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NYMNP

08/10/2018

**Date:** 5 October 2018  
**Our ref:** 50303/04/HS/JCx/16562539v1  
**Your ref:** NYM/2017/0505/MEIA

Dear Rob

**North York Moors: Woodsmith Mine - Application to Partially Discharge Conditions 4, 18, 34, 46, 47, 52, 57, 60, 64, 68, 70, 71, 76, 79, 91, 92, 93, 94 & 95 of Planning Permission NYM/2017/0505/MEIA**

On behalf of our client, Sirius Minerals plc ("Sirius Minerals"), we are pleased to submit this application for limited and partial approval of Planning Conditions 4, 18, 34, 46, 47, 52, 57, 60, 64, 68, 70, 71, 76, 79, 91, 92, 93, 94 & 95 of Planning Permission NYM/2017/0505/MEIA.

The Project will be delivered in a series of Phases. This application relates solely to the Phase 6a works at the Woodsmith Mine.

## **Background**

*On 19 October 2015, the NYMNP granted planning permission for the "Winning and working of polyhalite by underground methods including the construction of a minehead at Dove's Nest Farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, the construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the construction of an underground tunnel between Doves Nest Farm and land at Wilton that links to the mine below ground, comprising 1 no. shaft at Doves Nest Farm, 3 no. intermediate access shaft sites, each with associated landforming of associated spoil, the construction of buildings, access roads and car parking, landscaping, restoration and aftercare, and the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works" (Council Reference NYM/2014/0676/MEIA).*

NYM/2014/0676/MEIA was approved subject to 95 planning conditions and a Section 106 Agreement.

On 6 February 2017, the NYMNP granted planning permission for the "Variation of Condition 5 of planning permission NYM/2014/0676/MEIA to allow minor material amendments relating to that part of the development at the Woodsmith Mine site (formerly known as Doves Nest Farm and Haxby Plantation), including; re-design of foreshafts and shaft construction methodology, changes to building layout and shaft access arrangements, revisions to construction and operational shaft platform levels, revisions to location and layout of surface water attenuation ponds, revisions to groundwater management

*arrangements and amendments to internal access arrangements”* (Council Reference NYM/2017/0505/MEIA).

The amended scheme (NYM/2017/0505/MEIA) was approved subject to 98 planning conditions and a deed of variation to the originally approved Section 106 Agreement.

On 7 August 2018, Sirius Minerals (partially) discharged all necessary planning conditions from Planning Permission NYM/2017/0505/MEIA to allow Phase 6 works to be undertaken, including the construction of an access road, pad and drainage system in a cleared area within the Haxby Plantation. An application under Section 96a of the Town & Country Planning Act 1990 (As Amended) has since been submitted to NYMNPA to facilitate the installation and operation of a Liquefied Natural Gas (“LNG”) plant in this location (ref. PP-07326396).

The subject application seeks to discharge all the necessary planning conditions in relation to the installation and operation of the LNG plant which, for the remainder of this submission, is referred to as “Phase 6a”.

### **Phase 6a Works**

As detailed above, the full scope of the Phase 6a works comprises the installation and operation of a LNG plant at the Woodsmith Mine.

### **Planning Conditions 52, 57, 70, 73 and 95**

Sirius Minerals is committed to implementing the mitigation, monitoring and reporting measures developed in previous phases, throughout Phase 6a for the following conditions:

- NYM-52 Protected Species Management Plans;
- NYM-57 Landscape and Ecological Management Plan;
- NYM-70 Arboricultural Method Statement;
- NYM-73 Woodland Management Plan; and
- NYM-95 Archaeological Written Scheme of Investigation;

Sirius Minerals is not intending to re-submit the documentation for the above conditions as they have already been approved and implemented in full for the duration of previous phases and will continue to be implemented insofar as they relate to Phase 6a.

### **Partial Discharge**

Sirius Minerals acknowledges that limited and partial approval of Planning Conditions 4, 18, 34, 46, 47, 52, 57, 60, 64, 68, 70, 71, 76, 79, 91, 92, 93, 94 & 95 when given, does not constitute permission to undertake works other than those described, including any works at Lady Cross Plantation, and that such works remain subject to the approval of other conditions.

This approach has been discussed and agreed with your Planning Team and is consistent with the approach taken on previous phases of the Project.

### **Application Submission**

The application was submitted via the planning portal on 5 October 2018 (reference PP-07332343) and comprises the following documentation:

- Completed application form;
- Application drawings – Please see Appendix 1;



- Supporting Documents – Please see Appendix 1.

The requisite planning application fee of £116 has been paid online by credit card.

**Conclusion**

We trust that this application provides you with the necessary information to be able to (partially) discharge the above conditions to cover Phase 6a works at Woodsmith Mine. However, should you require any further information, please do not hesitate to contact me.

Yours sincerely

**James Cox**  
Senior Planner



**Appendix 1 : Supporting Documents**

**Table 1: List of Supporting Documents**

<b>Condition No</b>	<b>Description</b>	<b>Document Name / Number</b>	<b>Further Details</b>
N/A	N/A	Listed Plans	<p>40-ARI-WS-7100-CI-18-01020 - Woodsmith Mine Construction Phase 6a Masterplan</p> <p>40-ARI-WS-7100-CI-18-01022 – Woodsmith Mine Construction Phase 6a Drainage General Arrangement</p> <p>40-ARI-WS-7100-CI-18-01024 – Woodsmith Mine Construction Phase 6a LNG / Generator Plant Compound</p> <p>40-ARI-WS-7100-CI-18-01025 – Woodsmith Mine Construction Phase 6a Generator Plant Sections</p>
<b>4</b>	Phasing Plan	40-ARI-WS-7100-CI-18-01021 - Woodsmith Mine Construction Phase 6a Planning Phases Comparison General Arrangement	40-ARI-WS-7100-CI-18-01020 - Woodsmith Mine Construction Phase 6a Masterplan
<b>18</b>	Noise & Vibration	Phase 6a Woodsmith Mine Noise and Vibration Management Plan 40-RHD-WS-70-EN-PL-0032	<p>Phase 4 Woodsmith Mine Noise and Vibration Management Plan – 40-RHD-WS-70-EN-PL-0017</p> <p>Phase 6a Woodsmith Mine Construction Environmental Management Plan – 40-RHD-WS-70-EN-PL-0031</p> <p>Phase 3 Woodsmith Mine Construction Environmental Management Plan – 40-RHD-WS-70-EN-PL-0014</p>
<b>34</b>	Construction Traffic Management Plan	Phase 7 Woodsmith Mine Construction Traffic Management Plan 40-RHD-WS-70-CI-PL-0011	<p>To manage the potential impacts of construction traffic associated with the Phase 7 works at Woodsmith Mine a Construction Traffic Management Plan (CTMP; Reference 40-RHD-WS-70-CI-PL-0011) was submitted to North York Moors National Park Authority and North Yorkshire County Council (local highway authority) as part of application ref. NYM/2018/0585/CVC.</p> <p>The proposed duration of the Phase 6a</p>

			works would be entirely within the programme duration set out within the Phase 7 CTMP. The Phase 6a works would not require additional workers above the peak levels set out within the Phase 7 CTMP. Whilst the Phase 6a works will require HGV deliveries, the Contractors have confirmed that the demand for deliveries can be accommodated within the daily targets set out in the Phase 7 CTMP. It is therefore considered that the targets, measures and monitoring processes contained within the Phase 7 CTMP would be appropriate to manage the additional construction activities proposed as part of Phase 6a
<b>46</b>	Hydrogeological Risk Assessment	Phase 6 Works at Woodsmith Mine, North Yorkshire Hydrogeological Risk Assessment – 40-FWS-WS-70-WM-RA-0007	<p>The scope of works to be carried out as part of the installation and operation of the LNG plant as part of the Phase 6a works will not affect the chemical or physical impacts of the site and no site specific hydrogeological risk assessment is required.</p> <p>As no additional significant hydrogeological risks have been identified as part of Phase 6a, there will be no additional requirements for a revised hydrogeological risk assessment, construction and operational environmental monitoring and remedial actions above those previously documented for Phase 6.</p>
<b>47</b>	Groundwater Management Scheme	Phase 6 Works at Woodsmith Mine, North Yorkshire Hydrogeological Risk Assessment – 40-FWS-WS-70-WM-RA-0007	See Condition 46.
<b>52</b>	Protected Species Management Plan	Refer to CEMP (Condition 93)	N/A
<b>57</b>	Landscape & Ecological Management Plan	Refer to CEMP (Condition 93)	Phase 3 Landscape and Ecological Management Plan (40-RHD-WS-70-EN-PL-0008)
<b>59 &amp; 62</b>	Lighting	Refer to CEMP (Condition 93)	No permanent lighting is proposed as part of Phase 6a and we are not, therefore,

