# **Development Control Committee**

Meeting to be held on 20th January 2016

Electoral Division affected: Skelmersdale East

West Lancashire Borough: Application Number LCC/2015/0088
Pyrolysis plant to convert low worth waste plastic into diesel and gasoline, and to comprise a fuel reception hall, conveyors, chemical treatment plant, fractionation columns, fuel storage tanks, a generator set and offices. West Quarry Railway Pad, Appley Lane North, Appley Bridge.

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### **Executive Summary**

Application - Pyrolysis plant to convert low worth waste plastic into diesel and gasoline, and to comprise a fuel reception hall, conveyors, chemical treatment plant, fractionation columns, fuel storage tanks, a generator set and offices. West Quarry Railway Pad, Appley Lane North, Appley Bridge.

# **Recommendation – Summary**

That planning permission be **refused** for the following reasons:-

- 1. The application site is located on land that is safeguarded by Policy IF2 of the West Lancashire Local Plan for a small scale rail facility. The location and scale of the development would prejudice the use of the site for a small scale rail based facility and the applicant has not conclusively demonstrated that such a use is unviable. The development is therefore contrary to Policy IF2 of the West Lancashire Local Plan.
- 2. The applicant has not demonstrated that the proposal would not give rise to detrimental impacts on air quality. In the absence of such demonstration, the proposal is considered to be contrary to policy DM2 of the Lancashire Minerals and Waste Local Plan and Policy GN3 of the West Lancashire Local Plan.
- 3. The application is not accompanied by a noise assessment. In the absence of such information, it cannot be concluded that the development would not give rise to noise levels resulting in unacceptable harm to local and residential amenity. The development is therefore contrary to Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan and Policy GN3 of the West Lancashire Local Plan.

### **Applicant's Proposal**



The application is for a pyrolysis plant to chemically convert 6000 tonnes per annum of non-recyclable, non-hazardous, low worth waste plastic into diesel, gasoline, synthesis gas, white spirit and char (carbon by product). The application area measures approximately 120m x 30m (0.36 hectare) and would contain the pyrolysis plant to be enclosed by palisade fencing with the remaining 0.12 hectares to be vehicular access and turning space.

The pyrolysis plant would include a building for the reception of fuel measuring  $29m \times 13m \times 10.6$  high and an office building measuring  $17m \times 8m \times 10.6$  m high. The process plant would consist of a 17.3m high extruder, reactor and fractionation tower, a 15.2m high emergency flare, a petrol condenser and stripper tower, a used oil separation tank, waste water treatment, a 10m high water cooling tower, a gas oil separator, a generator, product processing plant, storage tanks, and a fuel storage facility consisting of  $8 \times 9m$  high tanks (3 diesel, 3 petrol and 2 waste water) and a parking area for seven vehicles plus one disabled space.

The diesel would be exported from the site. Some of the petrol and the synthesis gas produced would be burnt on site to generate power for the facility with the remainder exported along with white spirit and char.

The process feedstock would undergo preliminary sorting before being delivered to the site in bales. After being received at the application site, the baled feedstock would undergo a final sorting process to remove any remaining recyclables and undesirable residual fractions.

The site would generate an average of five HGV and eight employee car and LGV's trips per day. The facility would not utilise the adjacent railway line in any way. The facility is proposed to operate 24 hours a day, 7 days a week.

### **Description and Location of Site**

The proposed development would be located on the west side of the disused West Quarry Railway Pad, off Appley Lane North, Appley Bridge. The railway pad covers an area of approximately 1.1 hectares and measures 350m long by 45m wide as its widest point. The section of railway pad where the development would be located is 30m wide. The development site would occupy a third of the area of the railway pad and outside a fenced off area on the north side of the railway pad previously used to accommodate electricity generators associated with the former West Quarry landfill site. The whole of the 0.36 hectare application site is currently an open area with a concrete surface and is vacant.

The former railway pad is located on the north side of the Manchester-Southport railway line to the west of Appley Bridge. The restored West Quarry landfill site is immediately to the north of the site with a fish farm located to the west. An industrial complex is located 25m away on the south side of the railway line with the Leeds-Liverpool canal 50m due south of the application site. The closest residential properties are situated on Appley Lane North approximately 350m to the north-east of the site and 410m to the south-east of the site.

The site is accessed via a private road on the west side of Appley Lane North.

The entrance to Appley Bridge train station is 70m to the south, off the east side of Appley Lane North.

The site is outside of the Green Belt but the boundary runs between the West Quarry landfill site and application area.

## **Background**

History: West Quarry has a long history of mineral extraction and subsequent landfill operations.

Planning permission for an alternative restoration scheme providing for temporary retention of a rail terminal and pad and gas/ leachate management facilities was granted in September 1999 (ref. 8/99/206).

Planning permission for the installation and operation of a 5MW bioliquid to power generation facility was granted in April 2013 (ref. 08/13/0140).

A non material amendment to planning permission 8/13/0140 to allow the use of tallow along with cooking oil as a bio liquid for the use of energy generation on site and to amend condition 10 to allow no more than a total of 5 HGV's delivering waste cooking oil and tallow to the site per day was approved in December 2013 (ref. 08/13/0140/NM1).

# **Planning Policy**

National Planning Policy Framework (NPPF): Paragraphs 11 - 14, 17 - 19, 22, 28, 56 - 66, 109, 111, 122 - 125 are relevant with regard to the presumption in favour of sustainable development, core planning principles, building a strong competitive economy, supporting a prosperous rural economy, the requirement for good design, conserving and enhancing the natural environment, pollution control, noise, air quality and light.

