**Proposed Solar PV Development** 

# Byers Gill Solar EN010139

# 6.4.2.9 Environmental Statement Appendix 2.9 Outline Pollution and Spillage Response Plan

Planning Act 2008

APFP Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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# 1. Introduction

#### **1.1.** Purpose of Document

- 1.1.1. This document provides an Outline Pollution and Spillage Response Plan (PaSRP) for the construction, operation and decommissioning of Byers Gill Solar (the Proposed Development). It includes the proposed outline methods to manage pollution and spillage incidents on site. RWE (the Applicant) has prepared this Outline PaSRP as part of an application for a Development Consent Order (DCO) for the construction, operation and decommissioning of the Proposed Development.
- 1.1.2. An Environmental Impact Assessment (EIA) has been undertaken for the Proposed Development and an Environmental Statement (ES) (Volume 6 of the DCO application) has been prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). In accordance with the requirements of the EIA Regulations, the ES contains the assessment of the likely significant effects on the environment that may be caused during construction, operation and decommissioning of the Proposed Development and describes proposed mitigation measures.
- 1.1.3. The PaSRP will be produced for the Proposed Development following the appointment of a Principal Contractor (PC) prior to the commencement of construction. The PaSRP will be prepared in accordance with the Outline PaSRP, as per Requirement 7 of the DCO.
- 1.1.4. This Outline PaSRP provides the likely structure of the PaSRP and environmental action / commitment which may be included within the PaSRP to deliver the construction, operation and decommissioning phases of the Proposed Development. This Outline PaSRP also sets out the monitoring activities designed to ensure that such mitigation measures are carried out, and that they are effective.

#### 1.2. The Proposed Development

- 1.2.1. The Proposed Development is a renewable energy scheme, covering an area of approximately 490 hectares (ha), and comprising solar photovoltaic (PV) panels, on-site Battery Energy Storage Systems (BESS), associated infrastructure as well as underground cable connections between panel areas and to connect to the existing National Grid Substation at Norton. The Proposed Development will have the capacity to generate over 50 Megawatts (MW) of electricity. The Proposed Development is located in the north-east of England.
- 1.2.2. A full description of the Proposed Development and a detailed description of the design and environmental mitigation is provided in ES Chapter 2 The Proposed Development (Document Reference 6.2.2).

#### 1.3. Proposed Development Location

- 1.3.1. The majority of the Proposed Development, including the panel areas, substation and on-site BESS are located within the administrative area of Darlington Borough Council. The eastern part of the cable routes crosses into the administrative area of Stocktonon-Tees Borough Council. The northern extent of the planning boundary (the Order Limits) borders Durham County Council's administrative area.
- 1.3.2. The Order Limits and surroundings are comprised of agricultural fields, interspersed with individual trees, hedgerows, farm access tracks, woodlands and local farmholdings. There are several local villages located within close proximity to the Proposed Development, including Brafferton, Newton Ketton, Great Stainton, Bishopton and Old Stillington.
- 1.3.3. The Order Limits for the Proposed Development are shown in ES Figure 1.1 Location Plan (Document Reference 6.3.1.1).

#### **1.4. Project team roles and responsibilities**

- 1.4.1. Key roles and responsibilities during the construction phase in managing pollution and spillage response will likely include, but are not limited to:
  - Site Manager Overall responsibility for activity onsite and will be based onsite full time.
  - Construction Project Manager Overall responsibility for ensuring all elements in the DCO, CEMP and all environmental legal and other requirements are implemented, and appropriately resourced, managed, reviewed and reported.
  - Environmental Manager Responsible for the overall management of environmental aspects on site, ensuring environmental legislation and best practices are complied with, and environmental mitigation and monitoring measures identified are implemented. The Environmental Manager will oversee environmental monitoring on-site and carry out regular environmental site inspections, reporting and responding to any incidents or non-compliance. The Environmental Manager will liaise with relevant environmental bodies and other third parties as appropriate.
  - Environmental Clerk of Works (ECoW) Oversee the management of, and provide advice about, environmental and ecological risks during construction including for example, management of protected species, surface water management, pollution, air quality and noise.
  - Health and Safety Manager Responsible for the monitoring and controlling of health and safety compliance and related rules and regulations on-site.
  - Community Liaison Officer A Community Liaison Group will be set up in accordance with the relevant DCO requirement prior to construction and will continue through until final commissioning of the Proposed Development as a formal forum for local issues to be raised. A Community Liaison Officer will be appointed to lead discussions with local communities, and also act as the primary point of contact should there be any queries or complaints.

1.4.2. These roles and responsibilities are indicative and will be confirmed in the PaSRP. It is noted that ultimate responsibility for the implementation of the PaSRP under the DCO rests with the undertaker.

#### **1.5.** Structure of the Pollution and Spillage Response Plan

- 1.5.1. This Outline PaSRP is structured as follows:
  - Section 1 (this section) sets out the purpose of this document, a description of the Proposed Development, and project team roles and responsibilities;
  - Section 2 outlines typical environmental incidents which may occur, the principles of the response required and response actions; and
  - Section 3 outlines recommended monitoring methods to be considered following an incident if one were to occur.

