Havering
LONDON BOROUGH

MEETING	DATE	ITEM
REGULATORY SERVICES COMMITTEE	**27 August 2009**	**7**

REPORT OF THE CHIEF EXECUTIVE

SUBJECT: **U0013.08 - Rainham Landfill Site, Coldharbour Lane, Rainham**

PROPOSAL: **Proposed re-contouring of landfill site through controlled landfill involving continuation of road-borne waste imports until 2018 (as well as river-borne imports, as previously approved) to achieve appropriate restoration scheme and associated visitor facilities.**

WARD: **Rainham / Wennington**

SUMMARY

The application relates to a 177 hectare site located on the River Thames at the most southern part of the Borough. The application site currently benefits from an existing consent to deposit refuse materials through controlled landfill. The site is to be restored by 2018 relying solely on river sourced waste imports from 2012.

The applicant's recent experience on Rainham landfill and other landfill's taking municipal solid waste show that these are settling at a greater rate than originally assumed. This is due to the biodegradable content of domestic waste steadily increasing over time; the imposition of landfill tax; and the drive toward recycling which have resulted in the removal of inert materials such as bottles, plastics, cans, building waste which has ultimately increased biodegradable material. As a result the amount of settlement in Rainham Landfill would be greater than envisaged. This would result in poor site drainage and increased pollution risks. This may also impede the final use of the site for public access and incorporation within the Wildspace regeneration project.

The applicant therefore seeks planning permission to update the original planning permission taking into consideration the updated settlement rates in order to create a satisfactory final landform similar to that originally envisaged. The revisions include the importation of an additional 3.6 million tonnes of non-hazardous waste over the current landform. This would achieve a higher pre-settlement restoration height that would settle to a lower height that is not

dissimilar to the current planning permission. The revised landform would assist in the early delivery of the eastern side of the site for public access and allow for the delivery of various visitor facilities.

The importation of additional volumes of waste would require an extension in time for road-borne waste imports for the life of the landfill. It is likely that the final restoration would remain unchanged to be completed by the 31st December 2018.

The application has been submitted with a full Environmental Statement which has been fully considered.

Staff consider that on balance, the proposals would accord with the relevant policies of the LDF Core Strategy and LDF Development Control Policies DPD and that Havering should raise no objection to the LTGDC but if permission is granted that it be subject to a legal agreement and conditions.

RECOMMENDATION

1) That Members agree with staff that the development complies with government guidance, London Plan and Havering LDF policies as set out in this report and that no objections are raised to the application and should the London Thames Gateway Development Corporation be minded to grant planning permission that it be subject to the applicant entering into a Section 106 Legal Agreement under the Town and Country Planning Act 1990 (as amended) and impose conditions;

a) Legal agreement:

- Submission of a Travel Plan which includes the limitation of waste vehicle movements to 300 per day which shall be reduced as public access increases and volumes decrease to be reviewed annually or as otherwise agreed;
- Grant London Borough of Havering the option of a leasehold on Veolia's Land on a phased basis subject to an independent review of contamination, pollution and health risks;
- Uprate the existing Rainham to Purfleet path to a public right of way;
- Keep Coldharbour Lane for public access
- Grant London Borough of Havering the right to purchase Aveley Saltings;
- Ensure that Veolia extend public liability insurance should early public access be exercised;
- Provide realistic timeframes to allow early public access;
- Ensure public access is defined outside of operational and restricted areas through adequate measures;

- Submit and carry out and Ecological Method Statement for the treatment of existing habitats on already established areas;
- Submit and implement landscape and landscape plan;
- Revisit the settlement model at regular agreed intervals and provide a contingency plan.

b) Conditions;

- No exportation of material from the site except as per consent for the jetty;
- Restricted hours of road borne waste, except restoration materials, Monday to Friday and Saturday AM only. No Sundays or Public Holidays without prior written consent.
- No further waste processing buildings or building works without prior permission
- Dust Mitigation
- Noise Mitigation
- Odour Mitigation
- Vermin Mitigation

2) That the Head of Development and Building Control be authorised to prepare a written response to the London Thames Gateway Development Corporation in accordance with the recommendation or as otherwise resolved by the committee at the meeting.

REPORT DETAIL

1.0 Site Description:

1.1 The application site includes a triangular area of land approximately 177ha (437 acres) in the most southern point of the Borough, at Coldharbour point, Rainham and is bounded by Coldharbour Lane and the Thames.