National Planning Practice Guidance

National Planning Policy for Waste

Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD

Policy CS7 Managing Waste as a resource

Policy CS8 Identifying Capacity for managing our waste Policy CS9 Achieving Sustainable Waste Management

Joint Lancashire Minerals and Waste Local Plan – Site Allocation and Development Management Policies – Part One (LMWLP)

Policy NPPF 1 Presumption in favour of sustainable development

Policy DM2 Development Management

Policy DM4 Energy from Waste

Policy WM1 Capacity of Waste Management Facilities

West Lancashire Local Plan 2012-2027 Development Plan Document (DPD)

Policy SP1 A Sustainable Development Framework for West Lancashire

Policy GN1 Settlement Boundaries

Policy GN3 Criteria for Sustainable Development
Policy IF2 Enhancing Sustainable Transport Choice

Policy EN2 Preserving and Enhancing West Lancashire's Natural Environment

### **Consultations**

West Lancashire Borough Council – Object on the basis that insufficient information has been submitted in respect of air quality and that there has been inadequate demonstration as to the viability of the use of the railway pad for a small scale rail facility. The Borough Council also considers that there could be a detrimental impact on the amenities of nearby residents through increased noise and disturbance contrary to Policies IF2 and GN3 of the West Lancashire Local Plan DPD.

Wrightington Parish Council – Object for the following reasons:

- The requirements for the restoration of the West Quarry landfill site included that
  the railway pad should have been removed and the land returned back to the
  Community. However, as this never happened, the Parish Council has, at every
  available opportunity, suggested that the Pad be utilised as a car park for
  commuters using Appley Bridge Railway Station thereby alleviating significant
  parking problems on Appley Lane North.
- Not enough consultation has been undertaken with local residents who will be significantly affected by these proposals.
- The strength of public objection to the proposal is significant.
- The results of the Air Quality Assessment (AQA) submitted with the application are compromised by the fact that it has been undertaken by the agent for the project. Therefore, the AQA is neither independent or truly objective.
- Furthermore, the information contained within the AQA has been obtained as part
  of a desk exercise. No account is taken of the fact that the location of the
  proposed plant will be at one of the lowest parts of the village, at the base of the
  Douglas Valley. Major factors such as temperature inversion, the prevailing
  southerly winds and the impact on the air quality for residents of the village have
  been completely ignored.
- The proposal would have a significant detrimental impact on the quality of life of the residents of Appley Bridge. The air quality in Appley Bridge, surrounding villages and amenity areas in the Parish, such as Fairy Glen Biological Heritage Site, would be seriously compromised by the pollutants from the plant.
- A Health Impact Assessment should be undertaken by an independent body to
  determine the short and long term effects of the pollutants from the exhaust stack
  on local residents living close to the plant and, on the children attending All Saints
  Primary School which is 500 metres from the proposed plant, and also on the
  local wildlife found in the nearby Fairy Glen BHS and along the Canal Bank and
  Parbold Hill.

- An assessment of whether leakage of contaminants from the plant could pollute local watercourses or farmland where stock may be affected and the food-chain contaminated should be undertaken.
- The impact of resultant carcinogenic compounds left once the plastic has been through the plant process gives serious cause for concern.
- The fact that the sorting process will be reliant on manual work means that there
  is the potential for human error which could result in significant health and safety
  issues.
- The site is located on, and adjacent to, contaminated land where methane levels are still being monitored and leakages of methane in the past have resulted in explosions and fires. The methane leakage from the neighbouring landfill site has been completely ignored in the safety assessments. The proposals to produce highly flammable liquids from waste plastic, combined with the possible leakage of methane from the adjacent site, must not be overlooked.
- The existing parking problems on Appley Lane North would be exacerbated by the
  addition of another 20 vehicular HGV movements per day to and from the site
  together with, an increase in car movements depending on the number of
  employees entering and exiting the site both during the day and in the unsociable
  hours associated with a plant that would operates 24 hours per day, 7 days per
  week.
- The noise from the 24/7 operations and odour produced from the storage of the imported plastic, and from the chemical process used to breakdown the plastic into diesel and gasoline, would significantly impact on the residents and wildlife in Appley Bridge.
- The visual impact of the 17.5m stack and the distillation column are considered inappropriate in the Douglas Valley and would not accord with the West Lancashire Borough Council Supplementary Planning Guidance for natural areas and areas of landscape historical importance which states that "tall, columnar construction is inappropriate" for the Douglas Valley Area.
- The Joint Lancashire Minerals and Waste Local Plan details all locations throughout Lancashire which have been identified for the processing of waste and this site is not included in the list.
- The Leeds Liverpool Canal is defined by West Lancashire Borough Council as "an important habitat and corridor through the area" whilst Fairy Glen is described as "a designated Local County Biological Heritage Site" - both are located less than 500metres from the proposed plant.
- The proposed plant does not hold an EU patent and has not been tested anywhere else in this country and would result in Appley Bridge being used as a test site for experimental purposes. The residents and wildlife in Appley Bridge would also be test cases for the short and long term effects of locating this type of plant/factory in residential areas. It is Impossible to predict the impact that these proposals would have.
- LCC's recycling plant at Farrington would be a more suitable location for this type
  of plant. The carbon footprint would also be reduced if the Pyrolysis Plant was
  incorporated into the Farrington Recycling site as there would be no need to use
  HGV's to transport the plastics to Appley Bridge.
- There are unsubstantiated reports that LCC has been in discussion with P-fuels for 2 years and, have already agreed to be a contributor of plastics to the facility. If

- this is the case there is clearly a conflict of interest in the decision making process.
- The Parish Council would urge Planning Officers to take this application to Planning Committee and would urge Planning Committee Members to arrange a site visit so that they can see for themselves the significant impact these proposals will have on Appley Bridge and the surrounding area.