			<p>seeking to discharge NYMNPA-59 or 62 as part of this submission. For completeness, however, details of temporary lighting are included on the listed plans and referred to in Section 3.4 of the CEMP.</p>
<b>60</b>	Surface Water Drainage	<p>Woodsmith Mine – Phase 6 Works – NYMNPA 60 and 79 Surface Water Drainage Scheme - 40-ARI-WS-7100-CI-RP-01000</p> <p>40-ARI-WS-7100-CI-18-01022 – Woodsmith Mine Construction Phase 6a Drainage General Arrangement</p>	<p>The LNG tanks and generators are to be installed on the working platform constructed as part of the approved Phase 6 works. The surface water drainage scheme that was approved as part of the Phase 6 discharge of condition submission remains applicable for Phase 6a given that the works retain the same platform size and drained area as previously submitted and approved. The lowering of the platform by approximately 1m does not affect the surface water drainage scheme.</p> <p>The day to day operation of the power generation plant will not have an impact on the surface water drainage scheme. The LNG tanks will be constructed within a concrete bunded area. Surface Water drainage from the concrete bund will outfall through a valve which will close automatically if gas is detected, preventing any leakage of gas entering the surface water drainage system. All oil sources are either located within concrete bunded areas or stored in double bunded tanks. Any other oil leaks will be intercepted by the full retention interceptor.</p> <p>In the event of a requirement for the use of firefighting foam within the site or leakage from overhead water pipes, an automatic penstock is provided prior to the outfall from the drainage network into the drainage ditch. This penstock will automatically close in the event of fire or it can be manually closed in the event of another leak from the site, retaining fire water within the attenuation trench. The trench is sized to accommodate surface water runoff from a 1 in 20 year rainfall event plus sufficient storage for fire water that will be deployed in the event of a fire.</p>
<b>64</b>	Temporary	Refer to	Listed plans.

	Fencing	Construction Method Statement (Condition 94)	
<b>68</b>	Temporary Structures	Refer to Construction Method Statement (Condition 94)	Listed plans.
<b>70</b>	Arboricultural Method Statement	Refer to CEMP (Condition 93)	N/A
<b>71</b>	Hard & Soft Landscaping	40-ARI-WS-7100-CI-18-01023 - Woodsmith Mine Construction Phase 6a Hard and Soft Landscaping Plan	N/A
<b>73</b>	Woodland Management Plan	N/A	An updated Woodland Management Plan is currently being prepared in conjunction with NYMNPA and will be submitted under separate cover. Accordingly, we are not seeking to discharge Condition 73 as part of this submission.
<b>76</b>	Soil Management Plan	Refer to CEMP (Condition 93)	N/A
<b>79</b>	Surface Water Drainage	Woodsmith Mine – Phase 6 Works – NYMNPA 60 and 79 Surface Water Drainage Scheme - 40-ARI-WS-7100-CI-RP-01000  40-ARI-WS-7100-CI-18-01022 – Woodsmith Mine Construction Phase 6a Drainage General Arrangement	See Condition 60 above.
<b>91</b>	Emissions	Phase 6a – Woodsmith Mine Emissions to Atmosphere – NYMNPA - 91: 40-RHD-WS-70-EN-RP-0006	N/A
<b>92</b>	CVPMP	Phase 5 – Woodsmith Mine	A Construction Vehicle and Plant Management Plan (CVPMP) was submitted



		<p>Construction Vehicle and Plant Management Plan – 40-RHD-WS-70-CI-PL-0009</p>	<p>to discharge condition NYMNPA-92 as part of the Phase 5 Works at Woodsmith Mine.</p> <p>The construction of the LNG plant will overlap in time with Phases 5 and 6, and the existing plant on site for Phase 5 will be used to carry out Works associated with Phase 6a. Emissions from these items of plant were considered in the Phase 5 CVPMP. There will be three additional mobile cranes used during Phase 6a, which would be operational for only a very short period of time while the modular components of the LNG plant are installed. It is therefore not anticipated that the operation of these additional items of plant would result in a significant contribution to particulate emissions during Phase 6a, in the context of the other plant working elsewhere on site. The generators will be powered by natural gas and therefore particulate emissions are expected to be negligible.</p> <p>Emissions from vehicle movements were considered in the Phase 5 CVPMP, and were based on the maximum permissible light and heavy goods vehicle movements that can travel to and from Woodsmith Mine. Traffic movements associated with the Phase 6a Works will be accommodated within these limits and therefore consideration of additional traffic movements is not required.</p> <p>The Phase 5 CVPMP is therefore considered to remain applicable for Phase 6a.</p>
<p><b>93</b></p>	<p>CEMP</p>	<p>Phase 6a – Woodsmith Mine Construction Environmental Management Plan – 40-RHD-WS-70-EN-PL-0031</p>	<p>Phase 6a Construction Method Statement - 40-SMP-WS-7100-PA-MS-00004</p> <p>Phase 7 Construction Traffic Management Plan – 40-RHD-WS-70-CI-PL-0011</p> <p>Phase 6a Noise &amp; Vibration Management Plan – 40-RHD-WS-70-EN-PL-0032</p> <p>Phase 5 Construction Vehicle and Plant Management Plan – 40-RHD-WS-70-CI-</p>

			<p>PL-0009</p> <p>Phase 6 Hydrogeological Risk Assessment – 40-FWS-WS-70-WM-RA-0007</p> <p>Phase 6 Surface Water Drainage Scheme – 40-ARI-WS-7100-CI-RP-01000</p> <p>Phase 3 Surface Water Management Plan (reference 40-FWS-WS-70-EN-PL-0002)</p> <p>Phase 6 CEMP (reference 40-RHD-WS-70-EN-PL-0028)</p> <p>Phase 5 CEMP (reference 40-CAR-WS-8300-PA-MS-00001)</p> <p>Phase 4a CEMP (reference 40-RHD-WS-70-EN-PL-0026)</p> <p>Phase 4 CEMP (reference 40-RHD-WS-70-EN-PL-0023)</p> <p>Phase 3 CEMP (reference 40-RHD-WS-70-EN-PL-0014)</p> <p>Protected Species Management Plans:</p> <p>40-RHD-WS-70-EN-PL-0010 Ph3 PSMP for Reptiles;  40-RHD-WS-70-EN-PL-0011 Ph3 PSMP for Badgers;  40-RHD-WS-70-EN-PL-0012 Ph3 PSMP for Birds; and  40-RHD-WS-70-EN-PL-0013 Ph3 PSMP for Bats.</p> <p>Phase 3 Landscape and Ecological Management Plan (LEMP) (40-RHD-WS-70-EN-PL-0008)</p> <p>Listed plans.</p>
<p><b>94</b></p>	<p>Construction Method Statement</p>	<p>Phase 6a Construction Method Statement - 40-SMP-WS-7100-PA-MS-00004</p>	<p>Listed plans.</p> <p>Phase 6 CEMP (reference 40-RHD-WS-70-EN-PL-0028)</p> <p>Phase 4a CEMP (reference 40-RHD-WS-</p>



			70-EN-PL-0026) Phase 6 CMS (reference 40-SMP-WS-7100-PA-MS-00002)
95	Written Scheme of Investigation	Refer to CEMP (Condition 93)	N/A

**\* As agreed, documents from previous phases (where they remain unchanged in relation to Phase 6a) have not been resubmitted with this application**

## REPORT

# Phase 6a - Woodsmith Mine Construction Environmental Management Plan

Woodsmith Mine Phase 6a - CEMP

Client: Sirius Minerals PLC

Reference: 40-RHD-WS-70-EN-PL-0031 REV 0

Revision: 01/Final

Date: 05 October 2018

NYMNPA

08/10/2018

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Document title: Phase 6a - Woodsmith Mine Construction Environmental Management Plan

Document short title: Phase 6a CEMP  
Reference: 40-RHD-WS-70-EN-PL-0031 REV 0  
Revision: 01/Final  
Date: 05 October 2018  
Project name: Sirius North Yorkshire Polyhalite Project  
Project number: PB1110  
Author(s): Charlotte Goodman

Drafted by: Charlotte Goodman

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Checked by: Matthew Hunt

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Date / initials: 04/10/2018

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Approved by: Matthew Hunt

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Date / initials: 05/10/2018

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Classification

Project related



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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 (NYMNPAA) for permission to develop a polyhalite mine and underground Mineral Transport System (MTS). Planning permission was subsequently granted in 2015 subject to conditions, as varied in February 2018 by NYM/2017/0505/MEIA.
- 1.1.2 This Construction Environmental Management Plan (CEMP) has been prepared on behalf of Sirius Minerals plc (Sirius Minerals) for the Phase 6a Works at Woodsmith Mine (as described in paragraph 1.2.1 below).
- 1.1.3 This document is required to partially discharge condition NYMNPAA-93, and has been prepared in accordance with current good practice. This planning condition states that:

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

NYMNPAA-93	Compliance with Condition NYMNPAA 93
Prior to the commencement of each Phase of Construction 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:	This version of the CEMP is for Phase 6a as defined in Section 1.2 below.  Earlier versions of the CEMP have been produced for preceding works.
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 3.2, 3.3, Section 3.6 and Section 11.2 Phase 6a Construction Method Statement 40-SMP-WS-7100-PA-MS-00004
An Incident Response Plan to deal with any pollution that may occur during the course of construction;	Section 12
A scheme for the recycling/disposing of waste resulting from demolition and construction works;	Section 11
Storage of waste not covered by the Mine Waste Directive;	Section 11
Measures to control the glare from on-site lighting;	Section 3.4
Measures to manage deliveries by HGV including routing and timing for deliveries and details of the penalty system for breaches of the agreed control;	Section 4
Temporary traffic management;	Not applicable to this Phase



NYMNPA-93	Compliance with Condition NYMNPA 93
<p>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<sub>10</sub> 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;</p>	Section 6
<p>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;</p>	Lady Cross Plantation is not covered in this CEMP as works at that site have been deferred.
<p>How the requirements of the approved CEMP will be disseminated to all relevant staff/ Contractor's throughout the construction period;</p>	Section 2.2
<p>The location of the site notice board;</p>	Section 2.2.7
<p>A scheme for parking, loading, unloading during construction;</p>	Section 4.1.2
<p>A scheme for security and lighting during construction;</p>	Section 3.1 and 3.4

NYMNP-93	Compliance with Condition NYMNP 93
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;	Section 11.2
Contingency proposals for if fuel cannot be delivered for the generators, e.g. due to adverse weather;	40-RHD-WS-70-EN-PL-0014 - Phase 3 CEMP
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-ARI-WS-71-PA-RP-1050 – Phase 3 Surface Water Management Plan Phase 3 CEMP
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
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;	Section 7
Alarms fitted to mobile plant and vehicles for the purposes of warning pedestrians of their movements.	Phase 3 CEMP

1.1.4 Additional conditions addressed in this CEMP are detailed in **Table 1-2**.

Table 1-2 Additional Planning Conditions Addressed in the CEMP

Condition	Topic	Compliance with Condition
NYMNPA-52	Protected species	Section 7 Refer to Protected Species Management Plans: 40-RHD-WS-70-EN-PL-0010 Ph3 PSMP for Reptiles; 40-RHD-WS-70-EN-PL-0011 Ph3 PSMP for Badgers; 40-RHD-WS-70-EN-PL-0012 Ph3 PSMP for Birds; and 40-RHD-WS-70-EN-PL-0013 Ph3 PSMP for Bats. These remain applicable for Phase 6a
NYMNPA-57	Landscape and ecological management	No works of landscape or ecological management relating to the long-term environment of the mine site will be undertaken during Phase 6a. See Section 7.3.  Refer to the Phase 3 Landscape and Ecological Management Plan (LEMP) (40-RHD-WS-70-EN-PL-0008) as this remains applicable for Phase 6a
NYMNPA-70	Trees and vegetation	Section 7
NYMNPA-76	Soil management	Section 10
NYMNPA-95	Archaeological written scheme of investigation	Section 8

1.1.5 This document details only the additional activities required for Phase 6a at Woodsmith Mine associated with the Sirius Minerals 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 NYMNPA, as well as the Environment Agency and Natural England, agreed that they support this approach in meetings held in April 2016.

## 1.2 Phase 6a

1.2.1 The scope of Phase 6a described by this document is the installation and operation of a Liquefied Natural Gas (LNG) plant.

## 1.3 Scope of this Document

1.3.1 This CEMP details how the Phase 6a Works 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 6a of the project.

1.3.2 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 6a (condition NYMNPA-06 refers).

1.3.3 This CEMP should be read in conjunction with the following previous CEMPs, as information within these previous documents remains relevant to Phase 6a:

- Phase 3 CEMP 40-RHD-WS-70-EN-PL-0014;

- Phase 4 CEMP 40-RHD-WS-70-EN-PL-0023;
- Phase 4a CEMP 40-RHD-WS-70-EN-PL-0026;
- Phase 5 CEMP 40-CAR-WS-8300-PA-MS-00001; and
- Phase 6 CEMP 40-RHD-WS-EN-PL-0028.

1.3.4 The Phase 6a CEMP should also be read together with the documentation submitted to partially discharge the following conditions. Information provided in these documents is summarised in this CEMP where appropriate. Where documents prepared for previous Phases of construction are indicated, the information within them remains valid for this Phase:

- Condition NYMNPA-18: *Noise and Vibration Management Plan* (40-RHD-WS-70-EN-PL-0032 (Phase 6a));
- Condition NYMNPA-34: *Construction Traffic Management Plan* (40-RHD-WS-70-CI-PL-0011 (Phase 7));
- Condition NYMNPA-46: *Hydrogeological Risk Assessment, Ground and Surface Water Monitoring Scheme and Remedial Action Plan* (40-FWS-WS-70-WM-RA-0007 (Phase 6));
- Condition NYMNPA-52: *Protected Species Management Plans* (40-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);
- Condition-NYMNPA-60 and 79: *Surface Water Management Plan Woodsmith Mine – Phase 6 Works – NYMNPA 60 and 79 Surface Water Drainage Scheme* (40-ARI-WS-7100-CI-RP-01000);
- Condition NYMNPA-70: *Tree Protection and Clearance* (40-RHD-WS-70-EN-MS-0002 (Phase 3));
- Condition NYMNPA-76: *Soil Management Plan* (40-AMC-W-71-EN-PL-0006 (Phase 4));
- Condition NYMNPA-91: *Emissions to Atmosphere* (40-RHD-WS-70-EN-RP-0006 (Phase 6a));
- Condition NYMNPA-92: *Construction Vehicle and Plant Management Plan* (40-RHD-WS-70-CI-PL-0009 (Phase 5));
- Condition NYMNPA-94: *Construction Method Statement* (40-SMP-WS-7100-PA-MS-00004) (Phase 6a); and
- Condition NYMNPA-95: *Written Scheme of Investigation* (40-COT-WS-70-EN-PL-0002 (Phase 3)).

1.3.5 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 Contractors engaged on its behalf to deliver the Phase 6a Works. While overall responsibility for compliance with environmental and approvals requirements will remain with Sirius Minerals, the Contractors working on site are 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. All Contractors delivering this Phase confirm that this is the case.

## 2.2 Training, Awareness and Competence

### Internal Communication

- 2.2.1 All staff and sub-contractors working on Site will be required to attend a Site Induction prior to commencing work. This will cover the key environmental aspects relating to the project and the roles and responsibilities of individuals.
- 2.2.2 Toolbox talks will be undertaken by the Environmental Manager or other nominated personnel throughout the project. The aim will be to communicate information to all staff and serve to educate, prompt and remind them of their responsibility to protect the environment during construction activities.
- 2.2.3 Additional details on staff training and awareness are provided in the Phase 4 CEMP (40-RHD-WS-70-EN-PL-0023).
- 2.2.4 Monthly progress meetings will be used to disseminate the results of monitoring and audit reports. At these meetings, a review of the environmental performance throughout the site to date will be undertaken and any improvements required during the construction phase will be identified. Details of where sustainable approaches to construction have been implemented or developed as the work proceeds will also be discussed and recorded. Their suitability for implementation at other areas of the site will be considered and applied where appropriate. Decisions about amendments required to the processes and procedures will also be agreed.

### External Communication

- 2.2.5 Sirius Minerals will lead communication with members of the public, including adjacent landowners, local residents and businesses in line with the Community Stakeholder and Engagement Framework (CSEF) (refer to **Appendix A**).
- 2.2.6 The CSEF includes provision for a quarterly Liaison Group Forum meeting, which are open to members of the public to attend. These Liaison Group Forum meetings provide a mechanism to provide project updates and to exchange feedback on all project matters, including environmental ones.

### Site Notice Boards

- 2.2.7 A display board (i.e. a site information board) will be erected at the entrance to the Woodsmith Mine site, to keep local residents and stakeholders informed of the Works and their schedule. The site information board will identify key personnel, contact addresses, and telephone numbers, as well as showing visually the progress of Works.

