

	EPR Compliance Assessment Report	Report ID: SP3531SK/0254230			
This form will report compliance with your permit as determined by an NRW officer					
Site	Gwent Waste Management Centre EPR/SP3531SK		Permit Ref	SP3531SK	
Operator/ Permit holder	Tradebe Gwent Limited				
Date	02/12/2015		Time in	10:00	Out 15:30
What parts of the permit were assessed	Follow Up on Actions From Mar and June 2015 Inspections and pre OMA assessment of Monitoring Locations				
Assessment	Procedure review	EPR Activity:	Installation	X	Waste Op
Recipient's name/position	Mark Griffiths				
Officer's name	Andi Kemp		Date issued	14/12/2015	

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). 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			Condition(s) breached
a) Permitted activities	1. Specified by permit	A	
b) Infrastructure	1. Engineering for prevention & control of pollution	A	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	A	
	4. Containment of stored materials	A	
	5. Plant and equipment	N	
c) General management	1. Staff competency/ training	A	
	2. Management system & operating procedures	A	
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	A	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	A	
	2. Noise	A	
	3. Dust/fibres/particulates	A	
	4. Pests, birds & scavengers	NA	
	5. Deposits on road	A	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	N	
	2. Records of activity, site diary, journal & events	A	
	3. Maintenance records	A	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),
A = Assessed (no evidence of non-compliance), N = Not assessed, NA = Not Applicable, O = Ongoing non-compliance – not scored

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Total No Breaches is greater than zero, then please see Section 3 for details of 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 (e.g. 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 suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

Inspection and Actions Follow Up Tradebe: Dec 2nd 2015

Purpose of Compliance Assessment

The purpose of this inspection was to discuss with the operator progress on actions set in the March 2015 and June 2015 inspections. The operator has submitted a variety of evidence in order to discharge these actions.

From the March 2015 inspection, some actions were closed out by the June 2015 inspection, some were extended and some were created. At the end of the June 2015 CAR1 form the revised status was confirmed. Since then the operator has submitted further documentary evidence in support of closing out actions.

Below are the open actions only that were due for response by either 31st July 2015, 31st Aug 2015, 31st Oct and 31st Dec 2015 and cover extensions from 130315 visit and new actions from 180615 visit.

The monitoring points were also inspected with a view to conducting an Operator Monitoring Assessment sometime in the first half of 2016.

Action 1 Tradebe 130315
Action 5 Tradebe 130315
Action 8 Tradebe 130315
Action 9 Tradebe 130315
Action 10 Tradebe 130315
Action 12 Tradebe 130315
Action 1(i) Tradebe 180615
Action 1(ii) Tradebe 180615
Action 2(i) Tradebe 180615
Action 2(ii) Tradebe 180615

Action 1 Tradebe 130315

This was extended to 31st July 2015 and the operator has submitted the following to close this out: email 28th & 30th July 2015 and a DCWW ammonia analytical procedure document. This action was raised because the permit requires *ammonia*, *unionised*, as N, to be reported at sewer emission point S1, but the operator had been reporting total ammonia. The DCWW procedure revealed that the sample is analysed for total ammonia, then the operator should convert by a pH adjustment table to the unionised form and a further adjustment is also required in accordance with the temperature of the effluent. This is then finally converted to N. The equilibrium of NH₃ and NH₄⁺ is affected by pH and temperature in the following way – at pH 8 (0 deg C) = 0.8% unionised; at pH >10 (zero deg C) = increasing from 60% to 99.9% unionised. If the temperature increases to 15 deg C, the % NH₃ at pH 8 = 3% rising to 99.9% at pH >10. The operator has amended the data interpretation and so now unionised ammonia N (the more toxic form in the aquatic environment) is reported. The operator must measure the temperature

of the effluent as applying a conversion based on a low effluent temperature compared to the actual effluent temperature will under report unionised ammonia. As some graphs for temperature conversion are in 5 degree steps, it is important to convert the result accurately with reference to the actual temperature of the effluent. The recent reported monitoring data submissions reflect this adjustment from total ammonia to the unionised form:

Feb 2015 – total ammonia = 230mg/l
87.7mg/l

July 2015 – unionised (as N) =

Action 1 Tradebe 130315 Closed – based on operator accurately converting total ammonia to unionised, based on temperature and pH at the time of sampling and converting to Nitrogen.