Shevington Parish Council object to the application for the following reasons:

- Despite the doubts of the viability of the application site to be used for a rail based facility, the proposal would be contrary to Policy IF2 of the West Lancashire Local Plan
- The site will not be completely obscured by vegetation, as the applicant suggests, due to the scale of the plant and also because trees shed leaves in the winter.
   Longer distance views should have been included from the canal towpath approaching Appley Bridge from Gathurst.
- A transport assessment should have been submitted with the application that takes into account the impact of the scheme on the transport network immediately adjacent to the site and in the adjoining areas. There are roads in the local network, such as Mill Lane and Skull House Lane/ Miles Lane that are not suitable for the type of vehicle that would be used to service the site. The routes that vehicles would use to access the site have not been specified. The plant would operate on a 24 hour basis but there is no indication if site deliveries and collections would be on a 24 hour basis.
- The exact make and model of the plant to be installed at the site has not been confirmed, so how can an assessment of noise and emissions be made?
- The AQA includes impacts on air quality at eight specific sites, but only as far east
  as Appley Lane North. Given the prevailing wind direction, and the proximity of
  certain areas of Shevington Parish, why were no areas in the parish covered in
  the analysis? This gives no comfort that the impact of smells and atmospheric
  pollution will not be felt further away.
- There are concerns that the emissions could be carcinogenic.

Dalton Parish Council: object to the application for the following reasons:

- The requirements for the restoration of the West Quarry landfill site included that
  the railway pad should have been removed and the land returned back to the
  Community. However, as this never happened, the Parish Council has, at every
  available opportunity, suggested that the Pad be utilised as a car park for
  commuters using Appley Bridge Railway Station and so thereby alleviating
  significant parking problems on Appley Lane North.
- Not enough consultation has been undertaken with local residents.
- The strength of public objection to the proposal is significant.
- The AQA submitted with the application is not independent as the agent for the project, the Managing Director of Stopford Energy and Environment, is also a joint owner of the site.
- The site is located in a valley but the AQA does not acknowledge the local topography. The wind roses are for Manchester Airport on a plain but not the local area where the wind direction is different.

- The exact make and model of the plant to be installed at the site has not been provided.
- No noise assessment has been provided even though the plant would operate 24 hours a day, 7 days a week.
- No odour assessment has been provided even though sulphur dioxide would be emitted.
- There is no environmental assessment detailing the plastic travelling from the point of origin to the site and for waste leaving the site.
- The development would be contrary to Policy EN3 Part 2 (e) (ii) of the West Lancashire Local Plan DPD as it would prejudice the delivery of the informal countryside recreational activity at Parbold Hill.
- The development would be contrary to Policy EN3 Part 2 (f) (iii) of the West Lancashire Local Plan DPD as it would prejudice the protection and improvements of facilities at Fairy Glen.
- There are two adjacent landfill sites that still produce methane. There is no monitoring of the sites. Burning waste next to such locations could create explosion.
- The site must be contaminated.
- Residential amenity will be affected due to odours and impacts from traffic.
- A primary school and two residential homes would be located within the fallout zone of the chimney.
- Any run-off would contaminate the Leeds-Liverpool canal which is a designated wildlife corridor but no assessment has been made of the potential impacts.
- The proposal does not comply with the Joint Lancashire Minerals and Waste Development Framework Core Strategy or Policies DM2 and WM3 of the Joint Lancashire Minerals and Waste Local Plan
- No transport assessment has been carried out.
- Congestion around Appley Bridge train station obstructs traffic on both sides of Appley Lane North and would increase.
- There is no room for articulated vehicles to enter the site due to parked cars along Appley Lane North. There would be no alternative place for the cars to park if double yellow lines were introduced. The problem would be moved elsewhere.
- There are no time or weight restrictions, or designated routes for wagons going to or leaving the site.
- Wagons coming from/ going to the south will have to negotiate a humped backed canal bridge canal, and a 90 degree bend between two listed buildings where Appley Lane North joins Bank Brow.

Wigan Council – No observations received.

LCC Developer Support (Highways) – It is considered that the overall traffic generation would not significantly impact the efficient operation of the local highway network and hence there is no objection subject to the imposition of conditions requiring the provision of car parking, the use of wheel cleaning facilities during construction operations and submission of a construction management plan.

Environment Agency – No objection but provide the following comments:-

- The operation would be defined as a 'small waste incineration plant' in the Environmental Permitting (England and Wales) Regulations 2010 (as amended). The pyrolysis plant would therefore be regulated by the Local Authority, based on a capacity of less than 3 tonnes per hour. The regulation includes assessment of the submitted air quality assessment. It should also require a comprehensive fire and accident management plan, due to the nature of the materials to be stored.
- It is unclear as to where the feedstock for the operation is to be sourced, the quality of which can vary significantly.
- Consideration needs to be given to odour controls for any waste streams contaminated with organic material such as those that originate from municipal sources.
- There should be robust duty of care procedures in place for waste materials being handled, both those received by the site and those that are produced from the site processes.
- A suitable noise assessment should be carried out to ensure a good understanding of how the operation would impact on the local area in relation to background noise and to allow any noise attenuation measures to be considered.
- Maps show that Sprodley Brook, an ordinary watercourse, is approximately 380m WNW of the site but outside the boundary but do not show any watercourses within the site boundary. This does not preclude their existence, however, but as the site is within the boundary of a landfill site it seems unlikely. There may be watercourses draining from the fish farm to the west that are culverted under the railway pad but it is likely these would be outside the application boundary. In terms of the potential risks it would be an ordinary watercourse so any issues around flooding from blockages or surface water management would be LCC's responsibility as LLFA. From a pollution control perspective the site will be regulated and any surface water or groundwater issues will need to be dealt with under the appropriate regime.

LCC Specialist Advisor (Ecology) – No objection. The following comments have also been provided:

- The emergency flare would be enclosed and would operate infrequently. On this
  basis, and because of the nature of the application area, it does seem reasonably
  unlikely that the proposals would result in any significant impact on bats or birds.
- Due to a range of habitats in the surrounding area suitable to be used by waterfowl and wading birds, it is possible that birds will over-fly the site (e.g. between roosting/ foraging areas). However, there is no evidence to suggest a regular flyway and hence any significant impacts seem reasonably unlikely.
- Provided construction and operational impacts on adjacent habitats are avoided/ minimised, significant adverse impacts on protected or priority species appear unlikely.

