

Natural England

Record of a Habitats Regulations Assessment (including Appropriate Assessment) of a Notice dated 1 March 2012, as submitted by Walshaw Moor Estate Ltd (“WME”)

Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations”)

South Pennine Moors Phase 2 Special Protection Area (SPA) and Special Area of Conservation (SAC)

1 Site designations

- 1.1 Special Protection Area (“SPA”): South Pennine Moors Phase 2
- 1.2 Special Area of Conservation (“SAC”): South Pennine Moors
- 1.3 Site of Special Scientific Interest (“SSSI”): South Pennine Moors¹

2 Introduction & background

- 2.1 This is a record of a Habitats Regulations Assessment undertaken by Natural England of a Notice of Proposal to Carry Out Operations (referred to hereafter as “the Notice”) made by WME, the terms of which are set out at section 3, below. The Notice constitutes written notice to Natural England under regulation 20(1)(a) of the Habitats Regulations².
- 2.2 The management proposed in the Notice is materially different to that permitted by the imprecise terms of the consents given by English Nature to WME’s predecessors in title, Lord Savile and Yorkshire Water, in 1995, copies of which are attached hereto as Annex 1 (“the 1995 letters”). The 1995 letters are unlimited in the duration of their effect and have been interpreted by WME as allowing certain management activities, including burning, grazing and vehicular access, to take place without limitations as to intensity, location, methods or timing. It is on the basis of that interpretation that WME has managed the Estate for the period of its ownership. It is Natural England’s view that the effect and existence of the 1995 letters and WME’s management activities under their aegis are inimical to the conservation objectives for the European protected blanket bog, wet and dry heath habitats on the site and that they inhibit the maintenance or restoration of these habitats in accordance with those objectives. The Notice has been considered, subject to the requirements and application of the Habitats Regulations, in the light of (a) this unacceptable and detrimental situation, (b) what WME is now prepared to accept in terms of significantly improved regulatory control over its operations, (c) the collateral surrender of the 1995 letters, and (d) the resulting opportunity that these factors create to move towards the achievement of the sites’ conservation objectives.

3 The terms of the Notice

“I/we give notice under Section 28(E)(1)(a) of the Wildlife and Countryside Act 1981 and Regulation 20(1)(a) of the Conservation of Habitats and Species Regulations 2010 of

¹ The SSSI is referenced in this Habitats Regulations Assessment as the geography of the site is described by reference to the mapped units of the SSSI.

² The Notice also constitutes notice for purposes of section 28E of the Wildlife and Countryside Act 1981 in relation to the South Pennine Moors SSSI.

my/our proposal to carry out cause or permit to be carried out the operation(s) specified below on the land specified below:-

LAND ON WHICH THE OPERATIONS ARE TO BE CARRIED OUT:

Units 35, 36, 37, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 55, 56, 57, 79, 80, 81, 82, 83, 84, 90, 166 of the South Pennine Moors SSSI.

THE PROVISIONS OF THIS NOTICE AND CONSENT TAKE EFFECT FROM 1 MARCH 2012 AND SHALL REMAIN IN EFFECT UNTIL 1 MARCH 2037.

PROPOSED OPERATIONS:

Grazing:

On the following units at the following stocking densities:

Grazing parcel name	Grazing parcel area (ha)	SSSI unit number (s)	Summer ewes	Winter ewes
Brink Ends	672.36	36, 37	330	277
Stanbury Moor	415.74	41	245	245
Wolfstones	183.60	35	70	Nil
Wadsworth Moor, Widdop, Grieve Height, Pisser Rough and Sutcliffe	1502.09	44, 45, 46, 47, 48, 49, 50, 51, 55, 90	700	300

The provision of supplementary feeding will not occur other than in Unit 55.

Burning:

Where heather cover exceeds 50% burning shall be permitted on the basis of the following definitions and rotations:

Definitions:

For the purposes of burning there shall be the following categories of area/habitat:

- **Dry Heath:**
 - Communities dominated by dwarf shrubs, largely heather, on more mineral soils or shallow organic soils with peat depth at 0.5 metres or below. The moss layer, if present will be dominated by spreading, mat forming (pleurocarpous) mosses.

- **Degraded Blanket Bog:**
 - Where peat depth is greater than 0.5 metres and where sphagnum species are patchily distributed or absent.
 - If sphagnum and/or cotton grass cover increases to greater than 50% on areas with a high water table then such areas shall be reclassified as active blanket bog.
- **Active Blanket Bog:**
 - Areas with a high water table where the moss layer is dominated by sphagnum species and/or cotton grass is dominant and the peat depth is greater than 0.5 metres.
- **Sensitive areas:**
 - Areas defined as sensitive areas shall not be burned once mapped as provided for herein.
- **“Dominant” or “dominated by” means 50% cover or more.**

Mapping:

Pursuant to s. 28E(3)(b) of the Wildlife and Countryside Act 1981 and Regulation 20 (2)(b) Natural England and Walshaw Moor Estate Limited agree to carry out mapping of the area of land affected by this proposal on the following basis:

- The intention of the mapping is to identify the extent of dry heath, degraded blanket bog, active blanket bog and sensitive areas. Areas of wet heath (shallow wet peats with *Erica tetralix*) will be mapped with areas of degraded blanket bog.
- Sensitive areas shall be mapped on the basis of the definitions provided by the Heather and Grass Burning Code 2007 (save that it shall not be necessary to identify the category described as “Peat bogs and wet heathland”);
- The mapping shall be carried out on a unit by unit basis in relation to the units of the SSSI set out at the start of this proposal;
- The mapping shall be jointly undertaken by representatives of Natural England and Walshaw Moor Estate Limited acting together;
- If, by 1 March 2013, the mapping is not complete or dispute remains between the parties an independent third party shall be appointed with the agreement of the parties and that person shall complete the mapping or resolve areas of dispute by 31 December 2013 and their decisions shall be final;
- If the parties are unable to reach agreement as to the identity or terms of appointment of the independent third party that person shall be identified and their terms of appointment ascertained by the Chairman of the Institute of Environmental Management and Assessment;
- The mapping shall be reviewed after 14 years from the date of this agreement.

Rotations:

- *Dry heath:* 12 – 16 years
- *Degraded blanket bog and wet heath* 15 – 20 years
- *Active blanket bog* 20 – 25 years
- *Sensitive areas* no burning

For the avoidance of doubt, the extent of any one habitat that may be burned per annum in any single unit of the SSSI under a burning rotation = area of habitat in that unit divided by period of rotation ("the Annual Quota").

Catch-up burning:

If in any year the Annual Quota is not burned, the unburned portion of the quota may be carried forward into the next or a subsequent burning season.

Catch up burning is permissible in relation to burning permitted by this consent but not by prior consents.

Picking up areas:

Areas within a 50metre radius of a grouse butt may be burned when the heather reaches 10cm.

The Heather and Grass Burning Code:

WME will use reasonable endeavours to comply with the Heather and Grass Burning Code 2007 (or as from time to time amended) save where this is not compatible with the terms of this proposal and consent. For the avoidance of doubt, heather may only be burned on the basis of the rotations set out above and not on the basis of heather height.

Legal control of pest species:

Is permitted.

Maintenance of existing infrastructure:

Is permitted, but for the avoidance of doubt:

- *“maintenance” means the repair or reinstatement of infrastructure where the feature already exists and/or the component parts already exist, including replacement of grouse butts. Change of location and/or enlargement is not permitted.*
- *“existing” means visible from an aerial photograph, shown on an OS map or shown in photograph(s) to be taken by WME prior to repair, to include roads/tracks, car parks, grouse butts.*
- *“infrastructure” means roads, tracks, walls, fences, hardstands, banks, ditches, cables and grouse butts, ponds and buildings and footbridges.*

No maintenance of moorland drainage is permitted except where immediately adjacent to surfaced roads/tracks, walls and within a 50 metre radius around grouse butts.

Turves for butts:

The cutting of turves for the placement on butt tops, including the means of doing so and locations in such a manner as determined by WME may be undertaken.

Gritting

The setting out of quartz (medicated or otherwise) either directly on the ground or within bespoke containers, including the means of doing so and locations in such a manner as determined by WME may be undertaken but only in compliance with applicable laws or codes of practice;

Weed Treatment:

*The spot application of an appropriate herbicide of noxious weeds as defined by the WA 1959, plus soft rush (*Juncus effusus*) where it occurs within heather dominated vegetation, plus bracken (*Pteridium aquillinum*) where it occurs within heather dominated vegetation, in accordance with all applicable laws and codes of practice may be undertaken.*

Use of Vehicles:

Vehicles may be used for the following purposes:

- *General grouse management including direct dosing, setting out of grit, moor burning, transportation of water bowsers and misting equipment, and grouse shooting;*
- *The protection of the welfare and safety of those working on WME, or guests of WME and for the transportation of personnel.*
- *Sheep and stock management such as shepherding, gathering and inspection;*
- *General estate management such as, but not exclusively restricted to, the erection and repair of infrastructure, grip blocking, tree planting, bracken control, legal control of pest species etc.*

Vehicles may be used at all times of the year. However, due care will be taken to avoid disturbance to vegetation and to avoid disturbance to nesting birds. If the ground or the vegetation is damaged as a result of vehicle passage, use of that route will cease immediately, until the vegetation has recovered. Intervention methods to achieve re-vegetation as may be appropriate may be used subject to separate consent from NE.

Any vehicle used on un-surfaced vegetation will be of low ground pressure.”

4 Information about the European sites

4.1 South Pennine Moors Phase 2 SPA

4.1.1 Article 4.1 of the Birds Directive: supports breeding populations of Merlin *Falco columbarius*, and Golden Plover *Pluvialis apricarius* in numbers of European significance.

4.1.2 Article 4.2 of the Birds Directive: supports an internationally important assemblage of birds during the breeding season: Golden Plover *Pluvialis apricarius*, Short-eared Owl *Asio flammeus*, Common Sandpiper *Actitis hypoleucos*, Dunlin *Calidris alpina schinzii*, Twite *Carduelis flavirostris*, Snipe *Gallinago gallinago*, Curlew *Numenius arquata*, Wheatear *Oenanthe oenanthe*, Whinchat *Saxicola rubetra*, Redshank *Tringa totanus*, Ring Ouzel *Turdus torquatus*, Lapwing *Vanellus vanellus*.

