

**SUT/APF/616/60 - CM – Waste Recycling Group Ltd
Energy from Waste Incinerator (EfW) Infrastructure plus that for Combined Heat and Power (CHP), Incinerator Bottom Ash (IBA) processing plant with outside storage area, and Air Pollution Control Residue (APCR) treatment and disposal facility, Visitor and Office accommodation and landscaping. Land at Appleford Sidings, Appleford, Didcot, Oxon.**

1.0 The Proposal

- 1.1 This is a County Matter application for which the Vale of White Horse District Council is a consultee. The application sites lies in open countryside within the District boundary and involves the erection of an Energy from Waste (EfW) incinerator with associated infrastructure and development, including waste disposal to landfill, on land between the villages of Sutton Courtenay and Appleford, to the west and east respectively, and to the north of Didcot Power Station. A site location plan is attached at **Appendix 1**.
- 1.2 The application site covers an area of 50.3 hectares of former sand and gravel workings which have been reclaimed through the disposal of waste. The site forms part of the larger 'Sutton Courtenay Resource Recovery Park', which extends to some 264 hectares.
- 1.3 The EfW building is proposed on the southern part of the application site and will be 194.5 metres in length, 53.3 metres wide and 44.25 metres high with a chimney stack 4 metres in diameter and 95 metres high. Copies of the block plan and elevations are attached at **Appendix 2**.
- 1.4 Further proposed buildings to be located adjacent to the Incinerator include an Incinerator Bottom Ash (IBA) building, 37.6 m long, 28.2 m wide with a varying height of between 10.4 m and 12.6 m; an office building and visitor facilities measuring 33.6 m long, 12 m wide and up to 9.1 m high with car parking for 95 vehicles including 7 disabled spaces. This will include a conference and visitor suite for up to 50 people. The proposal would also provide for the capability to incorporate combined heat and power (CHP), which would be provided in a single storey building and thermal storage tower in an enclosure of approximately 200 sq m. Figure 4.2 showing the disposition of buildings is attached at **Appendix 3**.
- 1.5 The Incinerator plant will have the capacity to manage 300,000 tonnes of combustible waste per annum.
- 1.6 An area of land 500 metres to the north of the proposed incinerator has been identified to take the hazardous residue from the Air Pollution Control treatment at the Incinerator and will require two 18 metre high vertical silos above ground for the storage of imported waste prior to disposal.
- 1.7 The main vehicular access into the site is from the A4130 to the south. There are a number of public footpaths running across or close to the site. 'Portway' a footpath crosses the site and connects Church Hill Road in Sutton Courtenay with the B4016 to the east, and there are 2 public rights of way into the site from Old Wallingford Lane and Hobbyhorse Lane in Sutton Courtenay. Sustrans route 5 skirts the northern

boundary of the Power Station land to the south of the application site.

- 1.8 The application is accompanied by an Environmental Statement. This is available to view at Abbey House at Members' request.

2.0 **Planning History**

- 2.1 The Resource Recovery site has been the subject of a number of permissions for mineral, waste and ancillary development. Sand and gravel extraction is thought to have commenced on the site in the 1930's and the infill of mineral voids began in the 1970's. There is still an extant permission for clay extraction on the site.
- 2.2 1996 permission ref: SUT/APF/616/33-CM (which expires at the end of 2012), consolidated earlier permissions and permitted further minerals extraction and landfill. It restricted the inputs of waste to 600,000 tonnes per annum, 200,000 tonnes of which may be imported by road.
- 2.3 A further permission granted in 2001 (SUT/APF/616/45-CM) allowed for a maximum of 350,000 tonnes of waste to be imported by road until 2007 (then reverting to 200,000 tonnes) and the Council has resolved to permit another application (subject to a legal agreement which has yet to be completed) to vary this permission to extend landfill operations to 2021 and maintain importation levels of 350,000 tonnes of waste by road per annum (with 250,000 tonnes imported by rail).

