

Detailed Emergency Planning Zone Determination Report

Local Authority DEPZ Determination Report

Springfield Fuels Limited

Westinghouse

Salwick

Preston, Lancashire

PR4 0XJ

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This report has been prepared, reviewed and approved by Lancashire County Council as the lead Local Authority in line with Regulation 8 of The Radiation (Emergency Preparedness and Public Information) Regulations 2019.

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1. Introduction

Under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR 2019) Lancashire County Council, as the lead Local Authority for implementing REPPiR 2019, must inform the Site Operator and the Regulator (within two months of receiving the Consequence Report as per Regulation 7) of the determined extent of the Detailed Emergency Planning Zone (DEPZ) as per Regulation 8.

Regulation 8 (1) requires the local authority to determine the Detailed Emergency Planning Zone (DEPZ) on the basis of the operator's recommendation made in the Consequence Report of the Minimum Distance Area. Following receipt of the Minimum Distance Area within the Site Operators Consequence Report, the Local Authority may extend the area in consideration of:

- a) Local geographic, demographic and practical implementation issues;
- b) The need to avoid, where practicable, the bisection of local communities; and
- c) The inclusion of vulnerable groups immediately adjacent to the area proposed by the operator.

Under ACOP 8(1), the Local Authority must also ensure that the DEPZ is:

- a) Be of sufficient extent to enable an adequate response to a range of emergencies; and
- b) Reflect the benefits and detriments of protective action by considering an appropriate balance between dose averted; and the impact of implementing protective actions in a radiation emergency across too wide an area.

1.1. Purpose of the Report

The purpose of this report, following the decision of LCC in determining the DEPZ, under Regulation 8(3) and ACOP 8(3), is to inform the operator and regulator in line with the statutory timeline (i.e. within two months of receiving the Consequence Report) of the outcome of the determination of the DEPZ. The report must include:

- a) A description of the area;
- b) A map showing the extent of the area including any pockets of detailed planning within the outline planning zone as per Schedule 6, Part 2, Chapter 2, 3(b)(ii); and
- c) Suitable justification for the determination.

The report has been structured to ensure that the all parts of Regulation 8 including ACOP and Guidance are complied with and can be easily identified throughout the report.

1.2. Decision Making Process

It was agreed that on behalf of LCC the decision to determine the DEPZ for all sites would be taken by the Head of the Health, Safety & Resilience Service following development work by the Resilience team. This process and agreement was made in consultation with the Cabinet member portfolio holder for emergency planning in April 2019 and was deemed to be an officer rather than a political decision.

2. Description of the Area

2.1. Introduction

As per ACOP 8(3), this section of the report describes the local area, including geographical features, local population and key infrastructure and forms the basis for the determination of the DEPZ.

2.2. Site Background & Location

Springfield's Fuels Limited has provided nuclear fuel fabrication services since 1946. The site's principal activity is the production of fuel for civil nuclear reactors with the main process at the site being the processing of Uranium Hexafluoride (UF₆) to finished nuclear fuel products. Springfield's site has an area within the nuclear site boundary fence of 83 hectares or 205 acres.

Springfield's Fuels Limited is both a UK Nuclear Licensed Site and an Upper Tier COMAH Establishment and as such is required to adhere to both the Radiation (Emergency Preparedness and Public Information) Regulations 2019 and the Control of Major Accident Hazards Regulations (COMAH) 2015. The competent authorities which regulate the site are the Office for Nuclear Regulation (ONR), Health and Safety Executive (HSE) and the Environment Agency (EA).

2.3. Geographical Area

The site is situated in a rural location near the outskirts of Preston, Lancashire, 6 km West of Preston and 3 km East of Kirkham. The site is located in the Fylde Borough Council area with its eastern perimeter fence bordering immediately on to the Preston City Council area. The site is also within the Parish of Newton-with- Clifton.

Adjacent to the Site is the main Preston-Blackpool Regional Railways Line with a station 20 metres from the North West corner of the site. The Lancaster Canal runs adjacent to the site and the site is also 3km north of the Ribble Estuary. The Site is approximately 1 km from the A583 Preston to Blackpool trunk road, and can be approached by several unclassified roads. As per the current Springfield's Fuels Limited off-Site Emergency Plan (version 5.2, October 2019), the prevailing wind direction on the site is from the south-west.

