	Environment Agency
AV	Agency

EPR Compliance Assessment Report

Report ID: UP3431VF/0316833

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This form will report compliance with your permit as determined by an Environment Agency officer								
Site	Preston New Road Exploration Site EPR/AB3101MW			Permit Ref	UP3431	VF		
Operator/ Permit holder	Cuadrilla Bowland	Cuadrilla Bowland Limited						
Date	17/10/2018			Time in	10:25	Out	17:30	
What parts of the permit were assessed	Hydraulic Fracture	Plan Compliand	e					
Assessment	Site Inspection	EPR Activity:	Installation X	Waste Op	Wate	er Disch	arge	
Recipient's name/position	HSE&P Manager							
Officer's name	EA Installations			Date issued	31/	10/201	8	

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 Complia	Condition(s) breached		
a) Permitted activities	1. Specified by permit	Α	
b) Infrastructure	1. Engineering for prevention & control of pollution	Ν	
	2. Closure & decommissioning	NA	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	N	
c) General management	1. Staff competency/ training	Ν	
	2. Management system & operating procedures	Α	
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	Ν	
e) Emissions	1. Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates & litter	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance	1. Monitoring of emissions & environment	N	
and reporting	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	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

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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.

This was the second of a series of visits assessing compliance with the hydraulic fracture plan for Well 1z. An inspector from the Oil and Gas Authority was also present on site. All activities assessed were compliant with the requirements of the Environmental Permit.

Inspection topics:

- Microseismic monitoring
- Daily morning reports

During our site inspection fracturing of stage 2 of Well 1z was undertaken. A mini-frac using 21.4m³ of fracturing fluid without proppant prior to a main frac with 296.7m³ fracturing fluid containing proppant. Prior to the main frac of stage 2, a weak solution of 1m³ of hydrochloric acid was recirculated into the wellbore to help break down the cement bond at the stage opening in the well casing. The use of hydrochloric acid has been agreed by the Environment Agency.

During the main frac, shortly after the start of pumping of the hydraulic fracturing fluid, the pressure was reduced as a small (pinhole) leak of hydraulic fracturing fluid in the surface pipework had been detected. This did not involve the high pressure pipework used to inject fracturing fluid into the well. This was fixed and the main fracturing stage was continued. The surface pipework is all contained within a temporary bunded area, in addition to the main well pad liner.

Officers inspected the certificates and test reports for the installed geophones which were found to be adequate.

Daily morning reports

The daily morning reports for activities taking place on 16th and 17th October were reviewed and contained the following information:

- The 16th October morning report included a mini frac of stage 1 of 12.8m³ that occurred between 11:48-11:56 approximately and contained fresh water without additives or proppant. The main frac of 149.9m³ occurred between 14:25-15:04 approximately containing slickwater without proppant.
- The 17th October morning report included a mini frac of stage 2 of 21.4m³ that occurred between 15:20-15:25 approximately and contained slickwater without proppant. The main frac of 296.7m³ occurred between 16:05-17:40 approximately containing slickwater with proppant. Flow back volume of 24.9m³ stored for reuse.

Microseismic events plotted from the mini and main frac stage today showed events plotting below the lateral section of the well to a depth of 96.8m and laterally to a length of 191.5m.

For each report, no induced seismicity was noted and there had not been a breach of the sub-surface permit boundary.

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Operator/ Permit	Cuadrilla Bowland Limited	Date	17/10/2018		

Section 3- Enforcement Response	Only one of the boxes below should be ticked	
	e and prevent repetition. ence and can result in criminal prosecutions and/or suspension or n Section 2 and the steps you need to take in Section 4 below.	
Other than the provision of advice and guidance, at present w of the non-compliance identified above. This does not precluc information comes to light or advice isn't followed.		
In respect of the above non-compliance you have been issued enforcement action. This does not preclude us from taking additional comes to light or offences continue.		
We will now consider what enforcement action is appropriate a	and notify you, referencing this form.	

Section 4- Action(s)						
		e has been detected and an enforcement response has been selected above, this section to return to compliance and also provides timescales for this to be done.	summarises the			
Criteria Ref.	CCS Category	Action Required / Advised	Due Date			
See Secti	See Section 1 above					

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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.
- A civil sanction Enforcement Undertaking (EU) offer may also be available to you as an alternative enforcement response for this/these offence(s).

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 Environment Agency to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). The Environment Agency 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 Environment Agency 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 Environment Agency 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 28 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 03708 506 506 (Mon to Fri 08.00–18.00) and ask for the Customer Contact team or send an email to enquiries@environment-agency.gov.uk. If you are still dissatisfied, you can make a complaint to the Ombudsman. For advice on how to complain to the Parliamentary and Health Service Ombudsman phone their helpline on 0345 015 4033.

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