3.0 **Planning Policies**

National and Regional Policies

- 3.1 PPS10 - Planning for Sustainable Waste Management sets out guidance for those involved in making decisions about the management of waste and promotes sustainable waste management, moving the management of waste up the 'waste hierarchy' of *reduction, reuse, recycling, using waste as a source of energy, and only disposing to landfill as a last resort.*
- 3.2 Other planning policy guidance in the form of PPS9 – Biodiversity and Geological Conservation, PPG13 - Transport, PPG 15 Planning and the Historic Environment, PPS23 – Planning and Pollution Control, PPG24 – Planning and Noise, and PPS25 – Development and Flood Risk, are also relevant to the consideration of this proposal.
- 3.3 Policy W5 of Regional Planning Guidance 9, Minerals and Waste (RPG9) issued in 2006 sets targets for the region for the diversion of waste from landfill for recovery in other ways, such as recycling and thermal treatment, to reduce landfill.
- 3.4 The draft South East Plan (which will replace RPG9 when formally adopted) contains draft Policy W5 which requires waste authorities to ensure that policies and proposals are in place to contribute to the delivery of the waste hierarchy and provides targets for each category in the hierarchy up to 2025.

Structure and Local Plan Policies

- 3.5 Oxfordshire Structure Plan Policy G1 – Sustainable Development, G5 – Development outside Settlements, Protection of the Countryside, Policy G6 – Energy and Resource Conservation, Policy EG1 – Renewable Energy, Policy EG2 – Combined Heat and Power and the Recovery of Waste, and Policy WM2 – Waste Management Facilities all have a bearing on the consideration of this application.
- 3.6 The Oxfordshire Minerals and Waste Local Plan was adopted in 1996 and covered a 10 year period. Policies within this document have been saved until 2010. Policy W1 states that Oxfordshire should be self-sufficient in dealing with its own waste; Policy W2 accepts the principle of the County receiving waste from London and other parts of the South East; Policy W5 requires waste treatment plant to be properly screened.
- 3.7 Vale of White Horse Local Plan Policies GS2 (development outside settlements), DC1 (high quality development), DC2 (energy and resource conservation), DC5 (safe access), DC6 (landscaping), DC9 (hazardous substances), DC12 (water quality), DC13 and DC14 (flooding), NE5 (protected species), NE9 (Lowland Vale designation), DC11 (area for landscape enhancement), and TR2 (transport) are all considered relevant to this application.
- 4.0 **Consultations**
- 4.1 As this is a County Matter to which this District is only a consultee, consultations with statutory and other interested bodies and individuals has been carried out by the County Council. However, your Officers have undertaken some consultations on the application and have sought copies of consultee responses from the Highways Authority and the Environment Agency via the County Council. The consultation responses received to date are set out below.
- 4.2 Consultant Architect – please see attached at **Appendix 4**.
- 4.3 Architects Panel – “This use however desirable should be sited well away from people.”
- 4.4 Environmental Health – comments attached at **Appendix 5**.
- 4.5 Environment Agency – object, letter attached at **Appendix 6**.
- 4.6 Highway Engineer – comments attached at **Appendix 7**.
- 4.7 11 letters of comment/objection summarised as follows:
- adverse visual landscape impact
 - harmful impact on air quality
 - harmful increase in traffic, local villages already at saturation point
 - proposal will result in harmful emissions/pollutants/Dioxins being released with a resultant reduction in air quality that will have an unacceptable risk to human health
 - the need to supply the Incinerator will undermine efforts to reduce waste
 - noise emissions will increase
 - non-incineration options should be explored for residual waste first

- Operator has infringed safety regulations elsewhere
- possible contamination of local ground water and water courses
- Sutton Courtenay and Appleford already hemmed in by development and have enough unneighbourly uses close by
- Sutton Courtenay has unique micro climate
- 4th Report of the British Society for Ecological Medicine – The Health Effects of Waste Incinerators second edition 2008 – report into the role that fine and ultrafine particulate pollution and other pollutants from Waste Incinerators have on human health. A full copy of this report is available to be viewed on the planning file.