### Traffic Management Liaison Group

- 2.2.8 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.

2.2.9 Full details of the remit of the TMLG, its membership and its operation can be found in the Phase 5 CTMP (40-RHD-WS-70-CI-PL-0008).

## 2.3 Monitoring of Compliance

2.3.1 All construction and installation activities for Phase 6a Works will be supervised by the Contractors' Project Managers with the support of members of their teams on a daily basis using the same procedures as detailed in the Phase 4 CEMP.

## 2.4 Complaints Procedure

2.4.1 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 the Phase 3 CEMP (40-RHD-WS-70-EN-PL-0014), will be implemented.

## 3 Description of Site

### 3.1 Fencing and Security of the Site

3.1.1 Site fencing and security measures remain as per the Phase 6 CEMP. Fencing around the LNG platform is shown on the LNG/generator compound drawing 40-ARI-WS-7100-CI-18-01024.

### 3.2 Site Layout and Compounds

3.2.1 The Phase 6a site layout and compounds are detailed in drawings 40-ARI-WS-7100-CI-18-01020 (Construction Phase 6a Masterplan) and 40-ARI-WS-7100-CI-18-01024 (LNG/Generator Plant Compound), and the Phase 6a Construction Method Statement (40-SMP-WS-7100-PA-MS-00004).

### 3.3 Welfare Facilities

3.3.1 The welfare facilities detailed in the Phase 6 CEMP (40-RHD-WS-EN-PL-0028) remain valid for Phase 6a.

### 3.4 Lighting

3.4.1 The Phase 6a Works are to be carried out away from the existing platform and will be illuminated when necessary through additional temporary, task-specific directional lighting. The location of lighting columns are shown on drawing 40-ARI-WS-7100-CI-18-01024 (LNG/Generator Plant Compound). The following will apply to all lighting on-site:

- Directional tower lighting with directional lanterns will be used, with lights directed down towards the area required to be lit and away from any areas of concern (e.g. roads);



- Task lighting will be used where appropriate to light up local areas of small works instead of mast illumination affecting a large radius. Where required for safety reasons, lighting may be required from crane or rig masts;
- All open excavations will be fenced off and have adequate general and task lighting in order to ensure that all open excavations are clearly visible;
- The lighting will comply with the lowest recommended criteria within the relevant British Standards and relevant Chartered Institution of Building Services Engineers Lighting Guides (BS EN 12464-2 Lighting of work places – Outdoor work place, CIBSE Lighting Guide 6 – Lighting of the outdoor environment and CIBSE Lighting Guide 1 – Lighting of the industrial environment);
- Any construction lighting will be designed in accordance with relevant British Standards and guidance from the 'Bat Conservation Trust's Interim Guidance Note on Artificial Lighting and Wildlife' (June 2015 [http://www.bats.org.uk/pages/bats\\_and\\_lighting.html](http://www.bats.org.uk/pages/bats_and_lighting.html)); and
- Lights will be switched off when not in use.

### 3.5 Materials Storage

- 3.5.1 Details of the locations for storage of plant and materials remain unchanged from Phase 6. Materials will be stored appropriately in accordance with the approach detailed in the Phase 4 (40-RHD-WS-70-EN-PL-0023) and Phase 5 CEMP (40-CAR-WS-8300-PA-MS-00001).

### 3.6 Wheel Washing Facilities

- 3.6.1 Wheel washing facilities are provided on the site access road. Spent water will be managed as described in the Phase 5 CEMP (40-CAR-WS-8300-PA-MS-00001).

### 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 remain as for Phase 4 (40-RHD-WS-70-EN-PL-0023) and Phase 5 (40-CAR-WS-8300-PA-MS-00001).

## 4 Traffic

### 4.1 Construction Traffic Management Plan (CTMP)

- 4.1.1 A Phase 7 Construction Traffic Management Plan (CTMP; 40-RHD-WS-70-CI-PL-0011) has been prepared and submitted to partially discharge condition NYMNPA-34. The CTMP contains a range of measures for the management of transport during Phase 7 and remains applicable for Phase 6a.

#### **Parking and Deliveries to Site**

- 4.1.2 Deliveries and unloading arrangements at Woodsmith Mine will remain as detailed in the Phase 5 CEMP (40-CAR-WS-8300-PA-MS-00001).
- 4.1.3 Employees will use the North Yorkshire County Council Park and Ride facility at Cross Butts, Whitby during Phase 6a. There will be no parking on site with the exception of limited

designated spaces for exceptional use.

#### **Pedestrians and cyclists**

- 4.1.4 The procedures set out in the Phase 5 CEMP (40-CAR-WS-8300-PA-MS-00001) are applicable to Phase 6a.

## **4.2 Enforcement Systems for Breaches of Traffic Management Requirements**

- 4.2.1 These remain unchanged from Phase 5 (40-CAR-WS-8300-PA-MS-00001).

## **5 Noise and Vibration**

### **5.1 Noise and Vibration Management Plan**

- 5.1.1 A Phase 6a Noise and Vibration Management Plan (40-RHD-WS-70-EN-PL-0032) has been prepared and submitted to the NYMNPA to partially discharge condition NYMNPA-18. It includes details of the noise sensitive receptors, agreed noise limits, monitoring to be undertaken and the mitigation measures to be implemented.

## **6 Air Quality and Dust Management**

- 6.1.1 Measures developed to reduce the impact of construction on air quality and, as part of this, to manage dust, remain unchanged from Phase 5. They are set out in the Phase 5 CEMP (40-CAR-WS-8300-PA-MS-00001).

### **6.2 Construction Vehicle and Plant Management Plan**

- 6.2.1 A Phase 5 Construction Vehicle and Plant Management Plan (40-RHD-WS-70-CI-PL-0009), was prepared to enable the partial discharge of planning condition NYMNPA-92. This remains applicable to Phase 6a.
- 6.2.2 Mitigation measures identified in the Phase 5 CVPMP will be employed to minimise particulate emissions.

## **7 Nature Conservation**

### **7.1 Protected Species and Precautionary Method of Working for Site Clearance**

- 7.1.1 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 6a Works, and the Precautionary Methods of Working will be applied.



## 7.2 Vegetation Clearance

7.2.1 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 6a. Areas of vegetation to be retained are shown in drawing 40-ARI-WS-7100-CI-18-01023 (Hard and Soft Landscaping Plan).

## 7.3 Environmental Enhancement

7.3.1 The Phase 3 Landscape and Ecological Management Plan (LEMP; 40-RHD-WS-70-EN-PL-0008) was prepared to partially discharge condition NYMNPA-57 and remains applicable for Phase 6a.

## 8 Archaeology

8.1.1 There will be no Works carried out in Phase 6a that require archaeological consideration.

## 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. In order to prevent pollution of the water environment the construction works will be undertaken in accordance with industry guidance set out in the withdrawn Pollution Prevention Guidance (PPG5) which was produced by the Environment Agency.

### 9.2 Groundwater Management

9.2.1 Groundwater will be monitored and managed in accordance with the Phase 6 Hydrogeological Risk Assessment (40-FWS-WS-70-WM-RA-0007).

### 9.3 Surface Water Management

9.3.1 The Phase 6 Surface Water Drainage Scheme (40-ARI-WS-7100-CI-RP-01000) contains details of how surface water will be managed on site, including the LNG platform.

### 9.4 Silt and Pollutant Management

9.4.1 Silt and pollutant management measures remain as per the Phase 4 CEMP (40-RHD-WS-70-EN-PL-0023).

## 10 Soils and Contaminated Land

10.1.1 There will be no additional soil stripping undertaken during Phase 6a above that considered in Phase 6 for the construction of the LNG platform.

## 11 Materials and Waste

11.1.1 Details of the materials and waste materials stored on site are provided in the Phase 4 (40-RHD-WS-70-EN-PL-0023), 4a (40-RHD-WS-70-EN-PL-0026) and 5 (40-CAR-WS-8300-PA-MS-00001) CEMPs and remain applicable for Phase 6a.

### 11.2 Fuel Oil Storage and Refuelling on Site

11.2.1 Delivery and refuelling will be supervised at all times and checks will be made to ensure that the correct type and volume is being delivered. Appropriate pollution mitigation measures (including drip trays and spill kits) will be employed. Refuelling will occur across the site with appropriate control measures in place, as detailed in the Phase 5 CEMP (40-CAR-WS-8300-PA-MS-00001).

11.2.2 LNG will be delivered to site by tanker and pumped into the LNG storage tanks as detailed in drawing 40-ARI-WS-7100-CI-18-01024 (LNG/Generator Plant Compound). The LNG storage tanks will be contained within integrated concrete bunds, as shown in drawing 40-ARI-WS-7100-CI-18-01024 (LNG/Generator Plant Compound). Lubrication oil will be stored in accordance with The Control of Pollution (Oil Storage) (England) Regulations 2001.

