

Environmental Management Plan

This Environmental Management Plan (EMP) is a structured document that outlines the measures, procedures, and responsibilities required to manage the environmental impacts of a project, operation, or development. Its purpose is to ensure compliance with environmental legislation, minimize adverse environmental effects, and promote sustainable practices throughout the project lifecycle.

Aspects & Impacts

Purpose

This procedure outlines the methodology for identifying and assessing significant environmental impacts associated with the manufacturing processes at Bridgend Paper Mills.

Scope

This procedure applies to Bridgend Paper Mill and does not extend to any other WEPA UK sites. Within the Bridgend facility, it is applicable to all warehouses located on-site, the pulp yard, the Papermaking machines and their associated assets, all converting lines, and the effluent treatment system.

Definition and Acronyms

A&I	Aspects & Impacts
Floc	Flocculator
CHP	Combined Heat Power
KPI	Key Performance Indicator

Responsibility

Role	Responsibility
Environmental Manager	Ensuring implementation, adherence to and monitoring of this procedure
Environmental Engineer	Act as deputy on all aspects, where the manager is not available

Related Documentation

FD-BR-7014_EN Aspects & Impacts Register
EPR Permit (EPR/EP3738NG)
ISO14001:2015

KPI

The Aspects & Impacts Register is to be reviewed on an annual basis or when a change occurs throughout the paper mill, this is to dynamically review the environmental risks to the business and ensure mitigation is in place and controlled to reduce / remove the risk.

Procedure

Identification of an aspect

Aspect

An environmental aspect refers to any element of a process that has the potential to cause harm to the environment. Examples can include, but are not limited to:

- Emissions to air
- Discharges to water
- Use of natural resources.

These categories represent potential environmental impacts and must be systematically assessed.

Each environmental aspect shall be assigned a reference number to facilitate tracking and to identify those with the greatest potential impact.

The Details section should provide a more in-depth explanation of how each process contributes to an environmental aspect. Examples include the use of steam, the consumption of virgin fibre, or the use of electricity. Each of these processes constitutes an environmental aspect and has the potential to cause environmental harm.

The Impact section shall document the potential consequences of each environmental aspect, and should highlight the impacts that could occur, if no control measures are in place. Examples can include:

- Effects on air quality
- Waste handling and disposal
- Windblown litter

The Risk section shall identify the risks associated with each listed environmental aspect. For example, the use of steam may present a risk of excessive energy costs, while emissions to air could result in a breach of permits if adequate controls are not implemented.

Operational conditions under which each environmental aspect may occur should be categorised. For example;

- Emissions to air during routine operations are classified as normal
- Chemical discharge or spill would be considered an emergency

- Abnormal operations shall refer to instances where the plant is operated outside of standard procedures, such as discharging from a single flocculation tank to the final settlement tank rather than using both tanks

Evaluation of an aspect

To determine the effects and risk of the environmental aspect occurring, a risk assessment shall be conducted within the A&I register, the risk categories should fall into the below:

Legal Implications

Score	Level	Example of Justification
1	Negligible Impact	Minor or no legal consequences Minor procedural non-compliance with minimal fines or warnings
2	Minor Impact	Unlikely legal consequences Small fines or minor corrective actions required; low likelihood of enforcement action
3	Moderate Impact	Possible legal consequences Some risk of fines, notices, or compliance actions; medium likelihood of enforcement
4	Significant Impact	Probable legal consequences Major fines, formal notices, or legal action likely; high likelihood of regulatory attention
5	Sever Impact	Almost certain legal consequences Serious breach of environmental law; potential litigation, closure, or major penalties; almost certain regulatory intervention

Interested Parties/Stakeholders

Score	Level	Example of Justification
1	Negligible Impact	minimal consequences for stakeholders Minor concern or feedback from stakeholders; no regulatory or legal implications
2	Minor Impact	unlikely stakeholder dissatisfaction Small complaints or minor concerns; easily resolved with minimal action
3	Moderate Impact	possible stakeholder dissatisfaction Stakeholders may raise formal complaints; medium likelihood of reputational or operational impact
4	Significant Impact	probable stakeholder dissatisfaction Stakeholders likely to escalate concerns; potential reputational, financial, or operational impact
5	Sever Impact	Almost certain stakeholder dissatisfaction Serious stakeholder issues; could trigger regulatory attention, legal action, or major reputational damage

Likelihood

Score	Level	Example of Justification
1	Extremely unlikely to occur	May happen only in exceptional circumstances (e.g., <1% chance per year)
2	Unlikely to occur	Could happen occasionally, but not expected (e.g., 1–10% chance per year)
3	Possible occurrence	Could occur sometimes; intermittent (e.g., 11–30% chance per year)
4	Likely to occur	Expected to occur periodically (e.g., 31–60% chance per year)
5	Almost certain to occur	Very likely to occur, almost inevitable (e.g., >60% chance per year)

Severity

Score	Level	Example of Justification
1	Negligible impact	Minimal environmental or stakeholder impact; no legal or operational consequences
2	Minor impact	Minor environmental effect; slight stakeholder concern; minor corrective action may be needed
3	Noticeable impact	Moderate environmental harm or stakeholder dissatisfaction; may trigger some corrective actions or minor regulatory attention
4	Significant impact	Major environmental harm, stakeholder complaints, or probable regulatory/legal action
5	Severe impact	Serious or irreversible environmental damage, major stakeholder concern, or almost certain legal action; critical regulatory consequences

Existing controls

Score	Level	Example of Justification
1	Controls are robust and comprehensive	Procedures, monitoring, and mitigation fully address the risk; minimal residual impact
2	Effective controls	Well-established controls that significantly reduce risk; minor gaps only
3	Partially effective controls	Controls are in place and reduce risk somewhat, but gaps remain
4	Minimal controls	Some measures exist but are insufficient or poorly implemented
5	No or completely ineffective controls	No procedures, monitoring, or mitigation in place

Once assessed a significance rating shall be calculated to provide an overall score to prioritise where improvements are to be made. This is done per the below calculation:

Legal implications + Interested Parties + Likelihood + Severity x Existing Controls = Significance

The following key can be used to assess an aspects significance

Ranking	Scoring	Description	Control Requirements
A	251-375	Highly Significant	Requires Control and improvement (where practical)
B	101-250	Significant	Requires Control
C	0-100	Not Significant	Controls / Improvement not required

Controls section should outline the measures implemented to manage each environmental aspect and prevent associated impacts.

The controls shall be designed to reduce the likelihood of occurrence and lower the significance of the impact.

Where the significance is not sufficiently reduced, additional control measures shall be implemented.

Opportunities section shall enable users to identify potential measures that could reduce the likelihood or severity of environmental impacts associated with an asset. Examples can include improvements in maintenance practices or the adoption of new technologies etc.

Where opportunities are identified for a particular environmental aspect, the progress section shall record any progress made toward implementing those opportunities.

Monitoring Aspects & Impacts

The Aspects & Impacts (A&I) Register shall be reviewed on an annual basis at minimum

Whenever a new process is introduced or an existing process is modified, the Aspects & Impacts Register should be reviewed to ensure it is maintained accurately.

All reviews of the A&I Register must be documented, and a version history maintained.

