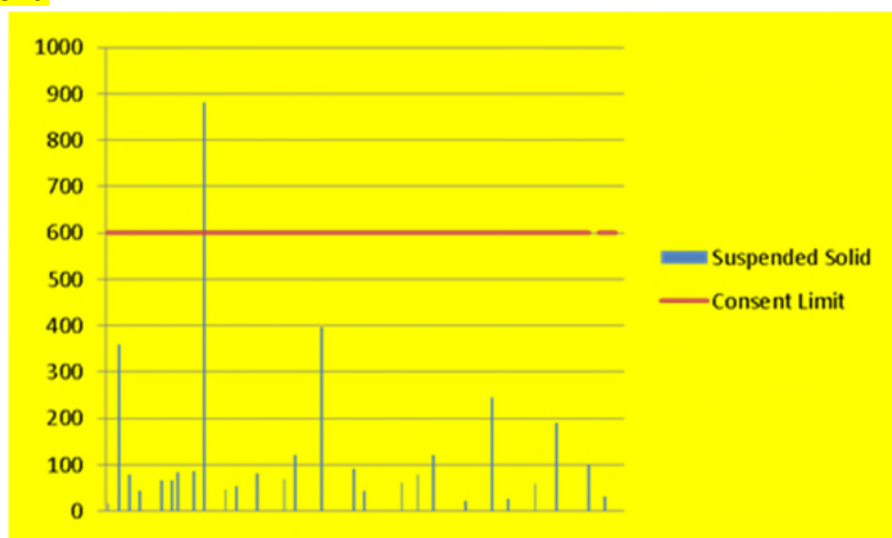
The graph illustrating the suspended solids results for 2016 to 2017 The two breaches for 2017 were on the 11th May 2017, pH 5.44 and 25th July 2017, pH 5.2, the consent limit is 6 pH

The graph illustrating the pH levels results since 2016, significant improvement.



7 breaches last year – learnings to be taken from Bradford experience but due to Cardiff's very low flow there is minimal risk.

The graph illustrating the suspended solids levels results form 2016, significant improvement.



The suspended solids results are in compliance with the consent limit. Heather Pepper, Trade Effluent Officer, Dwr Cymru - Welsh Water, confirmed that DC/WW, have no concerns regarding current performance.

Waste juice is currently produced at a rate of approximately 20m³ / week (1000m³/ year), and transported by road tanker for use as animal feed or for anaerobic digestion and converted into renewable energy. The current cost is £440 per 20m³ tanker, resulting in costs of £22,000 per year for disposal. These cost do not include effluent charges from Dwr Cymru / Welsh Water. There is potential for significant cost savings from dewatering of the waste juice and recycling.

Annual calibration and inspection of the MCERTS effluent meter (used to charge effluent bills) was completed, with a new meter installed. This is a requirement for compliance with the Natural Resources Wales IPPC permit.

Natural Resources Wales and Welsh Water have been informed. The MCERTS certification audit is planned for 24th April 2018. The flow meter is suitable for the low flow conditions.

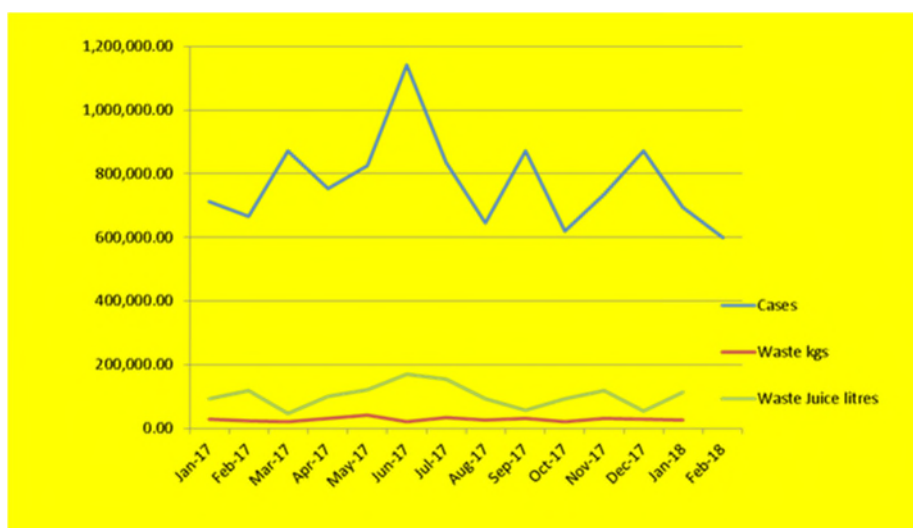
The Engineering Management Team and EHS Manager completed a SIRA MCERTS awareness course.

