

Review of Environmental Issues

Date: 11/03/11

By: Steven Coombes Health, Safety & Environment Manager
Victoria Gilbert Technical Manager

Reason: Site changes

Activity: Perimeter & grounds

Legislation	No change
Emissions to air	No change
Waste Management	No change

Opportunity for improvement waste is reviewed by area where it is produced but the collation of waste is in the yard area and therefore could be mentioned in the perimeter & grounds review.

Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	Change Required

Corrective Action The spill procedure reference has been changed to PROD06 Spill Kit but this is not reflected within the identification of environmental issues.

Energy Usage	No change
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Opportunity for improvement the lighting is on a light sensor and this could be including in the information if updated

Visual impact	No change
Noise	No change
Vibration	No change
Odour	No change
Dust	No change

Activity: Planning /Call off

Legislation	No change
Emissions to air	No change
Waste Management	No change
Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change

Opportunity for improvement carton size changes are not possible on the Tetra fillers only format changes eg singles, 4k and 6pk.

Activity: Raw Material Receipt / storage – Dry Ingredients / Aromas

Legislation No change

Opportunity for improvement Legislation referenced is correct but years do not match the summary of legislation – Could review removing years and referencing summary of legislation.

Emissions to air No change

Waste Management Change Required

Corrective Action Non-returnable pallets are collected for re-use as part of our waste segregation process.

Discharges to drain Change Required

Corrective Action The spill procedure reference has been changed to PROD06 Spill Kit but this is not reflected within the identification of environmental issues

Corrective Action Previously the storage of aromas has been in a locked bunded and covered storage location due to work on site this has temporarily been relocated but storage is no longer bunded or fully covered this has required a risk assessment to be completed with additional protection of the storm drain within the area.

Use of Raw Materials No change

Land Contamination No change

Energy Usage No change

Opportunity for improvement The chiller is not always in use and therefore the identification of environmental issues could be adjusted to state that the chiller is turned off to save usage of energy when it is not required for a planned period.

Activity: Raw material receipt / storage - packaging

Legislation No change

Emissions to air No change

Waste Management No change

Discharges to drain No change

Use of Raw Materials No change

Land Contamination No change

Energy Usage No change

Activity: Raw material receipt / storage - chemical

Legislation No change

Opportunity for improvement Legislation referenced is correct but years do not match the summary of legislation – Could review removing years and referencing summary of legislation.

Emissions to air No change

Waste Management No change

Discharges to drain Change Required

Corrective Action The spill procedure reference has been changed to PROD06 Spill Kit but this is not reflected within the identification of environmental issues.

Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change

Activity: Raw material receipt / storage – bulk ingredients tankers & drums

Corrective Action Activity requires changing to bulk ingredients tankers, flexi-tanks, drums and pallets

Legislation	No change
Emissions to air	No change
Waste Management	Change Required

Opportunity for improvement re-usable containers eg pallets can be received for varying ingredients not just the ones stated

Corrective Action Drums are listed as disposed off but this is only true for the plastic conical drums, the metal drums are sent for re-use.

Discharges to drain	Change Required
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Corrective Action Drums are no longer stored in racking due to work on the yard

Opportunity for improvement Reference to prevention of juice concentrate going to drain by use of spill kit and reference to PROD06 could be made to clarify and re-enforce that juice must be prevented from entering the drains.

Corrective Action Flexi-tanks contain approximately the same amount of concentrate as a bulk tanker and under normal discharge conditions there is no difference in the risk of spillage to drain. Accidental spillage risk as identified in the risk assessment is increased by the possible frequency increasing but the severity remains the same due to the nature of the concentrate and the quantity.

Use of Raw Materials	No change
Land Contamination	Change Required

Corrective Action Drums are no longer stored in racking due to work on the yard

Energy Usage	No change
Transport	No change (Flexi tank does not alter the environmental issues as transport impacts are the same as for a tanker)

Activity: Batch Blending

Legislation	No change
Emissions to air	No change
Waste Management	No change

Discharges to drain No change (work is ongoing to decrease the product lost during product change-overs either by pasteuriser drain off being kept for reuse or by adjustment of timer from the low level probe in tank)

Use of Raw Materials No change

Land Contamination No change

Energy Usage No change

Activity: Pasteurisation

Legislation No change

Emissions to air No change

Waste Management No change

Opportunity for improvement ISO9002 mentioned could be change to ISO9001

Discharges to drain No change

Use of Raw Materials No change

Land Contamination No change

Energy Usage No change

Opportunity for improvement chilled water for cooling now includes the benefit of environmental cooling and therefore reduces the energy used when the ambient temperature is cold this will not reduce the score from significant

Activity: Filling

Legislation No change

Emissions to air No change

Waste Management No change

Opportunity for improvement States cartons for quality checks and damaged cartons are discarded later it states sleeves are sent for recycling, this needs to be clarified as all sleeves that are waste are recycled.

Discharges to drain No change

Use of Raw Materials No change

Land Contamination No change

Energy Usage No change

Noise No change

Activity: Packaging and collation

Legislation No change

Emissions to air No change

Waste Management No change

Discharges to drain No change

Use of Raw Materials No change

Land Contamination No change

Energy Usage No change

Activity: Palletisation

Legislation No change

Emissions to air No change

Waste Management	No change
Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change

This area will need to be reviewed once the robots are commissioned and Palletisers are decommissioned. Details provided relative to the new robots indicates that the robots use 77kw whereas the old palletiser uses 123kw.