Spill Control Procedure

Purpose

This procedure outlines the measures to effectively manage a spill

Scope

Scope for this procedure is Bridgend Paper Mill only

Responsibility

Role	Responsibility
All members	If you are the first person to notice a spill, escalate it to the relevant department manager and shift manager & Environmental team
Shift Manager or Department Manager	• Co-ordinate spill clean-ups to ensure they are addressed as required • Report to Environmental team
Environmental Manager	• Ensure this procedure is adhered to • Ensure spills are reported as required
Waste Contractor	Remove hazardous waste and dispose of accordingly

Related Documentation

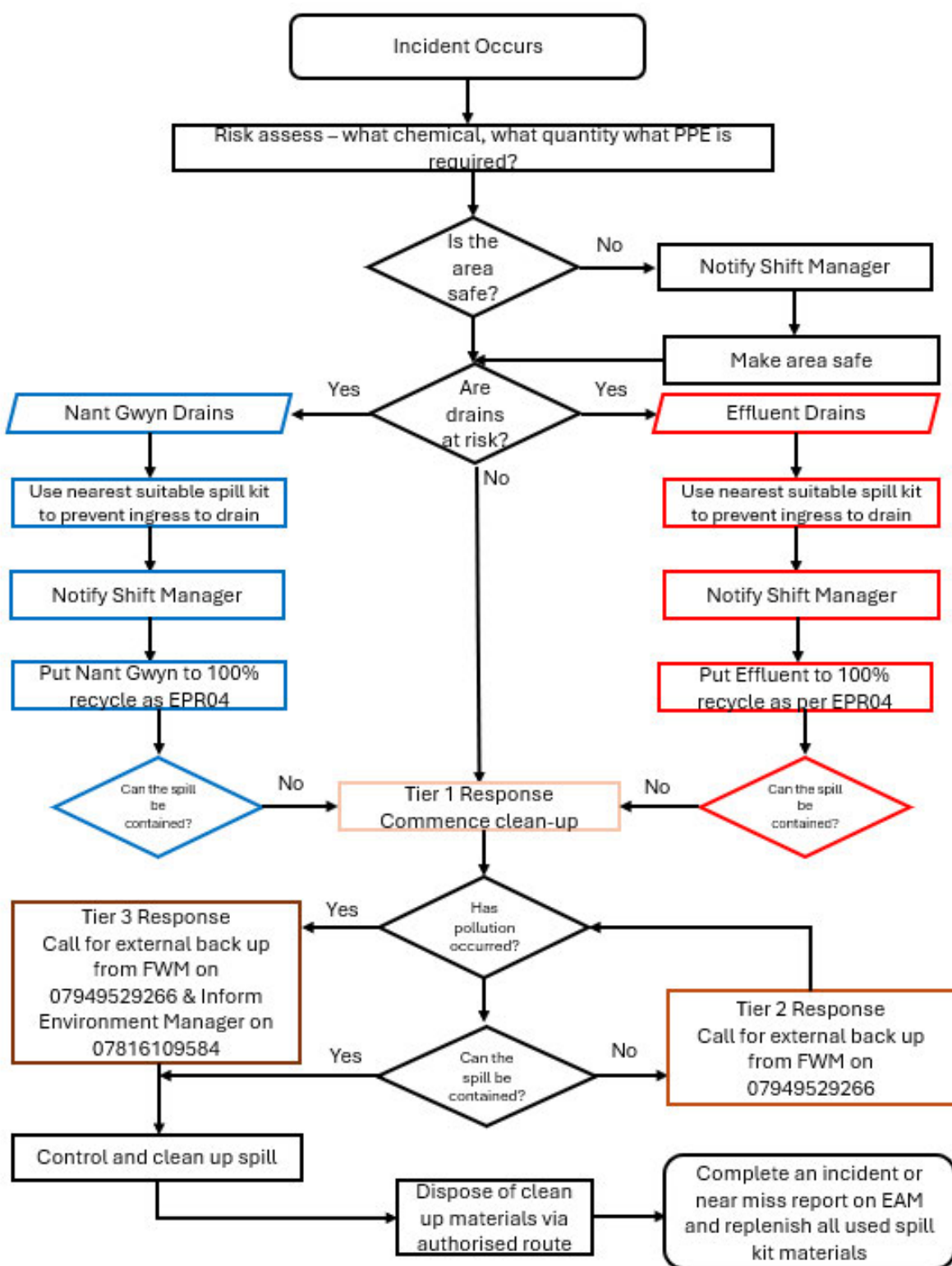
Service Operators Weekly Inspection – Microsoft Teams Form (link below)

[Service Operators Weekly Inspection](#)

KPI

This procedure does not have any specific KPIs, but any spills are to be recorded as environmental incidents which are tracked as a KPI

Procedure
Tier Process Flow



General

All used spill kit material must be treated as Hazardous Waste

All waste shall be contained within a sealable container, appropriately labelled with the location of the spillage, materials absorbed, time and date

Pre-formatted labels & sealable drums are available from waste contractor (FWM: 07949 529266)

Once contained, waste shall be taken to waste quarantine area, in Jonathan Basement

Waste contractor shall be informed (FWM: 07968 086834)

Situated around the Mill are spill kits, which contain essential equipment to help control a spillage

In the event of an emergency spillage, contact the below:

- Shift Manager (Radio: Alpha 1)
- Control Engineer (Radio: Echo 8)
- Environmental Service Operator (Radio: Alpha 6 / Alpha 8)
- Environmental Engineer
- Environmental Manager

Spill Kits

The locations of spill kits have been mapped out – see appendix

Spill kits shall be regularly inspected, and spill kit check sheet completed, to ensure all spill kits have sufficient contents

Check sheets shall be completed via the MS online form

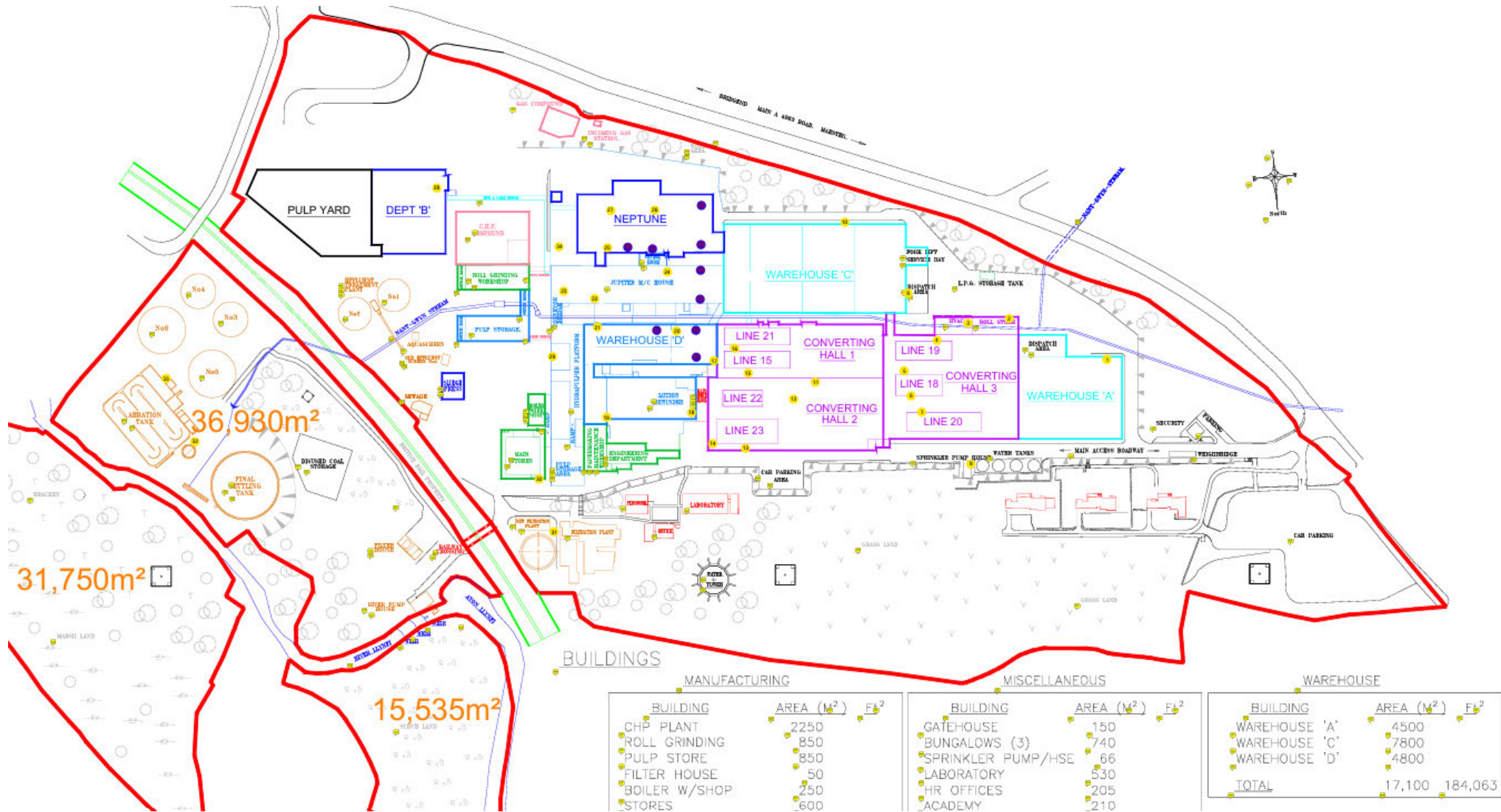
Fixed bunds

There are a number of fixed storage tanks across the site, some holding excess of 2000 litres of chemical / oil

Tanks shall be bunded to prevent any spills reaching water ways

Bunds shall be regularly inspected and emptied when required

Integrity of tanks shall be regularly inspected



Control of run of water from fires

Purpose

In the event of a major fire, it is imperative that the watercourses within the mill and its immediate boundaries are protected from contamination by the run-off water from firefighting.