11.2.3 The delivery mechanism is such that no LNG will escape during transfer. The LNG plant operates as a closed system and there is no potential for spillages of LNG as it is stored, vaporised and transferred to the generators.

11.2.4 Bunds for the 11kV transformers will have their own oil scrubber system and as a secondary containment safeguard the bund dewatering systems will be supported by a pumped water filtering system. The filtered water will be discharged to the site surface water drainage system.

### 11.3 General Management of Non-Extractive Waste

11.3.1 The management of non-extractive wastes will remain as set out in the Phase 4 CEMP (40-RHD-WS-70-EN-PL-0023).

## 12 Incident and Emergency Planning

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 procedures remain applicable to Phase 6a.



## **Appendix A Sirius Minerals Community and Stakeholder Engagement Framework**



# Community and Stakeholder Engagement Framework

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# Community and Stakeholder Engagement Framework

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# Community and Stakeholder Engagement Framework

## 1 Purpose and Scope

### 1.1 Background

There is widespread interest in the Company's North Yorkshire polyhalite (the Project) at local, regional and national levels. This is demonstrated by the ongoing media and stakeholder enquiries, as well as the levels of participation during the planning consultations or at Company events.

Sirius Minerals (the Company) has successfully engaged the community and other key stakeholders during this period, gaining widespread support for the Project. This has helped to provide the Company with a social license to operate. Maintaining this throughout the construction period is important to the successful delivery of the Project and is a key objective of the Company's board and management team.

### 1.2 Purpose

This Community and Stakeholder Engagement Framework (CSEF or the Framework) aims to set out a clear communications approach during the construction period which, when implemented correctly, can help to maintain the Project's social license to operate.

### 1.3 Scope

The Framework sets out an approach to community and stakeholder communications during the construction period. It outlines the overall strategy, identifies the main stakeholder groups and details the engagement objectives and activities. It sets out the roles and responsibilities of the Company and the principle construction contractors for implementing and managing its delivery.

Detailed community and stakeholder engagement action plans, which align to the approach set out in this Framework, will be produced before each of the construction events listed in Appendix 1.

It is not within the scope of this plan to include engagement with the planning authorities and other statutory bodies in relation to the compliance with planning obligations and further environmental requirements, other than those specifically regarding community engagement.

## 2 Engagement Strategy

This section summarises the strategy for communicating with the community and stakeholders during the construction of the Project.

### 2.1 Rationale

The strategy is based on the principle that the local community and key stakeholders will react best to being kept informed of developments and in advance of them occurring. The failure to communicate always leads to a communications vacuum and this in turn leads to misinformation and rumours which can negatively affect the perception of the Project.

Similarly, providing channels for feedback to the Company in the first instance allows local people or spokespeople to be engaged in matters that might affect them. It also allows them to be able contact the Company in the first instance.

Keeping people informed is not just about notification of physical activities during the construction period, but is also about allowing a channel for feedback that might raise an issue or local knowledge that the Company or its contractor teams was not previously aware of. It also enables a channel to positively promote the benefits of the Project as well as engaging in other positive public relations activities.

Any materials that are prepared for public consumption to explain parts of the construction work should be designed / drafted in a manner that promotes the understanding of works or issues in as clear and straightforward manner as possible. Ideas and initiatives to better explain construction work or progress will be received well by the Company.

## 2.2 Approach

In summary, the strategy that is to be adopted is to:

1. **Conduct pre-briefings for key events or activities**

Providing clear information before works commence at each site detailing what construction will involve, when it will take place and the measures to limit impacts.

2. **Have effective ongoing management of local communications**

Providing ongoing updates about construction progress and establish mechanisms that enable concerns to be raised and acted upon. This includes participation in the various liaison groups and clear processes to manage incoming queries or complaints.

3. **Community benefit initiatives**

Undertaking and promoting regular initiatives that deliver community benefits such as education and training schemes and employment and business opportunity information sessions. This may include any other positive public relations activities.

Further details on the methodology for pre-briefings, ongoing management and community benefits initiatives are available in sections 4.2 – 4.4.

## 3 Stakeholder Identification

Stakeholder groups have been identified and engaged as the Project has developed and can be broadly categorised as follows:

- **Local residents**

Residential neighbours and or landowners close to the individual construction sites. This could also include those directly affected in other areas such as those living close to key transport corridors or junctions.



- **Community representatives**  
This group includes elected representatives of the community including parish and town councils, local authority officers and councillors, and local MPs.
- **Interest groups**  
Business networks, environmental bodies, other local clubs and groups.
- **Education institutions**  
This includes local schools, colleges, universities and other training providers.
- **Media**  
All online, print and broadcast outlets and journalists are considered key stakeholders.
- **General public**  
The wider public as accessed through media channels, the website or site signage etc.

The engagement approach for each stakeholder group will follow a ‘monitor’, ‘keep informed’, ‘keep satisfied’, or ‘manage closely’ hierarchy depending on their level of interest and ability to influence the successful delivery of the Project.

## 4 Engagement Methodology

This section sets out how community and stakeholder communications will be handled during the construction of the Project.

### 4.1 Identify stakeholders

Whilst the broad stakeholder groups have already been identified there will be specific stakeholders relevant to each of the construction sites, consisting of those that are most likely to be impacted by the works, which will need to be engaged. This will include landowners and local residents in close proximity to the sites. The detailed action plans will identify these.

### 4.2 Pre-briefings for key events

Before construction of key stages of the Project begins it is important to provide information to the local community. For the purpose of this Framework these stages are defined as “construction events” (these are listed in appendix 1) and each would trigger the requirement to undertake these pre-briefing activities.

The information to be included in these activities will include details about what construction will involve and, if appropriate, focus on the main issues that have been raised during previous consultation. Reassurance will be given that measures will be taken to limit adverse impacts to an acceptable level and that planning conditions and other requirements are in place to ensure that this happens. People will also be informed of what they can do if they have questions or concerns.

This will help to raise awareness of what to expect and demonstrate that concerns will be listened to and acted upon wherever reasonably possible. As a minimum, the pre-briefing activities will include:

- Letters – Letters and or emails should be sent to those that are likely to be immediately affected. This might include neighbouring residents or households and businesses on access routes. As a courtesy, the same information will be sent to the local Parish Council, borough and county councillors covering those areas and the local MP.
- Newsletter / Leaflet – A short summary newsletter or leaflet about the works will be made available. Depending on the scale or profile of the works, this can be posted out to the recipients of the above or circulated more widely. The precise details will be a matter of judgement and as a result of discussions between the contractor and the Company. As a minimum, copies of the leaflet will be available on site during the works in case people make onsite queries.
- Information board and signage – Each site should have an information board at its entrance (and potentially at other prominent locations) containing the key details of what the work is, how long it is expected to last and contact details for further information, queries or emergencies. This should also include signage at sites where highways works related to the Project are being undertaken. HGV's associated to the Project should also be clearly identified.
- Exhibitions / Open days – In the case of certain key events it will be appropriate to inform local residents and the wider general public through open days prior to works starting. This would include further information on exhibition boards and would be attended by key personnel from the Company and contractors, who would be able to respond to queries and be able to provide reassurance on potential concerns.
- Press release – If appropriate (often where a wider audience is potentially affected or interested in the works planned) then a press release will be prepared detailing the key facts. The distribution will be a matter of judgement depending on the scope of the works. Any press release needs to be signed off by the Company in a timeframe that makes sure newspaper deadlines are met. Coverage should always appear in the week prior to the proposed activities beginning.
- Website updates – Details of key events should be uploaded to the Company website. Some works may also require more detailed information and documents to be uploaded. This information needs to be provided to the Company in a timely fashion to enable this happen.
- Social media updates – The Company will control its social media accounts. As above, the contractor will be expected to provide the relevant details to the Company in a timely fashion so the relevant information can be released through its social media channels.
- Stakeholder briefings – In some circumstances the contractor will be required to undertake specific stakeholder briefings to inform them of key events. This may be as a result of the stakeholders being closely affected by the works or as a reaction to the issuing of any of the publications detailed above. The Company will take the lead on such matters, in close

collaboration with the contractor (as it is likely to have existing knowledge or dealings with the stakeholders concerned). Each case will be different and on some occasions representatives from the Company may not be required to attend the meetings. Each case should be discussed in advance with the Company.