Activity: Transport – Fork lift trucks

Legislation	No change
Emissions to air	No change
Waste Management	No change
Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change
Noise	No change

Activity: Transport – Finished Product Transport – shunting & Despatch

Emissions to air	No change
Waste Management	No change

Opportunity for improvement The spill procedure could be referenced PROD06 Spill Kit.

Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change
Noise	No change

This review covers both shunting to external warehousing and despatch from site as both are used depending on production and demand.

Activity: on line QC Laboratory

Emissions to air	No change
Waste Management	No change
Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change
Noise	No change

Opportunity for improvement Comment has been copied over from the finished product transport review and needs to be removed as noise is not an issue for the QC laboratory

Activity: Control of non-conforming product

Emissions to air	No change
Waste Management	No change
Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change

Opportunity for improvement Comment states that a sump is installed to go to a collection tank in future from the baler but the baler is planned to moved and therefore a review will be required following relocation.

Energy Usage	No change
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Activity: Maintenance

Emissions to air	No change
Waste Management	Change Required

Corrective Action Waste disposal routes are now classified and this requires updating.

Discharges to drain	No change
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Opportunity for improvement The spill procedure could be referenced PROD06 Spill Kit.

Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change
Noise	No change

Activity: Office

Emissions to air	No change
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Opportunity for improvement Number of printers requires updating since the change to thin client

Waste Management	No change
Discharges to drain	No change
Use of Raw Materials	No change
Land Contamination	No change
Energy Usage	No change
Noise	No change

CONCLUSION

Perimeter & grounds, Raw Material Receipt / storage – ingredients / aromas, chemicals, bulk ingredients, tankers and drums and maintenance reviews need to be updated and re-issued. Changes are required to the EnvEffDet documents which may lead to changes to the SigEnvEff register

Identification of Environmental Issues

Assessment carried out by: 1: Steve Coombes
2: Victoria Gilbert

SC
VG

Date: 01/07/11

Activity: Perimeter and grounds.

Comment: Adjustment required following review of Environmental Issues

Assessment:

Legislation: Legislation will be determined by the activities taking place, in the event of changes being made planning and building regulations need consideration.

Emissions to air: There are no emissions to air from any activities around the perimeter.

Waste Management: The boundary to the site is mostly grass and shrubs and is relatively open; wind blown litter tends to collect within the boundary which is cleaned by site personnel. The site employs a clean as you go policy and any litter dropped should be removed, there is also a waste bin provided by the main factory entrance.

Waste is collected by area and then moved to the relevant waste collation areas/equipment e.g compactor for tetra carton waste, Recyclables skip, general waste skip, WEE container, Hazardous waste collection area, Fluorescent tube collection container.

Discharges to Drain: The yard area is cleaned using hoses or a pallet container filled with water. Personnel need to be made aware that spillages must not be cleaned in this manner if there is a danger of waste entering the storm drains.

Use of Raw Materials: The grass and shrubs are not fed with fertiliser and pesticide is not used. There are a number of bait traps around the perimeter to protect against rats entering the premises, these are checked regularly and supplied by a recognised sub-contractor.

Land Contamination: Land contamination could occur from spillages and a spillage SOP is in place Ref: PROD06. Chemical storage is to the rear of the factory area in a lockable bunded storage area.

Energy Usage: the grass is cut using a petrol lawnmower which is required due to the size of the perimeter. There is SON security lights around site which only operate when dark. Motion sensor on bailer and when lights are

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: Steve Coombes

2: Victoria Gilbert

3:

4:

Date: 01/07/11

Activity: Perimeter and Grounds

Area	Normal Operation			Accident/Emergency		
	Severity	Frequenc	Scor	Severity	Frequenc	Scor
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	3	2	6	3	1	3
Discharges to Drain	3	2	6	3	2	6
Use of Raw Materials	1	2	2	2	1	2
Land Contamination	3	1	3	4	1	4
Energy Usage	2	2	2	1	1	1

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1:



Date: 30/12/08

Activity: Planning / Call off

Comment: Review, referring to the previous review and actual practice. The company operates an enterprise resource system (SAP) which uses sales forecasting and bills of materials to determine demand for finished product and so for raw material usage. Raw materials are purchased centrally and are outside of the scope of this system, interpretation of the ERP system is however necessary by the Planning and Materials department.

Assessment:

Legislation: There is no relevant legislation for this process.

Emissions to air: Emissions to air are not relevant to this activity.

Waste Management: Waste materials and product are not an issue during normal operation. During accident or emergency it is possible that too much finished product may be produced which is not required by the retailer. The product may also be de-listed resulting in a large amount of unwanted raw materials being called off. The amount of wastage caused by such an event could be significant and requires close monitoring of sales forecasting, performance and new product introductions.

Discharges to Drain: The filling and process equipment requires cleaning at predefined intervals or on specific production changeovers. The planning of production will have an effect on the number of cleans that take place on a filling machine and so the amount of discharge to drain. Enforced CIP's are recorded to allow for investigation and corrective action to be taken.

Raw Materials: A small amount of paperwork is created in the form of reports and production schedules this is minimal and reduced by use of email and the computer based systems.

Land Contamination: This is not an issue for this activity.

Energy Usage: Size and format changes are possible on some of the filling machines, these changes can effect the initial efficiency of the line and so the energy usage. The planning department can minimise this effect by controlling the number of size and format changes.