All steps must be taken to ensure that run off waters are contained within the mill effluent system.

In the event of there being a risk of run-off water contaminating the Nant Gwyn, the following procedure must be implemented.

Scope

This procedure covers any such incident within the Bridgend Mill site.

Responsibility

The Mill Controller (Normally the Shift Manager) is responsible for ensuring that this procedure is followed. He will call for the support of other personnel as required.

KPI

This procedure has no direct KPIs associated with it although any fires that occur across the Mill are to be reported as an incident and follow the relative management processes.

Procedure

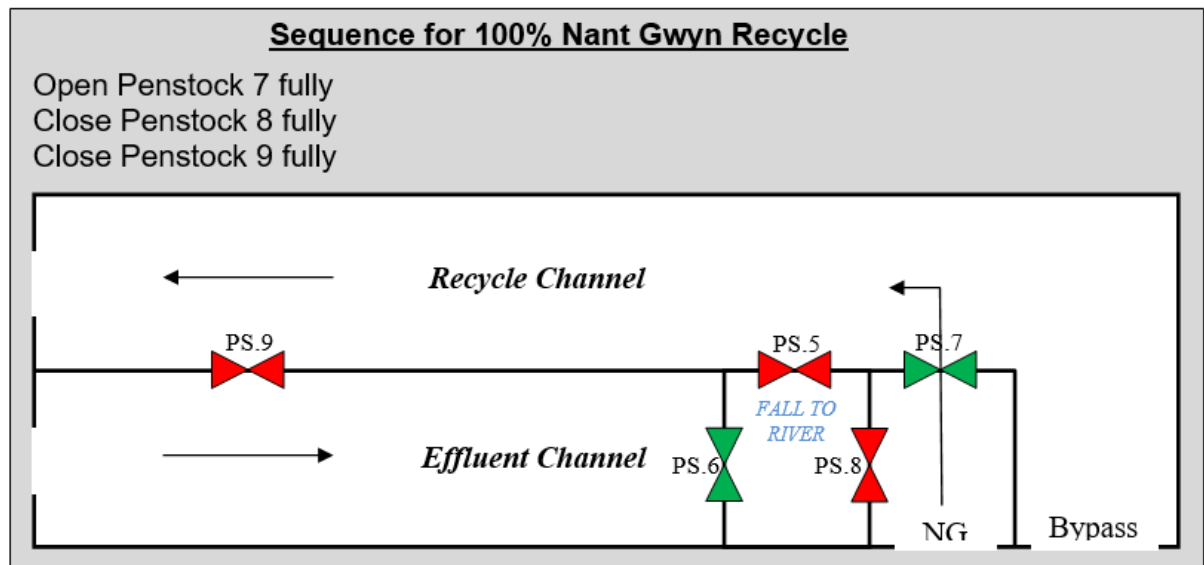
The mill controller will monitor the run-off water from fire-fighting activities.

If after assessment there is a risk of contamination then carry out the following:

Inform the Environment Agency of the situation (EA incident hotline 0800 807060).

Inform HSE manager, technical department and ESO operatives (if incident occurs during the day).

Instruct the shift technician to divert the Nant Gwyn flows to the River Pump House, using the following method:



At the River Pump House

The pump house design ensures that no Nant Gwyn water backflows into the river but if the flow is greater than mill requirements, the level in the pump house chambers will rise and stop the flow through the recycle line. Nant Gwyn will then overflow the effluent chamber into the discharge outfall. To make sure this does not happen:

Check, via PI or flow meter readings, that the recycle flow is less than the river pump flow. If not, increase flow from P3 by the following method (filter plant computer):

Override inverter-driven river pump P3

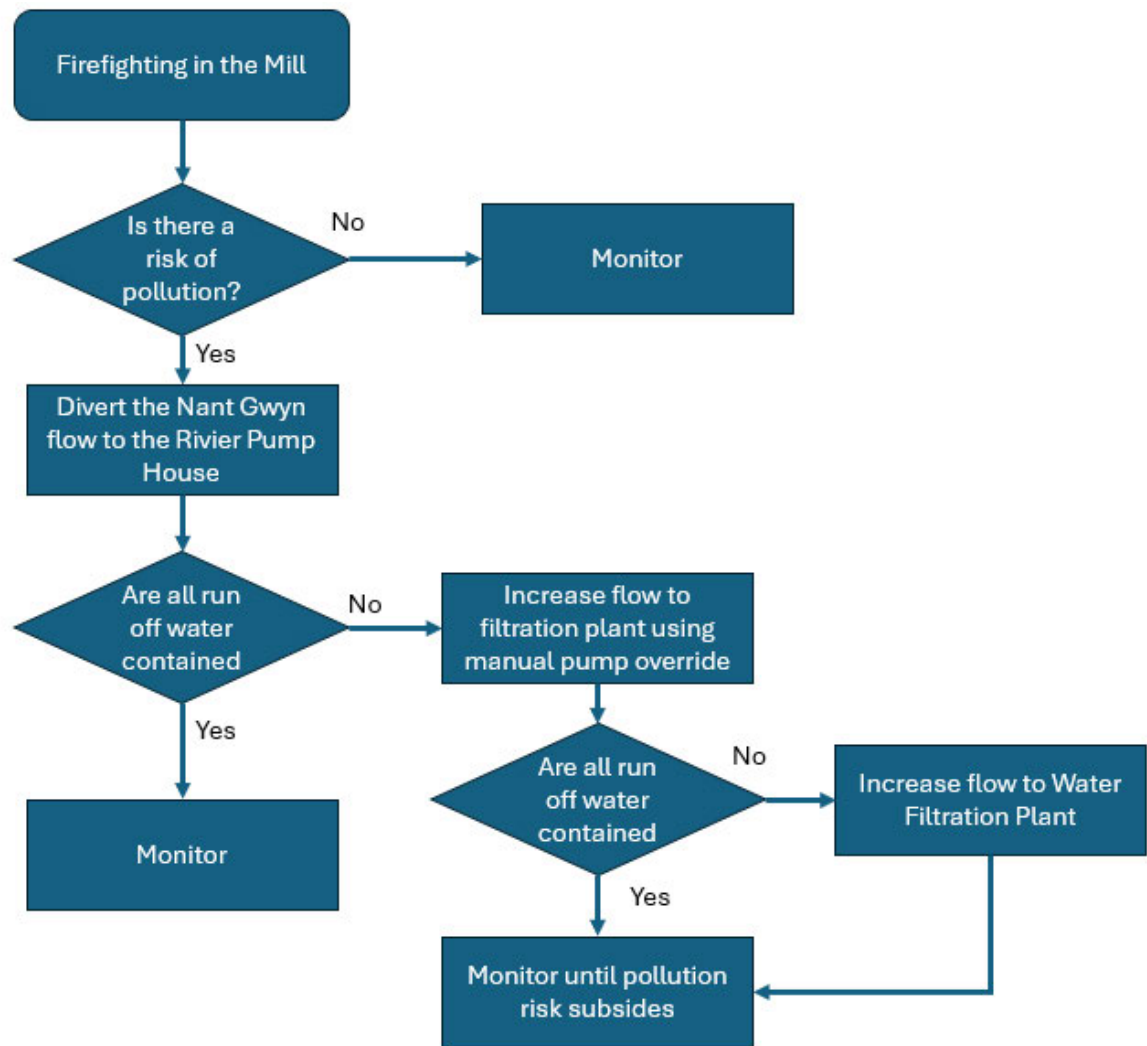
1. Select Main menu
2. Select F2 – River Pump House
3. Select F1 Pump control
4. Select Pump P3, Click MANUAL
5. Increase set point (S/P) to 100% using the + icon

Monitor evacuation of water from river pump house. If insufficient, start river pump P2:

Start river pump P2

1. Select Main menu
2. Select F2 – River Pump House
3. Select Pump P2
4. Click START (The RUNNING box will flash red).

Pump P2 is not inverter-driven and pulls a fixed flow of 6000 l/m. Pump P3 may need its set-point lowered after starting P2. Monitor and adjust regularly throughout the incident.