4.8 A petition has been circulated in the local area (a copy of which is attached at **Appendix 8**).

5.0 **Officer Comments**

- 5.1 The application site covers a significant area of land between Sutton Courtenay and Appleford and forms two main parts, a large rectangular parcel of reclaimed land to the east of Hobbyhorse Lane which will accommodate the new EFW incinerator and most of the other associated buildings and infrastructure and a square parcel of land 500 metres to the north, close to the Amey and Millennium Common sites in Sutton Courtenay, which will be used for the disposal of the alkaline hazardous waste residue which is a by-product of Air Pollution Control treatment at the incinerator. This will involve the erection of two 18 metre high vertical silos above ground for the storage of imported waste from the incinerator. This land, which has permission for landfill of non-hazardous waste, would be engineered to take the APCR through lining and cell creation, drainage works and the installation of leachate management systems.
- 5.2 The details of the EFW incinerator process are described in detail in the Environmental Statement (ES). What is not made clear, however, is how the energy produced will be fed into the national grid. Clarification of this is very important to ensure that if permission is granted on the site, it is not just for an incinerator. Similarly, the potential CHP element seems to have no obvious future destination.
- 5.3 Waste Recycling Group currently operates an integrated waste management facility at the Sutton Courtenay site. The site provides for waste disposal through landfill and energy is generated from the landfill gas from the landfill areas. Green waste is composted on the site and permission has recently been granted for an in-vessel composting plant and a materials recovery facility. Waste currently comes to the site by road from Oxfordshire and Berkshire and is also imported from London by rail for either composting or to be landfilled.
- 5.4 The nearest residential properties to the application site are Hartright House, Level Crossing Cottage and Hadlands in Appleford, all of which effectively abut the south eastern boundary of the application site. The triangle at the centre of Appleford village is some 700 metres from the site, while the properties situated to the south of the triangle along Main Street are closer. In Sutton Courtenay, the residential properties adjoining the Amey site on Appleford Road are some 400 metres away from the

closest part of the application site, with properties in Church Hill Road located about 500 metres away. The closest houses in Hobbyhorse Lane are some 900 metres from the site.

- 5.5 The closest part of Sutton Courtenay Conservation Area is approximately 600 metres from the application site, and Sutton Courtenay and Appleford villages both contain a number of listed buildings (around 77 in total).
- 5.6 The application site falls outside any designated flood zone, however, the northern part of the site is close to flood zone 2.
- 5.7 As the District is a consultee of the application, Officers have concentrated on three main potential impacts of the proposed development - (i) landscape impact; (ii) highway/transport issues and (iii) environmental issues related to air quality, noise, contamination and flooding.

Landscape Impact

- 5.8 The application is accompanied by an Environmental Statement that seeks to assess the landscape and visual impacts of the proposed development. The baseline situation takes into account the adjacent power station (in its current form until at least 2015) and its potential future redevelopment. It also makes the assumption that some of the cooling towers will remain after 2015.
- 5.9 Photomontages of the incinerator from various vantage points have been provided, however, some important view points seem to have been omitted, such as from the A415 to the north of the site and points along the A4130 to the south.
- 5.10 The visual impact assessment suggests that at close range the change will be 'Very Large' compared to the current situation, diminishing as the distance increases from the site. The overall conclusion of the assessment is that with incorporated mitigation, including the building's design, its material and colour and structural planting, the proposal will not result in a likely significant effect.
- 5.11 The application site lies in the designated Lowland Vale landscape where development which would have an adverse impact on the landscape and in particular long open views within and across the area, will not be permitted. It is also identified as an area for landscape enhancement. Notwithstanding the Environmental Statement's findings, your Officers consider that the proposed incinerator building will be highly visible in this relatively flat landscape by virtue of its size and scale. Planting woodland belts some distance away from the building may help mitigate its impact, however, no information has been provided as to the size and location of the proposed structural landscaping around the site or the finished site levels which may mitigate the impact of the building. Furthermore, the overall impact of the incinerator building seems to have been judged in the context of at least some of the 100 metre high cooling towers remaining on the power station site after 2015. Didcot A will close by 2015 but could close even earlier, and your Officers' understanding is that once closed, all the cooling towers will be demolished.
- 5.12 To conclude, your Officers consider that the proposed development will have an