2.4. Description of the Existing DEPZ

Within the current determined Springfield's Fuels Limited (SFL) DEPZ there are approx. 660 properties of various descriptions including residences, businesses and schools. The population estimate is based on 3 persons per property and as such is approximately 1950.

2.4.1. *Vulnerable Premises*

The following vulnerable premises have been identified within the existing DEPZ:

- **3 schools**
 - Keyes Barn School, registered for 14 pupils
 - Oakfield House, registered for 36 pupils
 - Lea St Mary's Catholic, Primary School. Approx. 98 pupils
- **1 caravan/camping site**
 - Bryars Farm

- **1 sheltered housing scheme**
 - Ash Court - New Fylde Housing
- **1 Village Hall**
 - Newton with Clifton Village Hall

All vulnerable premises identified above receive the public information from Springfield's Fuels Limited in the form of a letter, leaflet and a calendar.

2.4.2. Key Infrastructure

The following key infrastructure have been identified within the DEPZ:

- **1 Lower Tier COMAH Establishment**
 - F2 Chemicals Limited which is adjacent to the site and included within the off-site emergency plan.
- **Major Accident Hazard Pipelines (MAHP)**
 - MAHPs run West to North and West to South of the Site boundary within the DEPZ.
- **4 Electricity Sub Stations**
 - 4 Sub Stations within the DEPZ that are owned by Electricity North West Ltd.
- **1 Railway Station and Line**
 - Minor railway station located at Salwick, north to the site of Springfield's Fuels Limited which is located on the main Preston-Blackpool Regional Railways Line.
- **1 Canal**
 - The Lancaster Canal runs adjacent to the railway line and is north of the site. The canal is within the DEPZ and signs along the canal to inform members of the public.

2.5. Environmental Infrastructure

The Site lies in open countryside and is mainly rural with both arable and livestock farming. The Biological Heritage Sites (BHS) of Deepdale Wood and the Springfield's Ponds (and the nature Trail) are within the site boundary fence. Deepdale Brook flows from North to South after entering the Springfield's site half way along the northern boundary. The brook is in a culvert as it flows across the site within Deepdale Wood. South of the boundary fence it joins Savick Brook just north of Savick Bridge. Savick Brook (part of the Ribble Link) flows through Lea Marsh into the River Ribble which flows east to west 3 km to the south of Springfield's and then into the Irish Sea. The out-fall pipelines from the A 100 complex run directly south (and underground) to discharge into the River Ribble adjacent to Clifton Marsh Landfill site.

Within the 3 km zone there are a significant number of farms and plantations as well as a Site of Special Scientific Interest (SSSI), many Biological Heritage Sites (BHS), and numerous Built Heritage and Archaeological sites.

2.6. Further Information

Under REPIR Regulation 9, Outline Planning Zone (OPZ), information in relation to the local area, from the edge of the DEPZ to the set OPZ as defined in Schedule 5 can be found in the relevant section of the Springfield's Fuels Limited Off-Site Emergency Plan and supplementary documentation.

3. DEPZ Determination

3.1. Introduction

This section of the report describes the decision process and justification for the changes to the DEPZ as part of this redetermination

It is worth noting that since 2011, Lancashire County Council have used a combined area for both REPPIR and COMAH for the DEPZ and the PIZ. Within the off-site plan, this area is referred to as the DEPZ.

3.2. Background to Existing DEPZ

In 2002, the ONR determined the REPPIR off-site Emergency Planning and prior information areas to be a circular area of radius 1km around the Springfield's Fuels Limited. This was revised in 2011 by Lancashire County Council, to ensure that the DEPZ did not split local communities and ensured the inclusion of vulnerable groups immediately adjacent to the existing DEPZ. Ease of action of emergency responders and the distribution of public information was also taken into account, along with ensuring the DEPZ followed natural boundaries such as roads, rivers, footpaths to aid identification and understanding of the zone.

In 2017, the ONR as part of the redetermination project, reviewed the DEPZ for Springfield's Fuels Limited, which saw a small increase in premises within the DEPZ and was agreed by the Site Operator and Local Authority (Lancashire County Council). The review of the DEPZ took 12 months to complete and was completed in September 2017.