Action 5 Tradebe 130315

This action was extended until 31st July 2015 and concerned the sites waste sampling, assessment and classification of waste filter cake destined for landfill. To close out this the operator submitted an email on 31st July 2015 with attached site procedure: *A Sampling and Testing Protocol For The Assessment Of Hazard Status Of Gwent's Filter Cake*. This guidance references the most up to date hazardous substances and hazardous property identification guidance in the form of joint regulator guidance: WM3 (which in turn is aligned to the CLP). The procedure covers sampling, sample custody, analysis and external verification. The processes that generate the filter cake are a batch process and therefore a representative sample can be obtained from an adequate quantity of filter cake. The whole treatment tank is filtered through one of the presses, the filtrate is then sent passed the in line sampling equipment and through the flow meter to S1 sewer discharge. The treated effluent is discharged through the press after each batch has finished treatment, therefore the composition of the dewatered sludge should be homogenous.

The analytical suite the filter cake sample is subjected to is comprehensive and covers pH, moisture, metals and metalloids, PAH, phenol, TPH, VOCs, SVOCs, ammonia and inorganic anions such as phosphate, sulphate, chloride, cyanide. There are some other parameters that are required for the characterisation and leaching tests before going to hazardous landfill, that are not in the procedure, such as C6 – C40 hydrocarbons (which could be speciated to include BTEX, PAH and BaP), PCBs, TOC and DOC and physio – chemical parameters such as acid neutralisation capacity. If the site have correctly characterised the waste as the non hazardous mirror entry 190506 (term sludge is taken to include filter cake in Ch19), then numerical WAC does not apply, so the determinand suite the site currently adopt is probably broad enough in scope.

The attached procedure describes the principal stoichiometric chemical reactions involved at the treatment site that lead to sludge / filter cake production. Also included are various hazard statement codes and the linked hazardous property codes for a variety of worst case compounds and their hazardous property threshold. This is a piece of work that the regulator will look at in isolation in more detail following the site assessment process through, including how the operator liaises with the landfill operator.

Recommendation 1 Tradebe 021215: The operator should ensure any analytical suite they use to characterise waste that has an onward fate, includes sufficient parameters to include all potential hazardous substances and properties each batch of waste may contain. **Action 5 closed.**

Action 8 Tradebe 130315

This action was extended until 31st August 2015 and was raised because the operator was not recording all the maintenance activities that were scheduled to take place for a specific piece of

equipment – in this case Tank T10 maintenance records covering emptying and desludging. The actual activity, it appeared, had been carried out, just not recorded in the appropriate maintenance system. The site supplied the following evidence to discharge this condition: an email 29th August and attached documents: General Plant Inspection Register (Plant Item Scrubbers SC1 – SC3), Tank Inspection Register (Plant Item T10). These documents record what was done and when and can be cross referenced to the master Service & Maintenance Records, which detail an equipment description, specification of materials used and levels of maintenance activity.

The operator had completed formal tank inspections by an external contractor in August 2015. The output of this was given to Tradebe national engineering department for them to recommend interventions and timescales. It is hoped that all equipment, especially any identified as critical environmentally, i.e. primary, secondary and tertiary containment, level alarms, shut off valves, sumps, pipelines, boilers, relief valves, standby kit, pressure systems, temperature control systems and pollution monitoring and abatement equipment, benefits from a tiered planned preventative maintenance regime, designed in accordance with manufactures / installers recommendations and fit for purpose for the duty served.