Discharge Chamber – If the discharge chamber is overloaded due to fire run off water, open the valve at the bottom of the circulator to allow abstracted water to flow to the primary flocs. While doing this turn off M1 Screw to allow the balance tank to fill with effluent, this will decrease the flow in the recycle channel allow time for the balance tank to fill.

Response to ammonia Alarm

Purpose

Ammonia is measured daily using the proportional auto sampler. Our discharge permit limit is currently set at 1.0mg/l but may change in the future. Ammonia can kill fish at low levels and is therefore a very important parameter to control.

Scope

This procedure covers emergency actions in response to a high ammonia alarm.

Responsibility

Technical personnel, service operators, shift managers, Environment Manager, Environment Engineer

Related Documentation

ETM001 Ammonia

KPI

Ammonia levels are included on the environmental KPI scorecard, any reports of the high alarm being triggered will be reported as an environmental near miss and follow the relative reporting lines.

Procedure

Monitoring

Ammonia in final effluent is measured continuously by a Hach Polymetron ammonia analyser which is housed in the Biox cabin. It takes its sample from the submersible pump in the final effluent channel via the inline filter in the Biox cabin.

The effluent is normally very low in ammonia and a result of $>0.6\text{mg/l}$ is indication of problems with either the meter or the effluent treatment process. A high ammonia alarm should never be ignored and this procedure must be followed without delay.

Actions

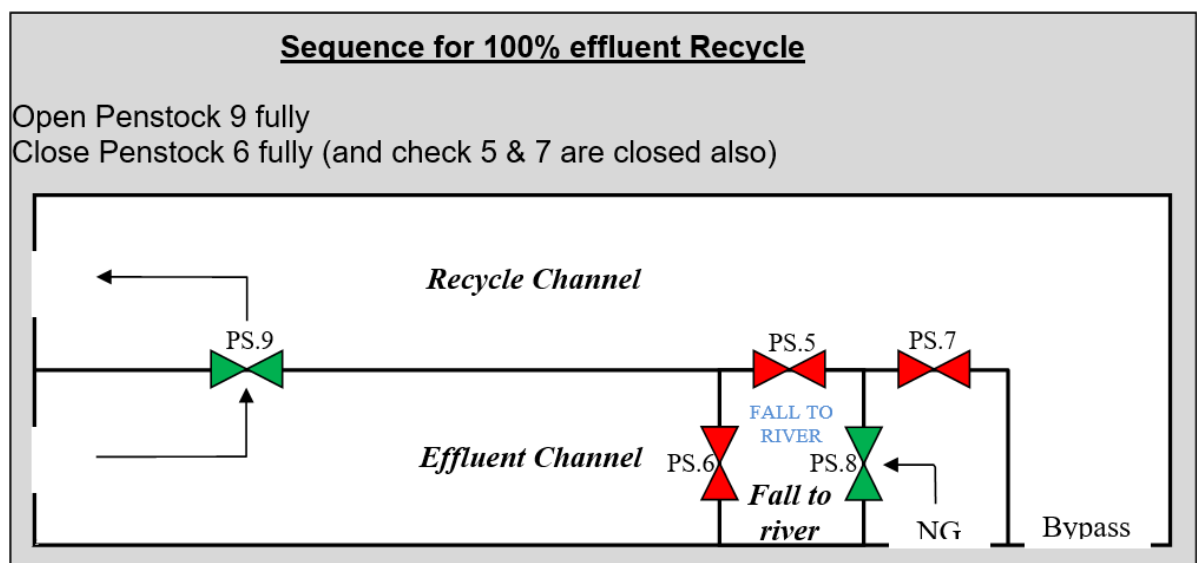
Following a high ammonia alarm in the security lodge, contact one of the following personnel, depending on availability onsite at the time.

Age Group	Percentage
18-29	80%
30-49	85%
50-64	85%
65-74	75%
75+	75%
18-29	65%
30-49	65%
50-64	65%
75+	65%



The notified person should check PI trends for ammonia. A smooth increasing trendline, however steep, is likely to be true. Huge step changes or a very noisy trendline are likely to indicate a meter error.

Walk to the effluent plant immediately and put effluent to 100% recycle before investigating further.



- Perform a manual ammonia test on the effluent to corroborate the meter result (instructions listed below for convenience)

1. Take sample from the auto sampler
2. Turn on the Palintest 7100 photometer, select ammonia from the list of tests, press OK.
3. Fill a round glass test tube to the 10ml line with effluent sample.
4. Place tube in photometer (display says "inset blank"). Press OK
5. Remove tube from the photometer. Add one ammonia No. 1 and one ammonia Noo2 tablet. Crush and mix to dissolve completely.
6. Move the cursor to "timer", press OK, then START. 10 mins will count down.
7. After 10 minutes an alarm will sound. Return the tube to the photometer (display says "insert sample") and press OK. Result is given in mg/l.
8. Turn off the photometer and rinse out test tube with tap water.

While waiting 10 minutes for the test, check the ammonia meter for visible problems e.g. split or twisted tubing, empty reagent bottles. Also check sample delivery to the unit by inspecting the submersible pump and inline filter. Confirm at least 2 mammoth rotors are running.

If the manual result is low, then the online meter must be faulty in some way. Technical department will investigate / service / recalibrate as necessary. Return effluent to discharge and notify security that the alarm is erroneous.

If the manual result is high, the online meter is reliable and effluent recycle must be continued until the source is determined and ammonia levels reduce to below 0.6mg/l.

Notify The Environment Manager and/or Technical Coordinator about a high ammonia result. An investigation strategy will then be established.

Power failure affecting the BOD

Purpose

In the event of a major power outage, it is imperative that the effluent treatment plant (BOD) is maintained in a running condition to ensure that no overflows occur direct to river.

It must be the first priority to go direct to the plant and establish whether the electrically driven equipment is still operating.

If the equipment has stopped then it must be restarted after the auxiliary power supply is switched over.

Scope

This procedure covers any such incident within the Bridgend Mill site.

Responsibility

The Mill Controller (Normally the Shift Manager) is responsible for ensuring that this procedure is followed. He will call for the support of other personnel as required.

KPI

This procedure has no KPI associated directly with it, although in the event of a power failure a near miss will be raised a follow appropriate reporting lines.

This procedure is to be reviewed annually and tracked in the Mills Management System plan

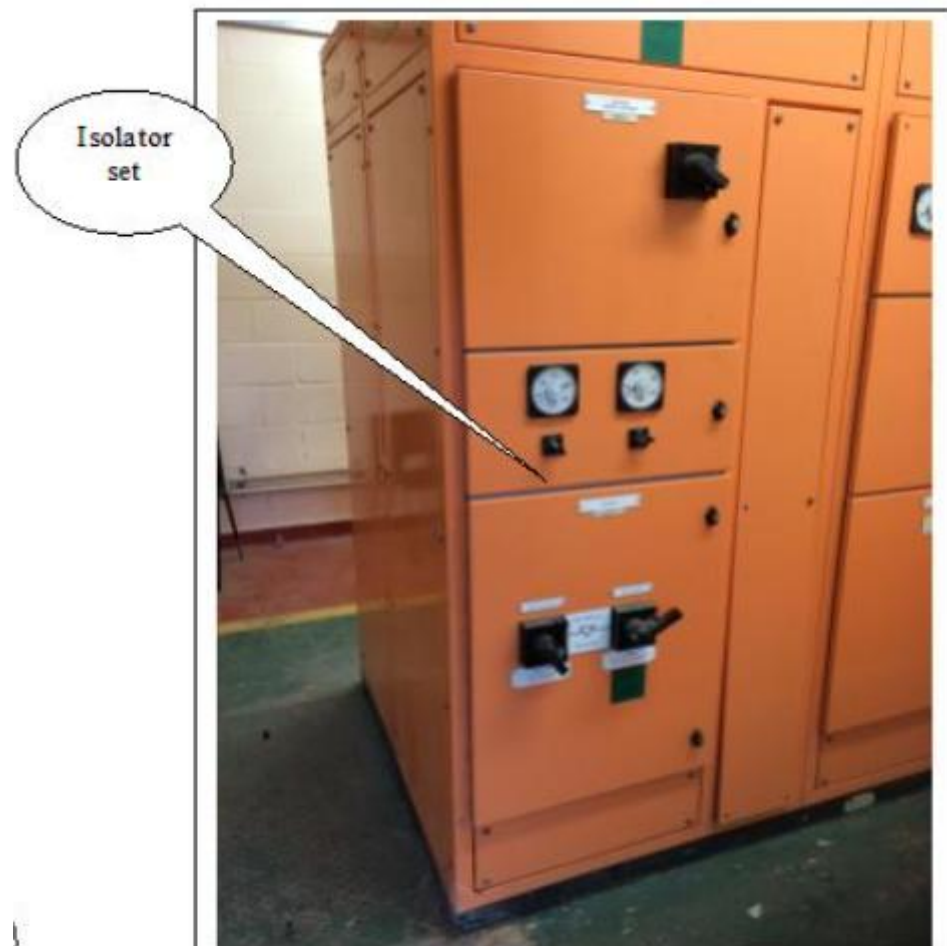
Procedure

The mill controller will establish that the House Set generator is running. If not it will need to be started before checking the BOD plant.