Following this, the revised DEPZ (October 2019) was put into operation as part of the Off-Site Planning arrangements and any supplementary documents such as maps, were updated.

3.3. Multi-agency Consultation

During September 2019, as per the Regulations (Guidance 8(1)), a Multi-Agency Consultation meeting was held to review the shape of the DEPZ. This meeting gave multi-agency partners the opportunity to consult on the DEPZ and suggest any improvements required. The meeting raised a number of key suggestions, which have been considered in making the decision on the DEPZ; the suggestions have been put into sections 3.5 to 3.9 of this report

3.4. Protective Actions / Initial Counter Measures

As stated by the Site Operator in the Consequence Report, the protective action remains the same as previously i.e. a single message of Shelter for the whole of the DEPZ for Springfield's Fuels Limited. There were no clear justifications for changing the protective action raised by Multi-Agency organisations at the consultation meeting nor subsequently.

3.5. Walk around DEPZ

During October 2019 colleagues from Lancashire County Council and Lancashire Constabulary completed a walk through the revised DEPZ (October 2019) as part of the evidence base for the determination process. The following objectives were agreed for the walk through:

- To confirm that the natural boundaries used for the DEPZ as detailed in maps and photography are correct.

- Opportunity to review and get a visual of the boundaries used for the DEPZ.
- Review proposed areas of inclusion with the DEPZ including any properties on the outline that could be included as DEPZ Pockets.
- Ensuring maximum, or as close as possible, access can be achieved around the DEPZ for Emergency Services and members of the public.

[Annex C](#) details comments made during the visit including any actions that need to be picked up outside of the DEPZ determination process. The key points noted through the walk are as follows:

- Only two changes required to the existing DEPZ, which have been noted under section 3.6.
- Action required to ensure signs on the Canal are updated and better positioning; a number of signs were covered or not accessible by those using the canal.
- Signs required on the railway line: no signs were visible at Salwick Station or on a number of the bridges as the railway line passes through the DEPZ.
- No clear justification for including any pockets of DEPZ as shown in Annex C.
- Question to be raised to Public Health England regarding the Monitoring Equipment located around the site and how often this is checked.

3.6. Changes to the DEPZ

As per Regulation 8(1) and the supplementary guidance, the DEPZ should only be extended due to local geographic, demographic and practical issues. The group agreed that the DEPZ agreed by the ONR during the determination in 2017 was still justified as it covered the Minimum Distance Area identified in the Consequence Report and still covered the COMAH PIZ - based on the HSE outer zone.

However, there are a number of changes to the DEPZ following the multi-agency consultation meeting and the walk around the DEPZ, which are as follows:

- 1) On the eastern side of the DEPZ: increase the existing DEPZ along Darkinson Lane up towards the canal to make the DEPZ shape even on this side. This is justified due to the potential planning development (property and local infrastructure) within this area.***
- 2) Due to poor hedge line along the properties on Darkinson Lane, it has been agreed to move the existing DEPZ along to the highway; this is justified as making this change now will make it easier for implementing mitigation measures within the DEPZ e.g. protective actions and access control.***

These changes can be seen in [Annex C](#).

3.7. Pockets of DEPZ within the OPZ

Consideration of " DEPZ Pockets" within the Outline Planning Zone were considered at the multi-agency consultation meeting and by the decision makers in the determination of the DEPZ. However, all were in agreement that there was no sensible or reasonable argument for

applying protective action outside the DEPZ for Springfield's Fuels Limited, based on the information / Minimum Distance Area provided in the Consequence Report.

