	Environment Agency
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# **EPR Compliance Assessment Report**

Report ID: UP3431VF/0291834

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	Limited					
Date	25/08/2017			Time in	09:00	Out	14:30
What parts of the permit were assessed	Permit condition 1.1. "General management", permit condition 2.3 "Operating techniques"; waste Duty of Care						
Assessment	ssessment Audit EPR Activity: Installation X Waste Op			Wate	er Disch	arge	
Recipient's name/position	Health Safety Environment and Planning Manager						
Officer's name	XXXXXXXX Date issued 07/09/2017				7		

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

The audit aimed to check operator's (i.e. Cuadrilla Bowland Limited) compliance and ability to comply with their permit provisions and any applicable legislation requirements.

The assessment was carried out against the following audit criteria:

- EPR/AB3101MW permit condition 1.1 "General Management" checks to verify the operator has a written management system that identifies and minimises risk of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to their attention as result of complaints;
- EPR/AB3101MW permit condition 2.3 "Operating Techniques" checks to verify site
  is operated using the techniques and in the manner described in the Waste
  Management Plan agreed with the Environment Agency;
- Other applicable legislation provisions checks to verify the operator comply and have the ability to comply with their waste duty of care responsibilities: waste minimisation, assessment, description, classification, storage, transfer or consignment paperworks, use of licensed carriers, producing and keeping records.

Audit consisted on observation, documents review and staff interviews.

At the time of audit, permitted activities were operated using the techniques and in the manner described in the permit. The operator's management system provides us reasonable assurance they have the ability to comply with their environmental permit provisions.

Please find below the audit findings.

# PERMIT COMPLIANCE

A. Checks carried out to verify the operator has a written management system that identifies and minimises risk of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to their attention as result of complaints

The operator has a written management system that identifies and minimises risk of pollution comprising:

 Site infrastructure plans – it includes main constructions on site, storage facilities, location of items for use in accidents and emergencies, entrances and exists that can

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be used by emergency services; points designed to control emissions; areas particularly vulnerable to pollution that are near the site; the drainage system on site; hazardous zones with risk of occurring a fire or explosion related to dangerous substances, gases under pressure and substances corrosive to metals, where it should be strict control of potential ignition sources;

- Identification, assessment and control of the risks of pollution from the activities covered by the permit –it was reviewed by Environment Agency at the permit determination stage;
- Site operations procedures are covered within the Waste Management Plan approved by the Environment Agency, including activities to be carried out on site, wastes types and quantities to be produced by each activity or process and waste storage provisions, aiming to prevent or minimise risks to the environment from each activity, process and type of waste;
- Accident prevention and management plans the operator identified potential accident scenarios, e.g. equipment breakdowns, enforced shutdowns, fires, vandalism, flooding, other incidents that may cause an unexpected change to normal operations. For each potential incident, they developed plans and procedures setting the measures they are taking to avoid the accident happening and to minimise impact if the accident does happen (i.e. Pollution Incident Plan CORP-HSE-PLA-007, Environment Management and Monitoring Plan used to manage the environmental aspects of the project on a day-by-day basis). The operator developed also procedures for incidents/accidents recording, investigation and response (i.e. Incident Investigation Procedure CORP-HSE-PRD-005, Emergency Incident Management CORP-HSE-PLA-005).
- Complaints procedure CORP-HSE-PRD-025 the operator set a 24 hours, seven days a week hot line phone number to collect and record complaints from public. The operator has procedures in place to ensure these complaints are investigated and follow-up upon; records are kept; the operator received only few public complains at their hot line.
- o Procedures for managing staff competence and training records clear roles and responsibilities were assigned for managing compliance with permit's provisions. Aside operational contractors on site, the operator appointed a waste contractor, a spill response contractor and a mud contractor. The operator briefed these contractors on the Waste Management Plan provisions, Permit requirements and site specifics. The operator carries out regular meetings with their contractors to discuss state of compliance and ways further; the latest meeting was held at the beginning of August. The operator produces and maintains a Waste Contractors Compliance Matrix CORP-HSE-MAT-005. It appears, staff has access to and understand the permit and the management system's sections that deal with activities they carry out on site.

- o Site and equipment maintenance —Operator checks site infrastructure's state as part of their regular daily and weekly inspections; findings are recorded and escalated whenever faults are observed; improvement actions are decided and tracked up to completion. The processes on site are very dynamic; activities and kit on site changes along the project development. Contractors bringing kit on site, maintain their machineries according to the manufacturer's or supplier's recommendations. Combinations of inappropriate equipment and poor inspection and maintenance procedures may increase the accident risk. You should obtain assurance from your contractors that the equipment brought on site in adequately maintained. We advise you to request contractors to provide you with preventative maintenance schedules, and inspections results, for the "productive" and "non-productive" items deployed and operated on your site.
- Records are produced and kept as per permit requirements;
- The operator has an emergency Shut Down procedure, approved by the Environment Agency. It aims to prevent unauthorised access to safety critical equipment and operational controls in case of a security breach.
- Contingency plans the operator's management system focuses on preventative measures aiming to reduce the environmental risk and ensure the protection of people and the environment. However, if an incident/accident occurs plans and procedures are in place to minimise the environmental impact.
- The operator has systems in place to review and improve their internal procedures, programmes, plans whenever necessary; periodic internal audits are carried out and findings are followed up and tracked upon.

# B. Checks carried out to verify site is operated using the techniques and in the manner described in the Waste Management Plan agreed with the Environment Agency;

<u>Site engineering for pollution prevention and control</u> - is inspected and maintained At the time of audit, there was sufficient surface water run-off drainage and attenuation capacity in the drainage ditch. surface water run-off is tankered off-site for treatment and disposal at a regulated facility, in line with the Waste Management Plan requirements. Contingency plans are in place to cover periods of heavy or prolonged rainfalls and any changes in the normal operations.

