

Compliance Assessment Report

Report ID:
CAR_NRW0032017

This form will report compliance with your permit as determined by an NRW officer

Site	Nantycaws Landfill EPR/CP3735PB		Permit Ref	CP3735PB	
Operator/Permit holder	CWM Environmental Ltd				
Regime	Installations				
Date of assessment	06/07/2017	Time in	10:00	Out	14:30
Assessment type	Audit				
Parts of the permit assessed	Leachate				
Lead officer's name	Taylor, Richard				
Accompanied by					
Recipient's name/position	Sean Gallagher/ Site Director	Date issued	11/08/2017		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
--	--------------	-----------------------

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
------------------------------------	----------	---	----------

If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

NRW undertook a scheduled site audit at Cwm Environmental on 7th July 2017.

Present – Sean Gallagher – Cwm Environmental Operations Director, Richard Taylor- NRW Site Inspector.

The audit took place on a hot July day with temperatures of 25 deg C. Slight wind was blowing from the SW. Visibility was clear with little seagull, crow or vermin activity. No odour was observed from the landfill site at the time of the inspection.

The inspection covered 3 main areas.

- 1. Current site status**
- 2. The leachate management**
- 3. Permit variation to reduce the monitoring regime.**

- 1. Current status** – Site has not taken any waste to the landfill tipping face since December 2016. The site remains under temporary cover with 1 tonne piles of earth holding down a geo membrane which covers cell 7. The piles of earth have now started to grow vegetation because of the length of the time that they have been in place. Site confirmed that the tipping face could be ready to receive fresh inputs in less than 48 hours were they to go ahead. The waste is currently being diverted to other more profitable areas of the business.



Pic 1. The tipping face of the current operational cell 7. The site has been temporarily capped off since Dec 16 and weighed down by 1 tonne piles of earth which have now sprouted vegetation. Seagull and pest activity was at a minimum at the visit and little to zero odour was observed coming from the landfill site.

2. **Leachate management.** – Leachate management is one of the four main areas of potential environmental pollution from the site and is heavily regulated. The others are emissions to groundwater, surface water and landfill gas to air. The permit requires leachate to be analysed each month for hazardous substances namely Chloride, Ammoniacal Nitrogen, Cadmium, mecoprop, diethylphlate, dichloromethane, and 4-methylphenol plus several others. As such all site leachate is collected in the main leachate holding lagoon on site and is fed by a network of pipes which drain the sites 7 cells.



Pic 2. Site main leachate holding lagoon. At the time of the inspection the temperature was hot. No rain had occurred for several days resulting in the lagoon being nearly empty.

The lagoon is emptied on an ad hoc basis triggered by observations from site staff. The leachate is tankered away to a nearby permitted site for disposal in their effluent treatment plant. There is a dirt track access road for the tankers to access the connection hoses. The trucks use their own pumps for the transfer. The area where this takes place was examined.



Pic 3. The tanker connection takes place within an engineered bowl which is geotextile lined and flows back to the lagoon. No spillage evidence was seen in this location and the system in place was robust.

Each cell has a leachate pump which is automatically activated through a float system similar to a toilet cistern. At the time of the inspection pump (cell 7) was activated and a small amount of leachate was observed to be pumped from cell 7 to the leachate lagoon.



Pic 4. Cell 7 leachate pump control. This is one of 14 similar boxes located between phase 2 and 3. The boxes each log the hour of operation which form the basis of their scheduled maintenance regime. The power supply for the pump control house is via an external generator which is run off diesel which uses approximately 300 litres of diesel per week. Site have previously conducted a feasibility study to run this operation off grid electricity but on balance the generator option is preferred at present.



Pic 5. External diesel generator to the leachate pump house. This is filled on a weekly basis and uses approximately 300 litres of diesel per week. Service schedule and hours run are shown on the service window. Site needs to ensure that this essential piece of equipment remains within the service schedule. Lack of maintenance on essential equipment constitutes a permit non-compliance to condition 2.3.5 where ***all plant and equipment used in the permitted installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.***

Note the service schedule requires the generator to be serviced after 500 hours running. This is 20.8 days of constant running. The day of the inspection was 6th July – and the last service was 19th May – some 47 days after the last service. The time difference suggests that the next service may be imminent.

Therefore to ensure compliance is met site are required to provide information on the hours run by the next service of this generator.

Action – Site to confirm scheduled service of this generator remains within the service schedule.



Pic 6. M2B leachate well reacts to the rising leachate level and pumps off the excess to the main holding lagoon. The well pump is powered by an electricity junction box.



Pic 7. M2B electricity junction box. Site needs to ensure that access remains open to site infrastructure by clearing back the obstructive vegetation.