Recommendation 2 Tradebe 021215: The operator should ensure all kit is covered by a maintenance programme and that maintenance is performed by persons trained and competent to do so. **Action 8 closed.**

Action 9 Tradebe & Action 10 Tradebe 130315

These actions was extended until 31st August 2015 and 31st October respectively and concerned ensuring the tertiary containment, i.e. concrete surfacing, kerbs, sills, bunds and sumps are inspected fully, maintained and a rolling programme of risk based repairs is drawn up, taking on board current guidance (e.g. CIRIA C736). In support of discharging this the operator sent an email on 29th August and included Containment Inspection Register sheet and Service and Maintenance sheet for plant roads, kerbs and expansion joints.

The operator has confirmed they have a copy of the CIRIA guidance and by now including this tertiary containment formally in their PPM system, the site have (i) inspected all roads, bays and sumps (e.g. the filter cake bay sump, transfer station sumps and treatment building sumps); (ii) have brought in external assessors to benchmark the state of the infrastructure; (iii) including the infrastructure on the maintenance schedules and recording routine site staff based inspections; (iv) have identified areas that need repair and are making Capex proposals. The operator provided evidence of the sump, concrete and road inspections and maintenance schedules; see emails 29th August and 30th October 2015. **Action 9 & 10 Tradebe 130315 closed.**

Action 12 Tradebe 130315

This action was extended to 31st August 2015 and required the operator to amend their SPMP to reference the appropriate permit conditions and to use existing data to compile a site baseline (Site Condition) report. The site can also revert to the lifetime records approach as mentioned in the Mar 2015 CAR1. IED will bring mandatory groundwater and soil testing on 5 year and 10 year intervals respectively.

Recommendation 3 Tradebe 021215: The operator should compile their SCR following RGN9 and H5 guidance. The site should also manage, maintain and protect the groundwater borehole installations so they can be used for the IED monitoring, are used to take samples following best practice (well purging, ionic balances etc.), are fit for purpose, can yield actual samples, are not damaged and do not represent a pathway for spills to groundwater. **Action 12 closed.**

Action 1(i) & (ii) Tradebe 180615

This two part action was extended to 31st July 2015 (part (i)) and 31st Oct 2015 (part (ii)) and required the site have their flow monitoring arrangements assessed under the MCerts scheme to ensure that the flow meter and monitoring arrangements meet the scheme requirements and that the complementary quality management system was also audited and if successful would lead to a site conformity certificate, i.e. site have MCerts standard effluent flow monitoring. The evidence to be provided to the Regulatory Officer.

The operator had arranged for an external assessor to come in and inspect the flow arrangements (were awaiting PO) and Siemens had attended site to calibrate the flow meter – this is part of routine maintenance and doesn't in isolation fulfil the MCerts flow monitoring requirements.

On site on 2nd Dec 2015 MG Tradebe enquired whether (as advised by the external assessor) the flow arrangements had to be compliant with the whole of the MCerts scheme requirements – this was due to wording in the permit:

“Monitoring equipment.....shall have MCerts certification or MCerts accreditation (as appropriate) unless otherwise agreed in writing by the Agency.”

AK advised MG that NRW would require full compliance with the MCerts flow monitoring scheme as long as the requirement to measure flow remains in the permit. MG will now advise the external assessor so that the appropriate inspections can be made leading to the issue of the site conformity certificate. **Action 1(i) & (ii) 180615 remains open and is extended until 31st March 2016.**

Recommendation 4 Tradebe 021215: The operator should ensure that any assessors / inspectors used for the flow monitoring arrangements are appropriately accredited and certified under the requirements of SIRA who oversee the scheme.

