

REPORT

Phase 4 - Woodsmith Mine Construction Environmental Management Plan

Woodsmith Mine Phase 4 - CEMP

Client: Sirius Minerals PLC

Reference: 40-RHD-WS-70-EN-PL-0023 REV 0

Revision: 01/Final

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HASKONINGDHV UK LTD.

Rightwell House
Rightwell East
Bretton
Peterborough
PE3 8DW
Industry & Buildings
VAT registration number: 792428892

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Author(s): Wendy Johnston

Drafted by: Wendy Johnston

Checked by: Matthew Hunt

Date / initials: 22/05/2017

Approved by: Gary Bower

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1 Introduction

1.1 Purpose of Document

- 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 consent was subsequently granted in 2015 subject to conditions.
- 1.1.2 This Construction Environmental Management Plan (CEMP) has been prepared on behalf of Sirius Minerals plc (Sirius Minerals) and details the requirements with respect to the Phase 4 Works at Woodsmith Mine ('Phase 4') only (as described in **paragraph 1.2.1** below). This CEMP should be read in conjunction with the CEMP produced for the Phase 3 Works, document reference 40-RHD-WS-70-EN-PL-0010 ('Phase 3 – Woodsmith Mine CEMP') as some of the works outlined in the Phase 3 CEMP will be undertaken in conjunction with the Phase 4 Works.
- 1.1.3 This document is required to partially discharge NYMNPA-93, and has been prepared in accordance with current good practice. This planning condition states that:

Table 1-1 Condition NYMNPA-93: Construction Environmental Management Plan

| NYMNPA-93 | Compliance with Condition NYMNPA 93 |
|---|--|
| Prior to the commencement of each Phase of the development in accordance with the approved Phasing Plan at either Dove's Nest Farm or Lady Cross Plantation, an updated CEMP shall be based on the approved Construction Method Statement (CMS) and shall be submitted to and approved in writing by the MPA in consultation with the Environment Agency in respect of the area concerned. The CEMP shall include details of: | <p>This version of the CEMP is for Phase 4 as defined in Section 1.2 below.</p> <p>Earlier versions of the CEMP have been produced for preceding works.</p> <p>As stated in Section 1.1.2 above, this version of the CEMP should be read in conjunction with 40-RHD-WS-70-EN-PL-0014 - Phase 3 – Woodsmith Mine CEMP</p> |
| The size, location and design of any site compounds, including how any potentially polluting materials will be stored to minimise the risk of pollution; | Section 3.3, Section 3.6 and Section 11.2 Appendix 1: Drawing 40-ARI-WS-71-CI-DR-1081; 40-RHD-WS-70-EN-PL-0014 - Phase 3 – Woodsmith Mine CEMP |
| An Incident Response Plan to deal with any pollution that may occur during the course of construction; | 40-AMC-WS-71-EN-PL-0005 – Phase 4 Emergency Response Plan 40-RHD-WS-70-EN-PL-0014 - Phase 3 – Woodsmith Mine CEMP' |
| A scheme for the recycling/disposing of waste resulting from demolition and construction works; | Section 11.2 and Section 11.5 40-AMC-WS-71-EN-PL-0006 – Phase 4 Site Waste Management Plan Appendix 1 Drawing 40-ARI-WS-71-CI-DR-1081 |
| Storage of waste not covered by the Mine Waste Directive; | Section 11.2 and Section 11.5 40-AMC-WS-71-EN-PL-0006 - Site Waste Management Plan Appendix 1 Drawing 40-ARI-WS-71-CI-DR-1081 |

| NYMNPA-93 | Compliance with Condition NYMNPA 93 |
|---|--|
| Measures to control the glare from on-site lighting; | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> : - Appendix 1a - Appendix 1b: Drawing 40-NMC-WS-70-FC-DR-0002 |
| Measures to manage deliveries by HGV including routing and timing for deliveries and details of the penalty system for breaches of the agreed control; | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |
| Temporary traffic management; | Not applicable to this Phase |
| The provision of a Dust Management Plan relating to Phase 1 of the construction period (earth works and bund formation) and Polyhalite handling and stockpiling to include dust generation modelling so as to identify sensitive receptors; likely dust generation and its disposition during the construction Phases and operation over time and under different weather conditions; the avoidance and mitigation measures required to ensure dust deposition levels at the sensitive receptors are maintained at the residual levels identified in the approved EIA, and monitoring arrangements. The Dust Management Plan must comply with the criteria set out in the 'Dust and Air Emission Mitigation Measures' best practice guidance for control of dust on construction sites from the Institute of Air Quality Management 2012. The monitoring arrangements will include dust deposition or dust flux or real-time PM ₁₀ continuous monitoring locations; baseline dust monitoring at least three months before construction commences; daily on-site and off-site inspections at monitoring locations with results recorded in a log to be made available to the MPA on request, and more frequent monitoring during periods of high dust generation; | Section 6.3 Appendix 4 It should be noted that where this condition relates to 'Phase 1', this specifically relates to Phase 1 as identified in the planning application. Sirius Minerals has renamed the Phases to define distinct stages in construction. 'Phase 4' in this CEMP falls within the scope of the original Phase 1 Works identified with the planning application. |
| In the event that there is insufficient clay within the Lady Cross Plantation site to form the 1m deep basal layer beneath the spoil storage area, a contingency plan to address the importation of clay, including the source, quantity and quality of such material, and how adverse effects on the water environment would be avoided; | Lady Cross Plantation is not covered in this CEMP as works at that site have been deferred. |
| How the requirements of the approved CEMP will be disseminated to all relevant staff/ Contractor's throughout the construction period; | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |
| The location of the site notice board; | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |
| A scheme for parking, loading, unloading during | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine</i> |

| NYMNP-93 | Compliance with Condition NYMNP 93 |
|--|--|
| construction; | <i>CEMP</i> |
| A scheme for security and lighting during construction; | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |
| A protocol for the replenishment of tanks and containers including that all refuelling of vehicles, generators, plant and equipment shall be supervised and shall take place within a suitable bunded, impervious hardstanding; | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |
| Contingency proposals for if fuel cannot be delivered for the generators, e.g. due to adverse weather; | Detailed in <i>Phase 3 – Woodsmith Mine CEMP</i> |
| How those artificial or historically straightened ephemeral surface water channels referenced in sections 15.7.22-15.7.24 of chapter 15 of part 2 of the ES are to be retained wherever possible, and enhanced to increase their capacity (e.g. through the introduction of meanders) and to increase their ability to capture sediment (e.g. through suitable planting); | 40-FWS-WS-70-CI-PL-0002 – <i>Phase 3 Surface Water Management Plan</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |
| Proposals / contingency plans for waste not managed as part of the Mine Waste Permit comprising the storage and management of temporary mining waste stored on-site for less than three years (e.g. Pyritic Mudstone); non-inert and non-hazardous materials stored for less than one year, and unexpected hazardous waste stored for less than six months, including measures to prevent the dispersal of dust, leachate and surface water runoff; | Section 11.2 and Section 11.5 40-AMC-WS-71-EN-PL-0006 – <i>Phase 4 Site Waste Management Plan</i> Appendix 1 Drawing 40-ARI-WS-71-CI-DR-1081 |
| A Precautionary Method of Working for Site Clearance (PMWSP) which shall be submitted to and agreed in writing by the MPA prior to commencement of Preparatory Works and shall be adhered to thereafter. The PMSWP shall set out proposals for tree clearance and the demolition of structures and shall include that between March and September each year surveys of areas to be cleared should occur no less than 48 hours before clearance occurs so that occupied wild bird nests can be identified and prevented from being destroyed; | Not applicable to this Phase of works |
| Alarms fitted to mobile plant and vehicles for the purposes of warning pedestrians of their movements. | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> |

