

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

## FOR THE PROPOSED BACK-UP POWER GENERATION FACILITY INCLUDING GENERATOR CONTAINERS, BLOCKWORK SWITCH ROOM, SUB-STATION, FENCING, GATES AND ANCILLARY EQUIPMENT

ON LAND OFF GRAPHITE WAY HADFIELD GLOSSOP DERBYSHIRE SK13 1QH

## APPROVED UNDER PLANNING PERMISSION HPK/2016/0470 DATED 04/11/2016

ON BEHALF OF MERCIA POWER RESPONSE LTD STRELLEY HALL MAIN STREET STRELLEY NOTTINGHAM NG8 6PE

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## **Issue Record**

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# **APPENDICES**

- Appendix A Drawing 16-2620-01 Revision B Location Plan
- Appendix B Drawing 16-2620-21 Setting Out Plan

# 1. Site Location

1.1 The site is located on land off Graphite Way, Hadfield, Glossop, Derbyshire SK13 1QH and lies to the east of the River Etherow, as shown on drawing 16-2620-01 Location Plan which can be found in Appendix A of this Plan, an extract of which is shown below.



Proposed site location

**River Etherow** 

# 2 Introduction

- 2.1 Mercia Power Response Ltd (the Developer) proposes to construct a back-up power generation facility, in accordance with planning permission reference HPK/2016/0470 granted 4 November 2016. That facility will be comprised of a level stoned platform, containerised generators, acoustic screen, sub-station, switch room, gas meter cabinet and site office enclosed by a wire mesh security fence and gates on land off Graphite Way, Hadfield. What follows is a Construction Environmental Management Plan (the Plan) for the proposed development.
- 2.2 The area of the secured compound is some 0.06 Ha (0.16 Acres).

2.3 Access to the compound will be via a new access track created off of Graphite Way, which in turn is off of Woolley Bridge Road.



A section of palisade fence will need to be taken down to accommodate the new access.

# 3. General Construction Method

- 3.1 The site will be constructed using the following method:
  - The temporary road signage, as described in Section 4, below, will be put in to place on the access route to warn other road users.
  - The access route from Graphite Way to the site compound will have to be surfaced in clean crushed stone to ensure that any dirt picked up by construction vehicles is not carried through on to the highway. If weather conditions are extreme or, despite this measure, there is a real risk of mud being carried on to the highway, then temporary wheel cleaning facilities will need to be installed.
  - The contractor will strip the topsoil, clear the site of shrubs, demolition material, concrete and other debris and cut to fill the site to the appropriate levels. The excavated materials will be carted away to an approved tip.
  - The site will then be prepared and stoned up to form a development platform. The compound will be fenced off using temporary heras, or similar, fencing, until such time that the permanent fencing / acoustic screen is erected.
  - A welfare cabin, storage cabin and temporary parking area will be established within the planning application area, as indicated on drawing 16-2620-21 Setting Out Plan, which can be found in Appendix B of this Plan.

- The Developer proposes to surface mount all the powers cables to and from the generators and we are informed that the only buried cable will be that supplying the District Network Operator's sub-station. It is likely that the trench for this cable will be dug by the Developer's contractor.
- The gas pipework trenches will be dug out.
- The Developer is aware of surface water and foul sewers under the site and is in discussions with United Utilities about building over them. If United Utilities grant permission to build over the surface water and foul sewer mains, the pre-approved method of work will be followed. If not, the approved method of work will be followed to divert the mains to the positions agreed with United Utilities.
- The concrete bases will be laid on a gas protection membrane (as specified in the separate Desk Top Study report). Shuttering for the reinforced concrete engine and other bases will be put in place and those bases will be cast using concrete brought in by concrete mixer lorries.
- The cabling and gas pipework will then be installed.
- The plant and equipment will be delivered to the site. Each generator will be delivered on a low loader and be installed using a 200 tonne mobile crane.
- The acoustic screen, site security fence and gates will also be installed. There will be no landscaping and planting other than climbing plants which will be added to the acoustic screen.
- Once all of the plant and equipment is in place the final wiring connections and fitting out will be completed and then the site will be commissioned.

# 4. Temporary Signage

- 4.1 Temporary road signage will be provided to the site access off Graphite Way, in the approximate position indicated on drawing 16-2620-01 Location Plan which can be found in Appendix A of this plan.
- 4.2 The signs will be as follows:

'WORK ACCESS' diagram 7301 - 1050mm x 750mm, x-height 100mm with white letters on red background, positioned in accordance with traffic signs manual, chapter 4.