Recycling Waste

Zero waste to landfill waste continues, with the waste management service from Forward Waste Management Limited (FWML). There has been a significant improvement in the coordination of waste management. FWML have completed awareness training with employees on site to reduce waste contamination incidents.

The environmental, health and safety risk control measures have improved significantly and a duty of care audits was completed. All waste streams follow the DEFRA hierarchy of waste management

The graph and table shows the waste produced in 2017, waste = 336,670 kg and waste juice = 1,339,400 litres



Waste 2017

Date	Cases	Waste kgs	Waste Juice litres
Jan-17	711,892.00	28,460.00	94,360.00
Feb-17	666,992.00	23,340.00	119,060.00
Mar-17	872,869.00	20,220.00	48,020.00
Apr-17	752,219.33	31,620.00	100,980.00
May-17	824,187.00	42,010.00	121,920.00
Jun-17	1,141,876.33	20,980.00	169,320.00
Jul-17	835,314.33	33,220.00	153,700.00
Aug-17	646,704.33	26,140.00	93,780.00
Sep-17	872,343.67	31,000.00	56,140.00
Oct-17	619,265.67	22,240.00	93,280.00
Nov-17	735,015.00	30,760.00	119,860.00
Dec-17	871,386.67	30,040.00	55,020.00
Jan-18	694,383.67	26,640.00	113,960.00
Feb-18	598,539.67		
Mar-18			
Total	10,842,988.67	366,670.00	1,339,400.00
		0.0338	0.1235

Accidental Emissions - Fugitive Emissions

There were no accidental and fugitive emissions to land, air, or water during the year. A review of the fugitive emission risks will be completed in April 2018, which will be sent to Natural Resource Wales. The chillers and all air conditioning units are subject to routine maintenance including leak testing, with service reports recorded.

Fugitive Emissions to Air

Release Point	Source	Substance/s	Emission Source	Control Measures	Risk Assessment
Process area doors	Processing of concentrate	Fruit juice, sugar, water	Odour	Doors are closed or plastic curtains in place. All process equipment lidded and closed when containing material.	Low risk
Refrigerant Equipment leaks	Refrigeration and air conditioning equipment	R134a, R22, R410a, R404A	Leakage	Maintenance contractors set up and F Gas Register in place. Equipment serviced every 6 months. Quantities low. REPOOM accredited engineer companies employed. Any repairs checked within one month of repair.	Low risk
Vehicle Exhaust	Pallet truck	Electricity used	No emissions from vehicles	Electric storage battery, all vehicles on contract. No exhaust from pallet trucks. Battery recharging generates small amount of hydrogen gas in a well ventilated room, controls in place to reduce the risk of ignition.	Low risk
Vehicle Exhaust	Forklift trucks	LPG Gas by cylinders	Vehicle engines	All vehicles on contract and serviced by qualified LPG engineers. LPG engines produce carbon dioxide and water vapour and used in well ventilated areas.	Low risk
Pool & Company Car Exhausts	Cars	Carbon dioxide	Vehicle engines	Cars serviced regularly, maintain in good condition.	Low risk

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IV. Trends in audit results

ISO 14001:2004 has been maintained for the year and compliance to ISO 14001:2015 will be completed in September 2018.

a. Internal Audit

Revised internal audits scheduled have been introduced to comply with the ISO 14001:2015 standard. The audits completed are for ISO 14001:2015 compliance and legal compliance.

a. External Audits

External audits were conducted during the review period by BSI. These audits monitored compliance to ISO 14001 and continued registration was maintained with no non conformances found. The plant continues to have a good relationship with Natural Resources Wales and Dwr Cymru / Welsh Water.