1.1.4 This document also provides the information necessary to partially discharge condition NYMNP-68 for Phase 4. This planning condition states that:

Table 1-2 Condition NYMNPAs: Final Details of Temporary Structures

| NYMNPAs | Compliance with Condition NYMNPAs |
|--|---|
| Final details of all temporary structures, including samples of materials proposed including colour shall be submitted to and approved by the MPA prior to construction. The temporary Structures as approved shall be implemented in complete accordance with the details agreed. | Section 3.5.1 Appendix 3 |
| For the avoidance of doubt this also includes colours of generator stacks. | No generator stacks are required for Phase 4 in addition to those supplied on the plant itself. |

1.1.5 This document only details activities required for Phase 4 at Woodsmith Mine associated with the Sirius North Yorkshire Polyhalite Project ('the project'). It does not include any activities at Lady Cross Plantation as these Works have been deferred. Updates to this plan will be prepared for subsequent construction Phases and following any design or method change. The NYMNPAs, as well as the Environment Agency and Natural England agreed that they support this approach in meetings held in April 2016.

1.2 Phase 4

1.2.1 Phase 4 comprises:

- Operation of the concrete batch plant;
- Installation, commissioning and operation of the bentonite plant and associated temporary structures;
- Installation of concrete guide walls (excavate to -3.5m and concrete wall down to -1.5m to -1.75m);
- Mobilisation to site of diaphragm walling equipment (cutters, cranes, workshops etc.);
- Diaphragm wall construction to -60m below ground level at the Production, Service and Mineral Transport System shafts; and
- Limited continuation of earthworks to create an area for future storage of spoil.

1.2.2 The works will be undertaken by AMC and its sub-contractor, Bauer Technologies Limited (BTL). The works being undertaken are described in detail in **Section 1.1.2** of the *Phase 4 Project Management Plan* (PMP), 40-AMC-WS-71-PM-PL-0003, a copy of which is provided in **Appendix 1** of this CEMP. The PMP, as well as the EMP (which forms Appendix B to the PMP) has been developed specifically for this Phase of the works. In addition further detail of the works can be found in a series of Risk Assessments and Method Statements (RAMS) in **Appendices 2a – 2e** inclusive.

1.3 Scope of this Document

1.3.1 This CEMP details how Phase 4 will be planned, monitored and managed in an environmentally responsible manner. It outlines the management framework for the environmental requirements, commitments, and performance targets associated with the planning and implementation of Phase 4 of the project only in accordance with planning permission NYM/2014/0676/MEIA. This CEMP should be read in conjunction with *Phase 3 – Woodsmith Mine CEMP (40-AMC-WS-71-EN-PL-0003)* because information which remains applicable from Phase 3 is not repeated in this document.

1.3.2 The documents produced to support the CEMP are shown in **Table 1-3** below along with where in this CEMP they can be located. **Appendix 3**, not referred to in this table, contains information about temporary structures as discussed in **Table 1-2** above.

Table 1-3 Project Management Plans and Risk Assessment and Method Statements

| Document | Location in CEMP |
|---|---|
| <i>Woodsmith Mine Phase 4 Project Management Plan (PMP) (40-AMC-WS-71-EN-PL-0003)</i> | Appendix 1 |
| <i>Woodsmith Mine Phase 4 Environmental Management Plan (40-AMC-WS-71-EN-PL-0004)</i> | Appendix 1 (Note: the Environmental Management Plan (EMP) is Appendix B to the PMP) |
| <i>Woodsmith Mine Phase 4 Mobilisation / Demobilisation RAMS (40-AMC-WS-10-SW-RA-0001)</i> | Appendix 2a |
| <i>Woodsmith Mine Phase 4 Installation of Guide Walls RAMS (40-AMC-WS-10-SW-RA-0006)</i> | Appendix 2b |
| <i>Woodsmith Mine Phase 4 Operation of the Slurry (Bentonite) Plant RAMS (40-AMC-WS-10-SW-RA-0005)</i> | Appendix 2c |
| <i>Woodsmith Mine Phase 4 Installation of Diaphragm Wall Shafts RAMS (40-AMC-WS-10-SW-RA-0004)</i> | Appendix 2d |
| <i>Woodsmith Mine Phase 4 Concrete Batch Plant Operation and Maintenance RAMS (40-AMC-WS-72-SW-RA-0002)</i> | Appendix 2e |
| <i>Woodsmith Mine Phase 4 Slurry Management Plan (Bentonite) (40-AMC-WS-10-EN-PL-0002)</i> | Appendix 2f |
| <i>Woodsmith Mine Phase 4 Dust Management Plan</i> | Appendix 4 |

1.3.3 This CEMP includes many of the policies and procedures that form part of a certified environmental management system. It sets out how environmental works will be undertaken, and how the environment will be protected during these works.

1.3.4 This CEMP refers to several management plans, which have been prepared to partially discharge a number of planning conditions. Collectively these plans incorporate all mitigation measures relevant to Phase 4 as identified in the original planning application (condition NYMNPA-06 refers). For completeness, in addition to being read in conjunction with the *Phase 3 – Woodsmith Mine CEMP*, this Phase 4 CEMP should be read in conjunction with the documentation submitted to partially discharge the following conditions:

- Condition NYMNPA-18: *Noise and Vibration Management Plan (40-RHD-WS-70-EN-PL-0017 (Phase 4))*;
- Condition NYMNPA-34: *Construction Traffic Management Plan (40-RHD-WS-70-CI-PL-0004 (Phase 4))*;
- Condition NYMNPA-46: *Hydrogeological Risk Assessment (40-FWS-WS-70-WM-RA-0004 (Phase 4))*;
- Condition NYMNPA-47: *Groundwater Management Plan (40-FWS-WS-70-WM-PL-0010 (Phase 4))*;
- Condition NYMNPA-52: *Protected Species Management Plans (400-RHD-WS-70-EN-PL-0010 Ph3 PSMP Reptiles; 40-RHD-WS-70-EN-PL-0011 Ph3 PSMP Badger; 40-RHD-WS-70-EN-PL-0012 Ph3 PSMP Birds; 40-RHD-WS-70-EN-PL-0013 Ph3 PSMP Bats as these remain applicable for Phase 4)*;