1.2 The site lies within a mixed setting of open marshland, partly restored and operational landfill and industrial uses. The Inner Thames Marshes Site of Special Scientific Interest (SSSI) lies immediately adjacent, referred to as the Rainham, Wennington and Aveley Marshes. The closest residential properties are located in Rainham, located approximately 1.3km north, Wennington 1.3km north east, Purfleet 1.4km east, and Erith approximately 1km to the south across the Thames. There are three industrial areas which lie north west of the site between 400m and 1km known as Tilda Rice, Beam Reach 8 industrial Park and Ferry Lane Industrial Estate. The Freightmaster Estate lies immediately adjacent the landfill and the Thames.

1.3 Parts of the site have been historically tipped since the 1800’s. River dredging's were since pumped onto the site and importation of mainly river-

borne domestic waste commenced in the 1960's. Permission was granted in the 1990's for landraising to be completed by 2018 to restore the site for public amenity. Existing operations include a Material Recycling Facility (MRF), waste transfer station, composting plant, wood chipping plant, ash plant and landfill gas utilisation plant exporting power to national grid including numerous (11) gas flaring units.

1.4 Access to the site is from Coldharbour Lane which links to the A13 from Ferry Lane. There is an existing operational jetty on the Thames from which waste is imported, and has recently been granted permission to allow the export of recycled aggregate.

2.0 Description of proposal:

2.1 The applicant's recent experience of current landfills accepting solid municipal waste has shown that these are settling at a greater rate than originally assumed which, for Rainham landfill means a lower, flatter landform affecting site drainage and adversely impacting upon the restoration of the site, creating pollution and environmental risks which would lead to ongoing maintenance issues that would adversely impact upon its inclusion within Wildspace. This is largely due to a number of factors including:

- the larger fraction of biodegradable waste steadily increasing over time;
- the imposition of landfill tax and;
- increased drive towards recycling;

2.2 The applicant therefore seeks planning permission for a number of revisions to the currently approved planning permission which is outlined below:

- Placement of an additional 3.6 million tonnes of non-hazardous waste over the current landform to achieve a higher pre-settlement profile to ensure that the site settles to a satisfactory post-settlement landform in the long-term.

- Amendments to the approved post-settlement contours to accommodate visitor facilities, ensure the intention of the previous application to encapsulate the pre-existing contaminated land is fulfilled, and; to harmonize the proposed increased pre-settlement contours with the existing restored areas;

- Continuation of road-borne waste imports for the duration of the landfill, until December 31st 2018.

2.3 The extent of the visitor facilities can be divided in two core themes:

o Phased approach to allowing early public access which include:

- Provision and maintenance of footpaths and cycle paths over the landform including two new viewpoints;

- Maintenance of the existing Rainham to Purfleet path;
- Access to, and provision of serviced sites for, a new car park, recreational facilities and visitor centre;
- Increased access to the Thames and to existing walking and cycle routes;

o Creation of new habitat and active management of these that would achieve a large amount of London's targets for biodiversity for flora and fauna.

3.0 Consultations and Representations

3.1 The application has been advertised as a major application by reason of its waste related nature and as an application supported by an Environmental Statement. The application was advertised by press notice, site notices and letters to neighbouring properties. As Havering remain consultees on this application to the LTGDC, all consultation responses would be forwarded to the Corporation along with Havering's response for consideration in their decision on this application. Should the LTGDC be of a mind to grant planning permission the application would then be referred to the Mayor of London who would decide to accept the decision or exercise his powers to direct refusal.

4.0 Planning History (relevant)

L/Hav/1416/67 - Disposal of household refuse and waste materials - Approved
L/Hav/1049/83 - Deposit of refuse materials - Approved
P0257.86 - Deposit of refuse materials to extend contoured landform - Approved
P0905.86 - Refuse container unloading and transfer system involving the extension of the existing deep water jetty complex - Approved
P1806.86 - Jetty Extension - Approved
P1809.86 - Refuse container unloading and transfer system involving the extension of the existing deep water jetty complex - Approved
P1409.91 - Renewal of temporary permission for refuse container unloading & transfer system involving the extension of the existing deep water jetty complex - Approved
P1424.93 - Relocation and improvement of facilities ancillary to landfill site, including works hop x 2, office, site control office, mess facilities, toilets facilities, wheelspinner diesel storage and car park - Approved
P0715.94 - Landfill gas powered electricity generating station - Approved
P1409.95 - Renewal of P1806.86 - Approved
P1058.95 - Modification of condition 10 of P1049.83 to enable supply of waste by road - Approved
P1275.96 - Deposit of refuse materials through controlled landfill provision of material recovery facilities and creation of contoured landform and restoration scheme - Approved
P0121.97 - Delete Condition 1 of permission P1058.95 to allow the continuation of delivery of waste by road to Rainham Landfill Site, Coldharbour Lane, Rainham - Approved
P0159.97 - Retention of road access - Approved