adverse impact on the local landscape and is therefore contrary to adopted Local Plan policy. The application lacks any proper detail as to how this negative landscape impact would be mitigated. The cooling towers at the power station are likely to be demolished in the next 5 –7 years and cannot be relied upon as a backdrop or setting for the incinerator. Furthermore, the potential visual impact of the lighting of the incinerator development at night has not been addressed in the ES, despite being raised in the Scoping Opinion by the County Council. Should permission be granted, this issue will require very careful consideration and control.

Highway/Transport Impact

- 5.13 The main access to the site is from the A4130/Collett junction to the south, however, there is also a secondary access from the B4016 Appleford Road to the north that is restricted to 100 two-way vehicular movements per day.
- 5.14 The site currently has a restriction of 350,000 tonnes of waste per annum coming into the site by road and 250,000 tonnes by rail. These tonnages are mutually exclusive. The green waste function on the site has consent for 40,000 tonnes per annum and is fully operational. This can be brought to the site by road or rail. There is also a legal limit of 125,000 tonnes of clay extraction from the site to be carried by road.
- 5.15 In addition to these permissions, there are additional uses on the site which have been resolved to be approved by the County Council but do not yet have full consent. These include 70,000 tonnes per annum for in-vessel composting and 70,000 tonnes per annum for materials recycling. These can be either road or rail.
- 5.16 Below is a table provided in the Transport Assessment that accompanies the application. This shows the amount of waste/material (in tonnes) relating to all of the WRG current and forthcoming planning permissions.

Operation	Existing	Consented	Proposed
Landfill rail	250,000	250,000	250,000
Landfill road	350,000	350,000	100,000
EfW	0	0	300,000
Clay extraction	125,000	125,000	0
MRF	0	70,000	70,000
IVC	0	70,000	70,000
Green waste	40,000	40,000	40,000
IBA	0	0	50,000
Others (lime etc)	0	0	25,000
Total	765,000	905,000	905,000

- 5.17 The figures contained above show that the consented schemes on the site generate the same tonnage of material as required for the proposed incinerator. This, however, implies that at least some of these consented permissions will not be implemented (for example the termination of the clay extraction activity) as the cumulative impact of

consented and proposed would obviously result in a greater highway impact. Any permission granted on the site would therefore require some of the consented uses to be limited or extinguished by legal agreement, and the comments of the Highways Authority attached as **Appendix 7** seem to acknowledge this.

- 5.18 The proposed EfW incinerator will have a capacity of 300,000 tonnes per annum and the transport assessment refers to data provided by the County's Waste Department which sets out their estimation of future waste deliveries to the Sutton Courtenay Waste Management Site in terms of its likely origin and tonnage. This estimates that upon opening there will be approximately 178,000 tonnes per annum of Municipal Solid Waste (MSW) available for importing to EfW. This would rise to a maximum of 200,000 tonnes per annum. The remaining 100,000 tonnes per annum would be Commercial and Industrial (C&I) Waste. A summary of Municipal Solid Waste origins (200,000 tonnes per annum) is set out below:

Cherwell district – 30,025 tonnes per annum (15.0%)
City of Oxford district – 44,450 tonnes per annum (22.2%)
West Oxfordshire district – 25,587 tonnes per annum (12.8%)
South Oxfordshire district – 34,017 tonnes per annum (17%)
Vale of the White Horse district – 29,540 tonnes per annum (14.8%)
County Waste Recycling Centres – 36,382 tonnes per annum (18.2%)
Total – 200,000 tonnes per annum

This summary provides the best indication of where waste to the site may come from across the County.