3.8. Review of DEPZ

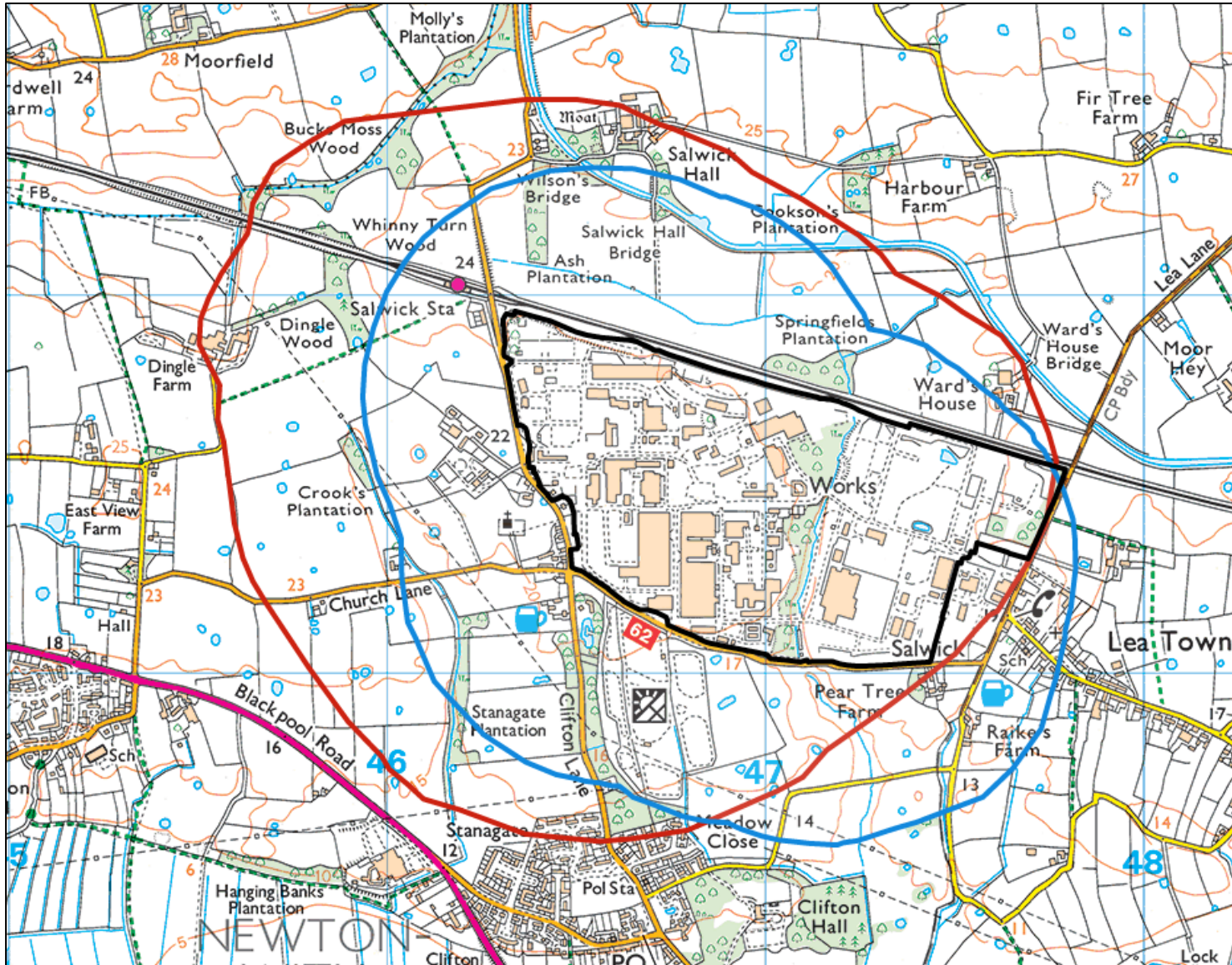
In accordance with Regulation 8(5) – 8(6), it was agreed at the Multi-Agency Consultation Meeting (September 2019) the DEPZ will be reviewed if one of the following occurs:

- A significant development occurs within or adjacent to the local area which may impact on the factors that are considered by the Local Authority when determining the detailed emergency planning zone;
- Changes to the distribution of or addition of new vulnerable groups;
- Changes to the infrastructure facilitating an emergency plan such as a new road;
- Changes affecting the emergency responders facilitating an emergency plan such as new or closed fire station, new or closed hospital, reduced services such as closing an A&E department.
- Changes to the area which necessitate a re-determination may also include significant temporary changes in the area which will be in place for an extended period of time (i.e. the development of a large construction village to support a significant infrastructure project).

At the multi-agency consultation meeting the group discussed the potential changes to the local infrastructure viz. Preston Western Distributor Road Link, which will link A583 to the M55 traversing into the DEPZ. The group discussed the easier natural boundaries and implications on the planning development around and the local area.