8. ADEQUACY OF RESOURCES (ISO 14001:2015 C9.3e)

Resources are being reviewed as part of the major site project.

10. OPPORTUNITIES FOR CONTINUAL IMPROVEMENT (ISO 14001:2015 C9.3g)

i. Suitability, adequacy & effectiveness of the environmental management system

The Quality, Safety, Health, Environmental (QSHEM) Policy Statement and manual will be reviewed to ensure compliance with ISO 14001:2015. The policy will update and will be issued by the General Manager, in April 2018.

Following the review of the Environmental Management System and the results of internal and external audits it is considered that systems and procedures are working.

The following recommendations will be implemented using the management system for ISO 14001:2015 Certification in September 2018;

- o Context of the organisation update current analysis.
- o Complete the management review 2017
- o Document compliance expectations with organisations and stakeholders.
- o Update policy and QSHEM system.
- o Re-evaluate the operational control bund protection requirements.
- o Analysis of lifecycle of packaging
- o Environmental aspects and impacts review

ii. Decisions related to continual improvement opportunities

iii. Decisions related to any need for changes to the environmental management system, including resources

iv. Actions if environmental objectives have not been achieved

v. Opportunities to improve integration of the environmental management system with other business processes

vi. Implications for the strategic direction of the organization

11. IMPLEMENTATION AND OPERATION

4.1 Understanding the organisations and its context has been demonstrated by meeting ISO standard.

4.3 Determining the scope of the environmental management system has been demonstrated

4.4 The QSEHM documents is to be updated

5.2 Environmental policy has been demonstrated

6.1.2 Environmental aspects and impacts review to be completed in April 2018.

6.2 Environmental Objectives and planning to achieve them has been demonstrated.

Clause 7. Support for the EMS has been demonstrated

7.2 Competence in the EMS has been demonstrated

It is considered that all employees have been trained to an appropriate level to protect the environment and business. This is monitored by the training matrices and competency check systems.

7.3 Environmental awareness by employee has been demonstrated, with further improvement identified. Refresher training has been established to ensure competency and maintaining of standards

7.4 Communications of EMS related matters has been demonstrated with further improvement identified. The internal communications procedure was considered to be working well. EHS meetings are taking place on a monthly basis and are considered effective. Safety, health and environment are an agenda item at daily and weekly management meetings and monthly briefings. There is procedure for external communications in place, with communication with Dwr Cymru / Welsh Water and Natural Resources Wales.

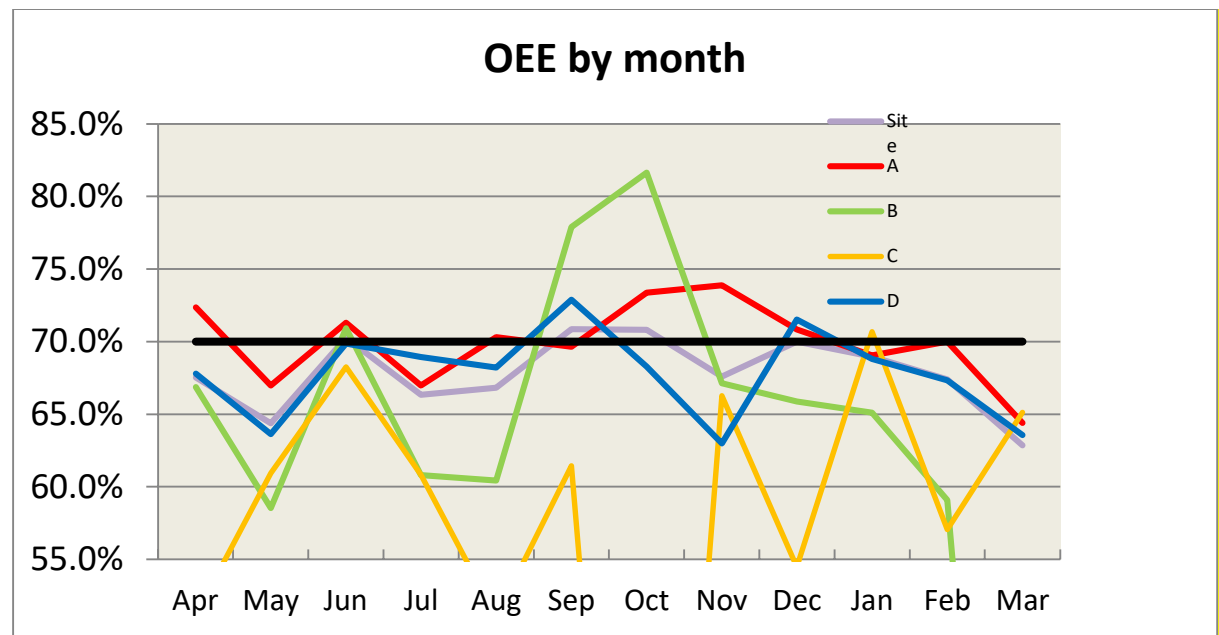
7.5 Documented Information has been demonstrated with further improvements identified.