P0824.97 - Erection of open plan temporary domestic waste transfer facility - Approved
P0835.97 - Continued use of the waste transfer jetty - Approved
P0015.98 - To retain and use existing vacant Nissan hut for recycling trials and occasional maintenance - Approved
P1139.98 - Renewal of permission P0824.97 for the erection of open plan temporary domestic waste transfer facility - Approved
P1324.98 - Storage, recycling and provision of recovered electrical equipment, paper & household co-mingled recyclable materials - Approved
P0861.99 - Variation of Condition No.11 of planning permission P1275.96 allowing opening on 27th & 28th December 1999 and 3rd January 2000 - Approved
P1032.00 - Improvements to unadopted Coldharbour Lane, including carriageway widening, the erection of gates and a security post - Approved
P1901.03 - A plant for the in-vessel composting of bio-wastes to produce a saleable compost - Approved
P1210.05 - Development of soil recycling area within the boundary of the landfill site to provide soils for restoration - Approved
U0002.05 - Autoclave processing facility for municipal solid waste - Approved
U0005.06 - An extension to the domestic materials recycling facility - Approved
U0011.08 - Variation of condition 1 of planning permission P0835.97 to allow for the export of recycled aggregates - Approved

5.0 Relevant Policy's

Development Policies

DC19 – Locating Cultural Facilities
DC20 – Access to Recreation and Leisure
DC22 – Countryside Recreation
DC33 – Car Parking
DC34 - Walking
DC35 - Cycling
DC40 – Waste Recycling
DC48 – Flood Risk
DC50 – Renewable Energy
DC51 – Water Supply, Drainage and Quality
DC52 – Air Quality
DC55 - Noise
DC58 – Biodiversity and Geodiversity
DC61 – Urban Design
DC62 - Access
DC63 - Crime
DC72 – Planning Obligations

Site Specific Allocations

SSA17 – London Riverside Conservation Park

Core Policies Document

CP7 – Recreation and Leisure
CP8 – Community Facilities
CP10 – Sustainable Transport
CP11 – Sustainable Waste Management
CP15 – Environmental Management
CP16 – Biodiversity and Geodiversity

London Plan
3C.2 Sustainable Transport in London
3C.25 Freight Strategy
4A.19 Improving Air Quality
4A.21 Waste Strategic Policy and Targets
4A.22 Spatial Policies for Waste Management
4A.23 Criteria for the Selection of Sites for Waste Management and Disposal
4A.24 Existing Provision – Capacity, Intensification, Re-use and Protection
4C.6 Sustainable Growth Priorities for the Blue Ribbon Network
4C.8 Freight Uses on the Blue Ribbon Network
4C.16 Importance of the Thames
4C.17 Thames Policy Area

Government Guidance
PPS1 – Delivering Sustainable Development
PPS9 – Biodiversity and Geological Conservation
PPS10 – Planning and Sustainable Waste Management
PPG13 – Transport
PPG17 – Planning for Open Spaces, Sport and Recreation
PPS22 – Renewable Energy
PPS23 – Planning and Pollution Control
PPG24 – Planning and Noise
PPS25 – Development and Flood Risk

Joint Waste Development Plan Document for East London Waste Authority Boroughs - Proposed Submission Document

Preferred Policy W1 - Sustainable Waste Management
Preferred Policy W2 - Waste Management Capacity, Apportionment & Site Allocation
Preferred Policy W3 - Energy recovery facilities
Preferred Policy W4 - Disposal of inert waste by landfilling
Preferred Policy W5 - General Considerations

Note: The Submission document has been approved by Cabinet and the three other East London Boroughs and is being prepared to be released for public consultation. This document therefore carries significant weight.

6.0 Officer Comments

6.1 Principle:

6.1.1 The application seeks planning permission to import additional volumes of waste in order to restore the site for public use and nature conservation. LDF Policy SSA17 closely follows RPG9a (The Thames Gateway Planning Framework) and London Plan policies 3D.10 and 5C which identify and support Regional and Metropolitan Park opportunities and promote this site for restoration into the London Riverside Conservation Park (Wildspace). Policy SSA17 acknowledges the extant planning permission which allows the land raising of the site through the importation of non-hazardous waste for restoration proposals to public open space and amenity in line with Wildspace objectives, with final soil tipping to be complete by 2018. The proposal does not conflict with the objectives of this policy and is required to achieve the high quality of final restoration and is considered to be acceptable in principle.