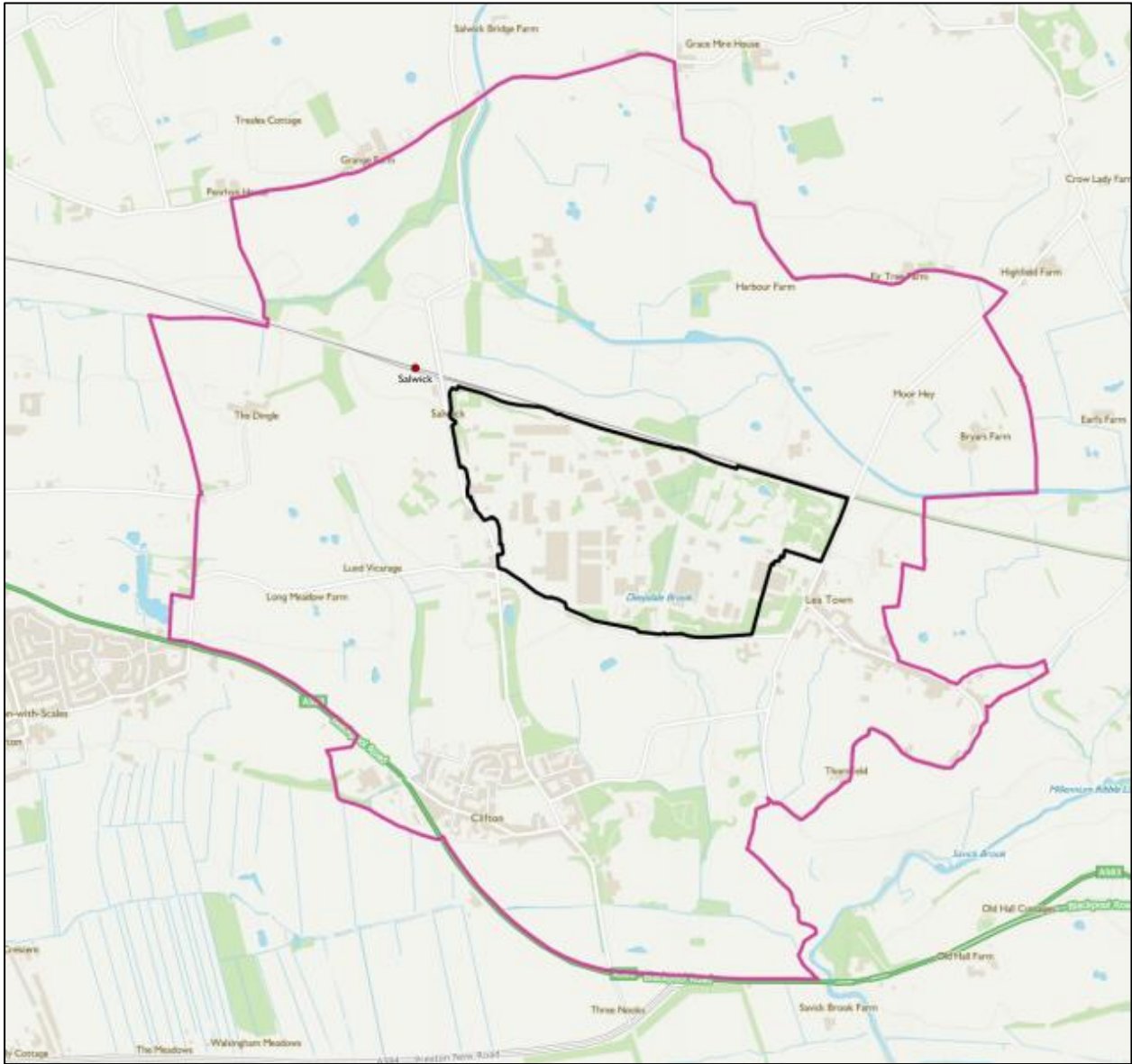
It was agreed that whilst construction is ongoing, the Off-Site Plan will include an appendix on the construction phase and once completed as per above, under ACOP 8(5)-8(6) and Guidance 8(5)-8(6), a review of the DEPZ will be required due to a change in the local infrastructure.