Reason for Re-issue: Review

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: 

Date: 31/08/07

Activity: Planning / Material Call off

Review Date: 30/12/08

Area	Normal Operation			Accident/Emergency		
	Severity	Frequency	Score	Severity	Frequency	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	N/A	N/A	N/A	3	3	9
Discharges to Drain	3	2	6	N/A	N/A	N/A
Use of Raw Materials	1	5	5	N/A	N/A	N/A
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	3	2	6	3	2	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1: Steve Coombes

2: Victoria Gilbert

Date: 11/03/11

Activity: Raw Material Receipt / Storage – Ingredients / Aromas

Comment: Adjustment required following review of Environmental Issues

Assessment:

Legislation: Aromas are stored in separately well sealed containers. The site has a spill kit and SOP ref.:PROD06. If a spillage was not handled correctly it could result in a loss to drain which would make the Water Industry Act for foul drain loss or the Water Resources Act for storm drain loss or the groundwater regulations relevant. (Relevant version references / years are available from the summary of legislation.)

Emissions to air: There are no emissions to air. Under accident conditions the more volatile aromas could escape to air however the environmental impact would be low as losses due to accident would be limited due to small individual container size and the site only uses natural components.

Waste Management: Ingredients are mostly delivered on returnable pallets. An amount of material will be received on non-returnable pallets that are collected as part of our waste segregation management process.

Discharges to Drain: There are no discharges to drain. Under accident or emergency conditions there could be spillage to drain which should trigger the spill kit procedure PROD06. Aroma storage on site should be in covered, locked and bunded storage where temporary storage is required this must be risk assessed and measures implemented to minimise the risk of spillage / discharge to drain.

Use of Raw Materials: Ingredients and aromas do not form a large part of materials used across the site. Again they are ordered to suit production needs and shelf lives are monitored under the ISO9000 system.

Land Contamination: This is not an issue and is unlikely to become an issue under emergency conditions.

Energy Usage: Electricity is used in the chilling unit to preserve the life of sensitive materials. The temperature is monitored and the unit is purpose built and so is insulated. The door to this area is kept shut. If the chiller is planned not to be used then the unit will be switched off to minimise energy usage.

Reason for Re-issue: Addition of Spill SOP reference and aroma storage requirement.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: Steve Coombes

2: Victoria Gilbert

3:

4:

Date: 11/03/11

Activity: Raw Material Receipt and Storage – Ingredients and Aromas

Area	Normal Operation			Accident/Emergency		
	Severity	Frequenc	Scor	Severity	Frequenc	Scor
Legislation	Relevant	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	1	1	1
Waste Management	2	4	8	3	1	3
Discharges to Drain	3	1	3	3	2	6
Use of Raw Materials	1	1	1	1	1	1
Land Contamination	N/A	N/A	N/A	3	1	3
Energy Usage	1	1	1	1	1	1

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Waste management and discharge to drain updated

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1:



Date: 30/12/08

Activity: Raw Material Receipt / Storage – Packaging

Comment: Review, referring to the previous review and actual practice.

Assessment:

Legislation: This is not relevant to receipt or storage either during normal or accident emergency conditions.

Emissions to air: There are no emissions to air.

Waste Management: Ingredients are mostly delivered on returnable pallets there is little wastage associated with delivery. Storage is mainly in unit 72 and under conditions which maintain the integrity of the packaging. Packaging is offloaded by fork lift trucks and damage is minimised through training of fork lift truck driver. Packaging is ordered to production schedules and there is not a significant wastage associated with redundant materials.

Discharges to Drain: There are no discharges to drain.

Use of Raw Materials: A relatively large amount of raw materials are stored in unit 72. Buildings are inspected weekly for fabric condition, fire alarm function is checked weekly.

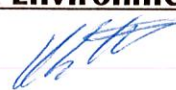
Land Contamination: This is not an issue.

Energy Usage: Packaging is stored in an unheated area. Unit 72 has movement sensors fitted to the lights to prevent lights being on when unit not in use.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: 
2:
3:
4:

Date: 31/08/07

Activity: Raw Material Receipt and Storage – Packaging

Review Date: 30/12/08

Area	Normal Operation			Accident/Emergency		
	Severity	Frequency	Score	Severity	Frequency	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	2	2	4	3	1	3
Discharges to Drain	N/A	N/A	N/A	N/A	N/A	N/A
Use of Raw Materials	1	1	1	3	1	3
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	1	1	1	1	1	1

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1: Steve Coombes

2: Victoria Gilbert

SC
VG

Date: 11/03/11

Activity: Raw Material Receipt / Storage – Chemical

Comment: Adjustment required following review of Environmental Issues

Assessment:

Legislation: The Control of Substances Hazardous to Health regulations are relevant. If there was leakage from stored chemical containers that were not contained within bunded storage the Water Industry Act and groundwater regulations and the environmental Protection Act may be applicable. During accident and emergency conditions there is a spill kit and procedure in place. (Relevant version references / years are available from the summary of legislation.)

Emissions to air: There is no emission to air under normal operating conditions. Under accident and emergency conditions there is a risk of a small amount of emissions through combination of chemicals.

Waste Management: Bulk deliveries of caustic are by dedicated tanker, smaller containers of chemicals are the property of the chemical company and returnable for re-use as are the pallets that they are supplied on.

Discharges to Drain: There are no discharges to drain during normal operations. The caustic tank is bunded as is the chemical storage area. There is a spill kit SOP PROD06 in place.