6.1.2 As one of two locally accessible regional waste disposal sites in London, the principle of importing additional volumes of waste from London is generally supported in LDF policies DC40 and CP11 and preferred policy W1 of the emerging East London Joint Waste Development Plan Document - Preferred Options April 2008, which promote sustainable waste management principles. The site is safeguarded by preferred policy W2 which has taken into consideration the limited timescale of 2018. The policy further aims to achieve the longer term goals of the London Plan and the LDF to reduce the long term reliance on landfill and ensure London's capacity is maintained and increased to ensure self sufficiency.

6.1.3 The site benefits from direct access to the Thames with 15% of all waste imports arriving by this method. Whilst the remainder is received by road, the site accepts predominately London based waste and is in direct access to the A13 and the M25, facilitating easier road access. A large amount of waste processed at the site is recycled where practicable, the remainder being disposed to landfill. Overall, these contribute to the site following the key sustainability objectives in waste disposal and treatment methods promoted by policy CP11, DC40, DC50 and preferred policy W1.

6.1.4 The proposed additional volumes of waste to be placed over the existing landform is proposed to ensure that a high quality landform results for the entire life of the landfill and for its final restoration profile, which is safe and accessible for public use with final restoration restoring biodiversity to the site in compliance with policies CP15, CP16, DC48, DC51, DC52 and DC58. The proposal accepts responsibility for pre-existing contamination arising from permitted landfill to date and proposes to adequately control likely future contamination through environmental controls in compliance with policies DC51, DC52, DC55 and DC58 and preferred policy W5.

6.1.5 The acceptability of the proposal rests, therefore, on whether the proposals are acceptable in terms of the successful delivery of the London Riverside

Conservation Park; whether the temporary impact on the landscape would be acceptable in terms of the pre-settlement contours and the restoration aims of the park; whether the continuation of traffic movements from 2012 to 2018 would have impacts to the deliverability of the final restoration of the site or impacts to the greater area in the short term; and whether the delivery of the east side of the park for public use at earlier stages is feasible.

6.2 **Revised Landform:**

6.2.1 The application proposes revisions to the current planning permission which would involve the importation of additional volumes of waste over the current landform. This takes into consideration changes in waste management practices and increased levels of settlement. The proposal would additionally slightly alter the final post-settlement profile to support various visitor facilities.

6.2.2 The proposed revised pre-settlement profile would be significantly higher in parts with the highest point being approximately 12m higher from that currently approved. As the settled landform would be similar to the landform currently approved, the main visual impact would be as a result of the proposed pre-settlement contours. A visual assessment was undertaken as part of the submission and the proposal has taken into consideration the conclusions which propose to restore the landfill in phases, focusing on the deliverability of the outer areas first and central areas last. The early completion of the outer areas aims to soften the visual impact from the immediate surrounding areas and ensure the success of delivering earlier restoration proposals.

6.2.3 It is additionally proposed that the final indicative restoration plan would involve various landscaping in key areas that would soften the appearance of the landform and neighbouring industrial uses from public vantage points on the site – such as the Freightmaster estate.

6.2.4 The profile of the post-settlement landform remains generally the same except for slight amendments which have been altered to accommodate various visitor facilities and gentler slopes. The maximum proposed increase in post-settlement levels at any location on the site is within the mid-slopes of the southwest-facing valley where the increase is approximately 7.5m from the current permission, whilst a reduction in heights of approximately 5m is proposed in the mid slopes to the north. The maximum increase in pre-settlement heights from the current permission required to achieve the planned profile would be approximately 12m on the west peak, 8.4m to the east peak and 3.5m to the saddle. A summary of the heights comparing the approved and subject applications are tabulated below.

	Pre-settlement Contours (metres AOD)		Post-settlement Contours (metres AOD)	
Landform[1]	**P1275.96**	**Proposed**	**P1275.96**	**Proposed**
East Peak	36	42.4	31	31
West Peak	41.2	53	37	37
Saddle	34	37.5	27	27

6.2.5 The proposed pre-settlement contours would settle in a controlled manner to ultimately create adequate slopes that would reduce leachate through controlled surface water run-off, reduce the potential for damage to the gas extraction pipework and reduce the potential need for post restoration repairs that would ultimately create a manageable, useable, high quality, public open space and nature conservation area in line with the current Wildspace objectives, LDF and London Plan policies.