### **4.3 Ongoing management**

Local residents and stakeholders will need to continue to be engaged as construction progresses and be kept informed of key developments (i.e. general updates outside those covered under 'key events' in appendix 1). This will enable the Company to provide regular updates of the Project's progress, and that it is being delivered in accordance with planning consents and any other Company commitments. Alternatively, if the Project is not progressing as expected it is important that stakeholders are provided with an explanation and reassurance that corrective measures will be implemented.

In addition, on-going engagement will include a range of communication channels that enable stakeholders to raise issues and ask questions and for the Company or the contractor to respond to these.

#### **4.3.1 Liaison Group Forum**

A Liaison Group Forum will be established prior to the commencement of construction and will meet quarterly, as a minimum, throughout the construction and post-construction period. It will be chaired by the Company and its membership will include representatives from the National Park Authority, parish and town councils, local residents and wider community stakeholder representation as appropriate. It will also be open for the general public to attend.

The purpose of the group is to facilitate liaison between local stakeholders about construction, providing updates about progress, and to enable issues and concerns to be raised and resolved. The contractor will be expected to provide one or more representatives at this forum to contribute to its successful operation. Attendees from the contractor must be of a suitably senior position to enable meaningful dialogue and feedback at the Forum.

#### **4.3.2 Traffic Management Liaison Group**

The purpose of this group will be to facilitate liaison between local authorities and other interested stakeholders in regards to construction traffic. The group will oversee the management and monitoring of the Construction Traffic Management Plan (CTMP), and will be chaired by the Company.

There will be representation from the National Park Authority, local authorities, parish and town councils, and other stakeholders who may be affected by construction traffic.

#### **4.3.3 24-hour community helpline**

To ensure that there are accessible points of contact for the local community and wider stakeholders there will be a 24-hour helpline and a community email address, which will be widely promoted and staffed by the Company.

#### **4.3.4 Regular briefings and updates**

Key individuals and organisations will be regularly briefed and updated, the frequency of which will be determined by whether they have been categorised as monitor, keep informed, keep satisfied or

manage closely. The general public will also be kept informed. Similarly to pre-briefings for key events, updates will be communicated through the following channels:

- Public meetings and presentations - Parish council and town council meetings will be regularly attended, together with presentations to local interest groups.
- Press releases - the print and broadcast media will be utilised extensively to communicate with the wider community and at a regional and national level.
- Newsletters, website and social media – regular updates produced throughout construction via the website, leaflets, newsletters, social media and publications relating to specific issues, such as careers.

#### **4.4 Community benefit initiatives**

The Company has made a number of commitments to benefit the local area during construction such as providing employment and supply chain opportunities, training schemes, school outreach programmes and funding community projects. It is important that these are implemented and widely promoted so that the community and stakeholders are aware that the Company's commitments are being delivered. The initiatives, many of which are planning obligations in the S106 agreements, are outlined below:

- Funding to Scarborough Borough Council and Redcar and Cleveland Council to identify and prepare local people for employment opportunities.
- Funding to raise awareness of science, technology, engineering and maths (STEM) related careers in schools in North Yorkshire and Redcar and Cleveland.
- Targets specified in the YPL Skills Strategy - take on 50 apprentices, recruit 15 local students on the YPL Undergraduate Programme and train 300 adults.
- Quarterly employment opportunity sessions to promote job opportunities to local people
- Education outreach initiatives, careers events and presentations.
- Meet the buyer events for local businesses.
- Funding community projects through the York Potash Foundation.

#### **4.5 Protocols and guidelines**

There are guidelines in place, as listed below, to ensure that communication methods are clear, consistent, responsive and appropriate to the audience when dealing with different situations. Contractors will be expected to adhere to these procedures.

- Complaints procedure
- Media protocol

- Crisis readiness

A clear communications approach is important should a major incident occur. The Company's Communications Issues Management Plan (CIMP) sets out the steps to be taken following a major incident. In such a situation the reporting procedures in the CIMP should be followed and it is the responsibility of contractors to incorporate key aspects of this plan into their own processes.

## 5 Roles and Responsibilities

This section provides a framework that identifies responsibilities for the delivery and management of community and stakeholder engagement, focusing on roles of the Company and the principle construction contractors.

The Company will be responsible for community and stakeholder engagement during construction, supported by each construction contractor as required.

### 5.1 *Sirius Minerals*

The Company will be responsible for:

- Identify key stakeholders likely to be impacted by the works.
- Undertake pre-briefing activities before construction starts such as:
  - Open Days / exhibitions as appropriate
  - Signage at construction sites and update as necessary
  - Produce an information leaflet including an outline of the programme, impacts and mitigation, contact information, etc.
  - Direct correspondence with neighbours and landowners in regards to construction events such as blasting
- Liaison with the planning authorities and community representatives, including chairing the Liaison Group Forum and Traffic Management Liaison Group.
- Media relations.
- Manage the complaints procedure.
- Staffing the 24-hour community helpline, producing project newsletters, social media and updating the website.
- Direct engagement and briefings with key stakeholders including local residents, community representatives and interest groups.

The YPL External Affairs Director has responsibility for all company communications and external relations and should receive a monthly community and stakeholder engagement report. The External Affairs Director will chair the Liaison Group Forum and YPL's Development Manager will chair the Traffic Management Liaison Group.

The External Affairs General Manager, reporting to the External Affairs Director, is responsible for production and implementation of detailed community and stakeholder engagement action plans.

## **5.2 Construction Contractors**

Each of the construction contractors will be required to support the Company's stakeholder engagement approach as follows:

- Provide expected durations of phases or work, their potential impact on the local community and mitigation measures.
- Provide details of any expected public transport diversions, delays, planned road closures, impacts on highways, interrupted access for residents/ businesses, or other expected community disruption.
- Participate in quarterly employment opportunity sessions, at least two meet the buyer events, and a minimum of two education outreach days per year
- Cooperate with YPL in media events and provide information to YPL for publications, the website, newsletters, etc.
- Adherence to YPL communications protocols and guidelines.
- Attend the liaison groups, parish/town council meetings and assisting YPL as required.
- Ensure that all sub-contractors comply with stakeholder and community relations requirements.

## **Appendix 1 – Construction Events**

## Appendix 1 - Construction Events

The following provides a list of construction events which would trigger the requirement for pre-briefing activities, as outlined in section 4.2. The list is not exhaustive and there may be other events or activities not listed here that could be classified as construction events as a result of discussions between the Company and its contractors.

The construction events for the purposes of this Framework are:

- Any significant geotechnical investigation or drilling works
- Highways works
- Any site preparations
- Commencement of the MTS works
- Mine site shaft sinking
- MHF construction
- Harbour construction
- Overground conveyor construction (if not included with above)
- Temporary Park and Ride construction
- Any road closures
- Requirement to bring in abnormal loads

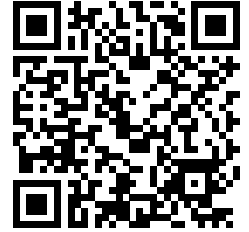
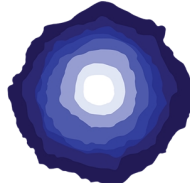


## Appendix 2 – Engagement Activities Summary

## Appendix 2 - Engagement Activities Summary

The table below provides an ‘at a glance’ overview of the main community and stakeholder engagement activities, together with the respective roles of YPL and the construction contractors in delivering them.

	Pre-briefing activities	Ongoing management	Community benefit initiatives
<b>York Potash</b>	<ul style="list-style-type: none"> <li>Establish Liaison Group Forum and Traffic Management Liaison Group</li> <li>Project update newsletter</li> <li>Media, website update, social media</li> <li>Briefings with site neighbours, landowners, community representatives and other key stakeholders as identified</li> <li>Produce leaflet detailing upcoming construction activities</li> <li>Send letters to stakeholders likely to be immediately affected</li> <li>Hold public open days / exhibitions</li> </ul>	<ul style="list-style-type: none"> <li>Chair Liaison Group Forum and Traffic Management Liaison Group</li> <li>Manage 24-hour community helpline and <a href="mailto:info@yorkpotash.co.uk">info@yorkpotash.co.uk</a></li> <li>Attend parish and town council meetings quarterly</li> <li>Regular updates to site neighbours, landowners, community representatives and interest groups</li> <li>Media, website update, social media</li> <li>Manage complaints procedure</li> </ul>	<ul style="list-style-type: none"> <li>Careers talks and events</li> <li>S106 training targets and promote initiatives funded by the S106</li> <li>Promote activities of the York Potash Foundation</li> </ul>
<b>Construction contractor</b>	<ul style="list-style-type: none"> <li>Install information board and signage at construction sites / transport routes</li> <li>Provide information to YPL to be used in leaflets, letters, web content, etc., as required</li> <li>Attend public open days/exhibitions and meetings with stakeholders as required</li> </ul>	<ul style="list-style-type: none"> <li>Attend liaison groups, parish council and other meetings as required</li> <li>Provide information to support on-going community and stakeholder relations</li> <li>Participate in media events as required</li> <li>Adherence to complaints procedure, media protocol and crisis response procedure</li> </ul>	<ul style="list-style-type: none"> <li>Hold meet the buyer events</li> <li>Attend quarterly employment opportunity sessions</li> <li>Education outreach programmes</li> </ul>