- Condition-NYMNPA-60: *Surface Water Drainage Scheme* (40-ARI-WS-71-PA-RP-1050 (Phase 3)) as this remains applicable for Phase 4 and is supplemented by Woodsmith Mine - Phase 4 Works NYMNPA 60 and 79 Surface Water Drainage Scheme (40-ARI-WS-71-PA-RP-1052);
- Condition NYMNPA-64: *Temporary Boundary Treatments* (40-ARI-WS-71-PA-RP-1052 (Phase 3)) as this remains applicable for Phase 4);
- Condition NYMNPA-70: *Tree Protection and Clearance* (40-RHD-WS-70-EN-MS-0002 (Phase 3)) as this remains applicable for Phase 4)
- Condition NYMNPA-76: *Soil Management Plan* (40-AMC-W-71-EN-PL-0006 (Phase 4));
- Condition NYMNPA-79: *Surface Water Management Plan* (40-ARI-WS-71-PA-RP-1050 (Phase 3)) as this remains applicable for Phase 4 and is supplemented by Woodsmith Mine - Phase 4 Works NYMNPA 60 and 79 Surface Water Drainage Scheme (40-ARI-WS-71-PA-RP-1052);
- Condition NYMNPA-91: *Emissions to Atmosphere* (40-RHD-WS-70-EN-RP-0002 (Phase 4));
- Condition NYMNPA-92: *Construction Vehicle and Plant Management Plan* (document reference 40-RHD-WS-70-CI-PL-0005 (Phase 4)); and
- Condition NYMNPA-95: *Written Scheme of Investigation* (40-COT-WS-70-EN-PL-0002 (Phase 3)) as this remains applicable for Phase 4).

1.3.5 Where other more detailed documentation about environmental issues exists, this CEMP summarises and references those documents. At the end of each section, where required, a table clearly signposts those other documents.

1.3.6 The CEMP will remain a live document, being reviewed and updated in consultation with the appointed Contractors or sub-Contractor(s) as required. Each of these updated CEMPs will be submitted to NYMNPA for approval prior to the start of each Phase of construction.

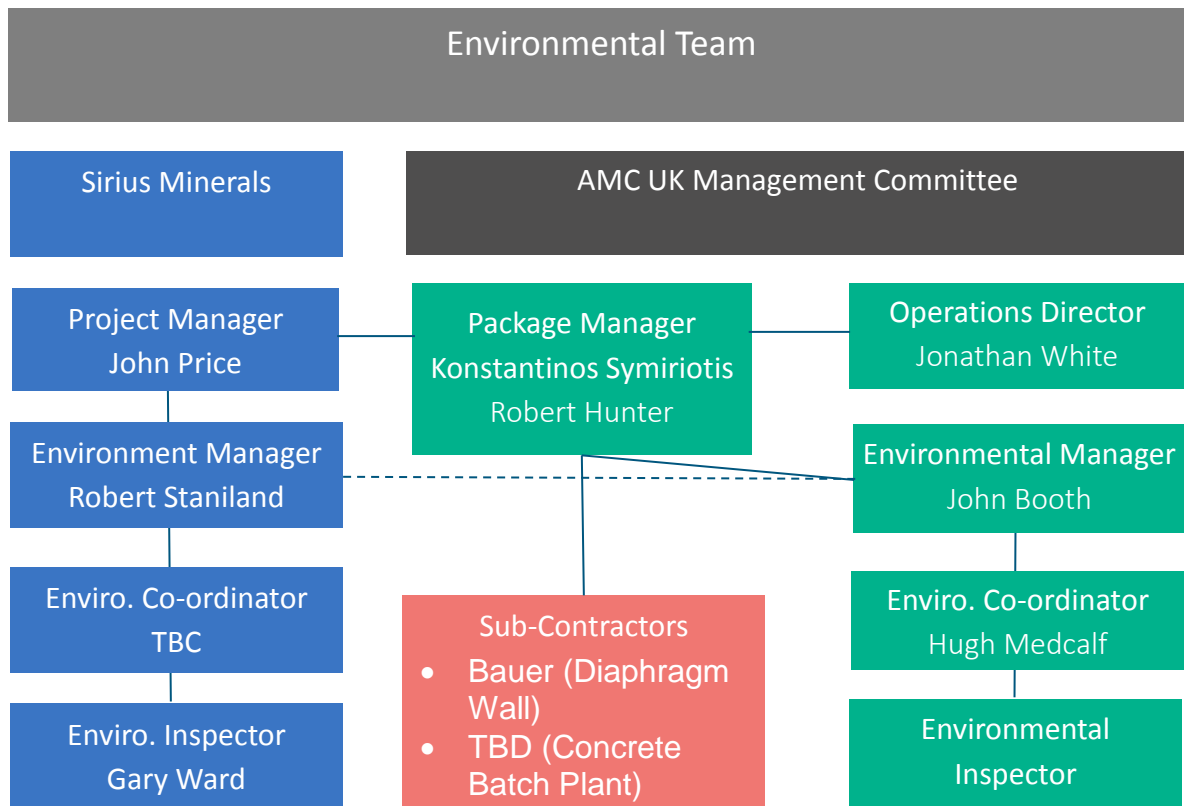
2 Environmental Management Framework

2.1 Structure and Responsibilities

2.1.1 This CEMP addresses those environmental matters within the responsibility of Sirius Minerals and the Contractor engaged on its behalf to deliver the Phase 4 Works. While overall responsibility for compliance with environmental and approvals requirements will remain with Sirius Minerals, the Contractor working on site is accountable for undertaking the construction activities in line with the requirements of this CEMP as well as all legal and other requirements imposed via permits and licences.

2.1.2 The organogram in **Figure 2.1** shows the lines of responsibility for environmental management during the Phase 4 Works.

Figure 2-1 Structure of the Environmental Team



2.2 Environment Policy

- 2.2.1 AMC UK procedures are prepared in accordance with their Environmental Management System which is described in their EMP which forms Appendix B to their PMP (**Appendix 1**).

2.3 Project Management Plan (PMP)

- 2.3.1 The PMP (40-AMC-WS-71-EN-PL-0003) encompasses only those activities and the identified risks which are specific to the works for Phase 4 at Woodsmith Mine, detailing the Safety, Health, and Environmental (SHE) requirements for each. The first section of the PMP contains details about the works and the contract arrangements. Section 2 provides details of the communication strategies to be implemented during Phase 4, including information about site layout and security arrangements, as well as information about the induction and training of staff. Section 3 identifies significant risks and provides details of the Quality Plans, Health and Safety Plans, and Environmental Plans that will be implemented during Phase 4. The remaining sections of the PMP relate to specific client requirements, data gathering, collation and storage processes that will be implemented during Phase 4.
- 2.3.2 Where information in the Phase 4 PMP would be the same as that in the Phase 3 PMP, it is not repeated. Therefore the Phase 4 PMP should be considered as additional to the Phase 3 PMP.

2.4 Environmental Aspects and Impacts

2.4.1 All activities to be undertaken on site during Phase 4 have been subject to an *Environmental Aspects and Impacts Assessment (EAIA)* (40-AMC-WS-17-EN-PL-0005) which built on the information included the Environmental Statement (ES). The EAIA:

- Identified any significant environmental impacts that can be anticipated for this Phase;
- Assessed the risks from these impacts;
- Identified control measures to mitigate the risk; and
- Reported any unacceptable residual risk such that changes can be implemented to reduce the risk to an acceptable level.