6.2.6 Staff are of the opinion that the higher restoration profile would be a short term measure resulting in greater long term results and are satisfied that through the proposed phasing scheme and indicative restoration proposals, that the short term visual impact would be reduced significantly and would help deliver the aims of the park at an earlier opportunity.

6.3 **Phasing:**

6.3.1 The land raising would be completed on a phased basis that would see the completion of the more visually prominent areas first along the northern fringe that will both create a visually softer landform to the adjacent marshes and to enable parts of the site for early public access and associated public facilities such as pathways, lookout points and car parking. As the site is restored, this would be the subject of a final restoration plan to detail landscaping, visitor facilities and ecological habitats to ultimately form part of the larger project, Wildspace.

6.4 **Settlement Rates:**

6.4.1 Although the pre-settlement contours are higher than the current planning permission, this is required in order to achieve appropriate post settlement contours that would be more representative to the current permission. This occurs via a number of means through mechanical and bio-chemical processes. Wastes generally compact and shift to nearby voids and the biodegradable components of the land filled waste break down over a period of time and form landfill gas and leachate. The landfill gas is extracted as part of the process and converted to energy. The leachate is extracted and treated before being disposed of. The total tonnage of waste therefore steadily reduces and the restoration surface steadily settles. The rate of settlement is comparatively rapid in the early years and the rate gradually decreases with time.

[1] Existing surrounding land lies at approximately 5m AOD

6.4.2 The applicant has applied a more comprehensive model to predict the settlement rates that have been applied to this landfill. The model has been calibrated for the Rainham Landfill and calculations tested successfully to various existing landfill sites in the UK. Figures have been specifically calibrated for this site and monitored over the past 7 years to give a more accurate representation and it is proposed to revisit this model during the filling process to ensure its accuracy.

6.4.3 The volumes and types of waste for each section of the landfill have been modelled to create a satisfactory post-settlement contour. It is calculated that the majority of the settlement (some 24% of the final landform at site closure in 2018) would occur in the first 20 years. Settlement will continue for some 80-150 thereafter but at significantly reduced amounts finally settling to approximately 36% of the total filled height at 2018. Staff are satisfied through adequate information provided that the settling landform would be an acceptable landform.

6.4.4 Due to the complicated nature of settlement rates, the pre-settlement contours are only representative of maximum overall heights that would be achieved if settlement did not occur. In practice, due to the phased, layered disposal of waste on the site, waste settles before the actual pre-settled contour is achieved. It is additionally noted that the entire site would not be raised at any one time to this height due to the phased nature and actual pre-settlement rates of waste and heights may be less by up to 3m than proposed. The applicant has included a slope stability assessment to ensure that the slopes created would be safe and stable at all times. This settlement model and slope stability assessment is expected to be updated often to ensure the rate of settlement achieves the post-settlement contours. Staff are satisfied that this model provides a more accurate representation of the settlement rates but would recommend that conditions be imposed to ensure this is re-visited often to ensure its accuracy. Additionally, it is staff's opinion that the developer provide a contingency plan that would safeguard the site to ensure it is not over tipped.

6.5 **Settlement Modelling and Changes to Waste Types**

6.5.1 The application was prompted by changes to waste management practices in the past 10 years that has resulted in a greater settlement rate than previously planned. The majority of waste accepted to the site is largely industrial and commercial, current legislation and government guidance are aimed more at the reduction of householder wastes and this is not considered to greatly affect the settlement modelling for the landfill within the ultimate completion date of 2018 that may affect the predictions of the settlement model.

6.6 **Odour:**

6.6.1 Past operations at the site have resulted in some odour complaints from nearby residential areas. Whilst the landfill techniques utilized on site have been improved significantly to address this, the more recent complaints were

as a result of techniques used at the open-air windrow compost site located adjacent the Thames. Various mitigation measures have since been employed such as deodorizes, lower compost heights, greater turning rates which has successfully reduced this impact. The formation of the Veolia-run community liaison group was a more recent venture which has improved public relations with the operator, and created a more transparent and communicative front between residents and the landfill to enable them to address various issues. An odour mitigation plan was required for the Environment Agency licensing. These practices have since proved successful in mitigating odour levels on the site and have enhanced relations between residents and the site operator to identify the source of these issues which commonly lead to complaints.

6.6.2 The main source of odour from landfill sites is from escaping landfill gas. Management of existing landfill gas is currently controlled through a network of pipes within the landfill and flared to existing generators which generate electricity to the grid. Due to the additional volumes of waste to be imported, gas levels are expected to be generated for a longer period of time but are not expected to increase the peak flows. Therefore the current gas extraction system is adequate in managing the level of gas produced not to create further odour impact to nearby sensitive receptors than present site operations.

