

# **CRANFORD LANDFILL**

## **Application to vary planning condition**

**SUEZ Recycling and Recovery UK**

**July 2016**





## Project quality assurance information sheet

### Cranford Landfill

### Application to vary planning condition

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<b>Prepared by</b>	Jon Woodhall SUEZ recycling and recovery UK Planning Manager
<b>Main contributors</b>	Jon Woodhall Bright & Associates Ken Yarrow – Site Manager
<b>Reviewed by</b>	Jon Woodhall SUEZ recycling and recovery UK Planning Manager



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## 1 INTRODUCTION

- 1.1 This Planning Supporting Statement (PPS) has been prepared by SUEZ Recycling and Recovery Limited (SUEZ) (formally trading as SITA UK). The PPS is being submitted to Northamptonshire County Council (NCC) in support of a planning application for the variation of planning condition 28 of planning permission 09/00016/WAS.
- 1.2 Planning permission was granted in 2009 for - **variation of condition 21 of planning permission KE/02/547C, to extend the end date for landfilling and subsequent restoration of the Cranford Landfill to October 2017**. The application superseded and consolidated previous permissions for the landfill is the extant permission for the site.
- 1.3 The proposal is to vary condition 28 which states - ***The final levels of the northern and southern extension (Areas A & B) shall be in accordance with the contour plan (Plan 5) received on 31" May 2002, and shall be evenly profiled to gradients not steeper than 1 in 8, and shall conform with the contours of the surrounding land, with natural drainage to the perimeter of the site without backfalls or ponding. Upon the completion of the waste disposal and grading operations the area shall be ripped (rooted) to relieve compaction and any stones or other materials which would impede subsequent agricultural cultivation, shall be removed or buried on site to a depth of not less than one metre.***
- 1.4 The variation is to replace 'Plan 5' referred to in the condition with plan ref- CR998-D6v2 which accompanies this application. The proposal is considered further in chapter 5 below. The application, made under S73 of the Town & Country Planning Act 1990 (as amended) seeks only a variation to the final landform within Areas A & B. No other amendments to the existing permission and operation of the site are proposed.
- 1.5 A copy of two plans referred to in the previous decision notices also accompany the application. Plan No 3 (May 2002) shows the defined areas of the site (Area A, B, C, D) referred to within the statement. Plan No 5 (May 2002) provides the current approved final landform for areas A & B that this application seeks to superseded.

## 2 THE APPLICANT

- 2.1 This application has been prepared and submitted by SUEZ Recycling and Recovery UK (SUEZ), subsidiary of the SUEZ Group. SUEZ is a recycling and resource management company which serves over 12 million people and handles over 9.7 million tonnes of domestic, commercial and industrial waste each year. SUEZ provides services for over 40,000 public and private sector customers and operates a network of facilities including: recycling, composting, refuse derived fuel production, solid recovered fuel production, wood processing, energy-from-waste and landfill.
- 2.2 SUEZ was established in 1988 and currently employs over 5,000 employees and has an annual turnover in excess of £740 million. SUEZ's purpose is to protect the environment by putting waste to good use.
- 2.3 The SUEZ Group is at the dawn of the resource revolution. In a world facing rapid demographic growth, urbanisation and a shortage of natural resources, securing, optimising and renewing resources is essential to our future. SUEZ Group supplies drinking water to 92 million people, provides wastewater treatment services to 65 million, collects waste produced by almost 50 million, recovers 14 million tons of waste each year and produces 5.138 GWh of sustainable energy. With 80,990 employees and a presence on all five continents, SUEZ Group is a key player in the circular economy and the sustainable management of resources. SUEZ Group generated total revenues of €14.3 billion in 2014.