Annex A: Site Minimum Distance Areas



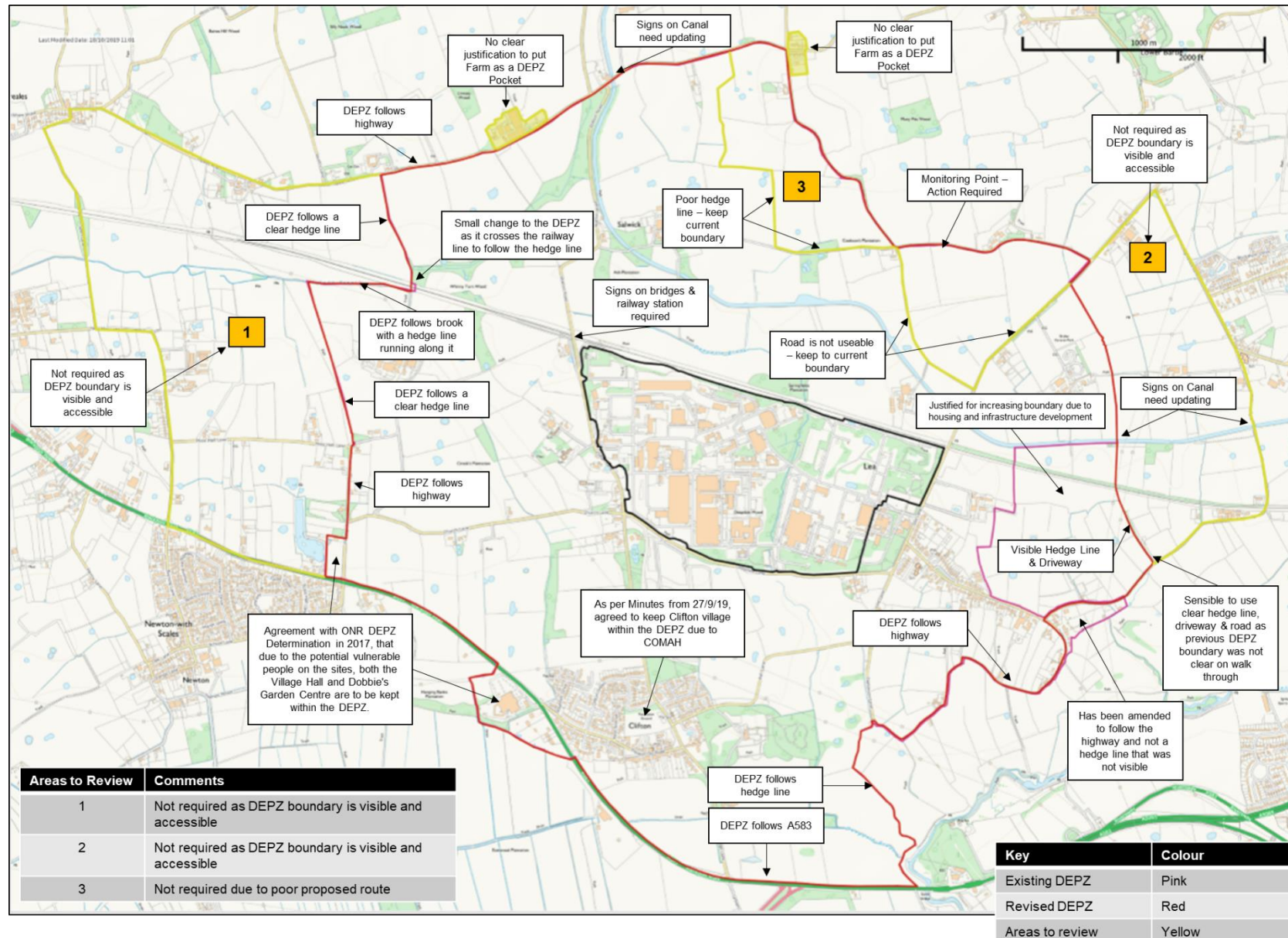
Key	Colour
Site Boundary	Black
REPPiR 1km Distance	Blue
COMAH Outer Zone	Red