Network Rail – No objection and comment that, with regard to the prospect of the West Quarry railway pad being used for a small-scale rail facility, there are issues to consider of capacity on the railway line, and whether it is feasible to install a crossover. The type and frequency of proposed freight traffic would also need to be assessed in detail, and any scheme would need to be funded by the developer.

If permission is granted, then a number of conditions are suggested to ensure protection of the railway line.

Canal and River Trust – Cannot provide any substantive comments as no details have been provided of the surface water that would be disposed into an existing watercourse.

LCC Lead Local Flood Authority – No objection subject to the imposition of a condition to require the development to be undertaken in accordance with a surface water drainage scheme.

Coal Authority - No objection.

Health and Safety Executive – No comment as the proposed development does not lie within the consultation distance of a major hazard site or major accident hazard pipeline.

Representations – The application has been advertised by press and site notice, and neighbouring properties informed by individual letter. 1120 representations have been received objecting to the application for the following summarised reasons:

## Traffic and Location

A detailed Transport Assessment should be included with the application detailing
the HGV movements delivering and despatching materials from the site.
Surrounding roads close to the site are used as a school route and parking is
limited due to the close proximity to the train station. The access roads and
general road layout were not built to accommodate large vehicles as the road is
already in a poor condition due to lack of maintenance. A Primary school, two care
homes and a hospital are all close to the proposed site and further tests need to
be done to protect vulnerable people in the area.

# **Environmental**

- There is an implicit classification of low value plastic waste as 'biomass', this term is incorrect as plastics are not produced by living organisms. Plastics have completely different chemical compositions and properties the correct term should be used. The modelling assessment should be based on data from the local area not Manchester Airport as stated.
- Carcinogenic fumes are generated from burning which are hazardous. As low grade plastics can contain phthalates which can change hormone levels and cause birth defects, full detailed Air Quality Assessments and Health Impact Assessments need to be completed. Tests need to be done on contamination of water supply in local area.
- The 17.5m flue does not have the capability to disperse emissions out of the valley and beyond the residential community. Further studies need to be done on environmental impacts, as there is a general absence of emissions data in the report. An Environmental Impact Assessment and a Screening Opinion should be made publically available.

• The Environmental Assessment does not account for any residue present in the plastic waste. Some of the wastes may come from industry with potential for trace quantities of carcinogenic compounds. The by-product of the pyrolysis and gasification process (char) can contain Cadmium, Mercury and Lead. There is a possibility of these toxins entering neighbouring farmland and cadmium exposure through the air, as toxins do not break down in the environment. Acceptance levels tests do not define whether these levels are for adults or for children.

# Odour, Noise and Ecology

- Storage of waste plastics whilst awaiting processing will lead to odour issues.
   Leachate from liquids contained in the plastic containers could also enter the local watercourses and soak into the local water table. A noise pollution assessment should be done.
- Odour, noise and light pollution will be emitted from the site resulting in ecology and visual impacts. Kingfishers, hawks and bats will need to be considered when assessing the application. Leeds Liverpool Canal and Fairy Glen site are close and at lower elevation - should any leakage occur it will flow towards the watercourse. There are also Tree Preservation Orders in place along the site which will need to be addressed. The application does not consider lower ambient noise levels overnight which will need to be addressed given the 24-hour nature of the proposed facility.

# Health and Safety - Disaster Plan

 Fire risk and risk of explosion due to methane from the adjacent landfill and proximity to the IKO plant. No assessment has been made with regards to outages, additional off site gas releases or what will happen in the case of a catastrophic emergency. Also no risk assessment has taken place with local emergency services or Environmental Agencies.

## **Planning Policy**

The development would be contrary to policies IF2, EC1 and EN2 of the adopted Local Plan 2012 to 2027 as the site is safeguarded for small scale rail based uses, would harm the amenities of nearby occupiers and would prejudice the protection of designated countryside recreation sites.

### General

- Lack of consultation with local residents all neighbourhood residents within a 3 mile radius from site should have been consulted due to nature of application. Insufficient time has been provided for consideration for this application and the proposal should not be determined under delegated powers but reported to committee and for them to make a site visit.
- Location is in green belt, surrounded by pockets of brownfield land, therefore the land cannot be deemed suitable for this type of development. Also the land was originally earmarked (after landfill) to be given to the community of Appley Bridge after landfill ceased.

- This site will be affecting local properties in the future due to all the negative impacts. These include public buildings holding children and adult social clubs.
   The 24-7 hour operation on the site would have a detrimental impact on local residents and the use of non-local employees would not help the local economy.
- Visual impact will affect tourism in area and local businesses. Shevington Parish Council needs to be included on list of consultees due to its close proximity to the site. The applicant does not own the land where the alternative entrance is proposed.
- The proposal should located on Farrington Waste Park.
- An independent assessment on the use of the site needs to be conducted the
  applicant should not be allowed to monitor itself. The Air Quality Assessment has
  used Emissions Limits rather than actual Process Plant Data. Douglas Valley
  needs to be accounted for in the Air Quality Assessment. The Environmental
  Assessment does not account for any remaining liquid waste. Prevailing westerly
  wind conditions have not been accounted for. These occur for 80% of the time
  across Appley Bridge which could cause the emissions to travel into other
  surrounding areas.
- There are unanswered questions including the origins of the plastic and the
  carbon and sulphur dioxide levels being generated from the site. More information
  is needed as the application is too simplistic for this type of scheme. Also off site
  monitoring has not even been considered which is a cause for concern. Land is
  classed as redundant in the report but have tests been done to prove this.

A number of letters have also been received from Rosie Cooper MP and Lisa Nandy MP supporting the objections that have been raised by their constituents.

#### **Advice**

Planning permission is sought for a pyrolysis plant on the West Quarry Railway Pad, off Appley Lane North, Appley Bridge. The plant would utilise a process known as thermal cracking to chemically convert non-hazardous, low worth non-recyclable waste plastic into hydrocarbons in the form of diesel, petrol and synthesis gas, white spirit and a carbon rich by-product known as char. The development area measures approximately 120m x 30m (0.36 hectare) and would contain the pyrolysis plant (measuring 98m x 25m (0.24 hectares) which would be enclosed by palisade fencing with the remaining 0.12 hectares to be vehicular access and turning space.