4.2 South Pennine Moors SAC. Qualifying features:-

4.2.1 Article 4(4) of the Habitats and Wild Flora and Fauna Directive: qualifying natural habitats listed at annex 1:

Blanket bogs (* if active)

European dry heaths

Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles. (Western acidic oak woodland)

North Atlantic wet heaths with *Erica tetralix*

Transition mires and quaking bogs

Annex I priority habitats are denoted by an asterisk (*). The qualifying features that may be affected by the Notice are underlined.

4.2.2 With reference to the relevant features which may be affected by the proposal, the stated conservation objectives for the SAC and SPA are:

... subject to natural change, to maintain the blanket bog and dwarf shrub heath in favourable condition with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated.

A copy of the Conservation Objectives are attached hereto as Annex 2.

5 Screening stage: Directly connected with or necessary to the management (of the European site) test (regulation 21(1)(b)).

SAC features:

5.1 It is considered that the rationale underpinning the constituent elements of the proposal is the management of the land for grouse shooting and agriculture and not the maintenance or restoration of the SAC habitats to favourable conservation status. Grazing and burning management is not considered necessary for the maintenance and/or restoration of blanket bog habitats and additional elements of the project (i.e. pest control and maintenance of infrastructure) are specifically intended for grouse management purposes. Therefore, notwithstanding that management, which can include grazing, is necessary to the conservation of the dry heath feature, Natural England judges that this proposal is not directly connected with or necessary to the management of the South Pennine Moors SAC.

SPA features:

5.2 It is considered that the rationale underpinning the constituent elements of the proposal is the management of the land for grouse shooting and agriculture and not the maintenance or restoration of the SPA interest features to favourable conservation status. Rotational burning is not considered necessary to maintain the SPA features and additional elements of the project (i.e. vehicle use and maintenance of existing structures) are specifically intended for grouse management purposes. Therefore, notwithstanding that grazing is necessary to create open areas favoured by certain elements of the SPA interest, Natural England judges that this proposal is not directly connected with or necessary to the management of the South Pennine Moors SPA. Natural England does, however, regard the fact that the site is to be managed in ways conducive to grouse production, including nesting success, as relevant to consideration of how various management operations will be carried out. In addition, Natural England does not consider it likely that any successor in title to this land would manage it other than for grouse production, grazing or conservation.

6 Screening stage: Checking for the likelihood of a significant effect (either alone or in-combination with other plans or projects) (regulation 21(1)(a)).

SAC and SPA features:

6.1 The various operations set out in the Notice are not expressed as alternatives or options and, accordingly, Natural England considers the Notice to constitute a single plan or project.

6.1.1 In relation to the three SAC Annex I habitats, and the SPA features, Natural England cannot exclude the likelihood of significant effect, either alone or in combination with other plans or projects, resulting from the operations set out in the Notice, and, accordingly, will make an appropriate assessment of the Notice.

6.1.2 For purposes of making the appropriate assessment, however, it is Natural England's view, in reference to the sites' conservation objectives, that the grazing, burning and vehicle use operations proposed in the Notice, in particular, have the most potential to undermine those objectives in the absence of a further examination of (a) the effectiveness of the proposed management restrictions contained on the face of the Notice itself, and/or (b) other countervailing considerations, through the appropriate assessment.

7 Conclusion of the screening stages

7.1 Natural England has considered the Notice as described above and has concluded that:

7.1.1 The Notice is not directly connected with or necessary to the management for nature conservation either of the SAC or the SPA, albeit that grazing is an activity that may be associated with the conservation of areas of dry heath and of habitat for certain SPA features;

7.1.2 The Notice, which is considered to be a single plan or project, identifies a number of operations that have the potential to undermine the conservation objectives of the SAC and the SPA. Accordingly, it cannot be excluded that the operations set out in the Notice will not have a likely significant effect on the features for which the SAC and SPA are designated, and an appropriate assessment is required in order to

determine whether or not it can be ascertained that the operations set out in the Notice will not have an adverse effect on the integrity of the sites.