2.4.2 The findings of the EAIA, and in particular the necessary controls to reduce risk, have been incorporated into the RAMS produced for Phase 4 (see **Table 2-2**) and daily Keep Safe and Well (K-SAW) forms as required. These documents will be briefed to all site operatives involved in the Works prior to the commencement of activities on site.

2.5 Environmental Management Plan

2.5.1 AMC UK has also prepared an EMP (document reference 40-AMC-WS-71-EN-PL-0004) that documents how the contractor and their sub-contractor(s) will comply with their environmental obligations during the Phase 4 Works. The EMP forms **Appendix B** to the PMP (**Appendix 1**).

2.6 Objectives and Targets

2.6.1 A number of QHSE (quality, health, safety and environment) objectives, and environmental targets and objectives, have been identified within AMC UK's PMP and EMP respectively. Further links to these objectives can be found in **Table 2-2**. The targets include:

- Zero environmental incidents;
- Zero accidents; and
- My Brother's Keeper Reporting.

2.7 Training, Awareness and Competence

2.7.1 Information relating to staff training, awareness and competence is provided in *Phase 3 – Woodsmith Mine CEMP* (**Table 2-2**) and remains applicable for Phase 4.

2.8 Internal Communication

2.8.1 Communication within the site team is discussed in *Phase 3 – Woodsmith Mine CEMP* and this remains applicable for Phase 4 (see **Table 2-2**).

2.9 External Communication

2.9.1 Keeping neighbours, stakeholders and the wider community informed of the works is paramount to managing any complaints and maintaining a good working relationship. Information about how communication with external organisations will be undertaken is provided in *Phase 3 – Woodsmith Mine CEMP* and remains applicable for Phase 4.

Site Notice Boards

2.9.2 The location and content of site notice boards is provided in *Phase 3 – Woodsmith Mine CEMP* and this remains applicable for Phase 4.

Traffic Management Liaison Group

2.9.3 A Traffic Management Liaison Group (TMLG) has been convened to oversee the implementation of the Construction Traffic Management Plan (CTMP), monitoring and enforcement of construction traffic movements. The TMLG will facilitate liaison between Sirius Minerals, planning authorities, highways authorities, and other key stakeholders in relation to the transportation aspects of the construction and operation of the project. Full details of the remit of the TMLG, its membership and its operation can be found in Section 6 of the Phase 4 CTMP.

2.10 Monitoring of Compliance

2.10.1 All construction and installation activities for Phase 4 Works will be supervised by the Contractor's Project Manager with the support of members of their teams on a daily basis using the same procedures as detailed in *Phase 3 – Woodsmith Mine CEMP*.

2.11 Complaints Procedure

2.11.1 The implementation of the systems and procedures to protect the environment will, if implemented, fully prevent environmental breaches. However complaints may still be received, and in this event the Complaints Procedure, which remains unchanged from that outlined in Appendix 6 of *Phase 3 – Woodsmith Mine CEMP*, will be implemented.

2.12 Location of Information Relating to the Environmental Management Framework

2.12.1 More detailed information about the issues addressed in **Section 2** can be found in a range of documents and these locations are detailed **Table 2-2** below.

Table 2-1 Location of Environmental Management Framework Information

| Section of CEMP | Topic | Documents |
|-----------------|----------------------------------|---|
| Section 2.1 | Staff Roles and Responsibilities | <p>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP:</p> <ul style="list-style-type: none"> Appendix 1a: Sections 2.1.2; 2.1.3, and 4 ;and Appendix 1a: Appendix B, Section 4 Appendix 2a: MS2. |

| Section of CEMP | Topic | Documents |
|-----------------|-----------------------------------|---|
| Section 2.2 | ISO14001 Certification | N/A |
| Section 2.2 | Environmental Policy | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Appendix B |
| Section 2.3 | Health and Safety | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Sections 3.2, 3.3, 3.4 and 3.5; and Appendix 2a: RA1 and MS2. |
| Section 2.3 | Environmental Aspects and Impacts | Appendix 1: Section 8.5.17 40-AMC-WS-17-EN-PL-0005 – Phase 4 Environmental Aspects and Impacts Assessment 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 3.7.17; and Appendix 1a: Appendix B, Section 2.3 |
| Section 2.4 | Objectives and Targets | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 2.2; and Appendix 2a: Sections 2.4 and 2.5. |
| Section 2.5 | Training Awareness and Competence | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Sections 2.5.3 and 2.5.4; Appendix 2a: RA1 and MS2; and Appendix 1a: Section 6. |
| Section 2.6 | Internal Communication | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 2.3 and 3.4.3; Appendix 1a: Appendix B, Sections 5.1, 5.2 and 5.3; and Appendix 2a: MS2. |
| Section 2.6 | Inspections on site | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 3.4.3; and Appendix 1b: Sections 7.1 and 7.2. |
| Section 2.6 | Monthly Progress Meetings | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 3.4.5. |
| Section 2.7 | External Communication | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 2.3; and Appendix 1b Sections 5.4, 5.5 and 5.6. |
| Section 2.7 | Site Notice Boards | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: <ul style="list-style-type: none"> Appendix 1a: Section 3.2.2. |
| Section 2.8 | Monitoring Compliance | 40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP: |

| Section of CEMP | Topic | Documents |
|-----------------|----------------------|---|
| | | <ul style="list-style-type: none"> Appendix 1a: Sections 3.3.6 and 3.7.6; and Appendix 1a: Appendix B, Section 7. |
| Section 2.8 | Inspections on site | <i>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP:</i> <ul style="list-style-type: none"> Appendix 1a: Section 2.2.3 and 2.2.4; and Appendix 1b: Section 7.1. |
| Section 2.8 | Environmental Audits | <i>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP:</i> <ul style="list-style-type: none"> Appendix 1a: Sections 2.2.3, 2.2.4, and 3.6; and Appendix 1b: Section 7.1. |
| Section 2.9 | Complaints Procedure | <i>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP:</i> <ul style="list-style-type: none"> Appendix 1a: Section 2.3.2; and Appendix 1b: Section 4.5. |

3 Description of Site

3.1 Fencing and Security of the Site

3.1.1 A fencing strategy, including security and maintenance is detailed in *Phase 3 – Woodsmith Mine CEMP*; this remains applicable to Phase 4. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 3-1**.

3.2 Site Compounds

3.2.1 The details of the site compounds at Woodsmith Mine and their layouts are detailed in *Phase 3 – Woodsmith Mine CEMP* and the majority of this remains valid for the Phase 4 Works. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 3-1**. The layout of the AMC UK compound for Phase 4 is updated to include the bentonite plant as well as a workshop and a welding shelter, and this revised site layout is detailed in drawing 40-ARI-WS-71-CI-DR-1081 which can be found in Appendix A of the PMP (**Appendix 1**).