With our inspection Report ID UP3431VF/0289932 we requested the operator to provide us the Construction Quality Assurance validation report for the well pad's membrane, by 31/08/2017. During the audit, we required the operator to provide this validation report for inspection. Evidence was not available for inspection during the audit. On 07/09/2017, the operator provided the report of the Geophysical Leak Detection Survey, carried out between

20/06/2017 and 29/07/2017. The report states the well pad liner system had been subjected to comprehensive Construction Quality Assurance regime, and validates it's integrity.

# Regulated activities

At the time of audit, permitted activities were operated using the techniques and in the manner described in the permit.

The types of muds used on site are bentonite (i.e. clay generated frequently from the alteration of volcanic ash) based and salt saturated (i.e. chloride) based. These waste types conform to the description in the Waste Management Plan. The operator only uses additives assessed and approved by the Environment Agency.

The operator monitors any loss or gain of fluids within the mud system throughout drilling operations, for appropriate actions to mitigate any further loss to be taken.

# Well integrity testing

The operator drills now in the Mercia Mudstone Group formation, at 263m MD depth, with salt saturated polymer water based muds. The muds used are those approved by the Environment Agency at the permit application stage. A casing and cement barrier protect shallow groundwater from well fluids during drilling, and provide a permanent seal across the Mercia Mudstone. Well integrity pressure testing, formation integrity testing ("FIT"), were planned to be carried out in few days after the audit date. The tests aim to provide assurance that the construction of the wellbore is sound, preventing pathways to receptors.

# Extractive waste handling, treatment, storage

Waste management hierarchy is applied to the generation of waste. Once returned to surface, drilling waste goes through a mud gas separator prior drill cuttings and drilling muds are separated from one another as far as reasonable practicable. Spacer fluid&suspension brine are incorporated into the water based mud system to the extent were not contaminated with the cement slurry behind them. Extractive waste is stored into tanks and containers annually tested for thickness and hydro tested for leaks. Records are kept for the quantity of each waste type generated on site. Fluid and solid bentonite and the chloride drilling waste were sampled for chemical analysis and waste acceptance criteria required by the offsite authorised waste facility. All drilling waste proved to be non-hazardous. Until the date of the audit, no hazardous extractive wastes were produced on site

Frequent testing of the drilling waste, (i.e. weekly samples alternating between solids and liquids or biweekly if the mud is taken off site in a combined slurry state), will allow the operator to spot changes in the chemical profile of waste, to inform decisions concerning future waste management arrangements and environmental risk control measures, as well as sampling and testing frequency.

Cement slurry returned to the surface during the well cementing, is stored on lined steel skips (i.e. as per the Waste Management Plan requirements), pending recycling at a permitted waste management facility. This cement slurry may be contaminated with spacer fluid and suspension brine.

Chemicals, oils, diesel were adequately stored on site.

Waste oily rags and aerosols were stored in closed containers, in a labelled, separate compound. We advised the operator, best practice is to store these waste types in robust, fire resistant, vented containers or cages, securely closed at all times, in a well-vented location.

# Notification procedure

Operator is knowledgeable about the requirement to notify Environment Agency in the event of an incident/accident which significantly or may significantly affect the environment as well as in

event of breach of any permit condition. They developed a Hazard and Incident Notification and Reporting Procedure CORP-HSE-PRD-005.

<u>Compliance checks</u> – the operator carries out daily and weekly checks in accordance with the Waste Management Plan and management system provisions: state of the site infrastructure, environmental monitoring points, waste management, environmentally critical equipment, impact on amenities, pollution prevention measures in place (i.e. drip trays, spill kits)

<u>Records keeping</u> – records demonstrating compliance with the written environmental management system and permit provisions are produced and maintained;

#### **WASTE DUTY OF CARE**

The operator samples surface water run-off and drilling wastes, and sends these samples to an accredited laboratory for chemical analysis. Using the test results, the operator assesses, classifies and describes the waste prior removal from site, in accordance with our 'Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste'.

Operator maintains a Waste Contractors Compliance Matrix CORP-HSE-MAT-005, to demonstrate compliance with their waste Duty of Care responsibilities. The operator uses only licensed, registered carriers for transfer of waste out of site. Waste is sent for recovery or disposal only to waste treatment or disposal facilities authorised to take it.

# Advice and guidance

You must properly plan and conduct the sampling programme to ensure you obtain accurate and representative results, so a reliable assessment. Please see Appendix D of the 'Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste'.

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This form will report com	This form will report compliance with your permit as determined by an Environment Agency officer				
Site	Preston New Road Exploration Site	Permit	UP3431VF		
	EPR/AB3101MW				
Operator/ Permit	Cuadrilla Bowland Limited	Date	25/08/2017		

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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 Sect	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 <b>major</b> environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a <b>minor</b> environmental effect	4
C4	A non-compliance which has <b>no</b> 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 <u>public register(s)</u>. 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 <u>public register(s)</u>. 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 <a href="Complaints">Complaints</a> and <a href="Commendations procedure">Commendations procedure</a>, phone our general enquiry number 03708 506 506 (Mon to Fri 08.00–18.00) and ask for the <a href="Customer Contact">Customer Contact</a> team or send an email to <a href="enquiries@environment-agency.gov.uk">enquiries@environment-agency.gov.uk</a>. If you are still dissatisfied, you can make a complaint to the <a href="Ombudsman">Ombudsman</a>. For advice on how to complain to the <a href="Parliamentary and Health Service Ombudsman">Parliamentary and Health Service Ombudsman</a> phone their helpline on 0345 015 4033.