The mill controller will then go directly to the BOD plant together with a competent electrical technician

On entering the switch room at the BOD plant, check all drives to ensure that they are operational.

If the equipment has stopped and supply has been lost, then instruct a competent electrical person to switch in the auxiliary power supply identified below. (This is fed from the House Set generator which should be running in the event of a power failure).





Please note that the auxiliary power supply is 100 amps and will only provide enough power to run the equipment specified below. Restart the following equipment one at a time.

Note: All pumps and motors are fitted with a black reset button. Ensure these buttons are depressed before pressing the start buttons.

One mammoth rota only, either no 4 or no 5



Either M10 or M11 screw pump



Final settlement tank bridge drive



Check to ensure that the equipment starts correctly and that all flows through the plant are restored.

Check the Effluent Chamber/Discharge Point and Manhole 1 to ensure that no overflow has occurred. If it has then contact the Environment Manager immediately.

Once mains power is restored then visit the BOD plant and switch the mains power back on.

THIS MUST BE DONE AS SOON AS THE HOUSE SET SWITCHES OFF AS OTHERWISE NO POWER WILL BE SUPPLIED TO THE BOD PLANT.

To switch back to mains power, visit the BOD switch room and reverse the position of the switches so that the main incomer is now live and the auxiliary incomer is switched off.

Then restart the following equipment one at a time:

Both M10 and M11 Archimedes screws.

M4 or M5 plus M6 or M7 mammoth rotors (2 running)

Final clarifier bridge drive

PI computer in corner of switch room.

Check to ensure that the equipment starts correctly and that all flows through the plant are restored.

Accidental release to effluent

Purpose

The effluent treatment plant treats all water that enters the production main drains. is Nant Gwyn stream which runs through the mill, has two upstream tributaries, one of which passes through a farm. We obviously have no control over what happens to the Nant Gwyn upstream from the mill. Nevertheless, we have voluntarily adopted a

responsibility to protect the river Llynfi whenever possible – but not at the expense of the effluent treatment plant.

Scope

This procedure covers emergency actions in response to effluent plant contamination

Responsibility

Technical personnel, Service Operators, Environment Engineer, Environment Manager.

KPI

This procedure does not have any KPI's directly associated with it, although any spills into the effluent system will be classed as a near miss and follow the relative reporting lines

Procedure

Inspection

There is instrumentation monitoring the Nant Gwyn. Its quality can be assessed using the data recorders or assessed by visual inspection at least twice per day as part of the Effluent Treatment Plant routines for the service operators and lab personnel. This procedure also relates to any casual observer of the Nant Gwyn. The Nant Gwyn is a very clean stream by nature, except of course with heavy rain and high flow. If the colour, odour or appearance is unusual, this procedure must be followed without delay.

Petrochemicals – e.g. Oils, diesel, kerosene, lubricants

Sodium hypochlorite

Ecotoxic chemicals – e.g. Kymene, biocides, softeners, perfume oils

Other chemicals

Petrochemicals

The majority of floating oil etc will accumulate within the central drum of the primary clarifiers and be contained there. It must be removed promptly with an oil skimmer, oil-absorbent mats or socks. High water flows from the mill can overflow the central drums thereby releasing all captured oils etc.

Arrange disposal of recovered oils with a licensed disposal company.

Technical dept. will monitor final effluent and primary sludge for contamination. If found in final effluent, 100% effluent recycle is initiated until clear. If found in pressed sludge, it must be disposed of as hazardous waste, rather than used for animal bedding or agricultural landspreading.

Sodium hypochlorite

The effluent plant will cope with volumes of 200 litres or less of sodium hypochlorite with no intervention (calculation detail below). For accidental releases greater than 200 litres, follow these steps without delay.

Enlist a team of at least 2 people, preferably more, to manage the situation.

Immediately stop Archimedes screw M1. The goal is to not let bleach reach the oxidation ditch, where it will kill the bacteria. The balance tank has more than 3 hours' worth of running capacity.

Use chlorine detector solution (available from the lab or Department B) to determine how far through the system the bleach has travelled.

Try to establish the total volume of bleach released. 5kg of sodium thiosulfate will neutralise 100 litres of neat bleach. Roughly calculate the quantity of sodium thiosulfate needed.

Start dosing sodium thiosulfate into both the primary effluent distribution chamber and Manhole 1. Pour the crystals directly into the chambers. They will rapidly dissolve into the water that flows over them.

Use the bleach detector solution to regularly check primary clarifiers and balance tank. Stop dosing sodium thiosulfate when satisfied that all the bleach has been neutralised.

Restart Archimedes screw M1

Put final effluent to 100% recycle as a precaution.

If any bleach reached the oxidation ditch, it is likely that a spike of ammonia will soon follow.

Technical dept. will monitor ammonia and chlorine levels and biomass health.

Calculation of harmful bleach dose (bleach strength = 15% free chlorine)

$$\frac{3.0 \text{ mg/l (Cl}^{-}\text{ EC50)} \times 10,000\text{m}^3 \text{ (mobile volume of clarifiers 1\&2 + oxidation ditch)}}{1000 \times 15\% \text{ (bleach strength)}} = 200 \text{ l}$$

Ecotoxic chemicals



Referring to a chemical with a dead fish hazard symbol on its container or SDS.

Immediately stop Archimedes screw M1 to prevent the spill from reaching the oxidation ditch.

Try to establish the volume lost to drain. If unknown, assume the maximum possible according to container size and quantity remaining.

Obtain SDS for the material. Check section 12 “Ecological Information” for bacterial inhibition or activated sludge inhibition data (EC50). The value in mg/l multiplied by 10 is roughly the number of litres that will harm the biomass in our particular plant. If the volume lost is less than this value, do nothing further. Be aware that this multiplication factor will change if only one primary clarifier is in use, from 10 to 8

Open the circulator drain valve to quickly send a large volume of water down to the effluent plant. The goal here is to dilute the ecotoxin as much as possible in the primary clarifiers and balance tank before the latter is full.

Once the balance tank is almost full (about to overflow into the RAS pit), re-start Archimedes screw M1.

Put final effluent to 100% recycle as a precaution.

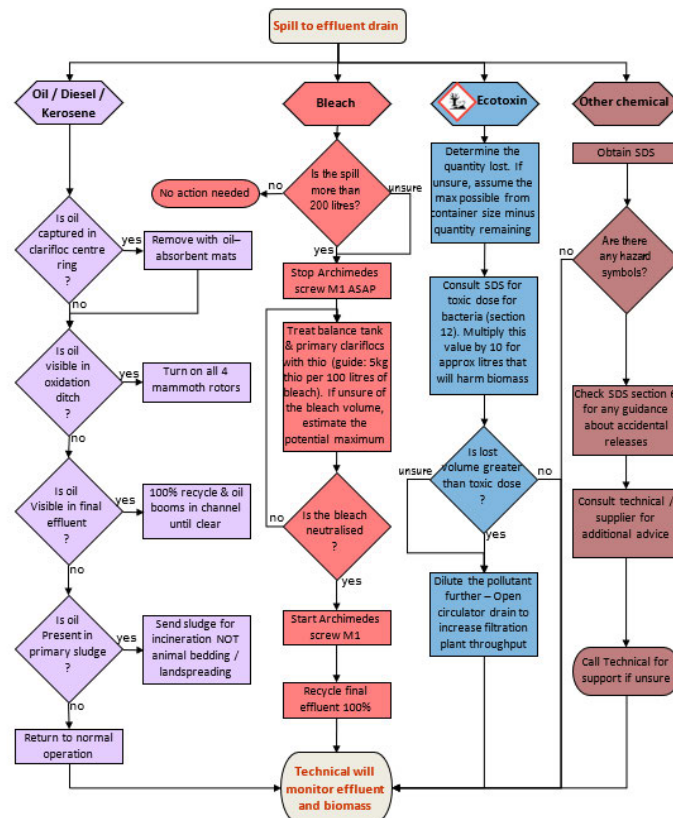
Technical dept. will monitor ammonia and chlorine levels and biomass health.