6.6.3 Part of the re-contouring requires the eastern side of the site to be surcharged with additional volumes of waste. This requires the existing cap to be stripped back temporarily. The main cause of odour in this instance would be through fugitive gas emissions during the cap removal. This process involves a small area stripped where fresh waste is disposed of over within a short time frame thus reducing exposure time. This technique is presently allowed under the existing consent and a similar process was undertaken in 2003 with no known complaints.

6.6.4 The proposed site re-contouring would ensure the integrity of the landfill extraction network remains in tact to ensure that gas is adequately extracted minimising odour impacts. Through an existing odour management plan, required under current site licensing, Staff are satisfied that there would be no significant increase in the expected odour emissions from the proposal and that through an adequate odour management plan there would be no significant increase in the local environmental effects associated with landfill gas production and odour.

6.6.5 The proposed re-contouring is required to ensure that the existing gas management system largely remains successfully operational. The additional volumes of waste are not expected to increase peak gas rates but rather the gas would be sustained for longer. It is anticipated that the total gas would increase by approximately 10% over the gas producing lifetime of the development. An extensive gas management system is currently in place and

would be retained throughout the lifetime and aftercare of the scheme. Existing flaring units, the subject of separate consents would remain and will continue to generate electricity to the Grid. Adequate treatment is undertaken to ensure that this does not create odour issues to nearby residential areas. As the site is a land raising operation, there is little to no potential for gas migration. Staff are satisfied that the proposals would not significantly impact upon the water and gas risks associated with landfills. Flood risk is minimised through controlling surface water flow rates in line with DC49; contamination and leachate control are minimised and treated in line with PPS23 and DC53; and odour is managed with gas utilised for electricity generation in line with sustainability policies.

6.7 **Health Risks – Air Quality:**

6.7.1 A detailed health risk assessment was undertaken examining the level of particulate matter and health related gases emanating from the site on nearby sensitive receptors such as residential areas, nearby industrial sites and the inclusion of a visitor centre immediately adjacent, if constructed. It was concluded that there would be no increase in current baseline air quality as a result of the proposed revisions and no further impact expected. Further consideration was given toward the principle of providing early visitor access, it was concluded that there would be minimal impact to the health of these receptors subject to various control measures being incorporated.

6.7.2 The existing air quality for current proposals is within acceptable limits and the proposals are not envisaged to increase these to a level that would be harmful. Subject to the likely future development and restoration of the area, the recommendations and conclusions of the health risk report and air quality are expected to be incorporated into conditions to ensure the continued protection of health for potential future visitors.

6.7.3 Staff are satisfied that the air quality would not deteriorate over the level already expected for existing operations as a result of this proposal and through the imposition of appropriate conditions, the impact of air quality to future visitors in the short term would be mitigated.

6.8 **Transport:**

6.8.1 Waste is imported to the site via road and water. Proposed access to the site for the deposit of road-borne incoming wastes would be a continuation of the existing access from Coldharbour Lane. This has been in operation for almost 11 years and accounts for approximately 85% of all imported waste to the site. Current activity has not created any significant traffic impacts and the continuation of this route at current levels is not anticipated to give rise to further impacts.

6.8.2 The potential impact of road traffic safety in allowing early public access to the site has been fully considered. Informal access is presently gained to parts of the site through existing footpaths and cycleways that has not resulted in

safety issues. Although this application seeks permission to extend road-borne waste imports until 2018, the number of heavy vehicles in each day will not be increased and will continue to reduce as the site nears completion. It is envisaged that as heavy good vehicles reduce, visitor numbers may increase and impacts would be minimal. Consideration has been made in the retention of the current landfill access and location of public facilities to ensure maximum safety. Staff are satisfied that minimal impact would occur in this regard and recommend this be included within a legal agreement to continue to monitor vehicle numbers and movements and an ongoing travel plan.

6.8.3 The remaining 15% of imported waste is generally allocated by river. Whilst it is preferred to import waste by water-borne methods, there is difficulty in securing the limited availability of contracts. Original calculations envisaged the delivery of the final soil tipping by 31st December 2018 which would allow for water borne waste imports to be the only form of waste import from beginning of 2013. However, as additional volumes are required to achieve the final landform, it was considered unnecessary to extend the life of the project to promote this but rather import additional material at a faster rate by continuing the road borne waste imports until final delivery of the site. Staff are satisfied that the proposal generally accords with Policy CP11 on promoting alternate transport options and understand that the applicant would utilise water borne methods where available over preference to road. The increase in time of the road borne waste activities are not expected to give rise to significant traffic impacts. The impacts of air quality from the additional traffic movements have been described above and concluded to have minimal additional impact in this regard.