Project Title / Facility Name:  
**North Yorkshire Polyhalite Project**

Document Title:  
**PHASE 6A NOISE AND VIBRATION MANAGEMENT PLAN**

<p>NYMNPA</p> <p>08/10/2018</p>
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**Document Review Status**

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| <input type="checkbox"/>            | 2. Reviewed – Accepted As Noted, Work May Proceed, Revise & Resubmit | On: 05 Oct 2018 08:45 |
| <input type="checkbox"/>            | 3. Reviewed – Work May Not Proceed, Revise & Resubmit                |                       |
| <input type="checkbox"/>            | 4. For information only  |                       |

Rev.	Revision Date (dd mmm yyyy)	Reason For Issue	Prepared by	Verified by	Approved by
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A	03-Oct-2018	Review	IFR		

Document ID:

**40-RHD-WS-70-EN-PL-0032**

# REPORT

## **Phase 6a - Woodsmith Mine Noise and Vibration Management Plan**

### **Woodsmith Mine Phase 6a - NVMP**

Client: Sirius Minerals plc

Reference: 40-RHD-WS-70-EN-PL-0032\_Rev0

Revision: 01/Final

Date: 04 October 2018

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Project name: Sirius North Yorkshire Polyhalite Project

Project number: PB1110

Author(s): Stephen Wigham

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Checked by: Nick Fry

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Date / initials: 04 October 2018 / NF

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Approved by: Matthew Hunt

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Date / initials: 04 October 2018 / MH

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Classification

Project related



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## Document Sign-Off

This document forms the Noise and Vibration Management Plan (NVMP) to address construction works associated with the Phase 6a Works at Woodsmith Mine. The NVMP was produced to address the requirements of Planning Condition NYMNPA-18.

The Contractor(s) commit(s) to comply with all noise and vibration management approaches and procedures detailed herein.

.....  
(Contractor)

.....  
(Date)

The remainder of this document contains technical information to support the NVMP and address the requirements of the Planning Condition. The document may be revised and updated as the project progresses.

# 1 INTRODUCTION

## 1.1 Purpose of this Report

- 1.1.1 In 2014 a planning application (reference NYM/2014/0676/MEIA) was submitted to North York Moors National Park Authority (NYMNPA) for permission to develop a polyhalite mine and underground Mineral Transport System (MTS). Planning permission 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 noise and vibration management for the Phase 6a Works at Woodsmith Mine (see Paragraph 1.1.4 below). This document is required to partially satisfy the requirements of Condition 18 of the NYMNPA planning permission. It has been prepared in accordance with current good practice. This planning condition states that:

Table 1-1: Condition NYMNPA 18 Noise and Vibration Management Plan

NYMNPA 18	Compliance with Condition NYMNPA-18
Prior to the commencement of the development at Dove's Nest Farm or Lady Cross Plantation, a Noise and Vibration Management Plan (NVMP) for the control, mitigation and monitoring of noise and vibration for both construction and operational phases at the two sites shall be submitted to and approved in writing by the MPA in consultation with the SBC EHO. The scheme shall set out the following:	This document addresses Phase 6a Works at Woodsmith Mine. Works at Lady Cross Plantation are deferred and are therefore not addressed in this Plan.
Noise-sensitive receptors for which predictions shall be made and at which the noise and vibration limits shall apply and which shall include recreational receptors.	Section 3.1
Predicted noise levels at the noise-sensitive receptors from noise and vibration generated at the DNF and LCP sites for the key construction phases during the forthcoming year including any periods in which the higher daytime limit of 70 dB $L_{Aeq}$ shall apply (permitted 56 days for temporary works to create noise-reducing bunds and/or barriers as per Conditions 16 and 18).	Section 3, and Appendix C
The best practicable means which will be used to control noise and vibration levels on site including such measures proposed in the Environmental Statement and Supplementary Environmental Information. Such measures shall include but are not limited to: the use of the quietest available plant, equipment and techniques; the regular maintenance and inspection of such plant and equipment; the use of cladding, attenuators and barriers to reduce noise levels from noisy plant and operations; the specification of appropriate reversing alarms to minimise annoyance; and, measures to reduce vibration and air overpressure during blasting.	Section 5
Details of the noise and vibration monitoring system to be installed around the DNF and LCP sites to continuously log noise levels during construction and operation. The system shall include at least six noise monitors installed around the boundary of the Dove's Nest site and at least four monitors at key residential receptors near the Dove's Nest site and at least four noise monitors around the Lady Cross Plantation Site and at least three monitors at key residential receptors near the Lady Cross Plantation site.	Section 4



NYMNP 18	Compliance with Condition NYMNP-18
<p>The precise number and location of noise monitors shall be set out in the NVMP. The developer shall use reasonable endeavours to obtain access to the residential receptor properties for the installation of noise monitors and only if access cannot be obtained the number or location of noise monitors may be reduced. The MPA and the SBC EHO and/or their advisers shall be granted access to inspect the noise and vibration data whenever required, records of the data should be kept for a reasonable period and these records should be accessible by the public.</p>	<p>Section 3, Section 4 and Figure B.1</p>
<p>Details of the procedure to be followed in the event that the noise predictions detailed in the NVMP or the noise limits detailed in conditions 16 to 19 are exceeded. Such procedures shall require the investigation of the reasons for the breach of the limits and the cessation of the activity causing the breach until such a time as additional mitigation can be provided.</p>	<p>Section 5.4</p>
<p>Details of how the residents will be informed and consulted about the site operations and progress, particularly in regard to blasting and especially noisy operations including details of complaints logging and management procedures and a 24-hour telephone incident hotline. Details of the procedure for investigating complaints and informing complainants of the results of such investigations and of any actions resulting from them.</p>	<p>Section 5.4</p>
<p>The NVMP shall be adhered to at all times unless agreed previously in writing by the MPA.</p>	<p>A document sign off section has been included within this report requiring the Contractor to commit to compliance with the NVMP</p>
<p>The NVMP shall be updated and agreed whenever appropriate to reflect changes in the programme during construction and operation and at intervals not less than 6 months after the initial start on site and thereafter annually.</p>	<p>Section 1</p>

- 1.1.3 This NVMP relates to the Phase 6a Works at Woodsmith Mine and does not include any activities at Lady Cross Plantation, as these works have been deferred. The NYMNP has confirmed that it supports this approach.
- 1.1.4 Phase 5 and 6 activities will continue past the start date of Phase 6a. This NVMP forms a standalone document separate from the other main works Phases at Woodsmith Mine. Activities required for Phase 6a comprise the following:
- Installation (daytime only) and operation (continuous) of LNG plant.

### ***Planning Conditions***

- 1.1.5 In addition to Condition NYMNPA 18, two further conditions NYMNPA 20 and NYMNPA 21 establish noise limits relating to the Woodsmith Mine site (see **Section 2.2**). Conditions NYMNPA 24, 27, 28 and 29 relate to vibration arising from blasting activities underground chamber construction, and as such do not apply to this Phase.
- 1.1.6 In this document, the term “*construction*” includes all physical and related engineering and construction activities associated with the Phase 6a Works, as described above. “*Operation of the LNG Plant*” relates to the 24-hour operation of four GE Jenbacher JGC420GS-N.L B09 engines and associated daily HGV delivery of LNG gas throughout the Woodsmith Mine construction phase.
- 1.1.7 Updates to this plan will be prepared and submitted to the NYMNPA for approval in advance of subsequent construction phases and following any material design or method change.

## **2 GUIDANCE**

### **2.1 Legislation and British Standards**

2.1.1 As a minimum, the Contractor will adhere to the following standards:

- BS 7445:2003 *Description and measurement of environmental noise*; and
- BS 5228:2009+A1:2014 *Code of Practice for noise and vibration control on construction and open sites*.

### **2.2 Construction Limits**

2.2.1 Established construction noise limits (as measured at the identified receptors) remain as:

- 55 dB  $L_{Aeq,1hr}$  for daytime (07:00 – 19:00);
- 65 dB  $L_{Aeq,1hr}$  for the demolition of buildings and erection of new structures;
- Up to 70 dB  $L_{Aeq,1hr}$  for temporary noisy operations to provide noise-reducing earth bunds and / or barriers; and
- 42 dB  $L_{Aeq,1hr}$  for evening and night-time (19:00 – 07:00).