Harmful dose, $l = (EC50 \text{ mg/l} \times 10,000 \text{ m}^3 \text{ (mobile volume of clarifiers 1\&2 + oxidation ditch)}) / (1000)$

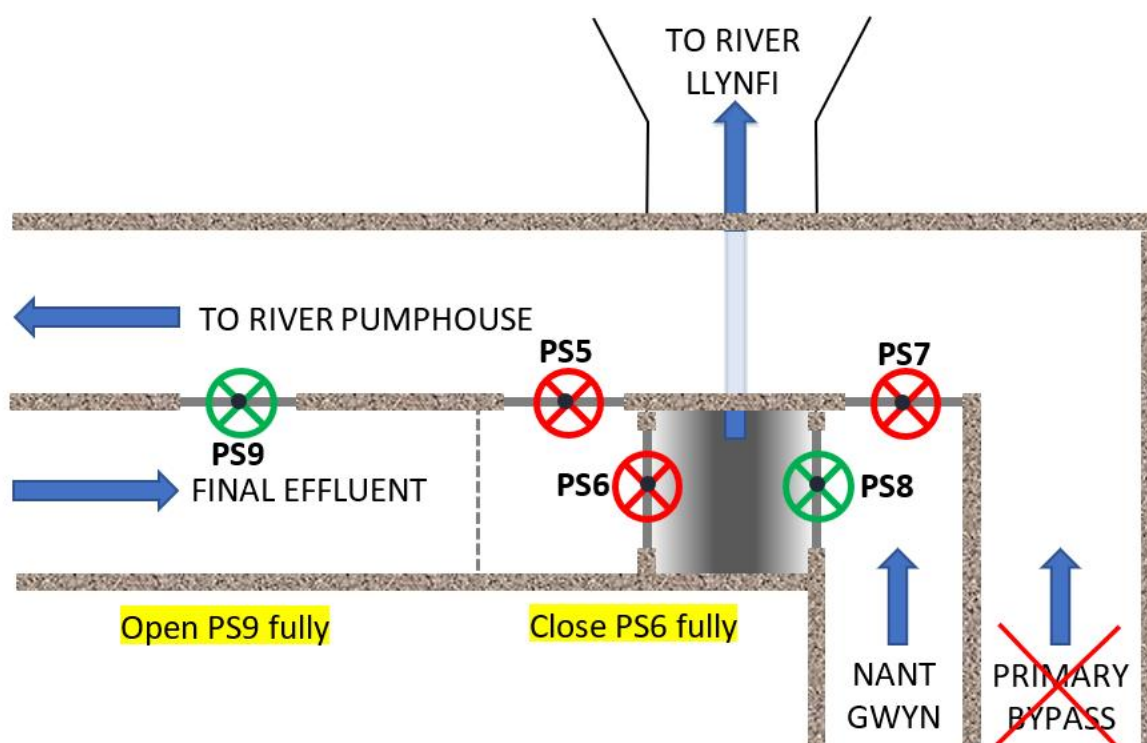
Other chemicals

If a chemical doesn't carry an ecotoxic hazard label, it is not likely to cause serious harm to the effluent plant. However, undesirable effects may still manifest, such as intolerable foaming, flocculated or floating fibre, high/low pH, high COD, high turbidity etc.

Obtain SDS for the material(s). Check section 2 for any hazard labels. / guidance on accidental release.



Actions at effluent chamber

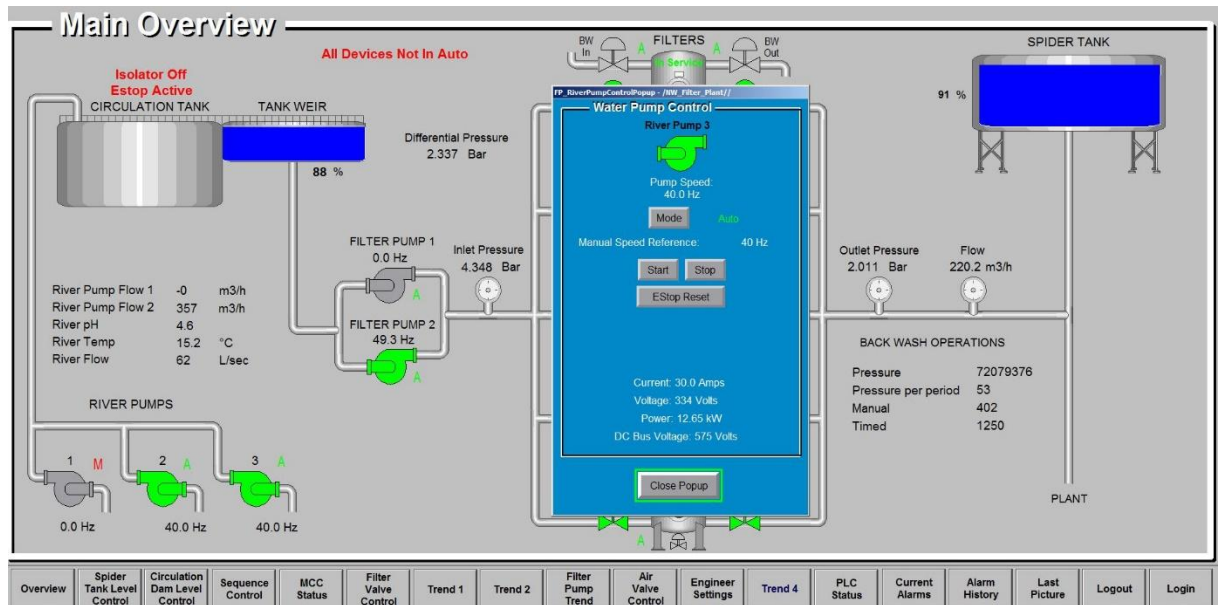


At the River Pump House

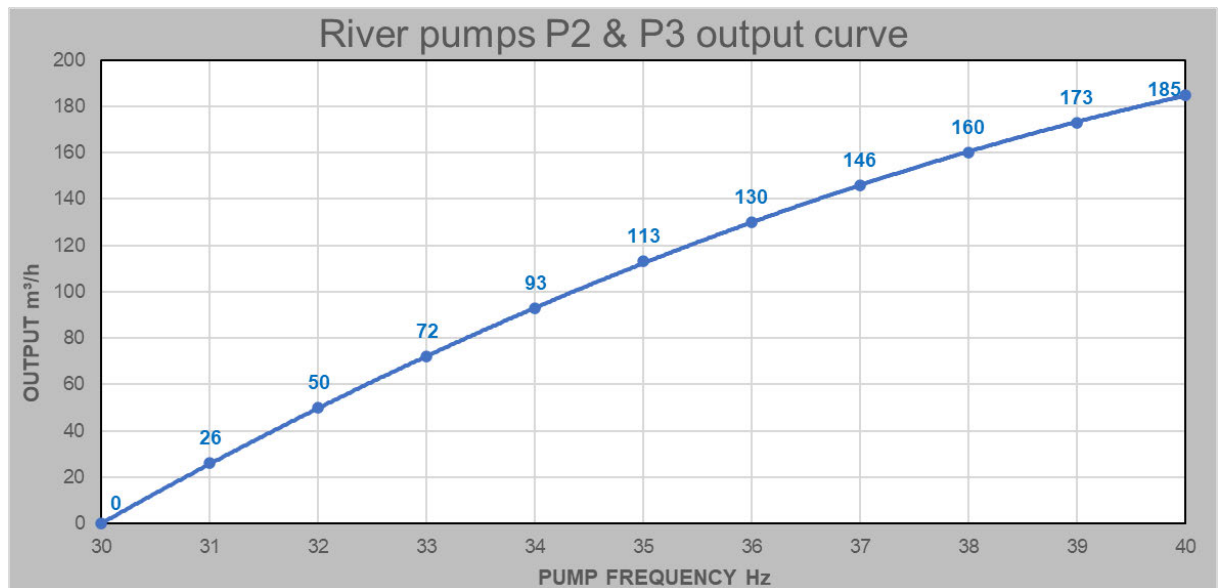
The river pump house autovalve ensures that no recycled water backflows into the river but if the flow is greater than mill requirements, the level will eventually overflow the recycle channel and join the discharge to river. To prevent this from happening, follow the steps below.