## 5. Layout of Contractor's Compound

5.1 The location and layout of the contractor's compound can be found on drawing 16-2621-21 Setting Out Plan which can be found in Appendix B of this Plan, an extract of which is shown below.



- 5.2 A double deck arrangement of a temporary site cabin and storage container will be provided on the site until such time as construction is nearly complete and the permanent welfare cabin is installed in their place. A portable WC will also be provided near to the temporary cabins.
- 5.3 Parking for site operatives and visitors will be provided on the new access road as indicated on drawing 16-2620-21 Setting Out Plan.
- 5.4 There is no room on the site to form a significant materials lay-down area so materials will be brought to the site as and when they are required.
- 5.5 The 200 tonne crane will positioned as shown on the drawing while the generator containers are lifted into place; this operation should take no more than a day.
- 5.6 If required, temporary wheel washing facilities will be provided near the entrance of the site, just off of the access road.

#### 6. Contractor and Construction Traffic Management

- 6.1 All construction traffic and deliveries will access the compound via the new access track created off Graphite Way, which in turn is off Woolley Bridge Road.
- 6.2 All vehicles will park in the area shown on the Setting Out Plan during the duration of the construction works.
- 6.3 The largest item of construction traffic will be the mobile crane and the lowloaders delivering the generator containers. The site will accommodate the crane and 1 HGV low-loader at a time. The contractor will be required to ensure that the delivery of the containers is staggered to avoid congestion on the highway and Graphite Way. As there will be 3 generators on the site, this will involve 3 separate HGV deliveries, each of which will be subject to a Movement Order.

### 7. Dust and Dirt Control

- 7.1 Dust from the site will be monitored and in dry weather dust suppression measures will be used.
- 7.2 The access route from Graphite Way to the site compound will have to be surfaced in clean crushed stone to ensure that any dirt picked up by construction vehicles is not carried through on to the highway. If weather conditions are extreme or, despite this measure, there is a real risk of mud being carried on to the highway, then temporary wheel cleaning facilities will need to be installed.
- 7.3 The public highway (Woolley Bridge Road) will be monitored regularly for construction mud / dust. A Road Sweeper will be used to keep the highway clear where necessary.

### 8. Noise and Vibration

- 8.1 The contractor will be required to carry out the works in such a way as to limit the adverse noise and vibration impact of the construction activities. Any noise and vibration resulting from the construction works will be kept within all of the statutory or other identified control limits.
- 8.2 The control of working hours is a fundamental means of controlling noise and vibration. Therefore, in accordance with good practice and to protect the local ecology, all construction and installation work will take place, during daylight hours, between 07:00 hours and 18:00 hours Mondays to Saturdays with no work to take place on Sundays and Bank Holidays.
- 8.3 The proposed development site is small by modern construction standards. The plant used will generally consist of either a small tracked excavating machine or rubber tyred excavator and dumper.

#### 9. Water Pollution

9.1 During construction, some activities may give rise to a potential risk of water course contamination.

The development site is, on average, some 4.5m above the level of the nearby River Etherow and about 2.7m above the pathway adjacent to the river.

The Developer will ensure that the contractor gives special regard to the risk of pollution of the nearby River Etherow and the intervening pathway which is separated from the site by an embankment.

The proposed mitigation measures will include the following:

- 9.2 <u>Deliveries</u>
- 9.2.1 Special care is to be taken during all deliveries, especially when fuel and/or hazardous materials are being handled. All deliveries are to be supervised by a competent person so that all storage levels are checked before delivery to prevent overfilling and spillage. The contractor's Risk Assessments and Method Statements will ensure that contingency plans are in place and suitable materials are available to deal with any incident that may occur.
- 9.2.2 All employees working on the site are to be briefed on the actions that are required in the event of a spillage. Any spillages are to be recorded and, if deemed significant, reported to the relevant authorities.

#### 9.3 <u>Storage</u>

- 9.3.1 Many of the materials used during construction operations, such as oil, chemicals and cement, have the potential to cause serious pollution. The bunded containment is to be designed to retain 110% of the maximum volume of stored materials and is to comply with the Control of Pollution (Oil Storage) (England) Regulations 2001.
- 9.3.2 All fuel and oils will be stored in approved bunded tanks with a drip tray and the tanks are to be locked when not in use.