Use of Raw Materials: The plant does not consume a large amount of chemicals for cleaning purposes and caustic for tank cleaning is re-used. The stock of materials kept is regularly monitored and wastage through excess stock is avoided.

Land Contamination: Presently there is a low risk of land contamination, chemicals are either stored in small separate containers or in the bunded caustic tank.

Energy Usage: This is not an issue.

Reason for Re-issue: Addition of reference to summary of legislation and PROD06

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Identification of Environmental Issues

Assessment carried out by: 1: Steve Coombes
2: Victoria Gilbert

SC
VH

Date: 11/03/11

Activity: Raw Material Receipt / Storage – Bulk ingredients Tankers, Flexi-tanks, pallets and drums

Comment: Adjustment required following review of Environmental Issues

Assessment:

Legislation: There is no relevant legislation for normal operation however under accident or emergency situations due to the lack of bunding there is a real risk of spillage to drain or to land. In these cases the Water Industry Act and Groundwater regulations would become applicable. (Relevant version references / years are available from the summary of legislation.)

Emissions to air: There are no emissions to air.

Waste Management: Tankers are re-used and various concentrates/bases are in reusable containers. Drum use is minimised because of handling and cost implications, plastic conical drums are disposed of as waste and metal drums are collected for re-use. Drums are delivered into the factory on reusable pallets which are part of the pallet exchange scheme. Material in drums is stored within double plastic drum liners which are discarded after use and sent for recycling.

Discharges to Drain: During tanker delivery a sample is taken and this can involve minor losses which will find its way to drain. Material in drums is contained within double plastic bags and drums are stacked within the yard. Silos are double valved to avoid loss through valve failure. All pipework is above ground and the area is regularly visited. If there were a spillage there is a foul drain point immediately in front of the silos which would result in uncontrolled discharge to drain, the spill kit and spill SOP PROD06 must be followed in these circumstances.

A flexi-tank contains approximately the same amount of concentrate as a bulk tanker and under normal discharge conditions there is no difference in the risk of spillage to drain. Accidental spillage risk as identified in the risk assessment is increased by the possible frequency increasing but the severity remains the same due to the nature of the concentrate and the quantity.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: S. Coombes

2: V. Gilbert

3:

4:

Date: 11/03/11

Activity: Raw Material Receipt and Storage – Bulk Ingredients, Tankers, Flexi-tanks, palletcons and Drums.

Area	Normal Operation			Accident/Emergency		
	Severity	Frequenc	Scor	Severity	Frequenc	Scor
Legislation	Relevant	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	2	4	8	2	1	2
Discharges to Drain	2	4	8	4	1	4
Use of Raw Materials	3	2	6	3	1	3
Land Contamination	1	1	1	3	1	3
Energy Usage	2	3	6	2	1	1
Transport	2	3	6	2	1	2

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Review and amendment of scores

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues Review

Assessment carried out by:

1: 

Date: 30/12/08

Activity: Batch Blending

Comment: Review, referring to the previous Environment review and actual practice.

Assessment:

Legislation: There are limited material losses in this area which will go to foul drain, a storm drain immediately outside the entrance ramp to unit 68 is not marked as such and so could also receive spillages in the event of a major spill. The Water Industry Act 1991 for foul drain loss or the Water Resources Act 1991 for storm drain loss. Raw materials are consumed during this operation and packaging materials discarded possibly making the producer Responsibility Obligations (Packaging Waste) regulations 1997 (1999, 2000) relevant.

Emissions to air: There are no emissions to air.

Waste Management: During blending raw material containers that are not returnable are sent for recycling. The major items that are pre-weighed from bulk (mainly 25Kg sacks), these are weighed into smaller plastic bags which are then collected for recycling but this is not a major source of waste.

Discharges to Drain: There are minor discharges to drain during sampling and tank rinsing, these discharges are not monitored. Where possible tank rinse and line purge is captured for re-use. Under accident or emergency conditions there could be spillage to drain, there is a spill kit and procedure in place. The area is not bunded, there are operator procedures for routine maintenance and cleaning of some seals.

Use of Raw Materials: All bulk ingredients and aromas are processed through the blending area. Raw material wastage forms part of the site KPI information under the ISO9000 system. Although wastage across the site is monitored as a whole and there are measures in place to minimise wastage, reduction is not actively targeted or measured by area. Blends are made to recipes which are controlled under the ISO9000 system and tested against documented testing regimes. As part of the blending activities large amounts of water are used in product make-up. Water and chemicals are used for tank and processing equipment cleaning.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: 

Date: 31/08/07

Activity: Batch Blending

Review Date: 30/12/08

Area	Normal Operation			Accident/Emergency		
	Severity	Frequency	Score	Severity	Frequency	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	1	1	1	1	1	1
Waste Management	2	3	6	2	2	4
Discharges to Drain	2	3	6	4	2	8
Use of Raw Materials	2	4	8	3	2	6
Land Contamination	1	1	1	1	1	1
Energy Usage	2	3	6	2	3	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1:

S.L. S. COOMBS
VH V. GILBERT

Date: 06/07/11

Activity: Pasteurisation

Comment: Review, referring to the previous review and actual practice.

Assessment:

Legislation: There is no relevant legislation for this process.

Emissions to air: Pasteurisation is the biggest user of steam which is generated by gas burning steam generators. Emissions to air are minimal as gas is a relatively clean fuel when compared to alternative units.

