

Dangerous occurrence at LJ/6- PNB, Preston New Road, Preston on 11 June 2017

Incident Details	
Brief Description	Whilst changing over from the auger rig to the RC rig, clean fresh water flow emanated from the top of the temporary casing. This followed a period of prolonged rainfall and is assumed to be coming from artesian pressured aquifer sands either at 14m or 28m. Previous slight flow at 14m was managed with mud and progress made to 28 m with no flow. Situation has stabilised with flow stopped by heavy mud and conductor will be augered deeper to c.33m.
Brief description of why this incident has been selected for investigation.	High public interest due to borehole site and operation.
Further information/Major hazard precursor	

Investigation Overview		
COIN Investigation Case No.	4513140	Show in COIN (double-click)
Name(s) of Duty holder(s)	Cuadrilla Resources Limited	
Investigating Inspector		
Investigator Line Manager		
Investigation TRIM Folder	4.7.13683.	
MEMT site	http://memt/Cuadrilla%20Resources%20Limited%2011.06.2017/SitePages/Home.aspx#	Show in MEMT (double-click)

Date Report Completed	20/07/2017
Authors	

Report Contents

Investigation Planning and Management

Factual Report

Analysis of Compliance

Approval Officer's Consideration and Decision

Appendices

- | | |
|---|-------------------------------------|
| 1. EMM1 | <input checked="" type="checkbox"/> |
| 2. Company Search | <input type="checkbox"/> |
| 3. COIN Inspection Records | <input type="checkbox"/> |
| 4. List of Witnesses and Others Interviewed | <input type="checkbox"/> |
| 5. List of Productions for Use in Trial | <input type="checkbox"/> |
| 6. List of Evidence to be Adduced | <input type="checkbox"/> |
| 7. Draft Complaint | <input type="checkbox"/> |
| 8. Disclosure Instructions Table | <input type="checkbox"/> |
| 9. List of Previous Convictions | <input type="checkbox"/> |

INVESTIGATION PLANNING AND MANAGEMENT

Initial planning

Prepare the Investigation	
Initial Preparation	Phone conversation held with Cuadrilla on the 19 th June 2017 regarding the aquifer flow during conductor drilling of well PNR-2 at the Preston New Road site. Arranged for HSE Mines Inspector to join site investigation visit.
Initial Objectives of Investigation	Initial objectives of the investigation are: <ul style="list-style-type: none"> ➤ Gather information regarding the condition of the well and suspected cause of flow. ➤ Determine whether there is any imminent serious risk to people. ➤ Determine whether there is any potential breach of health and safety regulation.
H&S Considerations	Conductor setting operations on new multi-well pad lease.
Outstanding invoices	No
Violence and Aggression Details	No
Violence and Aggression Source	N/A
Violence and Aggression Nature of Threat	N/A
Violence and Aggression Affected Person	N/A
Violence and Aggression Future Visits	N/A

Criminal Justice and Licensing (Scotland) Act 2010

Investigator		Reporting Officer	
Reviewing Officer		Senior Investigating Officer	

Complex Investigation Arrangements

Protocol for requesting material	
Protocol for storing material	
Material Officer	
TRIM filing protocol	
TRIM naming protocol	

TRIM Emails protocol	
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Ongoing planning & management

Visit Details

List all visits carried out in connection with this investigation. Include the following visit information:

- date; place; persons seen & role (include, other agencies – e.g. police);
- purpose of the visit(s);
- Significant telephone contacts with interested parties, for example solicitor;
- Actions taken to inform interested parties of investigation outcome.

Date of Visit	Visit Details
28/06/2017	Cuadrilla Resources Limited, Preston New Road Walsley Lancashire, PR4 3PJ. Site visit including meeting with Cuadrilla HSE Manager and [redacted] Visit to gather information regarding operations including utilisation of auger and reverse circulating rig operations.
18/07/2017	Follow up telephone meeting with Cuadrilla [redacted] discuss on-going mitigations for second conductor installation.

Management Reviews

Initial Review

Date	
Summary of progress	<p>Reviewed Weekly Reports submitted by Cuadrilla on 11th, 19th and 25th June 2017.</p> <p>Reviewed RIDDOR Report (1CAD09E379) submitted 15th June 2017.</p> <p>Arranged investigation site visit to Preston New Road for the 28th June 2017 and joined by [redacted] Well Engineering and Operations Inspector) and [redacted] Mines Inspector).</p> <p>Reviewed Daily Drilling Reports (10th, 11th, 12th and 13th June 2017), Conductor Drilling Programme and HAZID for conductor drilling operations.</p> <p>Discussed operation of auger and reverse circulation rig including mixing and pumping bentonite/barite mud system and handling of fluid returns.</p> <p>18/7/2017 – Telephone conversation with [redacted] to discuss on-going mitigations in place for second conductor installation. 42" conductor was cut as high as possible to gain 0.8-0.9m in hydrostatic head. 12ppg mud system was utilized from the start of auger/drilling operations. Auger was used to a depth of 39m with no flow. Reverse Circulation rig was utilized to drill to a total depth of 52m. No artesian flow during operations.</p>

AIMS		
Work-related Deaths	None.	
Date of primacy		
Immediate Enforcement Actions	The information available to us does not suggest or indicate that there is any immediate or imminent risks to people's health and safety, therefore, no enforcement actions taken.	
Potential Contraventions	From the information available including Wells IT, COIN, Well Notification and information gathered from Cuadrilla during investigation site visit (Daily Drilling Reports, HAZID report and Conductor Drilling Programme) there is no evidence of any contraventions of Health and Safety regulations.	
Sufficiency / strength of evidence		
Lines of enquiry/Tasks before next review	No further review is required.	
Key Decisions	No further investigation is required.	
Resource issues	None	
Reasons for continuing / curtailing investigation	No imminent serious risk to people. No evidence of contravention of Health and Safety legislation.	
	Name	Signature
HSE Lead Investigator		
Investigation Manager		
Names of others attending		
Date of next planned review		

APPENDICES

Appendix 1 – Form EMM1 (mandatory for all reports)

EMM Form Duty Holder: Cuadrilla Resources Limited

EMM Form



4513140 - EMM -
Cuadrilla - Preston Ne

Appendix 2 – Company Search

Appendix 3 – COIN Inspection Records