8 The Appropriate Assessment

SAC: Grazing, Burning and Use of Vehicles

- 8.1 **Grazing.** Grazing affects vegetation composition and structure, depending on stocking density and the timing and duration of grazing. At high stocking densities, grazing action favours vigorous grasses which are able to out-compete the characteristic species which form the respective vegetation communities. Localised nutrient enrichment and excessive poaching or trampling of the ground may result. Blanket bog is particularly sensitive to grazing, being very unproductive and being a habitat which is only partly, under certain circumstances, dependent on grazing to maintain its special scientific interest. Grazing can either maintain or reduce the cover of dwarf shrubs and other plants. Winter grazing regimes often result in the need for supplementary feeding of livestock, such as the use of mineral licks which if kept in the same location over long periods can cause localised but significant damage to upland heathland vegetation, further promoting changes to a grass-dominated vegetation community.
- 8.1.1 The proposal states that grazing will take place across units 35, 36, 37, 41, 44, 45, 46, 47, 48, 49, 50, 51, 55, 90 in accordance with the following: winter grazing of 822 ewes and summer grazing of 1345 ewes.
- 8.1.2 The total area affected by the proposal is 2,773.79 ha.
- 8.1.3 A medium ewe (e.g. Scottish blackface, Lonk) with lambs at foot equates to 0.1 livestock units (LU). The proposal (winter) is for 822 sheep, giving a stocking rate of 0.03 LU/ha. The proposal (summer) is for 1345 sheep, giving a stocking rate of 0.048 LU/ha. For these purposes the length of the summer and winter periods is 6 months, so that the overall annual stocking rate for the year is 0.039 LU/ha.
- 8.1.4 Natural England considers that the appropriate stocking density that blanket bog can sustain is a maximum annual average stocking rate of 0.035 LU/ha.
- 8.1.5 Natural England considers that the appropriate stocking density for maintenance of dry heath is a maximum annual average stocking rate of 0.101 LU/ha.
- 8.1.6 Natural England considers that blanket bog and dry heath are present over the area of the proposal in the approximate ratio of 70:30. Whilst Natural England considers that the blanket bog feature does not specifically require grazing management, the feature can tolerate limited light grazing occurring across a wide contiguous area. Accordingly, an appropriate overall stocking density which is appropriate to this site, given the balance between blanket bog and dry heath, is a maximum annual average stocking rate of 0.05 LU/ha.
- 8.1.7 Other considerations:
- 8.1.7.1 The relative palatability of dry heath vegetation at most times of year will affect the stocking levels on the two habitat types, reducing impacts on blanket bog;

- 8.1.7.2 Not included in this calculation are areas of reverted semi-improved grassland which will reduce the effective stocking rate of the most sensitive areas and will further reduce the risk of impacts on the two Annex 1 habitat types;
- 8.1.7.3 Bare ground, rock outcrops and areas of dense bracken are present and offer no grazing opportunity. Natural England does not assess the adverse effect of this loss of area as being greater than the positive affect of areas of reverted semi-improved grassland.
- 8.1.7.4 Trespass grazing: Trespass grazing has the potential to occur from Haworth Moor (Unit 77), Tom Groove, Extwistle Moor and Red Spa Moor (Units 52 and 53), Bedding Hill Moor (Unit 40), Hoarside Moor and Heptonstall Moor (Units 80, 81 and 83), Shuttleworth Moor and Flask ("Gorple" - Unit 56 and 57). The amount of grazing carried out on those moors is known to Natural England and is considered to be stable over the period in question. If trespass grazing took place to the extent where the entire unenclosed area was evenly used by stock the overall annual average stocking rate would be 0.052 LU/ha.
- Units 42, 43, 82 and 84 are enclosed and stock cannot stray on to the areas of proposed grazing.
- 8.1.7.5 Trespass grazing from Hoarside Moor and Heptonstall Moor (Units 80, 81 and 83) is likely to be at a low level, due to distance, topographical factors and the presence of the Widdop Road. If these units are removed from the calculation the overall annual average stocking rate would be 0.046 LU/ha.
- 8.1.7.6 Prescribed burning at the levels set out in the Notice will decrease the amount of edible biomass but increase the incidence of palatable young vegetation with effects in drawing grazing pressure from elsewhere. Overall, it is not considered that this affects the appropriate stocking levels set out above.
- 8.1.7.7 Re-wetting. Re-wetting by grip blocking is anticipated to take place over the period of the proposal and to improve the condition of Annex 1 blanket bog.
- 8.1.7.8 Infrequent vehicular use for shepherding purposes alone is not considered to be likely to lead to an adverse effect where carried out in compliance with the integral provision to avoid damage to vegetation or disturb breeding birds.
- 8.1.7.9 Supplementary feeding will not take place other than in unit 55, which contains reverting improved in-bye pasture of low conservation interest and greater physical resilience than the Annex 1 habitats.
- 8.1.7.10 It is likely that the proposed grazing regime will at least maintain the habitat condition and is likely to deliver a degree of enhancement. The annual average rate of under half a ewe per hectare is typical of other HLS moorland agreements where recovery of blanket bog is a significant objective.
- 8.1.7.11 The SAC also contains relatively small areas of Annex I wet heath habitat along the margins of much larger areas of blanket bog and dry heath. It is Natural England's view that grazing at the levels set out in the Notice will also be sustainable in relation to wet heath habitat in view of the conclusions set out above in relation to blanket bog.

8.1.7.12 Therefore it is Natural England’s view that the grazing proposals, in relation to grazing alone and taking into account the stocking rates on contiguous moorland and having regard to the possibility of trespass grazing and other elements of the proposal will not have an adverse effect on the integrity of the SAC.

9 Burning

9.1 In relation to active and degraded blanket bog and wet heath this activity is capable of simplifying or reducing the characteristic diversity of vegetation communities by promoting the dominance of a few fire-resistant species and altering the dominance as between ericoids and graminoids, increasing the quantity of bare ground, decreasing the abundance of key species, changing floristic composition, damaging and reducing the resilience of peat forming *Sphagnum* species, and drying out of the peat surface.