At the water filtration plant

Check, via PI or flow meter readings, that the recycle flow is less than the river pump flow. If not, increase flow manually by the following method:



From the main overview, check “River Pump Flow 2”. If the flow is insufficient to recycle all the final effluent, start either P2 or P3 in manual (whichever is not running). Click on the pump and a pop-up window will open. Enter the pump frequency required, click start and close the pop-up. Use the chart below to check the pump frequency needed for the required flow.



Try to establish the volume lost to drain. If unknown, assume the maximum possible from the container size minus the quantity remaining.

Consult technical department or chemical supplier for additional advice – e.g. potential antidotes, acid/base neutralisers, anti-foams etc.

Complaints procedure

Purpose

This procedure outlines the way in which environmental complaints are processed and handled at Bridgend.

Scope

This procedure applies to all complaints directed at the Wepa Bridgend Mill, this does not apply to any other Wepa owned Mills

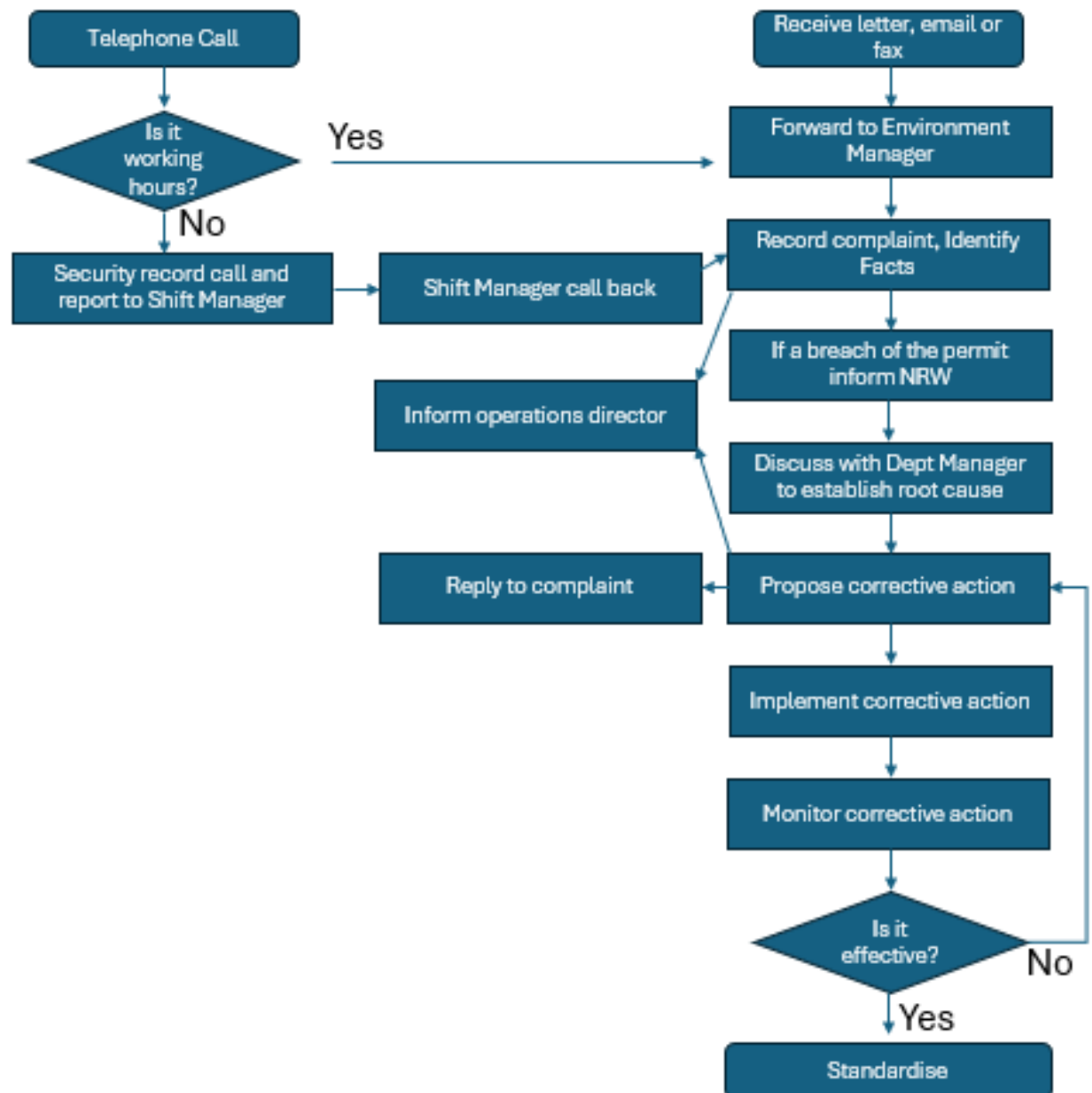
Responsibility

The environment manager is responsible for implementing and controlling this procedure and ensuring that it is reviewed on a regular basis.

KPI

The amount of complaints received per month and per year will be reviewed in regular meetings, any complaints raised will also be discussed in the morning meetings.

Procedure



Stack Emission Monitoring

Purpose

As part of the EPR permit there is a requirement to monitor certain emissions to air from points located around the papermaking and boiler processes. This procedure describes the process to meet this requirement.

Scope

This procedure covers the monitoring of the emissions and consents for emission points on Jupiter and the stacks in the CHP plant at Bridgend only.

Responsibility

The environment manager is responsible for ensuring that the stake emission points are monitored in compliance with our ERP permit and that the procedure if followed when being complete

KPI

There is no KPI associated directly with this procedure but if stake monitoring and testing was not completed it would result in a breach of the permit and would be recorded and discussed in relative meetings.

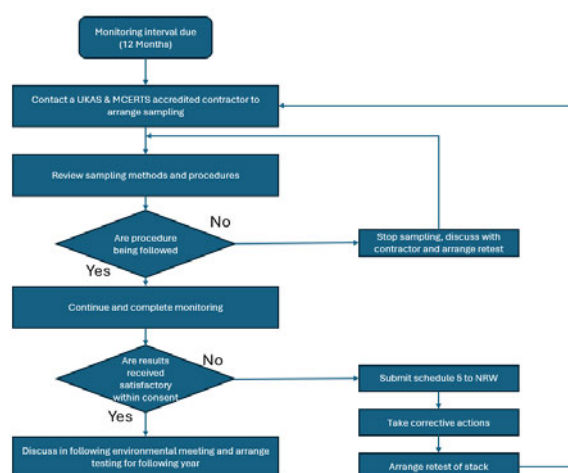
Procedure

	A11	A14	A15
Oxides of Nitrogen	40mg/m3	100mg/m3	100mg/m3
Carbon Monoxide		10/mg/m3	10mg/m3

A11 - Neptune Machine Hood Exhaust Vent

A – Boiler 1

A – Boiler 2



Environmental Redundancy

Purpose

This document will outline the redundancy within Wepa to continuously measure aspects of the permit relating to water compliance.

Scope

This procedure only covers the EPR/EP3738NG Permit

Responsibility

Role	Responsibility
Richard Lewis	Manage compliance to the permit
Matthew Bradwell	Manage Assets
Richard Mordecai	Assess Data
ESO	Report of faults

Related Documentation

Environmental Permit - EPR/EP3738NG

KPI

Any breakdown of environmental assets will be reported as a near miss which is documented in the environmental KPI file.