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### 3 SITE DESCRIPTION

- 3.1 Cranford Landfill is located on Thrapston Road, Cranford St. John, Nr. Kettering, Northamptonshire, NN14 4HY. The site is situated approximately 0.8km south south-east of the village of Cranford St John and 6 km east of Kettering in Northamptonshire at and around National Grid Reference (NGR) SP 935 768
- 3.2 The site is situated in a semi-rural setting comprising agricultural land reclaimed in part, from the restoration of former ironstone quarries and woodland. The northern boundary of the site is formed by the pastoral farmland bounded by the east-west running A14(T) approximately 175m to the north of the site. The site's eastern boundary is formed by farmland beyond which lies the north-south A510. Farmland also comprises the southern and western boundaries of the site with the village of Cranford St John located approximately 300m to the north-west.
- 3.3 The site has been developed from former limestone and ironstone workings as detailed above. The site is being filled in an easterly direction. The landfill can be considered as 9 cells of which Cells 1 to 7 have been filled. Cell 8 is active and at current inputs will cease accepting waste by February 2017. Cell 9 is not being engineered and therefore a revision to the landform is required.
- 3.4 The site has an active energy generating landfill gas facility located in the northern gullet area adjacent to the access haul road.

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## 4 PLANNING HISTORY

- 4.1 Key planning consents at Cranford landfill -
- 4.2 The extant planning consent is 09/00016/WAS granted in 2009 for the ***variation of condition 21 of planning permission KE/02/547C, to extend the end date for landfilling and subsequent restoration of the Cranford Landfill to October 2017.***
- 4.3 Permission KE/02/547C was granted in 2004 for ***Continuation of use of existing landfill site for a further period until the end of October 2009, the revision of the previously approved restoration contours and the siting of a gas flare stack.*** This consent superseded, consolidated and updated the previous planning permissions for the site which were previously granted under KE/90/369C and KE/92/496C. This application was superseded and consolidated by 09/00016/WAS
- 4.4 KE/92/496C was application for the land referred to as Area A and KE/90/369C was an application for the part of the site referred to as Area B & C

## 5 THE PROPOSED DEVELOPMENT

- 5.1 The proposal is to vary Condition 28 which states ***The final levels of the northern and southern extension (Areas A & B) shall be in accordance with the contour plan (Plan 5) received on 31<sup>st</sup> May 2002, and shall be evenly profiled to gradients not steeper than 1 in 8, and shall conform with the contours of the surrounding land, with natural drainage to the perimeter of the site without backfalls or ponding. Upon the completion of the waste disposal and grading operations the area shall be ripped (rooted) to relieve compaction and any stones or other materials which would impede subsequent agricultural cultivation, shall be removed or buried on site to a depth of not less than one metre.***
- 5.2 The condition requires the final levels of areas A & B (essentially the main landfill area, excluding the northern and southern gulleys, referred to within the application as Areas C & D) to be in accordance with the contours and levels shown on Plan 5.
- 5.3 The proposal seeks permission to amend the final landform, by way of re-profiling parts of the site, principally to remove a valley feature (on the boundary between Areas A & B) and produce a landform that is beneficial both visually and in terms of its long term management. Cell 9 has not been developed and therefore the landform on Plan 5 has to be amended. The site has been progressively restored in a west to east direction and the proposed minor changes to the landform will deliver a landform that will improve surface water management and be visually beneficial. The existing surface water management system will be unaffected by the proposal.
- 5.4 The proposal would require the importation of soils to achieve the proposed profile, the vehicle movements being ultimately off-set by the cessation of waste deliveries following closure of the site to waste inputs. The permission for the site requires landfilling and restoration to be completed by October 2017. It is noted that the availability of suitable soils cannot be controlled and is subject to market forces, however, this application does not seek to extend this time limit for development, as timely determination of the application will allow imports for the 12 months that it is expected to take.

### Other planning conditions

- 5.5 There are a number of Restoration conditions within planning permission 09/00016/WAS.