# 2. Pollution Prevention

#### 2.1. Typical Environmental Incidents

- 2.1.1. Typical issues associated with pollution control for standard solar farm construction, operation and decommissioning activities include:
  - Surface water, erosion and sediment run off management controls;
  - Management of soil;
  - Watercourse crossings and culverts installations;
  - Construction/establishment of the site compound and substation;
  - Construction, upgrading and maintenance of roads and tracks;
  - Delivery, storage, handling and use of chemicals and oils;
  - Use of vehicles, plant and equipment;
  - Refuelling;
  - Waste management;
  - Wastewater management (sewerage and foul waters);
  - Borrow pit operations; and
  - Concrete batching.
- 2.1.2. Mitigation measures will be incorporated into design specifications and method statements based on the principles of prevention, avoidance, reduction, compensation and remediation. The PC will be responsible for designing the pollution prevention control measures. Full details of the mitigations will be included in the Construction Environmental Management Plan (CEMP) that the PC will adhere to. The CEMP will be prepared in accordance with the Outline CEMP (Document Reference 6.4.2.6), as a requirement of the DCO. This document focuses on the principles of responding to any pollution or spillage incidents and the steps which must be taken.

#### 2.2. Principles of Pollution and Spillage Response

- 2.2.1. Prior to the construction phase the incident response procedure will be developed by the PC as part of the detailed PaSRP. The incident response procedures will first involve an investigation phase before adhering to the principles of Stop, Contain, Notify, Clean-Up.
- 2.2.2. Where a pollution incident or deterioration is identified either through direct observation of an incident, visual monitoring or trigger level exceedance through monthly water quality monitoring or continuous telemetry monitoring, the incident response procedure will be followed.
- 2.2.3. The relevant site operators will be suitably informed and trained in site pollution incident response procedures. It is expected that any pollution incidents will be identified by site operatives, the appointed ECoW and the water quality monitoring methodology outlined below.

The main steps in the response plan are shown in

2.2.4. Figure 1 in a process flow diagram which encompasses the Stop, Contain, Notify and Clean-Up procedure.



#### Figure 1 – Process flow diagram outlining the main steps in the response plan

#### 2.3. Response Actions

#### **Assess Safety**

- 2.3.1. Personnel must ensure safety to themselves and others prior to any environmental clean-up or tackling of an incident. Additional requirements include:
  - Identifying safety risks and taking corrective action where required;
  - Attending to any injured personnel and making the area safe;
  - Notifying the Site Manager/ECoW; and
  - Identifying spilled/leaked substance(s) and select the appropriate PPE.

#### Stop at Source

2.3.2. The source must be identified upon the discovery of a pollution incident, all work with the potential to contribute to the incident must be stopped, and any spill or leak must be stopped and contained if it is safe to do so.

#### Containment

- 2.3.3. Containment ensures that any ongoing spill or leak does not continue to enter soils, groundwater or watercourses. Containment procedures include:
  - The deployment of pollution control equipment, including spill kits, drip trays, or bunds of earth or sand; and
  - Checking that any pollutant has not reached drains, watercourses or other sensitive receptors.
- 2.3.4. Spill kits will be employed as the pollution control equipment on site and will be available within all construction compounds, the site office, substation control room, and in all work vehicles. The spill kits are appropriate for the type of pollutants expected to be present on the site. The spill kits' location will be marked on the site location plan within the CEMP and Risk Assessments and Method Statements (RAMS) and communicated during site inductions.
- 2.3.5. The recommended content and locations of the spill kits will be confirmed post consent and detailed in the CEMP. Additionally, all contaminated spill material will be disposed of in accordance with the Site Waste Management Plan (SWMP) and spill kit material replaced. The SWMP will be prepared in accordance with the Outline SWMP (Document Reference 6.4.2.11). Following any pollution and containment incident, the relevant personnel will assess the remaining quantity of spill kits on site and replenish the stocks as necessary.

#### 2.4. Notification Requirements

2.4.1. The Site Manager will act as a central point of contact for all identified pollution incidents. The Site Manager will inform the ECoW as soon as possible upon discovery of any spill or leak incident. The ECoW will advise on any other response requirements

and, after consulting with senior personnel, the requirements to contact external key contacts, such as the Environment Agency, as required. The necessary emergency contact details will be listed within the CEMP and an Emergency Response Plan, and will be adopted and updated during each phase of the Development.

2.4.2. The following details will be provided, if required and as relevant, when notifying emergency contacts during any major pollution/spill incidents:

- Name and contact details;
- Location of the source of the pollution/spill incident;
- Substances involved (including details on quantities);
- Any other immediate hazards;
- Status of safety of personnel, equipment and assets;
- Any receptor impacted; and
- The potential for linkage of pollutants to receptors.