3.3 Welfare Facilities

3.3.1 The welfare facilities for the Phase 4 works are the same as those detailed in *Phase 3 – Woodsmith Mine CEMP* with the addition of a new welfare facility serving up to 100 staff as shown on drawing 40-ARI-WS-71-CI-DR-1081. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 3-1**. Details relating to the new welfare facilities can be found in **Appendix 3**.

3.4 Lighting

3.4.1 Measures and controls to reduce light pollution are detailed in *Phase 3 – Woodsmith Mine CEMP* and these remain applicable for Phase 4. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 3-1**.

3.5 Materials Storage

3.5.1 Details of the locations for storage of plant and materials, and the measures to prevent pollution, contamination or nuisance, were provided in *Phase 3 – Woodsmith Mine CEMP* and most of this remains applicable for Phase 4. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 3-1**. Some minor amendments have been made for Phase 4. The amendments to materials generation and storage for Phase 4 can be found in **Section 11** of this document.

3.6 Wheel Washing Facilities

3.6.1 Wheel wash facilities are detailed in *Phase 3 – Woodsmith Mine CEMP* and this information remains applicable for Phase 4. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 3-1**.

3.7 Site Housekeeping

3.7.1 The implementation of a good site housekeeping policy is key to reducing the likelihood of accidents and environmental pollution incidents. Good housekeeping measures that will be implemented on site are detailed in *Phase 3 – Woodsmith Mine CEMP* and these remain applicable for Phase 4. Further information about the location of this information can be found in **Table 3-1**.

3.8 Location of Information Relating to the Site Layout

3.8.1 More detailed information about the issues addressed in Section 3 can be found in a range of documents and these locations are detailed **Table 3-1** below.

Table 3-1 Location of Information within the Project Management Plans

| Section of CEMP | Topic | Documents |
|-----------------|----------------------------------|--|
| Section 3.1 | Fencing and Security of the Site | <i>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 1a: Section 2.5.1; and Appendix 2a: MS3. |
| Section 3.2 | Site Compounds | Appendix 1 - Drawing 40-ARI-WS-71-CI-DR-1081 <i>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP</i> <ul style="list-style-type: none"> Appendix 1a: Section 2.5.1. |
| Section 3.3 | Welfare Facilities | Appendix 3 40-AMC-WS-10-SW-RA-0001 - <i>Woodsmith Mine Phase 4 Mobilisation / Demobilisation RAMS</i> <i>40-RHD-WS-70-EN-PL-0014 - Phase 3 - Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 1a, Section 2.6; |

| | | |
|-------------|--------------------------|--|
| | | <ul style="list-style-type: none"> Appendix 2a: MS2. |
| Section 3.4 | Lighting | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 - Woodsmith Mine CEMP</i> . <ul style="list-style-type: none"> Appendix 1a, Sections 2.5.1, 3.7.3 and 3.3.15. |
| Section 3.5 | Materials Storage | Section 11 of this document 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 - Woodsmith Mine CEMP</i> . <ul style="list-style-type: none"> Appendix 1a: Section 3.5.9.1; Appendix 1a: Appendix B, Section 8.1.2; and Appendix 2a: Part MS3. |
| Section 3.6 | Wheel Washing Facilities | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 - Woodsmith Mine CEMP</i> . <ul style="list-style-type: none"> Appendix 1a: Section 3.7.14; and Appendix 2a: MS3. |
| Section 3.7 | Site Housekeeping | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 - Woodsmith Mine CEMP</i> . <ul style="list-style-type: none"> Appendix 2a: Part MS3. |

4 Traffic

4.1 Introduction

4.1.1 A wide range of measures to manage the impacts of construction traffic have been put in place. Some of these measures have been incorporated into the design of the consented scheme, including a number of highway improvements and other mitigation measures to be implemented during construction. These are discussed in the sections below.

4.2 Construction Traffic Management Plan (CTMP)

4.2.1 The *Phase 4 Construction Traffic Management Plan (CTMP)* has been prepared for Woodsmith Mine, (40-RHD-WS-70-CI-PL-0004) and submitted to partially discharge condition NYMNP-34. The CTMP contains a range of measures for the management of transport during Phase 4 including:

- High occupancy travel for employees, including car-sharing and minibus pick up;
- All vehicles travelling to site using the designated routes only;
- A series of prohibited routes for construction vehicles, including prohibitive and directional signage; and
- A *Highway Communication Plan*, which is provided in Appendix D of the Phase 4 CTMP.

4.3 Parking and Deliveries to Site

4.3.1 Details of parking, deliveries and unloading at Woodsmith Mine are detailed in Section 4 of the Phase 4 CTMP which focusses on the number and timing of vehicle deliveries while the rest of the information can be found in the Phase 3 CEMP. Further information about the location of this information within the Phase 3 CEMP can be found in **Table 4-1**.

Parking on site

4.3.2 The details of parking identified in the Phase 3 CEMP are applicable to Phase 4.

HGV Deliveries

4.3.3 Procedures relating to the management of HGV deliveries to site, and the management of the removal of all materials from Woodsmith Mine are set out in the Phase 3 CEMP and in Section 4 of the Phase 4 CTMP (see **Table 4-1**).

Fuel Deliveries

4.3.4 The procedures set out in the Phase 3 CEMP are applicable to Phase 4.

Pedestrians and cyclists

4.3.5 The procedures set out in the Phase 3 CEMP are applicable to Phase 4.

4.4 Enforcement Systems for Breaches of Traffic Management Requirements

4.4.1 To ensure that measures in the CTMP are delivered and targets are quantifiable, effective enforcement mechanisms are detailed in Sections 7 and 11 of the CTMP and summarised in the PMP for Phase 3 (**Table 4-2** refers).

4.5 Location of Information Relating to Traffic

4.5.1 More detailed information about the issues addressed in **Section 4** can be found in a range of documents and these locations are detailed **Table 4-1** below.

Table 4-1 Location of Information relating to Traffic

| Section of CEMP | Topic | Documents |
|-----------------|--|---|
| Section 4.3 | Parking on site | 40-RHD-WS-70-CI-PI-0004 – <i>Phase 4 CTMP</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 - Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 1a: Sections 2.5.1 and 3.8.4 Appendix 2b: Section 2(c)(viii). |
| Section 4.3 | Deliveries to site | Appendix 1: Section 10.4.5. 40-RHD-WS-70-CI-PI-0004 – <i>Phase 4 CTMP</i> : Section 4 |
| Section 4.3 | Fuel deliveries | Appendix 1: Section 10.4.5. 40-RHD-WS-70-CI-PI-0004 – <i>Phase 4 CTMP</i> : Section 4 |
| Section 4.4 | Enforcement of traffic management requirements | Appendix 1: Section 10.4.5.2 40-RHD-WS-70-CI-PI-0004 – <i>Phase 4 CTMP</i> – Sections 7 and 11. |

5 Noise and Vibration

5.1 Introduction

5.1.1 A wide range of measures have been developed to reduce the impacts of noise and vibration from construction. Some are incorporated into the design of the development, such as the construction of noise bunds and an acoustic fence, while others involve mitigation to be incorporated on site during construction. These are detailed in the Noise and Vibration Management Plan (NVMP) for Phase 4 (**Section 5.2** below), and summarised in the PMP for Phase 4 (see **Table 5-1**).