The thermal cracking of waste plastic uses a chemical reaction known as plastic pyrolysis. Pyrolysis in general terms is a reaction that involves molecular breakdown of larger molecules into smaller molecules in the presence of heat. At any given temperature molecules are vibrating and the frequency at which molecules vibrate is directly proportional to temperature. During pyrolysis molecules are subjected to temperatures leading to very high vibration where every molecule in the object is stretched and shaken to such an extent that molecules start breaking down into smaller molecules.

Plastic pyrolysis involves subjecting plastic to temperatures of 350-550 Celsius, in the absence of oxygen. If oxygen is present then the plastic will start burning. During pyrolysis, plastic breaks down into smaller molecules of pyrolysis oil and gas and

carbon black hydrocarbons. The hydrocarbons would be cleaned and converted to diesel, petrol, synthesis gas, white spirit and char.

The proposal would involve accepting up to 6000 tonnes per annum of waste plastic at the site. The plastic feedstock to be processed would be sorted before being delivered to the site in bales. The applicant has advised that criteria have been developed for the acceptance of waste at the site to ensure that the volume of undesirable material brought to the site is kept to a minimum. After being received at the reception hall, the baled feedstock would be stacked until required when it would undergo a final sorting process to remove any remaining recyclables and undesirable materials. The plastics would then be subject to pyrolysis treatment using the process plant. The diesel and petrol produced would be stored in 3 diesel and 3 petrol tanks. There would be 2 tanks for the storage of waste water produced from the pyrolysis process.

The diesel produced would be exported from the site. Some of the petrol and the synthesis gas produced would be burnt on site to generate power for the facility, with the remainder exported along with white spirit and char. All waste plastics and products would be delivered to and from the site by HGV. The pyrolysis plant would operate 24 hours a day, 7 days a week.

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan, unless material considerations indicate otherwise. In considering the issues that arise from the proposed development, it is necessary to take into consideration the relevant policies of the Development Plan and the planning history of the site and all other material planning considerations. Government policy is a material consideration that should be given appropriate weight in the decision making process.

The Development Plan for the site is made up of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, the Joint Lancashire Minerals and Waste Core Local Plan – Site Allocation and Development Management Policies – Part One (LMWLP), and the West Lancashire Local Plan 2012-2027 Development Plan Document (DPD).

National Planning Policy encourages recycling and the re-use of waste to reduce reliance on land filling.

The NPPF seeks to ensure that the planning system supports and secures sustainable economic growth in order to create jobs and prosperity and plan for a low carbon future, whilst at the same time ensuring the environmental impacts of development are acceptable. Policy CS7 of the Core Strategy DPD seeks to manage our waste as a resource, while Policy CS8 of the Core Strategy DPD seeks to ensure an adequate provision of suitable waste facilities across the county to ensure that waste can be managed as a resource. Policy DM4 of the LMWLP seeks to ensure that processes capable of recovering energy from waste will include measures to capture electricity produced as a by-product of the waste treatment process and use it on site. Policy WM1 of the LMWLP seeks to support waste management facilities across the county so as reduce the amount of waste to be

landfilled. The policy includes figures as to the amount of waste that should be recovered.

The chemical conversion of waste plastic into hydrocarbons is a recycling operation which would divert waste from landfill thereby securing the management of such waste at a higher level in the waste hierarchy. The pyrolysis process would also be powered by utilising some of the petrol and the synthesis gas that have been produced by the pyrolysis plant. The proposal therefore complies with National Planning Policy for Waste and with Policies CS7 and CS8 of the Core Strategy DPD and Policy WM1 of the LMWLP in terms of recovering value from waste and ensuring that waste is managed at a higher level in the waste hierarchy.

The proposal raises issues in relation to the acceptability in policy terms of the proposed development on the application site, visual impact, highway impacts and safety, emissions and odour, noise, ecology, and safeguarding of watercourses and surface and foul water drainage.

Acceptability of the location of the proposed site in terms of Local Plan policies

The proposed site is on part of a large concrete hardstanding located between the former West Quarry Landfill site and the Manchester to Southport railway line.

The concrete pad was originally constructed as part of the operation to restore West Quarry and Parbold Hill Quarry through the importation of waste which took place in the 1980's. Municipal waste was imported to these sites by rail from Greater Manchester in containers. A siding was constructed off the main rail line and the containers were then off loaded onto the concrete pad to allow the containers to be transported to the guarry sites for landfilling of the contents.

At the time of the landfill operations, the concrete pad along with the adjacent landfill site was designated as Green Belt and therefore the planning permissions for the waste development required restoration of the landfill and pad area upon cessation of the landfill activities. A further planning permission was granted which permitted use of part of the pad for plant associated with the extraction of landfill gas and its utilisation to generate electricity. The permission for this plant required restoration of the pad upon cessation of commercial electricity generation.

As part of the former Lancashire Structure Plan, a number of rail sidings around Lancashire (including that at West Quarry) were safeguarded in order to comply with Central Government policy at that time relating to the need to promote movement of freight by rail whenever possible. As a result of the policy in the Structure Plan, the previous edition of the West Lancashire Local Plan removed the area of the pad from the Green Belt and included a policy safeguarding the site for small scale rail based uses. The safeguarding of the site for this purpose has been continued in the present edition of the Borough Local Plan (Policy IF2).

Policy IF2 of the West Lancashire Local Plan DPD states that development that would prejudice the use of the site for small scale rail based uses will not be permitted unless there has been a conclusive demonstration that such a use is unviable. West Lancashire Borough Council have objected to the application on the

basis that insufficient information has been submitted to demonstrate that the railway pad is unviable for a small scale rail facility.