Waste Management: Pasteurising temperatures are recorded on paper charts which are retained as Quality records under the ISO 9002 system, wastage from this source is extremely low.

Discharges to Drain: There are discharges to drain during start up and shut down. These are controlled and minimised where possible by collection for re-use. Wastage levels are monitored under site KPIs and effluent COD monitored by Welsh Water, also the sites carries out a two yearly test of the levels for PH, suspended solids, and COD. There is however no direct monitoring of this area but the MCERT effluent meter is uploaded into the sites system weekly to ensure we are with in consent for effluent volume. Emergency conditions would become immediately apparent and the pasteurisation unit would be shut down.

Raw Materials: Chemicals are used to treat water feeding the steam generators, chilled water for cooling is circulated through a closed system. All blended batches are passed through the pasteurisers and wastage is as above in discharges to foul drain.

Land Contamination: This is not an issue.

Energy Usage: Electricity is used for pumping. Water is chilled through a new energy efficient chiller which uses electricity. The pasteurisers are the biggest users of steam which is generated using natural gas as a raw material. Steam lines are not all lagged in production but are now lagged in the boiler house and condensate is returned to the holding tank. Pasteurisers recover heat from the pasteurised product in the regeneration section to aid in the reduction in energy.

Reason for Re-issue: Review

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by: 1: *SL S. COOMES*
ML V. GILBERT

Date: 31/08/07

Activity: Pasteurisation.

Review Date: 06/07/11

Area	Normal Operation			Accident/Emergency		
	Severity	Frequen	Scor	Severity	Frequen	Scor
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	1	4	4	1	4	4
Waste Management	1	4	4	1	1	1
Discharges to Drain	2	4	8	3	1	3
Use of Raw Materials	2	4	8	3	2	6
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	2	4	8	3	2	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1: *A.C.* *S. COMPTON*
14 *V. GILBERT*

Date: 06/07/11

Activity: Filling

Comment: Further to the last Review to review present practices and confirm continued relevance.

Assessment:

Legislation: Packaging is introduced to the process at this stage and thus the Producer Responsibility Obligations (Packaging Waste) regulations 1997. The filling process also generates noise and the Health and Safety at Work act 1974. Part 1 and Control of Noise at work regulations 2005 are also relevant.

Emissions to air: There are no emissions to air.

Waste Management: Damaged cartons, cartons used for quality checks and the external packaging that the sleeves are supplied in are discarded. The Tetra filler automatically rejects packaging material for certain filler events. During emergency or accident conditions the amount of damage could increase but this would be limited by the operator control of the filling machine. Cardboard waste is segregated for recycling. Sleeves are collected in disposable plastic bags for hygiene reasons and sent for recycling.

Discharges to Drain: There are minimal product discharges to drain at shutdown product is collected for re-use. During cleaning The Tetra Pak filler has an internal cleaning unit which discharges minimal amounts of caustic to drain. Rinse water which is used to remove both product and chemical residues is sent to drain. During emergency/accident conditions a product/chemical leak would result in shutdown of the process.

Raw Materials: The filler utilises hydrogen peroxide to maintain filling sterility. Hydrogen peroxide is critical to the asepticity of the product and is monitored automatically. Concentrate is blended with water, incorrect blending or filling levels will lead to overuse or to wastage if the material has to be reworked or scrapped. The highest proportion of concentrate used is Orange concentrate which is transported long distances (mainly from Brazil) and stored at low temperatures <-5°C.

Land Contamination: This is not an issue.

Energy Usage: Electricity is used for operation of the filler, to provide heat to dry the hydrogen peroxide in the carton as part of the sterilisation process,

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Identification of Environmental Issues

seal the longitudinal seal, transverse seal and carton flaps. Steam is used to provide aseptic barriers and to form a slight vacuum in the carton prior to sealing. Compressed air is used to operate valves and provide an amount of overpressure in the filling system. Electricity is used to drive the fans which drive air through the sterile filters and provide overpressure in the filler itself. During accident or emergency conditions the filler will shut down and so not generate large wastage, efficient use of energy will depend on the efficiency of the filling operation which is monitored by the operator and trended daily and weekly. The Tetra filler also uses electricity for forming seals and to drive the machinery however the use of servo motors and the greater speed of the filler reduce the amount of power required when compared to previous combi fillers.

Noise: The noise produced by the fillers is less than 80db's.

Reason for Re-issue: Review

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: *SL S. COOMES*
W V. GILBERT

Date: 06/07/11

Activity: Filling

Review Date: 06/07/11

Area	Normal Operation			Accident/Emergency		
	Severity	Frequen	Score	Severity	Frequen	Scor
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	1	1	1	1	1	1
Waste Management	2	4	8	3	2	6
Discharges to Drain	2	2	4	3	1	3
Use of Raw Materials	1	4	4	3	3	9
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	3	4	12	3	2	6
Noise	1	4	4	3	2	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1: S. < S. CUMBER
U/G V. GILBERT

Date: 06/07/11

Activity: Packaging and collation

Comment: Review, referring to the previous review and actual practice.

Assessment:

Legislation: Secondary packaging is used in the process at this stage and thus the Producer Responsibility Obligations (Packaging Waste) regulations 1997 (1999, 2000) is relevant.

Emissions to air: There are no emissions to air.

Waste Management: There is a minimal amount of damaged packaging generated at the various packaging stations (multipackers, tray and shrinkwrappers). There is also a minimal amount of secondary outer packaging discarded. Wooden pallets and top boards used to keep trays flat are returnable, the amount of other packaging discarded although minimal has not been measured and is not monitored. Discarded secondary cardboard and plastic packaging are collected for recycling.