5.2 Noise and Vibration Management Plan

5.2.1 *Phase 4 Noise and Vibration Management Plan* (40-RHD-WS-70-EN-PL-0017) has been prepared and submitted to the NYMNPAs to partially discharge condition NYMNPAs-18. It includes details of the noise sensitive receptors, agreed noise limits, monitoring to be undertaken and the mitigation measures to be implemented.

5.3 Location of Information Relating to Noise and Vibration

5.3.1 More detailed information about the issues addressed in **Section 5** can be found in a range of documents as detailed in **Table 5-1** below.

Table 5-1 Location of Information relating to Noise and Vibration

| Section of CEMP | Section | Documents |
|-----------------|-----------------------------------|---|
| Section 5.2 | Noise and Vibration (Environment) | 40-RHD-WS-70-EN-PL-0017 - <i>Phase 4 NVMP</i> Appendix 1: Section 8.5.11 |

6 Air Quality and Dust Management

6.1 Introduction

6.1.1 A wide range of measures have been developed to reduce the impact of construction on air quality and, as part of this, to manage dust. These were specified in the PMP and EMP in *Phase 3 – Woodsmith Mine CEMP*.

6.1.2 Mitigation specific to Phase 4 has been identified and is detailed in a Construction Vehicle and Plant Management Plan (CVPMP) (**Section 6.2**), and the Dust Management Plan (DMP) (**Section 6.3**). Information is also summarised in the PMP for Phase 4 (see **Table 6-1**).

6.2 Construction Vehicle and Plant Management Plan

- 6.2.1 The *Phase 4 Construction Vehicle and Plant Management Plan* (40-RHD-WS-70-CI-PL-0005), has been prepared to enable the partial discharge of planning condition NYMNPA-92. The CVPMP details the results of baseline dust deposition monitoring, which recorded levels well within accepted standards.
- 6.2.2 The main sources of particulate matter release during Phase 4 are from the combustion of fuel associated with the operation of on-site plant (referred to as non-road mobile machinery (NRMM)) and generators; and from brake and tyre wear arising from the transportation of staff to site, and HGV deliveries and movements.
- 6.2.3 Despite the low levels of particulate emissions during Phase 4, a number of mitigation measures have been identified to minimise these emissions (Section 5 of the CVPMP). These have been incorporated into the PMP and EMP (**Table 6-1** below refers). These measures include implementing fuel conservation measures and the installation of diesel particulate filters.

6.3 Dust Management Plan

- 6.3.1 Dust emissions can arise from the majority of the construction activities being undertaken on site as part of Phase 4. Measures and controls to minimise dust emissions from Phase 4 are provided in the PMP (see **Table 6-1**). In addition to an *Emissions to Atmosphere Plan* (40-RHD-WS-70-EN-RP-0002), the *Phase 4 Dust Management Plan*, is provided in Appendix 4 of this CEMP. Daily inspections and monitoring will be undertaken by the Contractors, in accordance with this procedure. Some of the dust management mitigation identified in the Dust Management Plan (DMP) include monitoring works in dry conditions, dampening down roads, profiling dust generating stockpiles and seeding soil stockpiles.

6.4 Location of Information relating to Air Quality and Dust Management

- 6.4.1 More detailed information about the issues addressed in **Section 6** can be found in a range of documents and these locations are detailed **Table 6-1** below.

Table 6-1 Location of Information relating to Air Quality and Dust Management

| Section of CEMP | Topic | Documents |
|-----------------|-----------------------------|--|
| Section 6.2 | Vehicle and Plant Emissions | 40-RHD-WS-70-CI-PL-0005 – <i>Phase 4 CVPMP</i> Appendix 1: Section 8.5.9 (PMP). |
| Section 6.3 | Dust Management | 40-RHD-WS-70-EN-RP-0002 – <i>Phase 4 Emissions to Atmosphere</i> Appendix 1: Section 8.5.9 (PMP) Appendix 4. |

7 Nature Conservation

7.1 Introduction

7.1.1 Numerous ecological surveys have been undertaken on the Woodsmith Mine site. These surveys resulted in a number of planning conditions being discharged and the information provided to discharge these conditions for Phase 3 remains applicable for much of Phase 4. Further information about where information relating to these issues can be found is detailed in **Table 7.1** below and documentation provided to discharge these conditions is described in **Sections 7.2 – 7.5** below.

7.2 Protected Species and Precautionary Method of Working for Site Clearance

7.2.1 *Protected Species Management Plans* (PSMP) were produced for bats, reptiles, badgers and birds to partially discharge planning condition NYMNPA-52 for Phase 3. These remain applicable for the Phase 4 works. There is no site clearance planned in Phase 4 and so no precautionary method of working for site clearance is required.

7.3 Tree Protection Area

7.3.1 The *Arboricultural Method Statement* (AMS), with an accompanying Tree Protection Plan (TPP) that was prepared to partially discharge NYMNPA-70 for Phase 3 remains applicable for Phase 4.

7.4 Protected Habitats within the North York Moors Natura 2000 Site

7.4.1 Woodsmith Mine is located adjacent to the North York Moors Special Area of Conservation (SAC) and Special Protection Area (SPA), which includes Sneaton Low Moor and Ugglebarnby Moor. Surveys have been undertaken to assess the extent of groundwater dependant terrestrial habitats. It has been concluded that the species recorded in the SAC / SPA do not make up groundwater dependent moor plant communities with the exception of one localised area.

7.4.2 The “Ugglebarnby Moor southern Spring Flush” area adjacent to Lousy Hill Lane, contains flora that is dependent on soil moisture conditions sustained by the spring flows and, as such, is sensitive to hydrogeological variations within the shallow rock aquifer. An assessment of the impacts of Phase 4 indicated that there would be a negligible physical impact on the Spring and as a result, no adverse effects on the flora present. This is discussed in more detail in the report, *Hydrogeological Risk Assessment for Phase 4 Works at Woodsmith Mine, May 2017* (40-FWS-WS-70-WM-RA-0004) which was prepared to allow the partial discharge of condition NYMNPA-46.

7.5 Environmental Enhancement

7.5.1 The *Phase 3 Landscape and Ecological Management Plan (LEMP)* (40-RHD-WS-70-EN-PL-0008) was prepared to partially discharge condition NYMNPA-57. This LEMP remains applicable for Phase 4.

7.6 Location of Information Relating to Nature Conservation

7.6.1 More detailed information about the issues addressed in **Section 7** can be found in the PMP and RAMS produced by AMC UK as detailed in *Phase 3 – Woodsmith Mine CEMP*. **Table 7-1** below identifies where within each document this additional information can be found.