9.2 Whilst it is Natural England’s view that burning on blanket bog (including degraded forms) and wet heath is not required to maintain the nature conservation interest of these habitats, and has the potential to be harmful to the site if carried out in an uncontrolled manner, regard must be had to specific terms of the Notice, and other relevant considerations, that give assurance that this activity will not adversely affect the integrity of the SAC, as follows:

9.2.1 Natural England is aware that the relevant units of land contain large areas of Annex I blanket bog (generally of the M20 NVC classification, though also including *Molinia*-dominated blanket bog) where heather cover does not exceed 50%. These areas will not be subject to burning at all under the terms of the Notice. Re-wetting of such areas following grip-blocking is not considered likely to increase the incidence of heather (considered further at paragraph 9.2.8 below) and, accordingly, there can be assurance that the extent of these areas will be maintained or increased as a result of grip-blocking.

9.2.2 Those areas of blanket bog where heather cover does exceed 50% include areas that will be mapped as “sensitive areas”, which once so mapped shall not be burned³.

9.2.3 In relation those areas of blanket bog that may be burned in accordance with a proposed rotation, the proviso in the Notice that “*the extent of any one habitat that may be burned per annum in any single unit of the SSSI under a burning rotation = area of habitat in that unit divided by period of rotation (“the Annual Quota”)*” serves to clarify the amount of burning allowed per annum, spreading the total allowable burning evenly over the period of the rotation and preventing “un-used quota” from one unit of the SSSI being used elsewhere on the site. Thus a unit of the SSSI dominated by degraded blanket bog could, on average, see no more than one fifteenth of the area of that habitat burned in any one year, regardless of whether un-used quota arose elsewhere on site.

³ The proviso (within the methodology for mapping) of the Notice that it shall not be necessary to specifically map the category of sensitive area defined by the Heather and Grass Burning Code 2007 as “Peat bogs and wet heathland” is not inconsistent with the provisions of that Code. The Code explicitly recognises that these areas may be burned in line with a management agreement with Natural England; in the event that the Notice, having been properly considered in accordance with requirements of the Habitats Regulations (and also if considered not likely to cause damage in reference to the SSSI notification) receives Natural England’s consent, then Natural England is of the view that such a management agreement will have been made.

9.2.4 The Notice's definition of catch-up burning, when coupled with the Heather and Grass Burning Code's definition of "*areas of late mature/degenerate heather (and other vegetation with a noticeably uneven small-scale structure) which have not been burned for many decades and which are likely to be particularly rich in plants and insects*" serves to protect old heather and areas surviving un-burned from the low intensity management regime that existed until the mid-2000s. In the first year of the proposal structurally diverse old heather in any particular unit could be burned, subject to the relevant Annual Quota, on the rotational basis appropriate to its underlying habitat type, but prescribed burning could not be used to "catch-up" any further on the lack of burning going back to the days of the previous land manager, as it is expressed to be permissible in relation only to burning permitted by the current proposal and not to that permitted by the 1995 consent. Following completion of the agreed mapping exercise all remaining "*areas of late mature/degenerate heather (and other vegetation with a noticeably uneven small-scale structure) which have not been burned for many decades and which are likely to be particularly rich in plants and insects*" will have been mapped as sensitive and will not therefore be burned.

9.2.5 The Notice, if consented, would require WME to use reasonable endeavours to comply with the Heather and Grass Burning Code. This incorporates the endeavour to burn carefully, with cool burns leaving large amounts of 'stick' and not damaging the moss layer. This burning technique would apply to both (a) those areas that may ultimately be mapped as sensitive by, at the latest, 31 December 2013, but which may, in accordance with the strict limitations of the Annual Quota in each relevant unit, be susceptible to a single burn before then, and (b) those areas not ultimately mapped as sensitive. Burns of this sort are considered most likely to be effective where, as here, the microtopography of the blanket bog surface is relatively low and homogenous. This method should also prevent the creation of significant areas of bare ground that could lead to exposure and soil erosion. Natural England will monitor WME's compliance with this undertaking, as well as the effectiveness of said undertaking, in line with its statutory powers. Re-wetting following the implementation of grip-blocking, in accordance with the Management Scheme (considered further at paragraph 9.2.8, below), is also believed likely to facilitate cool burning and will reduce the extent of fire-vulnerable grip-edges.

9.2.6 Natural England notes that the provisions set out below paragraph 14 of the Heather and Grass Burning Code (and relating to the burning of heather when it reaches a specific height) are specifically dis-applied by the terms of the Notice. This serves to prevent ambiguity in sites where (as here) heather grows relatively fast and clarifies that, other than in picking-up areas, there are no circumstances in which heather may be burned more frequently than is provided for by the proposed rotations.

9.2.7 Accordingly, in view of the conclusions reached in each of preceding paragraphs 9.2.1 to 9.2.6, the location, frequency and intensity of burning will be strictly and substantially limited during the 25 year period of the Notice.