All documents are now in the integrated management system with authorised change control issued in controlled paper form and are available as part of a PC based system

7.5.2. Creating and updating of documentations for the EMS has been demonstrated.

7.5.3. Control of documented information has been demonstrated.

Clause 8. Operation; Operational control has been demonstrated with improvements identified on site bund protection.



12. AGREED ACTIONS FOLLOWING REVIEW

ISO14001 2018-2019 OTP

	Objective	Target	Who	When	Plans
1	Energy Reduction Reduce Electricity usage by 5% per case @2012 ('w.A.G.E.S target commenced')	Average 2012 = 0.411 Kw/hr/Case Target = 0.371 Kw/hr/Case	Factory Engineer & Manufacturing Teams, EHS Manager	Mar-19	Establish energy / utilities centre / system with monitoring capability enabling expansion with the business development, including the following: 1. Monitor the utility by software and develop regular reviews / reports (e.g produce spread sheet and graphs etc.) 2. Log shutdown data against half hourly data to determine energy maps 3. Communication to employees regarding energy efficiency. switching off computers etc 5. Energy reduction programme on lines 6. Monitor via Utility spread sheet and graph 7. Monitor and repairing steam leaks on site Establish targets for 'w.A.G.E.S. improvements based on the process and equipment capabilities.
2	Waste Reduction Increase OEE to improve waste production at source Reduce water L/L usage by 5% from 2012 ('w.A.G.E.S target commenced')	Improve OEE > 72%	Operations Manager	Mar-19	1. Installation new equipment with less waste produced. 2. Establish autonomous maintenance programme on new equipment 3. Operator training programme on new equipment 4. Monitor via Utility spread sheet and graph 2. Water reduction programme on by establishing new Ingredient Process Centre (IPC)
3	Waste Reduction Continue with no waste to landfill, target achieved. New target to maintain no waste to landfill and reduce the waste generated, with new equipment installation.	Average waste to landfill 2012 = average 4% ('w.A.G.E.S target commenced')	Operations Manager EHS Manager	Mar-18	1. Installation of new production equipment with less waste generation than the current production equipment. 2. Monitor waste via by monthly reporting system and feedback on performance. 3. Maintaing waste segregation standards at Princes Cardiff during the buisness development 4. Investigate the feasibility of further waste segregation, films etc from the general waste.
4	Certification of the Integrated Management System Achieve certification of the integrated management system to ISO14001:2015	Certification of ISO14001:2015	Management Team EHS Manager	Sep-18	Compliance with ISO14001:2015 Standard by external audit.
5	Monitoring of Effluent Monitor and measure during the establishing of the new Ingredient Process Centre project and transfer to production of product Maintain MCERTS compliance for effluent meter Maintain compliance with Environmental Permit	Monitor effluent based on 2012 efficiency (when 'w.A.G.E.S started) and establish improvement target	Management Team & EHS Manager	Mar-19	Inform the Regulators, Natural Resources Wales and Welsh Water of the IPC development and planned installation. Monitor and measure effluent efficiency during the development and installation of the IPC and handover. 1. Investigate the feasibility of ensuring compliant, consistent and efficient effluent performance in conjunction with the new Ingredient Process Centre (IPC) installation. 2. Continue to remove waste product from the effluent system and to be reused in the anaerobic digestion plant. 3. Investigate the feasibility of reducing waste effluent with the new Ingredient Process Centre (IPC) installation.