Table 7-1 Location of Information relating to Nature Conservation

| Section of CEMP | Topic | Documents |
|-----------------|--|---|
| Section 7.1 | Protected Species | 40-RHD-WS-70-EN-PL-0010 - <i>Phase 3 PSMP Reptiles</i> 40-RHD-WS-70-EN-PL-0011 - <i>Phase 3 PSMP Badger</i> 40-RHD-WS-70-EN-PL-0012 - <i>Phase 3 PSMP Birds</i> 40-RHD-WS-70-EN-PL-0013 - <i>Phase 3 PSMP Bats</i> |
| Section 7.2 | Precautionary Methods of Working during Site Clearance | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 9 |
| Section 7.3 | Tree Protection Areas | 40-RHD-WS-70-EN-MS-0002 – <i>Phase 3 Tree Protection Areas</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 10 |
| Section 7.4 | Protected Habitats in Ugglebarnby Moor | 40-FWS-WS-70-WM-RA-0004 - <i>Hydrogeological Risk Assessment for Phase 4 Works at Woodsmith Mine</i> |
| Section 7.5 | Environmental Enhancement | 40-RHD-WS-70-EN-PL-0008 - <i>Phase 3 LEMP</i> |

8 Archaeology

8.1 Introduction

8.1.1 An assessment of the sites of archaeological interest within the footprint of Woodsmith Mine was undertaken during the development of the project and an archaeological desk based assessment was undertaken.

8.2 Written Scheme of Investigation

8.2.1 The Written Scheme of Investigation (WSI) prepared for Phase 3 (*Phase 3 Written Scheme of Investigation*, 40-COT-WS-70-EN-PL-0002) remains applicable for Phase 4 and will be applied to the limited earth works being undertaken in this Phase. Further information about the where the relevant information relating to this work can be found is shown in **Table 8.2** below.

8.3 Location of Information Relating to Archaeology

8.3.1 More detailed information about the issues addressed in **Section 8** can be found in the PMP and RAMS produced by AMC UK as detailed in *Phase 3 – Woodsmith Mine CEMP* **Table 8-1** below identifies where within each document this additional information can be found.

Table 8-1 Location of Information relating to Archaeology

| Section of CEMP | Topic | Documents |
|-----------------|-------------|---|
| Section 8.2 | Archaeology | 40-COT-WS-70-EN-PL-0002 – <i>WSI for Phase 3</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> • Appendix 1a: Section 3.7.13; and • Appendix 2a: MS3 |

9 Hydrogeology, Water Quality and Drainage

9.1 Introduction and Generic Water Protection Issues

9.1.1 A range of watercourses run through the site. In addition there are three different groundwater tables and a small area of habitat that is dependent on groundwater below the site (see **Section 4.7**). In order to prevent pollution of the water environment the construction works will be undertaken in accordance with best practice which is laid out in the withdrawn Pollution Prevention Guidance (PPG5) which was produced by the Environment Agency.

9.1.2 In addition, specific mitigation to protect surface water and ground water was developed and this is discussed in **Sections 9.2 – 9.4** inclusive below.

9.1.3 Information about these can be found in *Phase 3 – Woodsmith Mine CEMP* as detailed in **Table 9-1** below. These remain valid for Phase 4, apart from where specific Phase 4 measures are identified below.

9.2 Groundwater Water Management

9.2.1 Dewatering will be undertaken during Phase 4 as necessary, depending on groundwater levels, to prevent groundwater ingress into the construction areas during shaft sinking. The dewatering, to be undertaken using the series of approximately 35 dewatering wells to be constructed as part of Phase 3 works, will be undertaken in accordance with the strategy laid out in the *Hydrogeological Risk Assessment for Phase 4 Works at Woodsmith Mine, May 2017*, (40-FWS-WS-70-WM-RA-0004; and the *Groundwater Management Plan* (40-FWS-WS-70-WM-PL-0010), both of which were prepared to allow the partial discharge of condition NYMNPA-46.

9.2.2 Groundwater will discharge, via an existing outfall serving the temporary dewatering system on site, to a tributary of the Sneaton Thorpe Beck. The construction of diaphragm walls will prevent groundwater ingress into the shaft and head frame structures for the Production, Service and Materials transport systems.

9.3 Surface Water Management

9.3.1 The *Phase 3 Surface Water Management Plan* (40-ARI-WS-71-PA-RP-1050) remains applicable for Phase 4 (and is supplemented by Woodsmith Mine - Phase 4 Works NYMNPA 60 and 79 Surface Water Drainage Scheme (40-ARI-WS-71-PA-RP-1052)), as does information within the *Phase 3 – Woodsmith Mine CEMP* regarding surface water management.

9.4 Silt and Pollutant Management

9.4.1 Silt and pollution management outlined in *Phase 3 - Woodsmith CEMP* remains applicable for Phase 4. Further information can be found in the *Phase 3 Surface Water Management Plan* (40-ARI-WS-71-PA-RP-1050) which was prepared to enable the partial discharge of conditions NYMNPA-60 and NYMNPA-79 in relation to Phase 3, and is supplemented by Woodsmith Mine - Phase 4 Works NYMNPA 60 and 79 Surface Water Drainage Scheme (40-ARI-WS-71-PA-RP-1052).

9.5 Location of Information Relating to Hydrogeology, Water Quality and Drainage

9.5.1 More detailed information about the issues addressed in **Section 9** can be found in the PMP the RAMS and the EMP produced by AMC UK as well as in the documents relating to groundwater. **Table 9-1** below identifies where within each document this additional information can be found.

Table 9-1 Location of Information relating to Hydrogeology, Water Quality & Drainage

| Section of CEMP | Topic | Documents |
|-----------------|-------------------------------|--|
| Section 9.2 | Groundwater management | 40-FWS-WS-70-WM-RA-0004 - <i>Hydrogeological Risk Assessment for Phase 4 Works at Woodsmith Mine May 2017</i> 40-FWS-WS-70-WM-PL-0010 - <i>Groundwater Management Plan Phase 4 May 2017</i> |
| Section 9.3 | Surface water management | 40-ARI-WS-71-PA-RP-1050 – <i>Phase 3 Surface Water Management Plan</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 1a: Section 3.7.11.1; and Appendix 2a: RA1 and MS3. |
| Section 9.4 | Silt and Pollution Management | 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> : <ul style="list-style-type: none"> Appendix 1a: Section 3.7.11.1; Appendix 1a: Appendix B, section 8.2; and Appendix 2a: RA1 and MS3. |

| | | |
|-------------|----------------------------------|---|
| Section 9.5 | Ephemeral surface water channels | 40-ARI-WS-71-PA-RP-1050 – Phase 3 Surface Water Management Plan |
|-------------|----------------------------------|---|

10 Soils and Contaminated Land

10.1 Introduction

10.1.1 As part of Phase 4, soils will be stripped and added to the temporary and permanent earth bunds created on site as part of Phase 3. The Phase 4 *Soil Management Plan* (40-FWS-WS-70-CI-PL-0003) outlines the methodologies for this work and builds on the detail in the *Phase 3 Soil Management Plan (SMP)* (40-FWS-WS-70-CI-PL-0002). Phase 3 Soil Management Plan (see **Table 10-1**).