6.9 **Ecology - Biodiversity:**

6.9.1 The application is located immediately adjacent to land protected for biodiversity conservation. The Rainham, Wennington and Aveley Marshes are areas of SSSI and Borough SINC's and lie immediately to the north and east of the site. The sites southern boundary is adjacent the Thames River frontage which is part of the River Thames and tidal tributaries Metropolitan SINC.

6.9.2 The proposed future use of the landfill site is for nature conservation and public recreation, which is to be managed by Havering Council and other stakeholders and combined with the existing surrounding marshes would be incorporated into the London Riverside Conservation Park or Wildspace.

6.9.3 The proposed importation of additional waste to the site would impact parts of the site's established biodiversity in the short term, whilst the existing final layer is removed and surcharged with additional volumes of waste. However, this impact is expected in the short term and, subject to stringent ecological mitigation and management plans, the greater long term impact of site restoration would no doubt be increased with these proposals.

6.9.4 There are additional concerns that the presence of a landfill within the SSSI nature conservation areas attract a level of unwanted wildlife and pests. The impact of this on the surrounding nature conservation areas have been considered in this application and considered to be of marginal impact in the short term from the current proposals.

6.9.5 Staff are satisfied that the long term biodiversity gains would out weigh the short term impacts through the importation of additional volumes of waste to the site and that subject to various conditions imposed to secure mitigation and adequate restoration habitats that there would be minimal adverse long term ecological impacts as a result of these proposals.

6.10 **Flood and Surface Water:**

6.10.1 The current site profile has raised the landform over and above surrounding land levels thereby reducing the impact on flood levels. The proposal to revise the pre-settlement contours are proposed in order to ensure that the final landform would be of adequate angle and gradient to promote surface run-off and reduce drainage issues on the site which would otherwise lead to ponding and greater associated environmental risk. The additional pre-settlement contours have taken onto account the potential increased rate of surface water runoff and have been designed to ensure no impacts on surface water and food risk is to occur. Staff are satisfied that there would be minimal flood and surface water risks associated with the revised proposals.

6.11 **Public Access and After Use**

6.11.1 The proposed revisions would allow the site to be adequately restored to be included within Wildspace. The phased regeneration approach is proposed to allow the site to be available for public use at an earlier opportunity which was not included in the current permission. In addition to achieving a manageable site, the restored landfill is to be opened in stages for public use.

6.11.2 These can be divided into two core themes and would include:

- Public access including:
  - Provision and maintenance of footpaths and cycle paths over the landform including two new viewpoints;
  - Maintenance of the existing Rainham to Purfleet path;
  - Access to and provision of serviced sites for a new car park, recreational facilities and visitor centre;
  - Increased access to the Thames and to existing walking and cycle routes;

- Creation of new habitat and active management of these that would achieve a large amount of London's targets for biodiversity for flora and fauna.

6.11.3 In addition to the above, the applicant has also examined various alternate public facility possibilities that may be achievable and compatible with the restored landfill; the Thames and the areas of SSSI. These included such themes as an adventure playground, water sports facilities and general open space. Although not forming part of this application, it has formed a concept masterplan which identifies various areas of land that would be made available for any such similar facilities. These facilities would be subject to further design and subsequent planning consent and would be discussed in detail with various stakeholders.

6.11.4 Additional work was carried out by the applicant to ensure that through allowing early public access to parts of the site that this would be compatible to the operation of the landfill. Staff are satisfied that safe access can be achieved and is protected by condition and legal agreement.

6.11.5 Staff are satisfied that the applicant has recognised the future aspirations of the after use of this site and is assisting in helping to achieve the longer term goals and aspirations of the incorporation of this land into the London Riverside Conservation Park / Wildspace. Staff are satisfied that these can be secured through entering into a legal agreement.

6.12 **Alternatives:**

6.12.1 A logical alternative to the proposed revisions would be the "do nothing" scenario which would involve filling as per the existing consent with road borne movements ceasing in 2012. This scenario was included within the application and it was the modelling of the landfill under the current permission which prompted these revisions. The applicant states that filling to the current permission would result in a much lower landform which would settle at uneven rates reducing adequate surface runoff leading to high levels of site contamination, ponding of surface water would breach the cap creating more leachate and increased engineering issues within the landfill. Largely, this higher settlement rate is due to the larger fraction of biodegradable waste disposed of in landfill due to landfill tax; higher recycling rates; removal of non-biodegradable wastes such as building and demolition waste, cans, bottles, plastic which were existent in the granting of the current planning permission.