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- 5.6 **Condition 29** requires restoration of the northern and southern gulleys (Areas C & D) to be restored and managed for nature conservation. These areas are a County Wildlife site. Area C is the northern gully which contains the site access haul road, offices, weighbridge and electricity generating landfill gas facility. Area D is restored. The condition requires the submission of a scheme to support nature conservation in these areas. The information required to discharge this condition is being prepared for Suez by Bright and Associates. It is possible that condition 29 may also need to be varied to review the final landform in Area C, due to the long term presence of site infrastructure and access required for maintenance of the gas and leachate systems and also to assess the current ecological conditions and habitats which have developed over the intervening years. Suez will consult with the Planning Authority and the Wildlife Trust to establish the most appropriate solution to restoration / after use of these areas of the site.
- 5.7 **Condition 33** requires submission of an aftercare scheme not later than the completion of the waste operation or the end date whichever is sooner.
- 5.8 **Condition 24** requires submission of a landscape scheme six months prior to the end date of the permission.
- 5.9 It is considered that best approach to the 3 matters in a progressive manner, namely this application for the active landfill areas (A & B), followed by the gulleys (C & D) and then overall site aftercare and landscaping.

## **Leachate and Gas Management**

- 5.10 The landfill, given its size, volumes of waste deposited and timescales for tipping will continually undergo varying degrees of settlement for a significant period throughout which time leachate and gas production will be controlled and managed in accordance with the sites Environmental Permit. The site has significant leachate and gas collection systems in place, which include the pipe work, leachate and gas wells and ancillary structures and equipment.
- 5.11 SUEZ have experienced considerable difficulty in maintaining efficient gas and leachate extraction on sites where collection infrastructure has been buried. This is because the differential settlement of the waste causes collection wells to distort within the body of the landfill and gas pipework to block with condensate where differential settlement causes undulations in the pipes. Maintaining a steady fall on the gas collection pipework is key to maintaining an efficient collection system, enabling condensate to

drain to defined points in the system design known as 'knock-out pots'. Leachate pipework needs to be regularly inspected for leaks as it is a pressurised system.

5.12 The emphasis in a modern landfill site which is engineered for containment is on effective and efficient management of leachate and landfill gas produced by the waste as it degrades within the site over time. The landfill gas is collected and used to generate green energy, providing a valuable source of electricity to the National Grid and a revenue stream for the continuing maintenance of the landfill site post closure. As the site operator, SUEZ retain the responsibility to manage and monitor the landfill site for many decades after closure; until such time as it can be demonstrated that the site poses no further environmental risk. It is likely to be many years after site closure until such time as SUEZ are content that settlement rates and landfill gas production have reached a stage where burial of the collection pipework is considered appropriate.

5.13 Retaining leachate and gas infrastructure on the surface of the landfill presents a number of advantages:

- It allows gas collection efficiency and green energy generation to be maximised;
- It gives the replaced soils more time to regain structure and organic content before entering into a formal 5 year aftercare regime;
- It avoids repeated disturbance of soils to excavate pipelines and identify issues;
- Whilst grassland cannot reasonably be managed for agricultural purposes during the surface laid pipework stage, selective strimming would be used to maintain a variety of habitats within the site.
- Restored areas already provide a variety of valuable transitional habitats where soil fertility is low;
- Any areas of pernicious weeds resulting from disturbance and import of soils in the soil restoration phase can be treated prior to formal aftercare commencing
- Less pipework will be left abandoned within the soil profile in the long term;
- whilst pipework is on the surface many aspects of the aftercare can be undertaken before formal aftercare commences, allowing the Planning Authority to ensure planting areas were fully established.

5.14 Given the on-going settlement that is being experienced it is proposed that the wells and pipework remain at ground level in Areas A & B so that they can be visually monitored to ensure that any



settlement likely to cause damage to the infrastructure can be promptly observed and avoided where possible. It is proposed that all infrastructure would ultimately be removed from the site at the point at which it is no longer required for environmental control. It is proposed that this matter can be considered further upon submission of details for aftercare / site management and landscaping required under condition.