9.2.8 Substantial regard must also be given to the effect of habitat restoration works that will be undertaken in accordance with the Management Scheme served by Natural England on WME on 5th July 2011. Pursuant to that scheme over 200 kilometres of artificial drainage will be blocked, with the aim of restoring appropriate hydrological conditions for active blanket bog across large areas of the site. Natural England is committed to using regulatory powers, if necessary, to ensure compliance with the requirements of the Management Scheme. In addition to improving conditions for peat-forming plant species it is believed that grip-blocking will increase the resilience of blanket bog habitats to any effects of burning by increasing humidity at ground level,

assisting the carrying out of “cool” burns, and promoting recovery of sphagnum species after burning.

9.2.9 Further beneficial effects of grip-blocking include suppressing the vigour and dominance of heather at the expense of peat-forming species such as *Sphagna* and cotton-grasses. This is in itself in accordance with conservation objectives and may also serve to increase the area of peat bog with less than 50% heather which may then not be burned and/or to bring areas of degraded peat bog into the scope of the proposal’s definition of active blanket bog subject to the longer rotational burning regime.

9.2.10 Regard must also be had to the conclusions reached in the previous section of this assessment concerning grazing, which would, in the event that the Notice is given consent, be fixed at a level that is sustainable for the conservation management of blanket bog on the Estate. Accordingly, grazing would no longer have the potential, as it does under the 1995 consent, to act in conjunction with unregulated burning to undermine the SAC’s conservation objectives. The same is true in relation the limitations that the Notice places around vehicle use (see paragraph 9.5, below).

9.2.11 Finally, it should also again be noted that, if consented, the Notice is limited to a period of 25 years (to 31 March 2037), after which no areas may be burned without further consent. This will enable long-term conservation priorities for the site to be comprehensively reviewed and, if necessary and in view of future evidence, adjusted. During the period of the Notice, the Notice’s requirement that the habitat mapping is to be reviewed after 14 years would also, from a site monitoring perspective, assist Natural England in evaluating progress towards the sites’ conservation objectives in view of the conclusions made in this appropriate assessment. In addition, regard must also be had to the fact that, during the 25 year period of the Notice, no area of blanket bog⁴ would be subject to more than two cool burns, not less than 15 years apart.

9.2.12 The mapping of wet heath with degraded blanket bog links that habitat with the management of degraded blanket bog such as to allow, if granted consent, burning on a rotational basis of 15 to 20 years. It would be impracticable, at this site, to map wet heath as a single habitat-type as it is present in small areas and lines within and at the edges of blanket bog and dry heath, commonly at scales too small to be readily shown. The treatment of wet heath alongside degraded blanket bog would be consistent with the provisions of the Heather and Grass Burning Code 2007, which provides that it may be burned with the agreement of Natural England.

9.2.13 Accordingly, in view of these considerations, it is Natural England’s view that it can be ascertained that the proposed burning rotations on active and degraded blanket bog and wet heath will not have an adverse effect on the integrity of the South Pennine Moors SAC.

9.3 Rotational burning of dry heath is capable of promoting the dominance of a few species or switch the dominance from ericoids to graminoids, increase the quantity of bare ground and decrease the abundance of key species (i.e. species associated with this habitat type when in favourable condition). Short burning rotations can adversely affect the vegetation composition, age structure, nutrient status of the dwarf shrub community as well as the carrying capacity of the habitat for herbivores. Some species, particularly bryophytes, are more adversely affected by burning than others thus frequent burning management can curtail the development of these

⁴ Other than any limited areas within “picking-up areas” as defined by the Notice.

species. In frequently burned areas of dwarf shrub habitat *Calluna* is often the dominant species and this is often associated with a very poor bryophyte layer.

9.3.1 That said, these proposals would result in a mean burning rotation of 14 years on dry heath habitat and, as a result, avoidance of the above-mentioned impacts could be seen. The longer rotations proposed in this project should allow structural diversity of dwarf shrub species to development across the moor as well as allow species with longer post fire regeneration responses to be retained as part of the community structure.

9.3.2 It is Natural England's view that it can be ascertained that the proposed rotational burning on dry heath (12-16years) will not have an adverse effect on the integrity of the South Pennine Moors SAC

9.4 Catch-up burning. Catch-up burning, as it is proposed within this project, is intended to allow WME to undertake the total extent of permissible burning over the course of the proposed 25 year consent. The term has been defined in order to prevent catch-up burning being permitted *in addition to* the permitted rotational burning.

9.4.1 Given that the overall amount of burning on the site will not be increased by catch-up burning, Natural England takes the view that catch-up burning, as defined, is permissible in accordance with the conclusions reached in relation to the integrity of SAC in section 9.2 of this assessment.

9.4.2 It is Natural England's view that it can be ascertained that the proposed catch-up burning on dry heath and active and degraded blanket bog will not have an adverse effect on the integrity of the South Pennine Moors SAC.

9.5 Use of vehicles

9.5.1 The proposal includes the use of vehicles all year round for the purposes of general grouse management, safe transportation of clients and staff, and for general estate management. The proposal also states that care will be taken to avoid damage to vegetation and disturbance to nesting birds from vehicle use and that in the event of damage, use would cease to allow natural or managed recovery subject to Natural England's consent.