Once filled, the tanker goes to the site weighbridge where weighed in and weighed out measurements are confirmed. Paperwork is generated for each transfer and held on site. **Note – permit condition 4.1.1(b) requires this to be 6 years.** Monthly totals are recorded for accountancy purposes as well as permit reporting requirements for NRW. The accounts for May 2017 were chosen at random for inspection. These showed 28 journeys took place from 18th – 26th May. Interestingly the trips covered 4 active days where several trips were made by the same tanker on the same day. May totals were 794 tonnes of effluent left site this way and were adequately accounted for. The average tanker load was 28.364 28.364 tonnes.

Site water runoff drains to a series of holding ponds. These were checked and found to be very low flowing due to seasonal variation.



Pic 7. Surface water ponds drain site at the SW corner of the site. Access to the site showed signs of vegetation control.



Pic 8. The water flows out of the lagoon into a tributary of the afon y bantwen. At the time of the inspection flows were constant and clear without odour.

NRW Note - Leachate from the site is subject to tight controls on the hazardous substances (list 1) found within it. However there are currently no directly imposed permit limits. Instead there is a control measure in place which is set there to alert the site and the regulator to a possible problem. NRW will not impose a breach of permit conditions for measurements above these reported limits except the leachate levels, but will impose a breach if the site fails to inform NRW of a breach of the limit within 7 days of site becoming aware of it- as referenced by permit table S4.9.

3. **Permit Variation** – The site inspector RT informed site that they need to apply for a permit variation through the links on the NRW website. This is a joint sector approach for all landfill sites in Wales. Site are in the process of drafting a new HRA assessment to be included within the variation application. The variation will take the form of an application to reduce the monitoring burden.

The hydraulic risk assessment (HRA) should include an update conceptual site model (CSM) due to the site undergoing significant fill and engineering since the last 2008 HRA CSM. Therefore to support the permit variation, we will require an updated CSM to be included with the application. The CSM should include the outstanding information detailed below.

- a. Map of all the phases of landfilling at the site (to include past and future landfilling areas) with the context of the surrounding area, i.e. outside of the site boundary. The maps must include all the local streams within a 300 m radius of the site boundary and all monitoring locations as well as internal drains.
- b. Update the conceptual site model for the existing and future landfilling areas. This should include a summary update to the 2008 HRA as the site has evolved to its present condition and include geology and construction details. The cross section from SLR 2004 Drawing HRA1 should be updated to include the latest cells and proposed future cells.
- c. A table with all the monitoring boreholes details, this should confirm previous misunderstanding on the ground surface and groundwater levels at the monitoring boreholes. Table headings to include:
 - i. Borehole Name;
 - ii. Ground level (mAOD), iii; Top of collar (mAOD
 - iii. Base (mAOD and m below top of collar or mbgl)
 - iv. Geology
 - v. Screen selection
 - vi. Water levels minimum, mean and maximum (as either mbgl or mAOD).

1. **Summary** - No permit breaches were observed in the audit. The tipping face is temporarily closed which has led to a reduction in the immediate risk to the environment from surface level detritus. Site was clean and tidy and NRW have not received a complaint against the site since Feb 17th 2017 which was an unsubstantiated odour complaint.

Management needs to remain vigilant in the maintenance of infrastructure notably vegetation blocking access to monitoring equipment.

NRW will not score exceedances in leachate pollutants but will score leachate level exceedances and failure to notify us of haz substances in leachate exceedances.

Site are to apply to NRW permitting for a permit variation to reduce their monitoring burden using a new HRA assessment which addresses the outstanding issues listed above.

2. Leachate Mecoprop Update – 11th Aug 2017.

Site submitted a schedule 6 notification to NRW on 9th Aug 17 which contained details of a suspected 'breach of the limits' for mecoprop in sump1/2 leachate. The permitted limit for Mecoprop is 0.071mg/l and the reading was 0.11mg/l. However, permit variation 004 clarified that this 'limit' was in fact a 'trigger level' which is not a breach. The trigger level is placed as a tracking tool to enable site and the regulator to monitor the leachate quality coming from the site. Reference EPR CP3735PB V004 table S4.9 specification 2 where '(exceeded) trigger levels shall be notified in writing within 7 days of the result being received by the operator'. Therefore the schedule 6 is not a breach of permit, but a warning that the trigger level has been breached which now requires further management to bring this down under the limit.

Site informed NRW within 24 hours of the detection and all site leachate is tankered away for treatment at a licensed facility nearby. No non-compliances raised. End.

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0032017**

This form will report compliance with your permit as determined by an NRW officer

Site	Nantycaws Landfill EPR/CP3735PB	Permit Ref	CP3735PB
Operator/Permit holder	CWM Environmental Ltd	Date	06/07/2017

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. Health and Safety Executive, local authorities) on environmental issues
- Carrying out statistical analysis, research and development on environmental issues
- Providing public register information to enquirers
- Investigating possible breaches of environmental law
- Assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.