- 5.19 The County Engineer considers the transport assessment submitted by the applicant to be a fair estimation of the likely traffic generation of the scheme and considers that the assumptions made in the assessment appear realistic. The assessment concludes that the proposal will generate an operational daily increase of 50 two way HGV movements, increasing the current figure from 424 to 474. Additional vehicular movements will also be generated by the 50 new staff at the site (who will work in shifts over the 24 hour operating period) and traffic generated by the conference/visitor facility. Overall, the assessment concludes that the development will increase traffic flow onto the adjacent highway network by less than 10% during periods of peak activity. According to Institute of Environmental Management and Assessment (IEMA) guidelines, an increase of less than 10% is unlikely to create any perceptible effect upon the road network.
- 5.20 The increase in traffic movements in the local area also has a potential impact on the amenities of the villages of Sutton Courtenay and Appleford. HGV movements should continue to be controlled by routing and other agreements and therefore the villages should not be adversely affected by additional HGV's. However, domestic vehicular traffic may increase in the villages but as this will be below 10%, your Officers consider that it is difficult to argue that this will have a significant harmful impact on the villages given the IEMA guidelines referred to above.
- 5.21 The transport assessment also makes reference to the possible cumulative effects of surrounding developments at Great Western Park and the Asda warehouse. However, it does not take into account the potential impact of the redevelopment of the 40's,

50's and 60's site at Milton Park which was recently granted outline planning permission. Therefore, prior to determining the application, it is recommended that the County Council request the applicant to take this development into account also.

- 5.22 To conclude, the transport assessment suggests that by trading off existing uses/permissions on the site, the proposed development will not generate unacceptable levels of additional HGV or other vehicular traffic on the local highway network. However, this will require a comprehensive set of controls to be put in place by the County Council through a legal agreement should permission be granted.

Air Quality, Noise, Contamination and Flooding

- 5.23 Understandably, the possible impact of the proposed development on air quality and other environmental factors is of particular concern to local residents. With development of this nature, the Environment Agency has a considerable amount of control as the body which provides the permits and regulates the operation of incinerators.
- 5.24 If permission is granted for the incinerator, it will be listed under Part A (1) of the Pollution Prevention Control (PPC) Regulations and will be regulated by the Environment Agency. The installation will, therefore, have to have a PPC Permit to operate, which has to be issued by the Environment Agency. This permit will control and regulate emissions to air, water and land and emissions of noise, dust and odour from the installation. This Council's Environmental Health Officers will be consulted on any application for a permit. If approved, a PPC permit would specify permitted emission levels which will need to comply with the EC Waste Incineration Directive and permits are only issued if the Environment Agency is satisfied that the plant is designed, built, operated and maintained in such a way that the requirements of the Directive are met and human health and the environment are protected. Further information regarding the monitoring role of the EA is attached at **Appendix 5**.
- 5.25 In terms of local air quality, the application's environmental assessment is based on modelling and the model's predictions indicate that there will be no significant impact on annual mean concentrations of NO₂ (Nitrogen Dioxide) within the Abingdon Area Quality Management Area (AQMA). Nor are the additional traffic movements likely to have a significant impact on the AQMA, although the specific routes of the additional vehicles would need to be checked.
- 5.26 However, given the complexity of the modelling and interpretation, Environmental Health recommends that the County Council commissions an independent peer review and audit of the model to ensure that it is fit for purpose and that any such audit should be undertaken in consultation with the Environment Agency. This would provide a greater level of confidence in the predictions made.
- 5.27 The potential impacts generated by the proposal in respect of noise are considered acceptable, however, subject to this issue not being controlled as part of the PPC Permit, it is recommended that should planning permission be granted, the following condition be added:

"Noise levels from the proposed development shall not exceed 45dB LAeq (15 min)

measured at 1m from the façade of the nearest noise sensitive dwelling between the hours of 0700 and 2300 and 40dB LAeq (15 min) measured at 1m from the façade of the nearest noise sensitive dwelling between 2300 and 0700.”

- 5.28 In respect to contamination issues, consideration has been given to existing and new contamination from the proposed development. Much of the southern part of the application site has been made up with pulverized fuel ash and other forms of landfilling but it is considered that the impact of the development can be reasonably controlled with the imposition of the following condition:

“No development shall commence until a phased contaminated land risk assessment has been carried out by a competent person in accordance with DEFRA and the Environment Agencies ‘Model Procedures for the Management of Contaminated Land, CLR 11’. All phases need to be approved in writing by the Local Planning Authority (LPA). It is recommended that the LPA are consulted at each phase of the investigation for their approval.