9.5.2 The proposal relates to vehicle use on both surfaced and un-surfaced ground and provides that low-ground pressure vehicles which will be used on un-surfaced ground. This activity may directly cause localised damage to sensitive bog and heath vegetation particularly on wet ground with soft moss-dominated surfaces. Vehicle use can easily alter bog surface patterns, and even light vehicles can damage sphagnum lawns or bog pool systems. Localised impacts can also coalesce over time to impact upon a much larger extent of habitat.

9.5.3 However, given that the notice specifies that avoidance measures and, in the unlikely event of localised damage, restoration measures will be undertaken by WME, subject to Natural England's review and consent, which will prevent widespread and cumulative damage from arising, it can **be ascertained that there will be no adverse effect on the integrity of the SAC habitats from this proposed operation.**

10 SPA

10.1 Grazing

10.1.1 Grazing affects vegetation composition and structure of nesting and feeding habitat. Stock can disturb birds and/or trample nests depending on stocking density and the timing and duration of grazing. At high densities, vegetation can be over-grazed, favouring competitive grasses and resulting in localised nutrient enrichment and excessive poaching or trampling of the ground. Blanket bog is particularly sensitive to grazing being very unproductive and a habitat which is not dependent on grazing to be maintained. Grazing can either maintain or reduce the cover of dwarf shrubs and other plants. Winter grazing regimes often result in the need for livestock feeding such as the use of mineral licks which is kept in the same location over long periods can cause significant changes and damage to upland heathland vegetation, further promoting changes to grass-dominated vegetation. The presence of large numbers of livestock, and potential carrion, can encourage avian and mammalian predators, which also predate ground-nesting birds.

10.1.1 It is Natural England's view that, taking into account the considerations set out in relation to the proposed grazing levels and the SAC habitats at section 8.1, above, the grazing levels set out in the Notice will avoid the deterioration of the habitats on which the SPA bird species rely and will not undermine the SPA's conservation objectives. **It is therefore concluded that this element of the proposal will not have an adverse impact on the integrity of the SPA.**

10.2 Burning

10.2.1 Burning activity can adversely affect the vegetation composition and structure of nesting and feeding habitat. All the SPA bird species that breed within the Annex 1 habitats nest on the ground. Short-eared owl and merlin are ground-nesting species associated with tall and mature heather-dominated vegetation for nesting. Golden plover and dunlin favour more open areas. Depending on the timing of burns, the activity can directly kill/injure ground-nesting birds if undertaken in spring when they are present.

10.2.2 Regard must be had, however, to the fact that burning carried out under the Notice will be constrained by the statutory requirements of the Heather and Grass etc Burning (England) Regulations 2007, which prohibit burning between the period of 15 April and 1 October of each year. Accordingly, the burning on the Estate, where it occurs, is not likely to occur during the period when these species are nesting or rearing their young.

10.2.3 Similarly, other management activities (including predator and weed control, maintenance of infrastructure and gritting and ancillary vehicular use) will not be consistent with good grouse moor management if carried out in a way capable of disturbing breeding grouse. Because breeding grouse are very abundant and widespread across the Estate the avoidance of disturbance to grouse will lead to the avoidance of disturbance to other breeding birds.

10.2.4 In relation to the maintenance or restoration of blanket bog and wet and dry heath habitats on the SPA for purposes of supporting the SPA's bird features, this appropriate assessment has already concluded, in relation to the SAC, that the burning proposal contained in the Notice will not have an adverse effect on the SAC's

integrity (see section 9.2 above) in relation to those particular habitats, and will ensure the existence of a matrix of significant areas of non-burnable Annex 1 blanket bog, along with, in terms of age and structure, a diversity of heather-dominated areas on both degraded blanket bog and dry heath, including non-burnable sensitive areas, and areas of tall and old heather. Accordingly, it may be concluded, for the same reasons, that these habitats will not be adversely affected for purposes of assuring the SPA's integrity. (This is in contrast to the existing 1995 consent, which, given its imprecise terms, jeopardises the SPA's conservation objectives to the extent that it would enable uncontrolled burning over the entirety of Walshaw Moor Estate). **Accordingly, it can be ascertained that there will be no adverse effect on the integrity of these SPA features from this proposed operation.**

10.3 Use of vehicles

10.3.1 The proposal includes the use of vehicles all year round for the purposes of general grouse management, safe transportation of clients and staff, and for general estate management. The proposal also states that care will be taken to avoid damage to vegetation from vehicle use and in the event of damage, use would cease to allow natural or managed recovery subject to NE consent.

10.3.2 The proposal relates to vehicle use on both surfaced and un-surfaced ground, and as a mitigating measure, low-ground pressure vehicles would be used. This activity, depending on its location, frequency and duration may disturb nesting birds at certain times of year. Disturbance can result in birds leaving the nest and exposing eggs and/or chicks to either frost or predation, thus affecting the breeding success and population levels of populations. Similarly the use of vehicles off-road can destroy nests on the ground, kill or injure young birds, or disturb feeding birds.