Annex B: Existing DEPZ

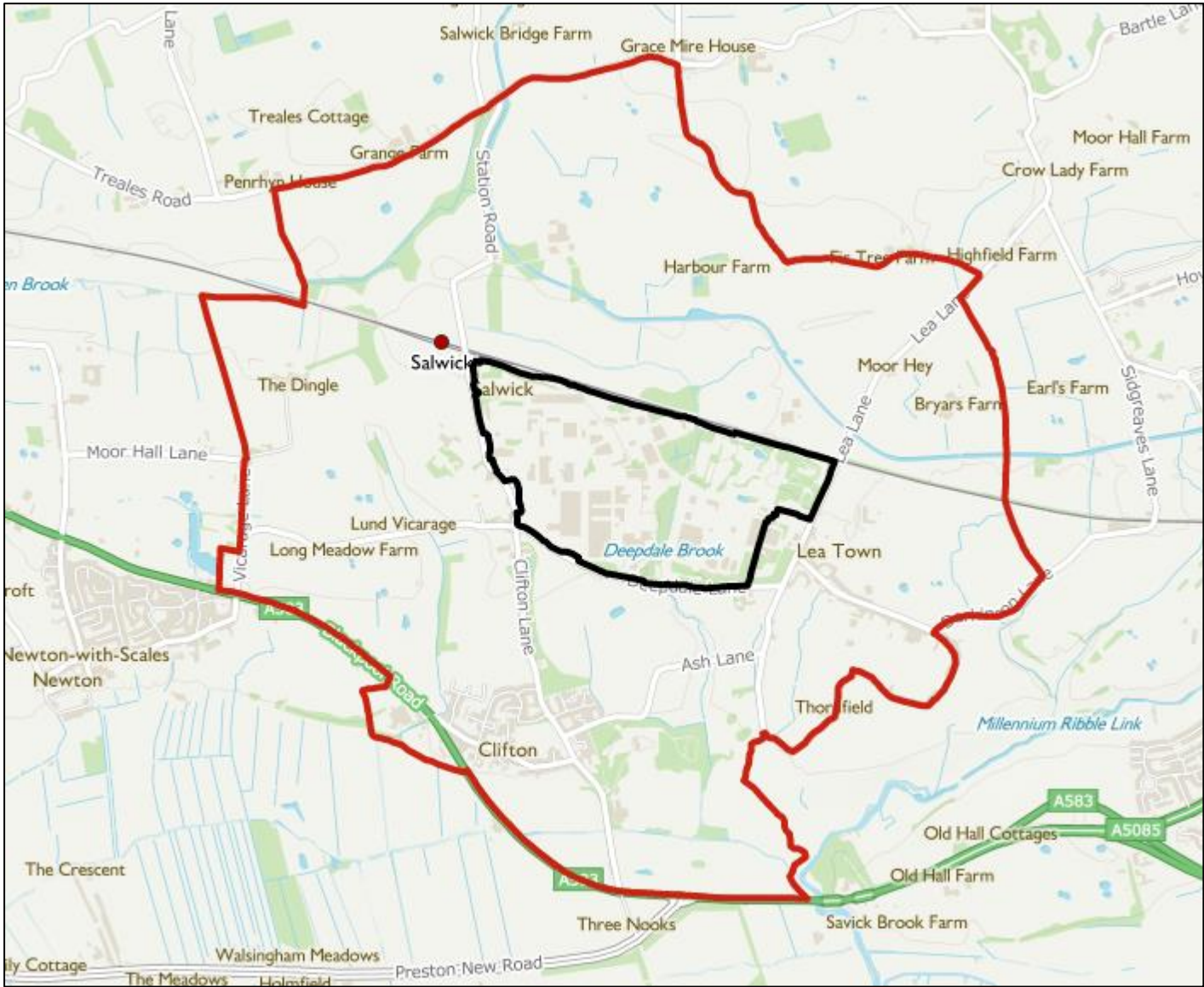


Key	Colour
Site Boundary	Black
Existing DEPZ	Purple

Annex C: Revised DEPZ with Comments



Annex D: Revised Detailed Emergency Planning Zone



Key	Colour
Site Boundary	Black
Revised DEPZ	Red