Discharges to Drain: There are no product discharges to drain under normal operating circumstances with only minimal discharge during accident/emergency or cleaning conditions, filters are in place in production and drain entry. Dry lubricant is used to lubricate the line conveyors and control of this is required to ensure minimal discharge to drain.

Raw Materials: Most of the packaging machines consume glue which forms a part of the final packaging.

Land Contamination: This is not an issue.

Energy Usage: Electricity is used for the operation of the packaging machines and to provide heat for shrinkwrap on finished cases and multipacks. Over the last few years work has been done to remove shrinkwrap on certain products which has reduced the amount of raw material and energy used. Merchandising units have also been introduced to decrease packaging and energy usage. Compressed air is also used for various machine functions, there are set pressures for operation of the equipment but no procedures for highlighting leaks. Operators are encouraged to switch off machinery when on CIP and during prolonged break downs.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Identification of Environmental Issues

Noise: Under normal operation and through a preventable maintenance system the packaging machinery noise emission is less than 80db's.

Reason for Re-issue: Review and add noise.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: *A.L. S. COOMES*
V.H. V. GILBERT

Date: 06/07/11

Activity: Packaging and Collation

Review Date: 06/07/11

Area	Normal Operation			Accident/Emergency		
	Severity	Frequen	Scor	Severity	Frequen	Scor
Legislation	Relevant	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	1	4	4	3	2	6
Discharges to Drain	1	4	4	2	2	4
Use of Raw Materials	1	4	4	2	1	2
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	2	4	8	3	2	6
Noise	1	4	4	1	4	4

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by: 1: *SL SCUMMAS*

Date: 06/07/11

Activity: Palletisation

Comment: Review, referring to the previous review and actual practice.

Assessment:

Legislation: There is no relevant legislation for this stage.

Emissions to air: There are no emissions to air.

Waste Management: There are very small amounts of damaged packaging generated at the palletiser and dollytiser. Wooden pallets are part of the GKN pallet exchange scheme and so are reused, dollies and half euros are rented and reused.

Discharges to Drain: There are no product discharges to drain under normal operating circumstances with only minimal discharge during accident/emergency or cleaning conditions to foul. Robot area has foul drain in place to deal with small spillages of juice and for washing away the cleaning water. Spill kit in place for large spillages and spillage procedure SOP PRO06

Raw Materials: The dolly uses a large tray to contain each layer of product which minimises the use of cardboard. Pallet stability is achieved through use of stretch wrap which is monitored and kept to a minimum to avoid both overuse and product damage.

Land Contamination: This is not an issue.

Energy Usage: Electricity is used for operation of the palletisers and its associated conveyors, new robots with servos and energy efficient conveyor inverter drives have been installed in the warehouse and only operate when product is present. As for other line equipment compressed air is also used for various machine functions, there are set pressures for operation of the equipment but no procedures for highlighting leaks.

Noise: Noise emitted from the robots and associated equipment is below 80db's.

Reason for Re-issue: Review & to amend due to changes in Palletiser area unit 69.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by: 1: *SK S. COOMES*

Date: 31/08/07

Activity: Palletisation.

Review Date: 06/07/11

Area	Normal Operation			Accident/Emergency		
	Severity	Frequen	Scor	Severity	Frequen	Scor
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	1	3	3	2	2	4
Discharges to Drain	N/A	N/A	N/A	2	2	4
Use of Raw Materials	2	3	6	2	1	2
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	2	3	6	3	2	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

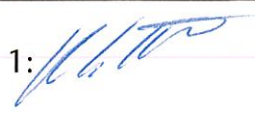
- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1: 

Date: 23/02/09

Activity: Transport – Fork Lift Trucks

Comment: Further to the last Review and due to the new warehouse project.

Assessment:

There are three types of fork lift trucks in use at the Cardiff site; Reach and Flexi trucks which are used to access the racking and are electrically powered and LPG powered trucks which are used for other duties.

Legislation: There are Health and Safety implications for use of fork lift trucks which are covered by the sites Health & Safety procedures and by safety check sheets and operator training.

Emissions to air: There are limited emissions to air from the LPG fork lift trucks and minimal emissions during battery charging. If the fork lift trucks are not maintained then these emissions would increase, this is covered off through maintenance contracts with the fork lift truck leasing company.

Waste Management: Waste engine and hydraulic oil is generated during service by the lease company, the disposal of the oil needs to be verified as do any replacement spare parts.

Discharges to Drain: There are no discharges to drain under normal operating circumstances. An oil or LPG leak or damaged battery would be noticed in normal operation immediately due to power failure and so would be minimised, the operator however needs to be made aware of what action to take.

Raw Materials: The Fork lift trucks consume LPG and / or electricity. LPG is supplied in reusable canisters. See energy usage below.

Land Contamination: This is not an issue during normal operation, spillage procedure and spill kit is in place to minimise any contamination during accident or emergency conditions.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1:



Date: 31/08/07

Activity: Transport – Fork Lift Trucks

Review Date: 30/12/08

Area	Normal Operation			Accident/Emergency		
	Severity	Frequency	Score	Severity	Frequency	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	1	1	1	1	1	1
Waste Management	2	1	2	3	1	3
Discharges to Drain	2	2	4	2	2	4
Use of Raw Materials	2	3	6	3	2	6
Land Contamination	1	1	1	2	2	4
Energy Usage	2	4	8	2	2	4
Noise	1	4	4	1	1	1

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by: 1: Steve Coombes *S.C.*
2: Victoria Gilbert *V.G.*

Date: 01/11/10

Activity: On line QC Laboratory

Comment: To remove a typing error where the noise section had been copied from a different review.