10.3.3 However, as discussed above, the need to avoid activities that might disturb breeding grouse serves also to protect other breeding birds from the effects of those activities. Red grouse, like the SPA species that are the subject of the site classification, are ground-nesting and sensitive to the same or similar types of disturbance during the nesting season, which coincides with that of the other ground-nesting birds on the Estate. It is Natural England's view that it is highly unlikely that the Estate or a successor in title will carry out proposed operations, including vehicle use, in a manner that will undermine the nesting success of red grouse. Rather, with regard to what is very likely to be a sensitive approach to land management during this time of the year, combined with the undertaken given in the Notice to otherwise avoid disturbance to birds, **Natural England concludes that use of vehicles on the Estate will not have an adverse effect on the integrity of the SPA.**

11 SAC and SPA: Remainder of operations

11.1 With regard to the remainder of the operations proposed in the Notice, having regard to (a) the conclusions reached in the preceding section in relation to grazing, burning, and, in particular, use of vehicles (as these remaining operations may require ancillary vehicular use), (b) the limitations and qualifications made in relation to these remaining operations as contained in the terms of the Notice and (c) the nature of the operations themselves, Natural England is able to ascertain that the remainder of the activities proposed in the Notice will not have an adverse effect on the integrity of either the SPA or the SAC, for the following reasons:

- 11.2 Legal control of pest species: the operation will be carried out according to law and reduction in the abundance of the species in question will have no detrimental effect on SAC habitats or SPA species;
- 11.3 Maintenance of existing infrastructure: the terms “maintenance”, “existing” and “infrastructure” are defined in terms that preclude the harmful maintenance of drainage features. Natural England possesses detailed aerial photographic evidence of the extent and nature of existing infrastructure and is able to be confident that the terms of the Notice will not permit the creation of new infrastructure or enlargement of existing structures; accordingly, Natural England ascertains that such maintenance activities, as limited, will have no detrimental effect on SAC habitats or those habitats supporting the SPA’s features of interest;
- 11.4 Turves for butts: turves cut from blanket bog or wet heath are unsuitable for this purpose; the cutting of small areas of turf from dry heath or acid grassland for the maintenance of existing butts is capable of increasing the structural diversity of that habitat. Accordingly, it can be ascertained that this operation will not adversely effect SAC habitats or those habitats supporting the SPA’s features of interest.
- 11.5 Gritting: to be carried out in compliance with applicable laws and codes of practice; a network of good quality gritting stations is already in place with the grit containers designed to prevent dispersal of the grit or its incorporation into the substrate, such that the network needs to be visited no more than twice per year. It is Natural England’s view that it can be ascertained that this operation, either as existing or, subject to applicable laws and codes of practice, as may be adjusted, will not adversely effect SAC habitats or those habitats supporting the SPA’s features of interest.
- 11.6 Weed treatment: limited to spot application of noxious weeds, soft rush and bracken, and to be carried out in accordance with applicable laws and codes of practice. Accordingly, having regard to these restrictions on the extent and manner of how weed treatment may be carried out, it can be ascertained that this operation will not adversely effect SAC habitats or those habitats supporting the SPA’s features of interest.
- 11.7 In addition, on the basis that the underlying rationale for the Notice generally is the management of the land for grouse production and in the knowledge that grouse moor management entails the avoidance of disturbance to grouse during the breeding season (April, May and June), it may be reasonably concluded that none of the above operations will be carried out during those months in ways detrimental to grouse breeding success. It is accordingly, Natural England’s view that disturbance to breeding SPA species from these activities will also therefore not result from the above 5 operations in a manner that would adversely effect the integrity of the SPA.

12 “In combination”

- 12.1 The proposed operations set out in the Notice have been considered by Natural England as a single “plan or project” for purposes of this Habitats Regulations Assessment. It is Natural England’s view, on the basis of the present scientific evidence, that these operations in and of themselves individually and collectively will not have an adverse effect on the integrity of the site.
- 12.2 It is also Natural England’s view that these proposals are, on the basis of the present scientific evidence and in the particular circumstances considered in this Habitats Regulations Assessment, environmentally sustainable (in that they will not undermine

the sites' conservation objectives) in relation to the 25 year period of the Notice and, accordingly will not act "in combination" with other plans or projects in ways that may have an adverse effect on the integrity of these sites.

13 Conclusions on adverse effect on site integrity

13.1 Following screening and judgements of likely significant effects, Natural England carried out an Appropriate Assessment under Regulation 21 of the Conservation of Habitats and Species Regulations 2010 of the WME management proposals contained in the Notice.

13.2 For the South Pennines SAC and SPA:

It can be ascertained that the proposed operations identified in the Notice will not adversely affect the integrity of the SAC or the SPA.

13.3 Moreover, Natural England also considers that taken together with the collateral surrender of the unsatisfactory and harmful 1995 letters, the restrictions on management set out in the Notice and the terms and effect of the Management Scheme in fact present the opportunity to move towards the achievement of the conservation objectives of the SAC and SPA.

13.4 In addition, and whilst not relevant to the determinations made in relation to this Habitats Regulations Assessment (including the Appropriate Assessment), it should also be noted that the Notice and any consent granted in relation to it will not restrict Natural England from the future exercise of its regulatory functions under either the Habitats Regulations or the Wildlife and Countryside Act 1981 should Natural England take the view in this particular case, based on future scientific evidence, that an alternative or modified approach is necessary in order to secure the favourable status of the sites' conservation objectives.