10.2 Top Soil and Sub-Soil Management

10.2.1 The soil (top soils and subsoils) handling procedures outlined in the *Phase 3 SMP* will be complied with during Phase 4.

10.3 Contaminated Land

10.3.1 No areas of potentially contaminated land were identified within the footprint of Phase 4 at Woodsmith Mine and the approach for dealing with unexpected contaminated soils found on site as described in *Phase 3 – Woodsmith Mine CEMP* remains applicable for Phase 4 (see **Table 10-1**).

10.4 Location of Information Relating to Soils and Contaminated Land

10.4.1 More detailed information about the issues addressed in **Section 10** can be found in the PMP, EMP and RAMS produced by AMC UK as detailed in *Phase 3 – Woodsmith Mine CEMP*. **Table 10-1** below identifies where within each document this additional information can be found.

Table 10-1 Location of Information relating to Soils and Contaminated Land

| Section of CEMP | Topic | AMC UK Documents |
|-----------------|-------------------|--|
| Section 10.2 | Soil Management | 40-FWS-WS-70-CI-PL-0003 – Phase 4 Soil Management Plan • |
| Section 10.3 | Contaminated Land | 40-RHD-WS-70-EN-PL-0014 - Phase 3 – Woodsmith Mine CEMP • Appendix 1a: Section 8.2. |

11 Materials and Waste

11.1 Introduction

11.1.1 A wide range of materials and waste materials are to be stored on site and these will be stored in a number of locations as detailed in **Section 3.6** above, and in *Phase 3 – Woodsmith Mine CEMP*. The only additional waste material that is to be stored on site is bentonite slurry, produced as a result of the construction of the diaphragm walls to a depth of -60m below ground level at the Production, Service and Mineral Transport System shafts. The methodology for the storage of this material is detailed in **Sections 15.3** and **15.5** of the PMP (**Appendix 1**) and within a number of RAMS and other documents produced by the Contractor (see **Section 11.2** and **Table 11-1** below).

11.2 Location and Nature of Storage Areas

11.2.1 The location and nature of the storage areas is dependent on the nature of the materials being held on site and is the same as those identified in Phase 3. As such, the storage areas identified in *Phase 3 – Woodsmith Mine CEMP* remain appropriate for Phase 4. However these are reiterated in Sections 15.3 and 15.5 of the PMP (**Appendix 1**), within the *Woodsmith Mine Phase 4 Operation of the Slurry (Bentonite) Plant RAMS (40-AMC-WS-10-SW-RA-0005)* in **Appendix 2c** and in the *Slurry Management Plan (Bentonite) (40-AMC-WS-10-EN-PL-0002)* in **Appendix 2f**. In addition a revised *Construction Site Waste Management Plan (40-AMC-WS-71-EN-PL-0006)* has been produced for Phase 4 (see **Table 11-1**).

11.3 Fuel Oil Storage and Refuelling on Site

11.3.1 Fuel oil storage and refuelling on site detailed in *Phase 3 – Woodsmith Mine CEMP* (see **Table 11.1** below) remains applicable for Phase 4.

11.4 General Management of Non-Extractive Waste

11.4.1 Methods for the management of Non-Extractive Waste are set out in the *Phase 3 – Woodsmith Mine CEMP* (see **Table 11-2**) and expanded in the Phase 4 Construction Site Waste Management Plan (40-AMC-WS-71-EN-PL-0006).

11.5 Location of Information relating to Materials and Waste

11.5.1 More detailed information about the issues addressed in **Section 11** can be found in a range of documents and these locations are detailed **Table 11-1** below.

Table 11-1 Location of Information relating to Materials and Waste

| Section of CEMP | Topic | AMC UK Documents |
|-----------------|--------------|---|
| Section 11.1 | Introduction | 40-AMC-WS-71-EN-PL-0006 – <i>Phase 4 Construction Site Waste Management Plan</i> <i>Appendix 1: Sections 15.3 and 15.5</i> <i>Appendix 2c</i> |

| Section of CEMP | Topic | AMC UK Documents |
|-----------------|--|--|
| Section 11.2 | Nature and Location of Storage Areas | 4040-AMC-WS-71-EN-PL-0006 – <i>Phase 4 Construction Site Waste Management Plan</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> <ul style="list-style-type: none"> Appendix 1a: Section 3.1.7 and 3.5.9; and Appendix 1a: Section 8.1.2. |
| Section 11.3 | Fuel Oil Storage and Refuelling (including spill kits) | 40-AMC-WS-71-EN-PL-0006 – <i>Phase 4 Construction Site Waste Management Plan</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> <ul style="list-style-type: none"> Appendix 1a: Sections 3.7.18.1; Appendix 1a: Appendix B, Section 8.1.2; and Appendix 2a: RA1 and MS3. |
| Section 11.4 | Non-extractive Waste | 40-AMC-WS-71-EN-PL-0006 – <i>Phase 4 Construction Site Waste Management Plan</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> <ul style="list-style-type: none"> Appendix 1a: Section 3.5.1 and 3.7.9 and Appendix 1a: Section 8.1.2. |

12 Incident and Emergency Planning

12.1 Introduction

12.1.1 The *Phase 3 CEMP* and the associated appendices detailed actions that will be taken to minimise the risk of pollution incidents occurring on site and identifies the actions to be taken in the event of a pollution incident. These documents remain applicable to Phase 4. In addition a *Phase 4 Emergency Response Plan* (40-AMC-WS-71-HS-PL-0003) has been prepared and is included in **Appendix 1**.

12.2 Location of Information relating to Incident and Emergency Planning

12.2.1 More detailed information about the issues addressed in **Section 12** can be found in a range of documents and these locations are detailed **Table 12-1** below.

Table 12-1 Location of Information relating to Incident and Emergency Planning

| Section of CEMP | Topic | Documents |
|-----------------|---------------------------------|--|
| Section 12.2 | Incident and Emergency planning | 40-AMC-WS-71-HS-PI-0003 - <i>Phase 4 Emergency Response Plan</i> 40-RHD-WS-70-EN-PL-0014 - <i>Phase 3 – Woodsmith Mine CEMP</i> <ul style="list-style-type: none"> Appendix 1a: Sections 2.10, 2.3.1; Appendix 1a: Appendix b, Section 9'and Appendix 1a:Appendix C. |



Appendix 1 Woodsmith Mine Phase 4 Project Management Plan

Appendix 2a Woodsmith Mine Phase 4 Mobilisation / Demobilisation RAMS

Appendix 2b Woodsmith Mine Phase 4 Installation of Guide Walls RAMS

Appendix 2c Woodsmith Mine Phase 4 Operation of Slurry Plant (Bentonite) RAMS

Appendix 2d Woodsmith Mine Phase 4 Installation of Diaphragm Wall Shafts RAMS

Appendix 2e Woodsmith Mine Phase 4 Concrete Batch Plant Operation and Maintenance RAMS

Appendix 2f Woodsmith Mine Phase 4 Slurry Management Plan (Bentonite)

Appendix 3 Temporary Structures

Appendix 4 Woodsmith Mine Phase 4 Dust Management Plan