Assessment:

Legislation: C.O.S.H.H. regulations are relevant to some of the substances that are in use and these are covered by the site Health and Safety procedures. There is no other specific legislation relating to this activity but as waste is created with packaging being disposed of and waste product going to drain the Water Industry Act 1991 and Produce Obligations (Packaging Waste) regulations 1997 (1999, 2000) need to be considered.

Emissions to air: There are minimal emissions to air during dispensing of volatile aromas and flavourings that are all natural products.

Waste Management: Line checks are carried out and basic chemical analysis is also carried out. A small amount of waste packaging is created during these operations which is disposed of in the factory process waste and recycling streams.

Discharges to Drain: There are minimal discharges to drain in this area consisting of product used during routine testing. The discharge however does not go through the effluent monitoring point and so any accident or emergency situation could go unnoticed. There is no collection of product in this area due to the danger to the product of contamination with chemicals used for testing.

Raw Materials: A small amount of chemicals are used for carrying out acidity and vitamin C checks, the usage is monitored by stock take and practices involve taking appropriate sample size to avoid over usage. Growth media is used in the micro laboratory but this is minimised by the use of an instrument that gives an instant measure of ATP. Cultured micro-organisms are not harmful being mainly yeast or non pathogenic bacteria, all micro waste is autoclaved prior to disposal. Laboratory testing is carried out to documented regimes and controlled by the ISO9000 and CLAS system although reduced testing systems could possibly be introduced.

Land Contamination: This is not an issue.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Identification of Environmental Issues

Energy Usage: The micro laboratory utilises a warm room for incubation of samples. This room is heated but also houses a boiler that provides hot water for the canteen and domestic use. The waste heat is therefore utilised although it is supplemented by electrical heating. Control of the temperature of this room is critical and is regularly monitored as part of the lab accreditation scheme. Various lab equipment, (balances, incubators, autotitrator, pH meter), consume electricity but the rating of this equipment is very low and use is minimal. The area has two air conditioning units.

Reason for Re-issue: To remove a typing error where the noise section had been copied from a different review

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1:



Date: 31/08/07

Activity: QC Laboratory

Review Date: 30/12/08

Area	Normal Operation			Accident/Emergency		
	Severity	Frequency	Score	Severity	Frequency	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	1	3	3	1	2	2
Waste Management	2	3	6	2	2	4
Discharges to Drain	2	3	6	3	2	6
Use of Raw Materials	2	3	6	2	3	6
Land Contamination	1	1	1	1	1	1
Energy Usage	2	3	6	2	3	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues Review

Assessment carried out by:

1:

SC S. COOMER
V. GILBERT

Date: 06/07/11

Activity: Control of Non-conforming Product

Comment: Further to the last Review to review present practices and confirm continued relevance.

Assessment:

Legislation: There is no legislation relating to this activity but as waste is created with packaging being disposed of and waste product going to drain the water industry act 1991 and Produce Obligations (Packaging Waste) regulations 1997 (1999, 2000) need to be considered..

Emissions to air: There are no emissions to air.

Waste Management: In the case of non-conforming finished product there are various means of disposal; short dated product or with minor quality defects may be regarded and sold and therefore would not incur any wastage. Short dated product this is not regarded suitable for sale and product with packaging defects may be reprocessed, this involves re-use of the juice and disposal of the packaging. Disposal of the packaging is through the normal waste disposal route (Tetra cartons sent for recycling) and percentage right first time is monitored under the current factory management systems. In the event of a major quality failure the amount of packaging disposed of would rise but is unlikely to be significant. Damaged and leaking cartons that are not suitable for reprocessing are disposed of using a licensed waste contractor.

Discharges to Drain: A small amount of damaged stock is disposed of on site with waste going to foul drain, this operation although minimal requires control and monitoring as there are no controls currently in place.

Raw Materials: Reprocessing of non-conforming product is mostly manual and so does not directly consume raw material. However the effect of reprocessing means that the juice passes through the system again incurring material use through the blending, pasteurisation, filling, packaging and in some cases distribution chain.

Land Contamination: This is not an issue with this activity. The baler has been recently renewed and its location, the baler is under shelter with a foul drain located in floor and area is surrounded by a wall bund. Ground sealed and painted with acid resistant paint.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Identification of Environmental Issues Review

Energy Usage: As for Raw Material usage energy is not directly consumed in this operation but the effect of having to reprocess product that has already been through factory processes once means that the energy cost of reprocessed product is double that of product which is 'right first time'.

Reason for Re-issue: New baler installed and re-location of bailer.

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1:

V. GILBERT
J. CUMBER

Date: 31/08/07

Activity: Control of Non-conforming Product

Review Date: 06/07/11

Area	Normal Operation			Accident/Emergency		
	Severity	Frequen	Score	Severity	Frequen	Scor
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	N/A	N/A	N/A	N/A	N/A	N/A
Waste Management	2	3	6	4	2	8
Discharges to Drain	3	3	9	3	2	6
Use of Raw Materials	2	3	6	3	2	6
Land Contamination	2	1	2	2	2	4
Energy Usage	2	3	6	3	2	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by:

1: Steve Coombes

2: Victoria Gilbert

SC
VG

Date: 11/03/11

Activity: Maintenance

Comment: Adjustment required following review of Environmental Issues

Assessment:

Legislation: There is no legislation relating to this activity but during activities diverse wastes can be created which need to be disposed of properly.