In considering Policy IF2, the applicant states that the railhead has not been in operation since 1994 and it has fallen into a state of dereliction. Network Rail have been asked for a quote for the cost of returning the railhead to a state that is fit for commercial activities. Network Rail provided an indicative quote in November 2012 based on similar work required elsewhere and estimate the cost of refurbishing the railhead at £1.5 million to £2 million. It should also be noted that Network Rail has no plans to restore the railhead and have clearly stated that the cost of such works will need to be incurred by the site developer. The applicant is therefore of the view that "small scale" enterprises will not be able to incur such charges as part of an economically viable development. The applicant also notes that there would be significant disruption to passenger travel and the rail provider during an upgrade of the scale that is required to return the railway pad and its siding to active use.

In view of the issues outlined above, the applicant's view is that designating the railway pad at Appley Bridge for a 'small-scale rail based facility' as suggested in Policy IF2 is contradictory and unsustainable. The applicant feels that the policy as it currently stands will prevent the use of a site in an already industrialised locality, and that Policy IF2 is not in line with Policy GN1 of the West Lancashire Local DPD. Furthermore he considers that the safeguarding of the site conflicts with the advice in paragraph 22 of the NPPF which states that planning policies should avoid the long term sterilisation of sites allocated for employment use where there is no reasonable prospect of a site being used for that purpose. Where there is no reasonable prospect of a site being used for the allocated employment use, the NPPF states that applications for alternative uses of land should be treated on their merits having regard to market signals and the relative need for different land uses to support sustainable local communities.

Whilst the proposed development would not occupy the whole of the pad, it would affect a significant proportion of the site, and if approved, would reduce the area remaining available to develop for rail based uses. Sites with potential to link to the rail network are scarce and should therefore be safeguarded for rail based uses where possible in line with Policy IF2.

Whilst the applicant argues that Policy IF2 is contradictory and unsustainable, the policy is recent and up to date. Various objections to the draft policy were made during the preparation of the Local Plan raising similar issues to that now raised by the applicant. The Local Plan was adopted in October 2013 and therefore post dates the NPPF. The Inspector considering the draft plan, including the wording of policy IF2, therefore considered the matter in the light of the objections that had been received and the policy in the NPPF including paragraph 22. Whilst the Inspector did make some changes to the policy IF2, the policy was found to be sound and was retained, with modification, in the adopted Local Plan. The Local Plan was adopted in 2013 and as a recent expression of policy in accordance with the NPPF, it is considered that considerable weight should be attached to policy IF2. There has not been a conclusive demonstration that such a use is unviable and hence the development would not accord with the requirements of Policy IF2 of the West Lancashire Local DPD.

# Visual Impact

In relation to the visual impact of the proposal, the main public views of the site would be in three locations; the road bridge where Appley Lane North crosses the Manchester-Southport railway line approximately 400m to the east of the site, the Leeds-Liverpool Canal tow path approximately 90m to the south of the site, and from Lees Lane located on the opposite side of the valley approximately 650m to the south-west of the site. The view from the road bridge is partially obscured by vegetation and is fleeting, the view from the Leeds-Liverpool Canal tow path would be prolonged given the relatively slow nature of walking but would be partially obscured by vegetation in the summer and offset by the industrial complex on the south side of the Manchester-Southport railway line. The view from Lees Lane would be distant with the plant appearing next to the aforementioned industrial site so that the visual impact would be minor. Views from the south generally would be obscured by the existing industrial complex.

The railway pad is at 30m AOD. The highest parts of the proposed plant would be the 17.3m high extruder, the 15.2m high emergency flare and the 10.6m high reception hall so the overall heights of these items of plant would be 47.3m, 45.2 and 40.6m AOD, respectively. The restored West Quarry landfill site directly to the north of the railway pad has an overall height of 45m or more and so would screen the site from the north. To the west, the land is countryside with limited views of the site. The site is located on the edge of the Green Belt but because of the relatively low height of the plant, the proposal is not expected to affect the openness or character of the area including the adjacent areas of Green Belt. It is therefore considered that the proposed development would not lead to any unacceptable visual impact on the area or on the Green Belt.

The application only provides some limited detail as to the proposed materials and colour of plant and buildings. It is considered, that a condition could require details of the materials and colour of the plant and buildings to be submitted for approval to ensure that it would be suitable for the location. It is the intention to provide lighting to the site in the form of a lamppost/s and sodium lighting. To restrict any light spill to the surrounding area, the details of such lighting could also be the subject of a condition.

# Highway Impacts and Safety

In relation to highway matters, the site would be accessed using the existing road to the West Quarry Railway Pad from Appley Lane North. The development would generate an average of five HGV and eight employee car/ LGV trips per day. Traffic levels may be higher during the construction phase, albeit for a short period. The primary flow of vehicles would be from/to the north along Appley Lane North.

The applicant has undertaken some traffic analysis of the access which concludes that some improvement by widening of the existing access would be necessary. The applicant has not provided any details of the works that would be required and has not confirmed that these works would be on land within his control. However, should planning permission be granted, it is considered that this matter could be controlled

through the use of a 'Grampian' style condition such that no other development could take place until the access had been approved in accordance with a scheme of access improvements to be first approved by the County Planning Authority.

The LCC Developer Support (Highways) considers that the overall traffic generation would not significantly impact upon the efficient operation of the local highway network and hence there is no objection to the pyrolysis plant subject to the imposition of conditions to require the submission of adequate car parking provision within the site so as not to increase the already high level of on-street parking in the area and the submission of details of a construction plan so as to maintain the operation of local streets and through routes in the area during construction, particularly during peak periods.

Appley Lane North is subject to considerable levels of on street parking predominately associated with the use of the nearby railway station. The applicant has suggested that 'no parking' restrictions should be applied to the length of Appley Lane North opposite the site access in order to ease the passage of HGV's into the site. However, LCC Developer Support (Highways) is of the opinion that such vehicles could safely access and egress the site without difficulties and that if waiting restrictions were introduced on the east side of Appley Lane North within the proximity of the site access, then parking would potentially be displaced further to the residential areas and so leading to unsatisfactory parking conditions in those areas with adverse effects on residential amenity, which would be unacceptable and which could not be supported

Taking into account the traffic and highway information that has been submitted, and the comments of the LCC Developer Support (Highways), it is considered that the development would be acceptable on highway grounds, subject to conditions to include one requiring the improvement of the site access in accordance with approved details prior to the commencement of any other development.