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## 6 ENVIRONMENTAL CONSIDERATIONS

- 6.1 It is anticipated that the proposals would not result in any significant environmental effects.
- 6.2 With regard to landscape and visual effects, the proposed changes to the landform would have no perceptible negative effects. Long term aftercare of the wider site, including management and habitat creation is a detail that will be considered upon the subsequent submission of restoration and management plans required under conditions 29 & 33.
- 6.3 With regard to hydrology and flood risk, the changes to the 'restoration and after use plan' should assist in reducing run off from the site. The Surface water management scheme in place is approved by the Environment Agency. Therefore it is not anticipated that there will be any significant effects on hydrology and flooding as a result of the proposed changes.
- 6.4 Finally it is not considered that there will not be any significant effects arising from the changes on residential amenity arising from noise and air quality. The site has planning consent until October 2017 and present estimations are that suitable soil quantities can be sourced and the site restored by the current end date. The reduction in waste deliveries is expected to off-set soil importation movements.

## 7 PLANNING POLICY CONSIDERATIONS

- 7.1 The Minerals and Waste Development Framework, or MWDF, was previously the adopted Minerals and Waste development plan for the county. The new Minerals and Waste Local Plan (MWLP) Plan was adopted on 1 October 2014. This sets out the strategy, policies and locations for minerals and waste development in the county to 2031.
- 7.2 The proposed variation to condition does not site wholly within the general waste management policies, as it is for a change to an existing permitted waste operation. The key policy is Policy 28: Restoration and after-use, which states-

All minerals and waste related development of a temporary nature must ensure that the site is progressively restored to an acceptable condition and stable landform.

***The after-use of a site will be determined in relation to its land use context, the surrounding environmental character and any specific local requirements, but on the basis that it:***

- enhances biodiversity, the local environment and amenity, and***
- benefits the local community and / or economy.***

***The restoration of minerals and waste sites should meet the following requirements (where appropriate):***

- sites previously comprising high-grade agricultural land or good-quality forestry use should be restored to the original land use and coupled with a secondary after-use objective,***
- precedence should be given to the establishment of Biodiversity Action Plan habitat, strategic biodiversity networks, promotion of geodiversity and enhancement of the historic environment and heritage assets where the specific conditions occur that favour such after-use objectives,***
- sites connecting or adjacent to identified habitat areas should be restored in a manner which promotes habitat enhancement in line with Biodiversity Action Plan targets and green infrastructure plans,***
- sites located near to areas identified as lacking recreational facilities should be restored in a manner that promotes such opportunities,***

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- *sites located within river corridors should be restored to support water catchment conservation and incorporate flood attenuation measures, and*
  - *in specific instances, and where fully in accordance with policies in other local plans in Northamptonshire, sites may be restored in a manner that promotes economic opportunities.*

7.3 This policy set out the priorities for restoration and after care of landfill sites, enhancing bio diversity the local environment and amenity. The proposed variation to the landform would have no adverse effects upon the environment and will provide a more suitable long term landform for management of the landfill for decades to come. Aftercare and management of the site is in the long term will be considered upon submission of aftercare and management details that will be submitted to the planning authority under the terms of the conditions discussed in section 5.

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## 8 SUMMARY AND CONCLUSION

- 8.1 The application seeks to vary a condition of the extant landfill permission to revise the landform of part of the site and which will produce a landform to ensure the ongoing integrity of leachate and gas collection systems to ensure that all environmental risks are managed appropriately and environmental controls are not compromised.
- 8.2 The proposal would have no adverse environmental impacts and along with long term restoration aftercare and management (subject to a separate submission) will allow habitat creation with long term benefits to the site and wider area.
- 8.3 The ongoing management and aftercare of the landfill will continue for many years. The updated landform design and subsequent aftercare and management will ensure that environmental benefits are delivered through its implementation and that long term environmental and ecological benefits are realised.