Emissions to air: Emissions to air could occur during overhaul of chiller units. The Primary European (EC) Regulation 2037/2000 on Ozone Depleting Substances need to be considered during all maintenance of the chiller and refrigeration units.

Waste Management: There are several wastes which require correct disposal for hazardous / harmful waste.

Discharges to Drain: There should be no discharges to drain during routine maintenance but in emergency or accident conditions polluting substances could be discharged to drain. Spillage SOP PROD06 and spill kit is in place to avoid this causing environmental impact.

Raw Materials: Raw materials used are mainly replacement parts which have a minimal impact. Other raw material usage includes greases and oils, disposal and spillage procedures are required and storage of these items need to be controlled. If maintenance is ineffective the effect will be to cause wastage of packaging and product and energy. Service schedules are monitored as are everyday issues and these are acted on to lessen the risk of potential break downs and so unnecessary waste of materials. Sourcing of spare parts is necessarily to manufacturers recommendations, where these recommendations are not in place sourcing should be considered both from a location and manufacture view point.

Land Contamination: This is not an issue within the factory buildings but the chillers, baler and mobile equipment (fork lift trucks etc.) is surfaced outside of the buildings and leakage could result in land contamination.

Energy Usage: Energy usage for this activity is low and is confined to welding, cutting and power tool equipment. Efficient maintenance of high energy equipment such as the compressors results in energy not being wasted.

Reason for Re-issue: Spill SOP

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: S. Coombes

Date: 11/03/11

2: V. Gilbert

Activity: Maintenance

Area	Normal Operation			Accident/Emergency		
	Severity	Frequenc	Score	Severity	Frequenc	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	2	1	2	4	2	8
Waste Management	3	2	6	3	2	6
Discharges to Drain	3	1	3	4	2	8
Use of Raw Materials	2	3	6	2	2	4
Land Contamination	1	1	1	3	2	6
Energy Usage	2	2	4	3	2	6

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

- 1 - Unlikely, never happens
- 2 - Occurs very infrequently
- 3 - Occurs sometimes
- 4 - Occurs most of the time
- 5 - Occurs all of the time

Reason for Re-issue: Review of scores

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.

Identification of Environmental Issues

Assessment carried out by: 

Date: 30/12/08

Activity: Offices.

Comment: Further to the last Review to review present practices and confirm continued relevance.

Assessment:

Legislation: There is no relevant legislation to this operation at this stage and the oil used for office heating has been discontinued.

Emissions to air: Emissions to air are minimal comprising mainly of six printers and one photocopier in the main office and four printers and one photocopier in the individual offices.

Waste Management: Waste materials are mainly paper used for printing which is only reused or recycled on an individual basis. The site does have a computer system and shared drive on the server which allows transfer of a lot of information electronically. Waste from the offices is transferred to the main waste skips which contain the factory waste packaging and is sorted for recycling.

Discharges to Drain: The main office has a small kitchen which allows tea making equipment to be washed, the use of this facility is minimal.

Raw Materials: An amount of paperwork is created in the form of reports and routine quality and administrative paperwork this again is minimal and reduced by use of e:mail and the computer based systems.

Land Contamination: This is not an issue for this activity.

Energy Usage: The main office has energy efficient lighting being fitted with light reflecting fittings and small tubes. The lights are fitted with movement sensors and are switched off outside of office hours. The main photocopier incorporates an energy saving device which activates when not in use. The main office and factory managers office is fitted with air conditioning units. Heating is supplied to the main office by individual free standing electrical heaters.

Reason for re-issue: Review

The assessment should be carried out with consideration of all possible environmental effects (consideration must be given to aspects of legislation, waste management, discharges to drain, emissions to air, contamination of land, use of raw materials, energy usage and any other local environmental issues. The team shall consider the impact of the activity under both normal running conditions and under accident/emergency conditions.

Determination of Significant Environmental Effects

Determination carried out by:

1: 

Date: 23/06/03

Activity: Offices.

Review Date: 30/12/08

Area	Normal Operation			Accident/Emergency		
	Severity	Frequency	Score	Severity	Frequency	Score
Legislation	N/A	N/A	N/A	N/A	N/A	N/A
Emissions to air	1	1	1	1	1	1
Waste Management	1	1	1	1	1	1
Discharges to Drain	1	1	1	1	1	1
Use of Raw Materials	2	4	8	2	1	2
Land Contamination	N/A	N/A	N/A	N/A	N/A	N/A
Energy Usage	2	3	6	2	1	1

The severity of the effect is to be given a score out of 5 for both normal and Accident/Emergency conditions.

- 1 - No viable impact
- 2 - Minimal Impact
- 3 - Impact
- 4 - Major impact
- 5 - Catastrophic impact

The frequency of occurrence is to be given a score out of 5 for both normal and accident/emergency conditions.

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- 5 - Occurs all of the time

Reason for Re-issue: Amendment to significant score description and review due to changes to summary of legislation.

The determination is carried out using the identification of environmental issues form for the given area. A score of 8 or above will be considered as significant and the activity will be included in the register of significant environmental effects.