### **Emissions and Odour**

In relation to emissions from the site, an Air Quality Assessment (AQA) has been submitted with the application that examines the likely air emission impacts of the development. The AQA concludes that the proposed stack height would be adequate to disperse the pollutants and that the development would have an insignificant impact on local air quality. However, a high number of concerns have been received from local residents and Wrightington, Shevington and Dalton Parish Councils as to the impact on health as a consequence of dispersed pollutants.

The County Council has commissioned an Independent Critical Review of the AQA. The aim of this review is to provide an evaluation of the likely air quality impacts of the proposed development to inform the determination of the planning application. The review also provided specific responses to questions raised by the County Council and to consider comments raised in consultation responses including that from Dalton Parish Council. The review highlighted five high priority issues that must be addressed by the applicant as they are potentially important for understanding the impact of the development.

The "High" priority issues identified in the review are as follows:

- No confirmation has been provided that the proposed emission limits could be achieved by the proposed gas engine plant. It is recommended that the applicant should be requested to provide confirmation that the emission limits can be achieved in practice. If this cannot be provided, confidence in the findings of the air quality impact assessment may be reduced.
- The AQA may have under-estimated background concentrations of nitrogen dioxide. No baseline data at all is provided for other substances. It is recommended that the applicant should be requested to review the AQA results in the light of a detailed review of background air quality data.
- The stack height assessment and interpretation of AQA results is based on outdated guidance. It is recommended that the applicant should be requested to revise the assessment of the impacts of the proposed development on the basis of the current guidance. Using the new guidance, and taking the emission limit data at face value, it is estimated that the proposed development would give rise to a "slight" impact on nitrogen dioxide levels at some locations.
- The air quality assessment highlights a potentially significant issue in respect of modelled levels of cadmium. It is recommended that the applicant should be requested to review and provide further substantiation for the conclusions in respect of cadmium.
- The AQA does not take into account indirect exposure pathways for dioxins and furans, which are likely to account for the majority of exposure to dioxins and furans. It is recommended that the applicant should be requested to revise this assessment.

The review also identified a number of medium and low priority and editorial issues.

The review advised that some of the points raised in the consultation response from Dalton Parish Council are closely aligned to issues highlighted in the review – in particular, relating to the achievability of the proposed emission limits.

In relation to the specific questions raised by officers, the review comments as follows:

- The overall approach to the air quality assessment is considered to be appropriate. However, a number of areas in which the methodology for the air quality assessment should be improved are identified.
- The atmospheric dispersion model used in the AQA is appropriate for the assessment of air quality impacts of the proposed facility.
- It is recommended that the applicant should be requested to provide further detail on the nature and composition of the feedstocks in order to support the assessment.
- It is considered that the AQA does not demonstrate that the proposed development would give rise to a "negligible" impact on air quality and does not support the conclusion that "the air quality impact would be 'insignificant' for all pollutants except cadmium". The comments in relation to the impact of cadmium are not supported by evidence. The feedstocks to be processed at the site are unlikely to be strongly odorous. Further information on the nature of the process

- would need to be provided in order to assess whether there would be a significant potential for odorous emissions due to escape of process gases.
- It is considered that the AQA does not demonstrate that the proposed stack height of 17.5 m would be appropriate. The AQA does not demonstrate that this stack height would give rise to a "negligible" impact.

Paragraph 122 of the NPPF requires that planning authorities should not seek to control processes or emissions where these are subject to approval under separate pollution control regimes and that LPA's should assume that these regimes will operate effectively. However, the planning authority does need to reach a judgement as to whether the development would have any unacceptable impacts on air quality, health or local amenity. The applicant has submitted an air quality assessment which has been subject to independent scrutiny through the County Council's air quality consultant. The independent assessment has identified a number of shortcomings in the way that the assessment has been undertaken and its conclusions.

The operation would fall under the definition of a 'small waste incineration plant' in the Environmental Permitting (England and Wales) Regulations 2010 (as amended) and would therefore be regulated by the Local Authority based on a capacity of less than 3 tonnes per hour. West Lancashire Borough Council could therefore impose detailed controls on the emissions and odour from the pyrolysis plant through their regulatory powers for such plants. However, as part of the determination of the planning application, it is necessary for the County Council to reach a view as to whether the proposal is an acceptable land use in this location. Having regard to the information that has been submitted in support of the application and the findings of the County Council's independent assessment, it cannot be concluded at present that the proposed development would not have detrimental impacts on air quality which would result in harm to local and residential amenity. In the absence of such demonstration, the application is considered to be contrary to policy DM2 of the Lancashire Minerals and Waste Local Plan and Policy GN3 of the West Lancashire Local Plan.

Issues relating to health and safety and fire risks can be adequately addressed through site design and working practices that are covered by other legislation. The HSE have provided no comment as the proposed development does not lie within the consultation distance of a major hazard site or major accident hazard pipeline.

A number of residents are concerned about the implications of the location of the site adjacent to the West Quarry landfill site, particularly in terms of landfill gas and other contamination. Whilst the landfill site is still producing some gas, although at a much lower rate than has previously taken place, the gas is controlled through the use of flaring and venting to ensure that it is managed safely. The proposed plant is not located on the landfill itself and would not increase rates of gas production or increase the likelihood of gas migrating outside of the site. Therefore it is not considered that there would be any implications in terms of landfill gas or other contamination arising from the previous uses of the land.