Action 2(i) & (ii) Tradebe 180615

These actions concern the transfer station sump, to which the internal individual waste storage bay sumps drain. The actions require the site to ensure this item is on the PPM schedule and benefits from appropriate inspection and maintenance and recording thereof. The site drainage plans need to be updated to reflect the transfer station waste bay drainage, which is separate from the roof water drainage system. The drainage plan amendments were also to include other aspects as mentioned in the Mar 2015 CAR1, e.g. treatment building roof drains and where they enter the adjacent reeve / ditch along Corporation Road. Part (i) of this action was due by 31st July, part (ii) is due by 31st Dec 2015. In support of closing out these actions, MG Tradebe submitted an email and attachments relating to the transfer station pump. This documentation states that the individual sumps have been emptied and inspected. The accompanying specification sheet states that the age of the plant is 1998 and it supplies the sumps volume - **what is not clear is the main sump outside the transfer station – what is it made of and what is its capacity?**

These two actions remain open until evidence is supplied showing clearly the specification and capacity of the external catch-all transfer station sump and the drainage plans are updated. These actions are extended to 31st Mar 2016.

The summary of the position with regard to actions from March and June 2015 inspections is:

Actions 1, 5, 8, 9, 10 & 12 130315 - **all closed.** This means all actions from Mar 2015 are closed.

Action 1 (i) & (ii) 180615 – extended until 31st Mar 2016

Action 2 (i) & (ii) 180615 – extended until 31st Mar 2016

Inspection of Monitoring Points

The operator is required to monitor the following points:

S1 – emissions from the treatment process to DCWW sewer – flow and a variety of parameters are required to be monitored, although there are no limits set. The site discharge to sewer under the authorisation of a DCWW Trade Effluent Consent.

SC1, SC2, SC3 and SC5 – the pH of the primary acid and alkali abatement scrubbers and the secondary catch all sewer is monitored on a daily basis. It was noted in the Mar 2015 CAR1 that the ammonia treatment process and therefore the associated scrubber, SC5, were never put into practice – this is always reported blank.

In view of the up and coming Operator Monitoring Assessment (sometime between end of Mar 2016 and end of June 2016), AK wanted to see the emission points and monitoring locations. MG showed AK the treated effluent flow from the final bulk tank, through the filter presses, with the filtrate flowing through the in line monitoring equipment and then through the flow meter, before being discharged via S1 to the sewer. These aspects and the MCerts status of the effluent sampling and flow monitoring arrangements will be looked at in the OMA.

The scrubbers operate with high pH solutions to neutralise the fume / vapour from tank head space of the acid treatment system and a low pH to neutralise the alkali fume / vapour from tank headspace of the alkali treatment system – points SC3 and SC2 respectively. The secondary scrubber, SC1 has feeds from both the previously scrubbed acid and alkali treatments and due to potential acid gas breakthrough (not so likely to happen with the alkali system) must have a pH of equal to or greater than 10.

Recommendation 5 Tradebe 021215: The scrubbers need to be labelled so it is obvious which sample point relates to which scrubber and by extension its pH limit.

The OMA will seek to identify evidence that the operator has good management systems for identifying what needs to be monitored, where and what species and what limits and reference periods / methods apply. The OMA extends to examining the calibration of equipment and adequacy of sampling position. Data interpretation, for example, does the data suggest any deviations from the optimum treatment conditions, does it suggest abatement may not be as effective as it should be etc.

It was noted that the transfer station reception area contained a significant amount of waste. There is a written follow up due on pre-acceptance and containerised waste storage procedures from the 7th Sep inspection – since then the operator has confirmed what versions of what internal Tradebe procedures currently cover this area. This evidence will be assessed and a full CAR1 will be produced in due course.

END

	EPR Compliance Assessment Report	Report ID: SP3531SK/0254230	
This form will report compliance with your permit as determined by an NRW officer			
Site	Gwent Waste Management Centre EPR/SP3531SK	Permit	SP3531SK
Operator/ Permit	Tradebe Gwent Limited	Date	02/12/2015

Section 3- Enforcement Response		Only one of the boxes below should be ticked	
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.			☐
In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.			☐
We will now consider what enforcement action is appropriate and notify you, referencing this form.			☐

Section 4- Action(s)			
Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.			
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 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 which 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 fulfill 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 (e.g. 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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information 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 twenty 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 the officer's line managers. 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.