### **2.3 Construction Method**

2.3.1 Contractors associated with the Phase 6a Works (see Construction Environmental Management Plan (CEMP; reference 40-RHD-WS-70-EN-PL-0031)) have provided details of the construction masterplan, number and type of plant items to be used and location/duration of construction activities within the site. The Construction Method Statement for the Phase 6a Works (reference 40-SMP-WS-7100-PA-MS-00002) outlines the proposed approach.

2.3.2 **Appendix C** details the plant items used within the model, their sound power level and location on site. Predictions of noise levels based upon these details are assessed within this NVMP.

### 3 PREDICTED CONSTRUCTION NOISE AND VIBRATION LEVELS

#### 3.1 Baseline Receptor Locations

3.1.1 Residential and recreational receptors for this NVMP remain as identified in the Environmental Statement (ES) which accompanied the planning application, in previous iterations of the NVMP (e.g. Phase 4 NVMP; document reference 40-RHD-WS-70-EN-PL-0017), and as shown in **Figure B1 (Appendix B)**.

#### 3.2 Predicted Noise Levels

3.2.1 Noise modelling was undertaken to provide predictions of installation and operation noise levels throughout the Phase. **Tables C.1 and C.2** in **Appendix C** outline the LNG Plant installation and operation noise assessment predictions for the Phase 6a Works.

3.2.2 Noise levels due to activities in the Phase 6a Works were not predicted to exceed the agreed construction noise limits at any of the identified noise-sensitive receptors during the daytime, evening or night-time. When LNG Plant noise is assessed cumulatively with other general construction noise from the Woodsmith site (Phase 5), levels fall within the Conditioned criteria and effects are negligible.

#### 3.3 Vibration

3.3.1 In relation to all other construction works ground borne vibration was considered according to the conservative approach outlined in previous NVMPs (e.g. Phase 4 document reference 40-RHD-WS-70-EN-PL-0017; see Table C.7, Appendix C for minimum set-back distances for vibration levels of reportable significance).

3.3.2 All identified sensitive receptors are at least 437m from the nearest site boundary, and the minimum distance between the primary haul route and any of the surrounding receptors is over 440m. Therefore ground-borne vibration levels will be below levels considered to be *“just about perceptible in residential environments”*<sup>1</sup>.

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<sup>1</sup> Planning Policy Guidance Note 24 (PPG24, 1994), Department for Communities and Local Government

## 4 NOISE MONITORING PROGRAMME

### 4.1 Noise Monitoring

- 4.1.1 Continuous noise monitoring, as required by condition NYMNPA 18, is being undertaken during construction at three key residential receptor locations and seven boundary locations as described in previous NVMP (e.g. Phase 4 document reference 40-RHD-WS-70-EN-PL-0017) and shown in **Appendix B, Figure B1**.
- 4.1.2 Monitoring commenced at each location on 04 April 2017 and continues to operate in compliance with relevant guidance as outlined in previous NVMPs (e.g. Phase 4 document reference 40-RHD-WS-70-EN-PL-0017). The Sound Level Meters (SLMs) record  $L_{Aeq}$ ,  $L_{Amax}$ ,  $L_{A90}$ , and  $L_{A10}$  data with a “fast” time constant and A-weighting (see **Appendix A** for descriptions of these terms). Weather condition monitoring is carried out simultaneously.
- 4.1.3 A system of real time alerts allows remote monitoring of noise levels. Alerts are managed by the Contractors, who respond to any potential breaches appropriately. Reports are produced monthly for submission to SBC and NYMNPA, confirming the measured noise data at each location and cross-referencing to corresponding weather data and Works Contractor Site Activity Logs. The full dataset is presented in graphical format.

## 5 MITIGATION AND PROCEDURES

### 5.1 Purpose of the Section

- 5.1.1 This section outlines measures to be taken by the Contractors to limit, and manage the impact of, noise. This section also outlines the Best Practicable Means and specific mitigation actions to be adopted.

### 5.2 Best Practice Measures

- 5.2.1 The Control of Pollution Act (1974) and BS 5228:2009+A1:2014 define working methods and mitigation measures referred to as Best Practicable Means (BPM). Appropriate BPM, set out in previous NVMPs (e.g. Phase 4, reference 40-RHD-WS-70-EN-PL-0017) and briefly described below, will continue to be applied to the Phase 6a Works.

#### **Management Structure and Responsibilities**

- 5.2.2 While overall responsibility for compliance with environmental and approvals requirements will remain with Sirius Minerals, all Contractors working on site are accountable for undertaking the construction activities in line with the requirements of this NVMP.
- 5.2.3 The CEMP (reference 40-RHD-WS-70-EN-PL-0031) provides details of the lines of responsibility for environmental management (including relating to robust implementation of noise management and mitigation measures) during the Phase 6a Works.

## **Maintenance**

- 5.2.4 Maintenance of plant will be carried out routinely and in accordance with the manufacturers' guidance. Daily inspections will be undertaken as described in previous NVMPs (e.g. Phase 4, reference 40-RHD-WS-70-EN-PL-0017).

## **Training**

- 5.2.5 The site induction programme and site rules will include good working practice instructions for site staff, managers, visitors and contractors to help minimise noise, as set out in previous NVMPs (e.g. Phase 4, reference 40-RHD-WS-70-EN-PL-0017).

## **5.3 Specific Mitigation**

- 5.3.1 No specific mitigation measures – for example bunds, barriers, screens or enclosures, or limits on activity timing, are required for the installation and operation of the LNG Plant during Phase 6a.

## **5.4 Communications**

### **Procedure for complaints or breach of limits**

- 5.4.1 The procedures to be followed in the event of a complaint or a breach of permitted noise limits will remain as set out in previous NVMPs (e.g. Phase 4, reference 40-RHD-WS-70-EN-PL-0017).

### **Public relations**

- 5.4.2 Good relations with the public, and local residents in nearby noise-sensitive receptors, will be maintained.
- 5.4.3 A Community and Stakeholder Engagement Plan is provided in Appendix 4 to the Phase 3 CEMP (40-RHD-WS-70-EN-PL-0014). It remains valid for Phase 6a Works, and details actions to be taken by Sirius Minerals plc and the Contractors.

## Appendix A Acoustic Terminology

Term	Definition
Noise sensitive receptors	People, property or designated sites for nature conservation that may be at risk from exposure to noise and vibration that could potentially arise as a result of the proposed development/project
Noise and Vibration study area	The area assessed for noise and vibration impacts during this assessment
Baseline scenario	Scenarios with the proposed development/project not in operation
Decibel (dB)	A unit of noise level derived from the logarithm of the ratio between the value of a quantity and a reference value. It is used to describe the level of many different quantities. For sound pressure level the reference quantity is 20 $\mu$ Pa, the threshold of normal hearing is 0dB, and 140dB is the threshold of pain. A change of 1dB is only perceptible under controlled conditions. Under normal conditions a change in noise level of 3dB(A) is the smallest perceptible change.
dB(A)	Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a similar way to the human ear. Measurements in dB(A) broadly agree with people's assessment of loudness. A change of 3 dB(A) is the minimum perceptible under normal conditions, and a change of 10 dB(A) corresponds roughly to halving or doubling the loudness of a sound. The background noise level in a living room may be about 30 dB(A); normal conversation about 60 dB(A) at 1 metre; heavy road traffic about 80 dB(A) at 10 metres; the level near a pneumatic drill about 100 dB(A).
$L_{Aeq,T}$	The equivalent continuous sound level – the sound level of a notionally steady sound having the same energy as a fluctuating sound over a specified measurement period (T). $L_{Aeq,T}$ is used to describe many types of noise and can be measured directly with an integrating sound level meter.
$L_{A10,T}$	The A weighted noise level exceeded for 10% of the specified measurement period (T). $L_{A10}$ is the index generally adopted to assess traffic noise
$L_{A90,T}$	The A weighted noise level exceeded for 90% of the specified measurement period (T). In BS 4142:2014 it is used to define the 'background' noise level.
$L_{Amax}$	The maximum A-weighted sound pressure level recorded during a measurement.
PPV	Instantaneous maximum velocity reached by a vibrating element as it oscillates about its rest position.
'A' weighting	A frequency weighting to compensate for the varying sensitivity of the human ear to sound at different frequencies.
Fast time constant	Sound level meters have two conventional time weightings, F = Fast and S = Slow with time constants of 125 ms and 1000 ms respectively. Fast time constant relates to the response time of the meter which allows rapid variations in noise level to be registered.