Procedure

Measurement of water flow & volume through flow devices

In the event of a failure to discharge flow meter the sites environment & electrical team will work to bring the system back online as soon as possible, failing the systems functionality the recycle lines flow meter will be installed to the discharge line to ensure compliance with the permit. This will be done by disconnecting and demounting the recycle line flow transducer and replacing it into the discharge line. This will then be calibrated by the sites technician prior to use.

[FlowCERT Lite | Pulsar Measurement](#)

[dBMACH3 & dB3 | Open Channel Flow | Pulsar](#)

Measurement of Ph throughout discharge of water

In the event of a failure to the Ph probe or monitor the flow is to be recycled immediately to ensure no unknown material is discharged to river. The effluent system is then to stay on recycle ensuring no effluent is discharged to the river. Spot samples will also be completed while on recycle to maintain current readings. Wepa has a strong working relationship with Endress & Hauser the supplier of the probe and meter in which both can be supplied within 24hrs. The units are also readily available on RS for delivery.

[High-performance field transmitter with great ease-of-use | Endress+Hauser](#)

[Memosens CPS11E digital pH sensor for standard applications | Endress+Hauser](#)

Measurement of Temperature throughout discharge of water

In the event of a failure to the temperature probe or monitor the flow is to be recycled immediately to ensure no unknown material is discharged to river. The effluent system is then to stay on recycle ensuring no effluent is discharged to the river. Wepa has a strong working relationship with Endress & Hausser the supplier of the probe and meter in which both can be supplied within 24hrs. The units are also readily available on RS for delivery.

Measurement of COD throughout discharge of water

In the event of a failure to the COD probe or monitor the flow is to be recycled immediately to ensure no unknown material is discharged to river. The effluent system is then to stay on recycle ensuring no effluent is discharged to the river. Wepa has a strong working relationship with Endress & Hausser the supplier of the probe and meter.

Use of Autosampler for 24hr proportional samples

In the event of a failure to the autosampler a mobile pump will be installed into the discharge line, these pumps will run on a fixed flow rate per hour which can be changed to allow a 24hr proportional sample. The pump will then be checked daily to ensure functionality until the autosampler is repaired.

Reporting

All failures of environmental equipment and assets are to be reported via the EAM system and to the environmental manager, technician and engineer to immediate action.

Non Conformance & Corrective Action

1. Purpose

To determine and document a line of communication to report all Environmental Non-conformances, a set procedure to correct the non-conformance and determine the corrective and preventative measures required.

2. Scope

This procedure applies to the Bridgend Paper Mill and no other Wepa owned Mills

3. Definition and Acronyms

NCR	Non Conformance Report
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Responsibility

The Energy & Environment Manager is responsible for determining the nature and source of the non-conformance and then carrying out the procedure below.

Environmental contacts list for emergency situations covering chemical/oil spills, odour problems and out of consent permitted conditions. – S:\Environmental\Environmental Mgt System (EMS)\4.4 Implementation and Operation\4.4.7 Emergency Preparedness and Response.

Water abstraction and discharge over consents will be highlighted by the mill effluent monitoring system and the Shift Manager contacted if problems arise – see EPR 04 procedure.

Spill Containment procedure – EPR 11

Radioactive sources control and management procedure (Site Security Manager)

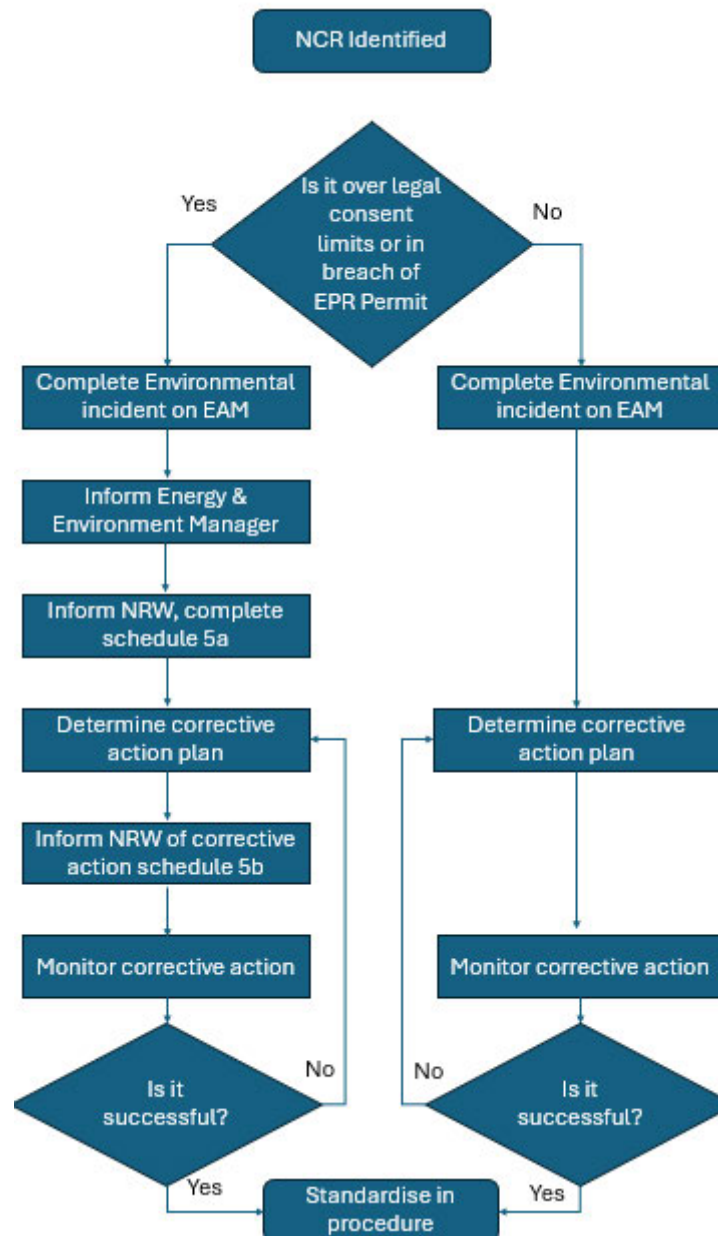
Related Documentation

EPR Permit Schedule 5 Notification Documentation.

KPI

The number of open NCR's are reviewed during regular environmental meetings.

Procedure



Detail of Procedure

- Determine the source and nature of the Environmental non-conformance i.e. is it a legal/over consent or an aspect from general housekeeping or internal audit.
- Contact Natural Resources Wales - NRW (if appropriate) and internal contacts. (See Emergency Environmental Contacts List)
- Determine the corrective and preventive action required and notify the relevant personnel of the action to be taken.
- Where appropriate, submit a Schedule 5 to NRW detailing the source/nature of the Non-conformance and the corrective action that is to be undertaken (see notes below and EPR permit).

- Where the corrective action is not for over consent (NRW) an Incident/Near Miss form should be completed (EPR 23).
- The relevant procedure must then be reviewed and amended to prevent a re-occurrence.

NRW notes from EPR permit

During normal operation, the mill discharges/emissions are controlled within set limits as detailed in the EPR Permit. However due to unforeseen circumstances the operating conditions may result in an Environmental Non-conformance, and therefore an over consent within the EPR requirements.

The Operator is required to notify the Natural Resources Wales (NRW) under condition 4.3.1:

(a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) Inform Natural Resources Wales,

(ii) Take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) Take the measures necessary to prevent further possible incidents or accidents;

(b) In the event of a breach of any permit condition the operator must immediately—

(i) Inform Natural Resources Wales, and

(ii) Take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) .In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

NRW Procedure in detail

Once a non-conformance has been identified which has caused or may cause pollution and/or will result in the mill exceeding its legal consent requirements the following procedure must be followed:

The Energy & Environment Manager must be notified who in turn must then notify Natural Resources Wales initially by telephone.

In the event of his absence, the Senior Process Technologist should be contacted.

An official notification must then be sent to NRW – Schedule 5, Part A immediately as stated in the EPR Permit. For further detail of the Schedule 5 document please refer to EPR Permit.

Schedule 5 documentation should be filed under S:\Environmental\Environment Agency (NRW)\Schedule 5 Notifications.

This procedure will affect all Environmental aspects on site.

Once NRW have been contacted the relevant control procedures must be implemented which will be within the relevant Aspect in the EMS manual, (see operating control procedures).