#### 2.5. Clean-up and Remediation

- 2.5.1. Clean-up will commence as soon as practicable once a spill or leak has been stopped and contained at the source. Clean-up and remediation activities following a pollution/spillage event will be undertaken internally or by an external specialised PC, which will be determined by the senior personnel. The following procedures will be followed during clean-up and remediation:
  - Residual pollutants on hardstanding, equipment and machinery, or natural ground will be cleaned using safe and suitable methods including excavation of contaminated ground if necessary; liquids can generally be soaked up using absorbent material;
  - Pollutants present in water will be removed using appropriate absorbent materials such as booms, pads, or wood chips. These materials will be replaced at the source until pollutants have been removed or degraded; and
  - Contaminated materials will be removed and stored of in designated storage facilities. The disposal will be undertaken by waste management contractors in compliance with regulatory requirements.

#### 2.6. Reporting and Investigation

- 2.6.1. All environmental incidents and near misses will be documented by the relevant PC who will submit these to the Applicant and ECoW. Whilst the PC will align the proforma to their management requirements, as a minimum the following information will be recorded:
  - name and contact details of the individual reporting the incident;
  - date, time and location of the incident (if known);
  - type, category, nature and description of the incident including quantity/volumes (if known);
  - notifications, response/corrective actions;
  - root cause of incident (if known);

- measures to prevent a recurrence; and
- responsibilities: incident owner and sign off.

## 3. Monitoring Considerations

#### 3.1. Monitoring Locations

- 3.1.1. Monitoring locations will be based on the approved final layout but should be positioned to determine risk to sensitive receptors at appropriate locations such as:
  - along minor watercourses within the Order Limits;
  - upstream of public or private water supply boreholes;
  - Sites of Special Scientific Interest, SSSI (e.g., Newton Ketton Meadow SSSI); and
  - locations where previous incidents have occurred.

#### 3.2. Monitoring Methods

#### **Visual Monitoring**

- 3.2.1. During the construction phase of the solar farm the ECoW, along with the construction team, will carry out visual checks of the watercourses and water management measures for oil, scum, turbidity, aquatic non-native species and algal blooms. The visual inspections will include an assessment of the monitoring location from the bank and drainage management features to record the condition of water/runoff. To ensure consistency, a template and format for recording visual checks will be developed.
- 3.2.2. In active construction areas visual checks will be undertaken daily, with observations reported back to senior personnel on a weekly basis. The visual inspections will be focussed on areas where high risk activities are being undertaken, such as concrete pouring, stockpiling of materials and refuelling.

#### In-situ Monitoring

- 3.2.3. Watercourses will be monitored in-situ using handheld water quality monitoring units which are capable of instantaneously analysing dissolved oxygen, electrical conductivity, pH, temperature and turbidity.
- 3.2.4. These devices will allow for real-time indication of water quality in the sampled watercourses by simultaneously measuring several water quality parameters. For safety, all sensors will be attached to a cable that will allow site workers to collect measurements away from potentially unstable banks or during periods of high flow.

#### **Extractive Sampling**

3.2.5. Water samples will be collected and dispatched to a UKAS accredited laboratory that will analyse the collected water samples. The parameters to be measured will be established from baseline samples of the minor and major watercourses within and near the site boundary.

#### 3.3. Monitoring Frequency and Duration

#### Construction

- 3.3.1. During construction daily visual monitoring, including comparison to colour standards will be undertaken when construction activities (i.e., ground-breaking and or borrow pit blasting) are within 500m or upstream of a monitoring location by the ECoW and key construction team members. Weekly visual monitoring will be undertaken at all locations by the ECoW.
- 3.3.2. The frequency and duration of any required in-situ and extractive monitoring will be set out in the PaSRP and agreed with the ECoW taking into account the construction methods and risks posed to receptors.

#### **Operational and Decommissioning**

- 3.3.3. Following the post-construction period in-situ and extractive monitoring will cease. Upon completion of construction, visual checks will be made to identify any new flow pathways that may have appeared because of the tracks and solar panel placements. It is considered that there is a lower pollution risk during the operational phase , however any maintenance that may pose an increased environmental risk would be covered by an appropriate RAMS..
- 3.3.4. Whilst proactive monitoring would not be carried out, incidents will be managed in accordance with the Emergency Response Plan and job-specific RAMS and reported as per local and national requirements. All incidents will be recorded and will serve to identify and attribute contamination incidents for insurance purposes.

#### 3.4. Response Training and Testing

- 3.4.1. All relevant personnel working on the Proposed Development will receive basic spill response training. Personnel with responsibilities for dealing with environmental incidents and/or handling hazardous liquids with the potential to cause pollution will receive specialist spill response training. Records of spill response training shall be documented and maintained by the relevant PC and made available for inspection.
- 3.4.2. The PC with the support of the ECoW will be responsible for periodic testing of emergency procedures during construction, operation and decommissioning, including spill response. Records of emergency response testing will be documented and retained on site for review.
- 3.4.3. The PC will have a contingency plan involving the procurement of specialist contractors to deal with major incidents involving highly polluting liquids and/or material that the site personnel are not able to deal with. The specialist contractor performing this service will be made familiar with the logistics of the site and be available to respond on an emergency basis. Contact details for the specialist contractor will be detailed in the CEMP.