### 9.4 <u>Refuelling</u>

- 9.4.1 During the refuelling of plant, the risk of spilling fuel is at its greatest. Mobile plant is to be refuelled in a designated area only, preferably on an impermeable surface and away from any drains or watercourses. A spill kit is to be accessible in this location.
- 9.4.2 Hoses and valves are to be checked regularly for signs of wear and turned off and locked when not in use.
- 9.4.3 Diesel pumps and any similar equipment are to be placed on drip trays to collect minor spillages.

#### 9.5 <u>Silt</u>

- 9.5.1 At no point must water containing silt be pumped into surface water drains or clean water courses. Silty water can arise from excavations, exposed ground and stockpiles.
  - Excavations measures are to be taken to prevent water from entering excavations, i.e. by the use of cut-off ditches.
  - Spoil Heaps spoil heaps are to be located and built-up in a way that will avoid the risk of contaminating surface water drainage or clean water courses.
  - Site Roads site roads are to be kept free from dust and mud deposits. In dry weather, dust suppression measures may be required.
  - Dealing with Silty Water prior approval from the appropriate authorities will be received for any planned discharges of silty water.

#### 9.6 <u>Concrete</u>

- 9.6.1 Concrete is highly alkaline and corrosive and can have a major impact on watercourses. It is important to take particular care with any works that involve concrete and cement. Suitable provision is to be made for the washing out of concrete mixing plant or ready mix lorries and concrete pumps, so that washings do not flow into any drain, watercourse or seep underground.
- 9.6.2 In the event of a spillage on site, the material must be contained using an absorbent material, such as sand or soil.

#### 10. Waste

- 10.1 The objectives of the waste management methodology employed on the site are to deliver the following:
  - to minimise the creation of waste where possible;
  - to remove rubbish, debris, surplus material and spoil regularly and to keep the site clean and tidy;
  - to ensure that waste disposal is managed in a controlled way; and
  - to ensure that surplus material is minimised and any non-usable surplus material is recycled.
- 10.2 Waste from the site will be dealt with in the following manner:
  - All surplus excavated material will remain on site. This material will be placed into an agreed area and stockpiled. No spoil is to be removed from site.

- Waste material will be removed from site in skips, using an approved waste carrier, and a record of the quantity will be kept.
- The waste management on site will be monitored on a regular basis via site visits carried out by the management of the Principal Contractor.
- Waste disposal records will be kept up to date at all times.
- It is not expected that any quantity of waste material will be produced from this project.
- The levels on site will be worked out to utilise the bulk of the excavated material as fill on the site.
- The timber formwork that is to be used for the shuttering of the concrete bases will be a re-usable type.

## 11. Protection of Existing Services

11.1 The only services the Developer is aware of on the site are surface water and foul sewers. Discussions are taking place with United Utilities about building over the sewers. If United Utilities grant permission to build over the surface water and foul sewer mains, the pre-approved method of work will be followed. If not, the approved method of work will be followed to divert the mains to the positions agreed with United Utilities.

### 12. Protection of Existing Habitats

- 12.1 Until the 2.4m high wire mesh fencing and the 4m high absorptive green wall are installed, the site will be surrounded by a temporary heras fence.
- 12.2 In order to minimise the risk to nesting birds, vegetation will ideally be cleared to avoid the bird nesting season. If the clearance of vegetation must take place during the nesting season, an appropriately experienced Ecologist will be appointed to check the site for signs of nesting birds.
- 12.3 Any trenches dug as part of the work will be left with either a ramp or a sloping end to prevent mammals from becoming stuck. All pipes will also be capped off overnight.
- 12.4 To minimise any adverse effects on the local ecology, all construction and installation work will take place, during daylight hours, between 07:00 hours and 18:00 hours Mondays to Saturdays with no work to take place on Sundays and Bank Holidays.

### 13. Site Security During Construction

- 13.1 During the construction works the following security measures will be in place:
  - All valves and trigger guns and tools are to be protected from vandalism and unauthorised interference, turned off and locked away securely when not in use.
  - Where possible, during the evening and night time periods, all materials will be securely locked up and out of view.
  - During the construction phase the compound will be manned, at all times, during daytime working hours.
  - Temporary fencing, until such time as the permanent boundary fencing is in place, will be installed around the site and will be securely locked during the evening and night time periods.
  - During the evening and night time periods, a manned professional security service will be shared between this site and the existing Mercia Power Response sites.

### 14. Site Management and Community Responsibility

- 14.1 The Developer and contractor will liaise with the adjacent building occupiers to inform them when the works are anticipated to commence and, in particular when the generator containers are due to be delivered, so any concerns they might have can be raised and be resolved.
- 14.2 The contractor is to embrace the objectives of the Considerate Constructors Scheme.