REPORT

Phase 4a - Woodsmith Mine Construction Traffic Management Plan

Woodsmith Mine Phase 4a - CTMP

Client: Sirius Minerals PLC

Reference: 40-RHD-WS-70-CI-PL-0006 REV 1

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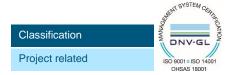
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1 Introduction

- 1.1.1 In 2014 a planning application (reference NYM/2014/0676/MEIA) was submitted to the North York Moors National Park Authority (NYMNPA) for permission to develop a polyhalite mine and underground Mineral Transport System (MTS). Planning was subsequently granted in 2015, subject to conditions, as varied in February 2018 by NYM/2017/0505/MEIA.
- 1.1.2 This document has been prepared on behalf of Sirius Minerals plc (Sirius Minerals) and details the requirements with respect to traffic management for amended Phase 4 Works (herein 'Phase 4a') of the development at Woodsmith Mine (see paragraph 1.1.5 below). This document is required to partially discharge Condition 34 of the NYMNPA planning permission NYM/2017/0505/MEIA.
- 1.1.3 Table 1-1 contains full details of condition 34 and how this document addresses the objectives.

Table 1-1 Condition NYMNPA-34 Construction Traffic Management Plan

Table 1-1	Condition NYMNPA-34 Construction Traffic Management Plan		
Objectives	Condition	Compliance with Condition NYMNPA-34	
Plan (CTMP), dated Februar Planning Auth Construction T	mmencement of each Phase of Construction a Construction Traffic Management based upon the submitted Framework Construction Traffic Management Plan y 2015 shall be submitted to, and approved in writing by the MPA [Mineral ority] in consultation with the appropriate Highway Authority. The approved raffic Management Plan shall be adhered to throughout the construction period se agreed in writing with the MPA. The statements shall provide for:	-	
1.	The appointment of a CTMP co-ordinator	Section 2	
2.	Measures to control the number of employees travelling individually to the sites and their mode of travel	Section 2	
3.	The Traffic Management Liaison Group agreed level of HGV trips to the site	Section 4	
4.	Measures to identify HGVs associated with the development travelling to the construction sites	Section 5	
5.	The links to the Traffic Management Liaison Group	Section 6	
6.	Signing for HGV routes including prohibitive signing	Section 7	
7.	Accident record monitoring	Section 8	
8.	Driver training	Section 9	
9.	A communications plan	Section 10	
10.	A complaints mechanism	Section 10	
11.	An incident reporting mechanism including near misses; and	Section 8	
12.	A penalty system for breaches of the agreed CTMP	Section 11	

1.1.4 This document only details the works required for the Phase 4a Works at Woodsmith Mine. Activities at Lady Cross Plantation have been deferred and this document does not contain information relating to that site.

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- 1.1.5 The scope of Phase 4a described by this document is as per Phase 4 with the exception that no D-Walling will be undertaken at the MTS shaft, and instead the following activities will be implemented:
 - Mobilisation to site:
 - Use of a Vertical Shaft-sinking Machine (VSM) at the MTS Shaft, in place of the previously planned D-Walling machines;
 - Construction of the guide wall and strand jacks for the operation;
 - Installation of ancillary equipment;
 - Machine setup and installation of VSM;
 - Excavation to -55m below platform level (bpl);
 - Excavation to -120m bpl;
 - Deposition of limited extractive material from within the first 120m of the MTS shaft into earthworks bunds; and,
 - Grouting of Annulus.
- 1.1.6 This document is intended to be read in conjunction with the Phase 4 Woodsmith Mine Construction Traffic Management Plan (reference 40-RHD-WS-70-CI-PL-0004), and the information herein supersedes that documentation only where specified. Appendices remain unchanged and are not duplicated here. Since the submission of the Phase 4 CTMP a number of beneficial changes have been brought forward in relation to how Sirius Minerals and its Contractors manage logistics. These are also discussed within the relevant sections.
- 1.1.7 This CTMP has been prepared by Royal HaskoningDHV in liaison with BAUER Group, Collins Earthworks Ltd. and the VSM Contractor ('the Contractors').