6.12.2 The applicant states that this would potentially lead to an unsafe landform not suitable for public access or nature conservation and would require further longer term remediation techniques involving stripping of the restoration layer and surcharging areas which may have depressed, consistently disturbing the longer term goal of a regional open space objective and creating further environmental issues, such as leachate control, methane production, water management issues and site management issues.

6.12.3 Staff have examined the submitted modelling techniques and various supporting information with this application and are satisfied that the continuation of this landfill under the current permission may lead to longer

term management difficulties which may adversely affect the future aspirations of the site as a public open space and amenity area within the Wildspace objectives.

6.13 **Conclusions**

6.13.1 Changes in waste management practices have resulted in a greater fraction of bio-degradable wastes being disposed of in the landfill that has resulted in a greater settlement rate than originally modelled.

6.13.2 This would result in a lower, flatter landform which would affect site drainage and consequently create increased pollution risks, ongoing site maintenance issues and difficulties of site management. The ongoing maintenance would impede the final use of the site for public access and incorporation within the Wildspace regeneration project.

6.13.3 The proposed increase in pre-settlement heights to Rainham Landfill are considered necessary in order to ensure the final post-settlement profile is achieved as originally approved and would ensure the site can be restored to the greater aims of the site into Wildspace.

6.13.4 Policy generally accepts the provision of a higher landform in this location in the short term to enable the site to be adequately restored for public amenity and nature conservation into the Rainham Conservation Park / Wildspace.

6.13.5 The existing permission provides the principle of restoring this site to an agreed post settlement profile in accordance with this greater aim. The current application proposes to dispose of additional volumes of waste in order to achieve a final profile which accords with the current permission.

6.13.6 Staff are of the opinion that, due to the relatively short time frame of the increase in the proposed pre-settlement contours and early delivery of public access to the eastern areas of the site is acceptable, in order to achieve the greater long term benefits of the landform and safe public access and operations.

7.0 Financial implications

7.1.1 In approving this application, the permission would be subject to the applicant entering into a legal agreement to secure various measures as detailed in this report. It is the intention that the London Borough of Havering would exercise an option to actively manage the site either via a ‘pie crust’ leasehold arrangement with the various landowners or to take up an option to become landowners. An additional option to take up ownership of the 'Saltings' is also offered. If Havering decide to take up the options, they would be responsible for the upkeep of the site under the arrangements of the lease or otherwise for the period following the completion of the aftercare period required to be fulfilled by the developer and in the case of the 'Saltings' ,in regard to general land management. The Council would need to extend its public liability

insurance in allowing public access once this option is exercised. It is recommended by Staff that Havering do not agree to the leasehold or ownership until such time as an independent review is carried out on the site as it is progressively restored and allowed 'open' for public access. Reasonable costs should be met by the applicant and the option to take the leasehold to be agreed subject to the conclusions and recommendations of such a report. There are ongoing financial costs in securing the extension to the public indemnity insurance and longer term park management.

8.0 Legal Implications

8.1 There would be time and manpower associated with the creation and monitoring of the legal agreement and in determining to take up any options offered in regard to public access, leaseholds and land ownership.

10.0 Human Resource Implications & Risks:

10.1 Planning and legal input would be met from existing staff resources as part of current responsibilities. There would be substantial manpower associated with the facilitation of the site in its inclusion to the Wildspace regeneration project and offers of pubic facilities.

11.0 Equalities and Social Inclusion implications:

11.1 The Council's planning policies are implemented with regard to equalities and diversity. Any contracts entered into by the council would contain appropriate clauses to reflect the Council's equalities and diversities policies and relevant legislation.

Staff Contact: Simon Thelwell
Designation: Planning Control Manager
Telephone No: 01708 432685
E-mail address Simon.Thelwell@havering.gov.uk

CHERYL COPPELL
Chief Executive

Background Papers

1. The planning application as submitted or subsequently revised including all forms and plans.

2. The case sheet and examination sheet.

3. Ordnance survey extract showing site and surroundings.

4. Planning Conditions and heads of terms for a s106 agreement.

6. Copy of all consultations/representations received and correspondence, including other Council Directorates and Statutory Consultees.

7. The relevant planning history.