Phase 1 shall incorporate a desk study and site walk over to identify all potential contaminative uses on site and to inform the preliminary conceptual site model. If potential contamination is identified then Phase 2 shall be undertaken.

Phase 2 shall include a comprehensive intrusive investigation in order to characterise the type, nature and extent of contamination present, the risks to receptors and to inform the remediation strategy proposals. If significant contamination is found then Phase 3 shall be undertaken.

Phase 3 requires production of a remediation and/or monitoring scheme to ensure the site is rendered suitable for its proposed use. The remediation shall be carried out in accordance with a scheme and timetable first agreed in writing by the LPA and no development or phase of development shall be occupied until all remedial works have been approved by the LPA. Following implementation of the remedial measures a full validation report detailing the measures carried out to ensure compliance shall be submitted to and approved in writing by the LPA.”

- 5.29 Should the development go ahead, it will create new potential sources of contamination both during the operational stage of the facility and in the development of the Air Pollution Control Residue (APCR) Disposal facility. Any potential impacts from operational activities such as chemical reagent storage will be mitigated through appropriate infrastructure, management and maintenance in accordance with the requirements of the PPC Permit. In respect of the APCR, it will be contained within a permitted disposal facility which will be engineered to the necessary standards again set out in the Permit.
- 5.30 In addition, consideration has been given to the potential dust and odour emissions from the development. This will also be controlled by the PPC Permit but no significant dust or odour impacts are envisaged from the development if it is effectively managed.
- 5.31 Finally, with regard to flooding issues, the site does not fall within Flood Zone 2, however, the scale of the development required the submission of a Flood Risk Assessment. It is clear from the objection received to the application from the

Environment Agency (attached at Appendix 6) that further clarification /information is required to demonstrate that the drainage proposals on the site are acceptable and Officers would support this objection until such time as all the required information has been provided and agreed. Officers also support the EA's comments in respect of biodiversity issues on the site.

6.0 **Recommendation**

6.1 *That Vale of White Horse District Council raises objections to the application on the grounds that:*

- (i) the development is contrary to Policy GS2 and NE9 of the adopted Local Plan;*
- (ii) the development will have an adverse impact on the local landscape;*
- (iii) the proposal represents a potential flood risk;*
- (iv) it has not been conclusively demonstrated how the energy generated from the EfW incinerator will be fed into the national grid;*
- (v) no draft legal agreement or heads of terms has been submitted to show how the potential cumulative impact of the proposed use along with existing permissions on the site will be controlled to ensure that there is no significant impact on the local highway network as suggested by the submitted transport assessment;*
- (vi) the cumulative impact assessment of other large scale developments in the area has omitted to take into account the redevelopment of the 40's, 50's and 60's site at Milton Park: and*
- (vii) the assessment of the impact on local air quality relies solely on a model which has not been the subject of robust independent audit.*

6.2 *These objections could be overcome by the County Council satisfying itself regarding the following:*

- (i) that the applicant demonstrates that the proposed incinerator will genuinely provide a source of energy to the national grid:*
- (ii) that the need for an EfW incinerator in this location justifies an exception to adopted Local Plan policies:*
- (iii) that it can be demonstrated that the landscape impact of the proposal can be mitigated by a scheme of substantial woodland planting on the peripheries of land under the control of the applicant;*
- (iv) that the objections to the scheme from the Environment Agency can be overcome in full;*

- (v) *that in light of existing permissions on the site, the level of traffic generation from the development and its impact on the local highway network can be adequately controlled through Section 106 and other agreements and that the cumulative impact of the recent development at Milton Park has been adequately addressed; and*
- (vi) *that the air quality model is the subject of a robust interrogation by an independent party in consultation with the Environment Agency and that this audit judges the model fit for purpose. And, this being the case, that the conditions recommended in paragraphs 5.27 and 5.28 above are attached to the planning permission.*