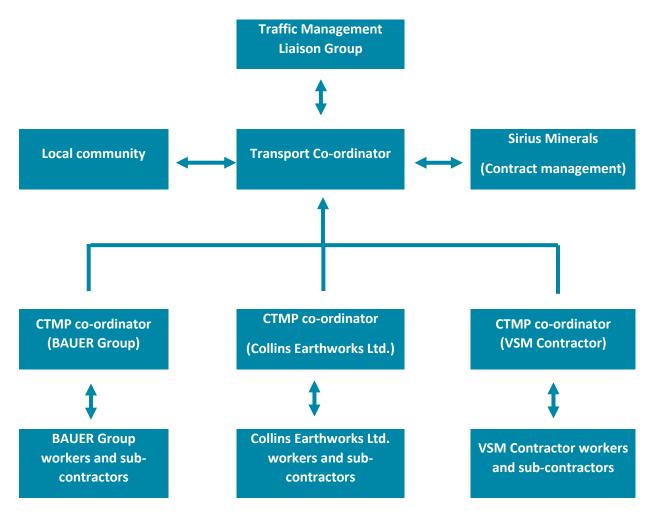
2 CTMP Co-ordinator (Objective 1)

- 2.1.1 The content of this section is unchanged with the following two exceptions.
 - The Principal Contractors identified within the Phase 4 CTMP have changed; and
 - A third CTMPCo will be introduced for the VSM Contractor associated with Phase 4a.
- 2.1.2 An updated management structure detailing the Contractors, and relationships between the CTMPCos, TCo and other parties is shown in **Figure 2-1**.

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Figure 2-1 CTMP Management Structure



3 Control of Personnel Movements (Objective 2)

- 3.1.1 The content of this section is unchanged except for the following points of note.
 - To date, Sirius Minerals and its Contractors have complied with the target daily vehicle movements through the adoption of a multi-occupancy vehicle strategy.
 - Sirius Minerals has agreed with North Yorkshire County Council Highways (NYCC) that
 up to 187 additional parking spaces will be constructed at the existing NYCC Park and
 Ride facility to the west of Whitby (Cross Butts) for the use of construction and,
 subsequently, operational employee parking.
 - Consent was granted in 2014 for 180 spaces at Cross Butts (Ref: NYM/2014/0864/FL), a Section 73 variation to this permission has subsequently been submitted to North York Moors National Park Authority to provide a further seven spaces (and minor amendments) and currently awaits determination.
 - It is currently projected that these additional spaces would be constructed by Quarter 3 2018.

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- The Contractors have confirmed that the Phase 4a works would not change the peak number of employees on site from the 176 previously considered for Phase 4. Employees who would have been required by BAUER Group for the diaphragm walling of the MTS shaft will instead be employed by the VSM Contractor.
- The Contractors have confirmed that of the total 176 employees required for Phase 4a, approximately 50 would be required to work a night shift, with the remainder working a day shift.
- In addition to the peak Contractor staff numbers of 176 employees, it is estimated there could be an average of five visitors per day from Sirius.
- To achieve the target of '60 in and 60 out' vehicle movements, a minimum employee to vehicle ratio of 3.1 employees per vehicle would be required (181 divided by 60).
- In addition to the implementation of up to 187 parking spaces at Cross Butts by Sirius Minerals, the Contractors have also committed to implementing a package of measures to manage employee traffic demand. These remain unchanged since Phase 4a.

4 **Control of HGV Movements (Objective 3)**

- The content of this section is unchanged except for the following points of note: 4.1.1
 - The booking system has been updated with a new bespoke 'Delivery Management System' (DMS) enables a daily profile of deliveries to be maintained within the consented envelope (126 two-way movements) and allows the Contractors to ensure that the required deliveries for competing activities are managed. For example, if 50 deliveries of stone are required on one day, only 13 deliveries of other materials will be allowed.
 - Prior to the commencement of Phase 4a, a 'Freight Consolidation Facility' (FCF) will be opened in Teesside. The FCF will primarily consolidate smaller loads, such as parcels, from 'white vans' to reduce the number of single vehicle trips to Woodsmith Mine. In addition, where previously HGVs would have delivered part loads to Woodsmith Mine, where practicable these will now be directed to the FCF before being consolidated and sent to Woodsmith Mine.
 - Phase 4a will introduce at least two additional abnormal loads associated with the movement of the machine body and boom attachment for the VSM. No changes are proposed with respect to the methods for controlling abnormal loads.

5 **Monitoring Strategy (Objective 4)**

5.1.1 The content of this section is unchanged.

6 CTMP Management Structure (Objective 5)

6.1.1 The content of this section is unchanged.

7 **HGV Route Compliance (Objective 6)**

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- 7.1.1 The content of this section is unchanged.
- Managing Road Safety (Objectives 7 & 11) 8
- 8.1.1 The content of this section is unchanged.
- **Driver Training (Objective 8)** 9
- 9.1.1 The content of this section is unchanged.
- 10 **CTMP Communication Procedures (Objectives 9 & 10)**
- 10.1.1 The content of this section is unchanged.
- **Enforcement (Objective 12)** 11
- 11.1.1 The content of this section is unchanged.