#### Noise

The applicant has not submitted a noise assessment as the exact make and model of the plant has not been confirmed. They intend to submit such an assessment when they have chosen the plant. The applicant believes that the proposed facility would not contribute to significant changes in ambient noise levels at the nearest receptors. However, the impacts of noise on residential amenity is a material planning consideration and therefore sufficient information must be submitted as part of a planning application to allow adequate consideration of this issue.

The EA have commented that a suitable noise assessment should be carried out to ensure a good understanding of how the operation would impact on the local area in relation to background noise and to allow any noise attenuation measures to be considered. There are concerns from residents in the area that there would be a constant noise from a plant that would operate 24 hours a day, 7 days a week. West Lancashire Borough Council have objected due to detrimental impact on the amenities of nearby residents through increased noise and disturbance.

The nearest houses are located approximately 350m to the north-east of the site on the west side of Appley Lane North, and 410m to the south-east of the site fronting the east side of Appley Lane North. Noise would arise from vehicles and outside machinery associated with the site. While there are no houses close to the site, the fact that the restored landfill site would provide some noise screening, and that there are other noise generating land uses in the area, namely the industrial estate to the south of the railway line and the traffic on Appley Lane North, it cannot be ruled out that there would not be noise arising from the site to a level that would not create a disturbance. In the absence of a noise assessment it cannot be concluded that the proposal would not cause unacceptable noise impacts and, the development is contrary to Policy DM2 of the Joint Lancashire Minerals and Waste Local, and Policy GN3 of the West Lancashire Local Plan.

#### **Ecology**

The proposal is located on an existing concrete hardstanding and the development would not result in the loss of any wildlife habitats. Therefore no ecological assessment was submitted with the application. However, a Bat and Bird Risk Assessment was submitted. The Manchester-Southport railway line on the south side of the railway pad is allocated as a Major Wildlife Corridor and is subject to Policy EN2 of the West Lancashire Local Plan DPD.

The LCC Specialist Advisor (Ecology) has not objected and is satisfied that the proposal is unlikely to result in any significant impact on bats or birds because the emergency flare would be enclosed and operate infrequently, the nature of the application site and because there is no evidence to suggest a regular flyway of the site by birds. Provided construction and operational impacts on adjacent habitats are avoided/ minimised, significant adverse impacts on protected or priority species appear unlikely and the Major Wildlife Corridor and the nearest protected wildlife sites would not be affected. The application is therefore considered acceptable in relation to ecological impacts and complies with Policy EN2 of the West Lancashire Local DPD.

Safeguarding of Watercourses and Surface and Foul Water Drainage

The Canal and River Trust commented that no details have been provided of the surface water that would be disposed into existing watercourses. However, the site is already hardsurfaced and therefore it is unlikely that the development would result in an increase in run off from the site. There would be no direct impacts on any watercourses and it would be possible to impose conditions to control any pollution impacts including the bunding of any fuel or other liquid storage tanks. Subject to such conditions, it is considered that the development accords with Policy EN3 of the West Lancashire Local Plan DPD.

## Conclusion

The proposed pyrolysis plant would convert 6000 tonnes per annum of waste plastic in to a range of hydrocarbon products. The development would therefore be a recycling operation that would divert waste from landfill securing the management of such waste at a higher level in the waste hierarchy. In this respect, the proposal would comply with National and Local Planning Policy.

However, the application site is located on land that is safeguarded by Policy IF2 of the West Lancashire Local Plan for a small scale rail facility. The location and scale of the development would prejudice the use of the site for such a use and the applicant has not conclusively demonstrated that such a use is unviable as is required by the policy. The development is therefore contrary to Policy IF2 of the West Lancashire Local Plan. In addition, no noise or suitable air quality assessment has been submitted, and in the absence of such, it cannot be concluded that there would not be air or noise emissions arising from the site to a level that would not create unacceptable disturbance to local and residential amenity. The development is therefore contrary to Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan and Policy GN3 of the West Lancashire Local Plan.

The other impacts of the development in terms of the visual impact, highway access and safety, ecology, and the safeguarding of watercourses and surface and foul water drainage, are acceptable or can be made so by planning conditions. However, the acceptability of the development in these terms together with the benefits of the development outlined above are not sufficient to outweigh the conflict with the policies of the development plan relating to safeguarding of the rail pad and protection of local amenity.

# **Human Rights Issues**

Article 1 of the 1st Protocol concerns the enjoyment of property and provides that everybody is entitled to the peaceful enjoyment of his possessions and that no one should be deprived of the enjoyment of property except in the public interest. The refusal of planning permission has the potential to affect the applicant's rights under this Article. However, the County Council has a duty to secure the proper location of waste development in order to safeguard protected rail head facilities and to ensure the protection of local amenity as set out in the policies of the Development Plan. The proposal would conflict with these policies and the interference in the rights of the applicant is therefore considered to be justified in order to protect the public interest. It is considered that the public interest can only be safeguarded by refusal of

permission and that refusal of the application would not place a disproportionate burden on the applicant.

#### Recommendation

That planning permission be refused for the following reasons:-

- 1. The application site is located on land that is safeguarded by Policy IF2 of the West Lancashire Local Plan for a small scale rail facility. The location and scale of the development would prejudice the use of the site for a small scale rail based facility and the applicant has not conclusively demonstrated that such a use is unviable. The development is therefore contrary to Policy IF2 of the West Lancashire Local Plan.
- 2. The applicant has not demonstrated that the proposal would not give rise to detrimental impacts on air quality. In the absence of such demonstration, the proposal is considered to be contrary to Policy DM2 of the Lancashire Minerals and Waste Local Plan and Policy GN3 of the West Lancashire Local Plan
- 3. The application is not accompanied by a noise assessment. In the absence of such information, it cannot be concluded that the development would not give rise to noise levels resulting in unacceptable harm to local and residential amenity. The development is therefore contrary to Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan and Policy GN3 of the West Lancashire Local Plan.

Local Government (Access to Information) Act 1985 List of Background Papers

Paper Date Contact/Ext LCC/2015/0088

Rob Jones Planning and Environment 534128

Reason for Inclusion in Part II, if appropriate N/A